

# **Veröffentlichungen und Vorträge**



# **DESY-Kolloquien**

## **DESY Heinrich-Hertz Lecture on Physics**

G. T'HOOFT (Univ. Utrecht/NL)  
Black Holes and Quantum Mechanics.  
24.09.2003

K. ZAPFE, D. RESCHKE (Hamburg/D)  
Tibet – ein Reisebericht vom Dach der Welt.  
29.1.2003

## **Festkolloquium für Walter Schmidt-Parzefall**

M. DANILOV (ITEP Moskau/RUS)  
20 Years with ARGUS

D. STÖFFLER (Berlin/D)  
Ist der Mond himmlische Erde?  
12.2.2003

D. MacFARLANE (Univ. of California/USA)  
Perspectives on B Physics.  
27.11.2003

C. SCHERF (Hamburg/D)  
Wie sich die DESY-Administration auf TESLA vorbereitet.  
26.2.2003

## **DESY Lecture Series in Memory of Prof. Dr. W. Jentschke**

K.C. HOLMES (MPI for Medical Research, Heidelberg/D)  
The Impact of Synchrotron Radiation on Molecular Biology.  
4.12.2003

S. RÜSCH-GERDES (Borstel/D)  
Der Tuberkelbazillus – immer noch Geißel der Menschheit?  
19.3.2003

K. WILLE (Dortmund/D)  
Beschleuniger in der Grundlagenforschung und ihre Entwicklung.  
26.3.2003

T. HENSCHEL (Berlin/D)  
Welche Bildung brauchen wir für das Wissenszeitalter?  
16.4.2003

D. MILSTEAD (Liverpool/GB)  
Chasing the Magnetic Monopole.  
23.4.2003

W. SCHLOSSER (Bochum/D)  
Die Himmelsscheibe von Nebra – ein früher Blick des Menschen  
in den Kosmos.  
30.4.2003

O. STRANGFELD (Frankfurt a.M./D)  
Perspektive Deutschland – wie sehen die Bürger ihren Staat?  
14.5.2003

R. SÜSSMUTH (Berlin/D)  
Bildungs- und Wissenschaftspolitik – Diskrepanzen zwischen  
programmatischer Ankündigung und praktischer Umsetzung.  
25.6.2003

J. WAMBSGANSS (Potsdam/D)  
Auf der Suche nach Planeten um andere Sonnen.  
9.7.2003

A. WAGNER (Hamburg/D)  
DESYs Zukunft: Neue Anlagen und neue Wege.  
3.9.2003

C. LEITZMANN (Gießen/D)  
Prävention von Zivilisationskrankheiten durch richtige Ernährung.  
10.9.2003

# **Academic Training**

M. DIEHL (DESY Hamburg/D)  
Generalized Parton Distributions.  
3.-7.11.2003

E. IANCU (Saclay/F)  
QCD at High Energies.  
17.-20.11.2003

# **Vorträge – Innerbetriebliche Fortbildung**

S. BLUDMAN (Hamburg/D)  
What was the Star of Bethlehem?  
8.1.2003

B. SEITZ (Gießen/D)  
HERMES: vom Spinrätsel zur femto-Fotographie.  
22.1.2003

U. VOIGT (Hamburg/D)  
Was ist Mnemotechnik?  
17.9.2003

D. ELSCHENBROICH (Frankfurt a.M./D)  
Kinder als Naturforscher.  
15.10.2003

D. LÜST (Berlin/D)  
Strings und Membrane – eine neue Theorie zur Struktur von  
Elementarteilchen, Raum und Zeit.  
29.10.2003

K. HOEPFNER (Aachen/D)  
Vorstoß zu neuen Energien – das Entdeckungspotential zukünfti-  
ger CERN-Experimente.  
26.11.2003

PHYSIKANTEN & CO (Dortmund/D)  
Platsch! – Die interaktive Wasser-Show.  
17.12.2003

## Öffentliche Abendvorträge am DESY

M. SCHROEDER (Göttingen/D)  
Entwicklung und Zukunft der Physik.  
5.2.2003

H. RUDER (Tübingen/D)  
Was Einstein noch nicht sehen konnte.  
5.3.2003

K. HEINLOTH (Bonn/D)  
Energie – Optionen für die Zukunft.  
4.6.2003

R. HILGENFELD (Lübeck/D)  
SARS – ein Jahr nach dem Ausbruch.  
5.11.2003

R. HAENSEL (Kiel/D)  
Licht mit Zukunft: die Synchrotronstrahlung.  
9.12.2003

## Vorträge – Direktorium

R. KLANNER

Schülerförderung am DESY.  
Vortrag am Heraeus Seminar über Schülerförderung, Wittenberg/D  
(2003)

Physics Results from HERA and News from DESY.  
Seminar, University Geneva, Geneva/CH (2003)

Recent Particle Physics Results from DESY.  
Theory Workshop, Hamburg/D (2003)

DESYs Strategie für Teilchen- und Astroteilchen-Physik.  
Treffen des Komitees für Elementarteilchenphysik, Hamburg/D  
(2003)

J.R. SCHNEIDER

Synchrotron Radiation Research at DESY: PETRA III and XFEL.  
EMBL Review Board Meeting, Hamburg/D (2003)

X-ray Free-Electron Lasers.  
Risoe Workshop on „Future need Large Scale Facilities for Syn-  
chrotron Radiation and Neutrons“, The Royal Academy, Copen-  
hagen/DK (2003)

European XFEL Laboratory Project.  
5th Meeting of the European Strategy Forum on Research Infra-  
structures, Brussels/B (2003)  
7th Meeting of the European Strategy Forum on Research Infra-  
structures, Trieste/I (2003)  
Treffen der Wissenschaftsattachés, BMBF, Berlin/D (2003)

Freie-Elektronen Laser: Zeitenwende für die naturwissenschaftli-  
che Forschung mit Röntgenstrahlung.  
Kolloquium der Naturwissenschaftlichen Fakultät der Universität  
Kiel, Kiel/D (2003)

X-ray Free-Electron Laser Projects at DESY.  
SNS, Oak Ridge National Laboratory, Oak Ridge/USA (2003)

The DESY VUV-FEL and Plans for a European XFEL Laboratory.  
Brookhaven National Laboratory, Upton/USA (2003)

New X-ray Sources.  
Gordon Conference on X-ray Physics, Bristol/USA (2003)

Röntgenlaser bei DESY: Der schnelle Blick auf die Atome.  
IFF-Kolloquium, Forschungszentrum Jülich, Jülich/D (2003)

Free-Electron Laser Activities at DESY.  
Workshop on the Use of Free Electron Lasers, Kista, Stockholm/S  
(2003)

Von Pioniergeist getragen: Forschung mit Synchrotronstrahlung  
und Freie-Elektronen-Laser.  
Feier des 75. Geburtstages von Professor Dr. Dr. h.c. Ulrich Bonse,  
Universität Dortmund, Dortmund/D (2003)

Forschung mit Synchrotronstrahlung bei DESY.  
ANKA-BESSY-DESY Industrieforum „In-situ Charakterisierung  
katalytischer Prozesse“, Hamburg/D (2003)

VUV and Hard X-ray SASE Free-Electron Laser User Facilities at DESY.

ESF-Workshop 2003: Opportunities and Challenges for Atomic and Molecular Science at the new European VUV- and X-FEL sources, Berlin/D (2003)

#### D. TRINES

Status of Accelerator Physics at DESY.  
Kolloquium, IHEP, Protvino/RUS (2003)

#### A. WAGNER

TESLA – A new Tool for Science.  
Kolloquium, Universität Mainz/D (2003)  
Kolloquium, Novosibirsk/RUS (2003)  
Babcock Noell Nuclear Symposium Leipzig/D (2003)  
Kolloquium, Universität Krakau/PL (2003)

Die Zukunft der Teilchenphysik – Neue Beschleuniger, entscheidende Erkenntnisse.  
Universität Göttingen/D (2003)

Status and Plans of TESLA.  
LC Workshop, Amsterdam/NL (2003)

TESLA – Discovery through Precision.  
St. Petersburg/RUS (2003)

DESY Zeuthen, HERA, Major Events since last ECFA Meeting Nov. 02.  
ECFA at CERN/CH (2003)

Road Map for High Energy Physics – The DESY View.  
EPS Aachen/D (2003)

Materie, Raum und Zeit.  
Öffentl. Abendvortrag, Aachen/D (2003)

Understanding Matter, Energy, Space and Time: The Case for the e<sup>+</sup>e<sup>-</sup> Linear Collider.  
Seminar, Universität Krakau/PL (2003)

TESLA and the International LC.  
ECFA Workshop, Montpellier/F (2003)

New Funding Framework for DESY, HERA, FELs, Linear Collider.  
ECFA at CERN/CH (2003)

From Inanity to Infinity – Beschleuniger erforschen das Universum.  
Abendvortrag Planetarium Hamburg/D (2003)

## **Forschung Hochenergiephysik**

### **H1 Experiment**

#### **Veröffentlichungen**

##### **H1 COLLABORATION**

Measurement and QCD Analysis of Neutral and Charged Current Cross Sections at HERA.

Eur. Phys. J C30 (2003) 1-32 und DESY-03-038/hep-ex/0304003

Search for New Physics in e<sup>±</sup>q Contact Interactions at HERA.  
Phys. Lett. B568 (2003) 35-47 und DESY-03-052/hep-ex/0305015

Diffractive Photoproduction of J/ψ Mesons with Large Momentum Transfer at HERA.

Phys. Lett. B568 (2003) 205-218 und DESY-03-061/hep-ex/0306013

Multi-Electron Production at High Transverse Momenta in ep Collisions at HERA.

Eur. Phys. J C31 (2003) 17-29 und DESY-03-082/hep-ex/0307015

Search for Single Top Quark Production in ep Collisions at HERA.  
Subm. to Eur. Phys. J. C and DESY-03-132/hep-ex/0310032

Muon Pair Production in ep Collisions at HERA.  
Subm. to Phys. Lett. B and DESY-03-159/hep-ex/0311015

Inclusive Dijet Production at Low Bjorken-x in Deep Inelastic Scattering.

Subm. to Eur. Phys. J and DESY-03-160/hep-ex/0310019

Measurement of Dijet Production at Low Q<sup>2</sup> at HERA.  
DESY-03-206/hep-ex/0401010

#### **YU.A. BASHMAKOV ET AL.**

An Electromagnetic Calorimeter with a Transversal Orientation of the Scintillating Fibers.

Instruments and Experimental Techniques, Vol. 46, No. 4 (2003)  
462-466

#### **Veröffentlichte Vorträge**

##### **XIth Intern. Worksh. on Deep Inelastic Scattering (DIS), St. Petersburg/R (2003) Proceedings**

###### **B. ANDRIEU**

Inclusive Jet Cross Section in Photoproduction at H1.

###### **M. BECKINGHAM**

Production of J/ψ Mesons at High t and the Study of γp → γp.

###### **Y. COPPENS**

Measurement of F<sub>2</sub>D.

###### **B. DELCOURT**

Measurement of the Jet Charge in Deep-Inelastic Scattering at H1.

- A. DUBAK  
Neutral and Charged Current Cross Sections and the Measurement of  $xF_3$ .
- P. FLEISCHMANN  
Elastic Photoproduction of  $J/\psi$  Mesons and  $\rho$  Meson Production in DIS at Low  $t$ .
- G. FLUCKE  
 $D^*$  Production in  $\gamma - p$  Collisions at H1.
- G. FRISING  
Isolated Lepton Production at H1.
- C. GERLICH  
Beauty in Photoproduction at H1.
- L. GÖRLICH  
Forward Jet and Pion Production in Deep-Inelastic Scattering at H1.
- R. LEMRANI  
Prompt Photon Production in ep Collisions, Recent H1 and ZEUS results.
- V. LENDERMANN  
Measurement of  $F_2$  at Low  $Q^2$  Using QED Compton Scattering at HERA.
- B. LIST  
Heavy Flavour Physics at HERA-II.
- E. LOBODZINSKA  
A Determination of  $F_L$  at Low  $Q^2$ .
- S. MAXFIELD  
A Search for Magnetic Monopole Production at H1.
- A. MEHTA  
Electroweak and BSM.
- B. NAROSKA  
Heavy Flavours.
- E. PEREZ  
 $R_p$  Violating SUSY at H1.
- R. PÖSCHL  
H1 Results on Dijet Production at Low  $x$ .
- B. REISERT  
QCD Fits and the Extraction of the Parton Distribution Functions.
- S. SCHÄTZEL  
Comparison of Final States in Diffraction with QCD Predictions.
- J. SCHEINS  
Contact Interactions and Limits on Leptoquark Production and Other New Physics at H1.
- S. SCHMIDT  
Jet Production in Deep-Inelastic Charm Events at H1.
- A. SCHÖNING  
Search for Single Top Production in ep Collisions at H1.
- M. SCHNEIDER  
Searches for Excited Fermions at H1 and ZEUS.
- F. SEFKOW  
Heavy Flavour Summary.
- A. SPECKA  
Inclusive Jet Production in Deep-Inelastic Scattering at H1.
- M. SUTTON  
Scaling Violations and  $\alpha_s$ .
- International Europhysics Conference on High Energy Physics (EPS2003), Aachen/D (2003) Proceedings**
- O. BEHNKE  
Beauty Production in Electron-Proton Collisions.
- K. DAUM  
Studies of the Photoproduction of Charm.
- L. FAVART  
Studies of DVCS and High  $|t|$  Photon Production with the H1 Detector.
- T. KLUGE  
Event Shape and Jet Sub-Structure Studies at HERA.
- T. LASTOWICKA  
Measurements of  $F_2$  and  $F_L$  at Low  $Q^2$ .
- B. LIST  
Measurements of Meson Production in ep Scattering at H1.
- D. MILSTEAD  
Search for Magnetic Monopoles Produced in ep Collisions.
- R. PÖSCHL  
Parton Dynamics Revealed in Measurements of Forward Jet and Pion Production in DIS.
- E. RIZVI  
QCD Fits to Structure Function Measurements.
- F.-P. SCHILLING  
Diffractive Interactions at H1.
- P. SCHLEPER  
Experimental Tests of QCD.
- C. SCHWANENBERGER  
A Review of Searches for RP Violating SUSY.
- P. THOMPSON  
Inclusive Measurements of Diffractive DIS at H1.
- M. WESSELS  
Generic Searches for New Physics Phenomena.
- T. ANTHONIS  
Diffractive Final States.  
Proc. of the Low  $x$  Workshop on DIS, Diffraction and Related Subjects (Lowx2003), Nafplio/G (2003)
- O. BEHNKE  
H1 Results on Beauty Production.  
Proc. of Heavy Quark Physics at the Upgraded HERA Collider (HQHERA2), Rehovot/Israel (2003)

**V. BLOBEL**

Some Comments on  $\chi^2$  Minimisation Applications.  
Proc. of PHYSTAT2003, SLAC, Stanford, California/USA (2003)

**D. BROWN**

Measurements of DVCS and High  $|t|$  Vector Meson Production at HERA.  
Proc. of the Moriond-Conference on QCD and High Energy Hadronic Interactions (Moriond-QCD), Les Arcs/F (2003)

Diffractive Vector Meson Production at HERA.

Proc. of the Low x Workshop on DIS, Diffraction and Related Subjects (Lowx2003), Nafplio/G (2003)

Diffractive Photon and Vector Meson Production at Large  $|t|$  at HERA.

Proc. of the Worksh. on Small-x and Diffractive Physics (Smallx03), Fermilab/USA

**A. BUNYATIAN**

Diffraction at HERA.  
Proc. of the Xth International conf. of Hadron Spectroscopy (Hadron2003), Aschaffenburg/D (2003)

**G. BUSCHHORN**

Jet Studies and  $\alpha_s$  Measurements at HERA.  
Proc. of New Trends in High Energy Physics (Crimea2003), Alushta, Crimea/Ukraine (2003)

**V. CHEKELIAN**

$\alpha_s$  and the Gluon Density from Structure Functions.  
Proc. of New Trends in HERA Physics (Ringberg03), Schloß Ringberg, Tegernsee, Bavaria/D

**B. COX**

Rapidity Gaps Between Jets.  
Proc. of the Low x Workshop on DIS, Diffraction and Related Subjects (Lowx2003), Nafplio/G (2003)

**J. CVACH**

Photoproduction of jets and Prompt Photons.  
Proc. of New Trends in HERA Physics (Ringberg03), Schloß Ringberg, Tegernsee, Bavaria/D

**K. DAUM**

Heavy-Flavour Production in Electron-Proton Collisions.  
Proc. of New Trends in High Energy Physics (Crimea2003), Alushta, Crimea/Ukraine (2003)

**C. DUPREL**

H1 Results on  $F_2$  and  $F_L$ .  
Proc. of the Low x Workshop on DIS, Diffraction and Related Subjects (Lowx2003), Nafplio/G (2003)

**P. FLEISCHMANN**

Exclusive Vector Mesons and DVCS.  
Proc. of the Worksh. on Small-x and Diffractive Physics (Smallx03), Fermilab/USA

**R. GERHARDS**

H1 Results on Charm Production.  
Proc. of Heavy Quark Physics at the Upgraded HERA Collider (HQHERA2), Rehovot/Israel (2003)

**J. HALLER**

Searches for New Physics at HERA.  
Proc. of the Moriond Conference on Electroweak Interactions and Unified Theories (Moriond-EW), Les Arcs/F (2003)

**K.-H. HILLER**

Review of Diffraction at HERA.  
Proc. of the XXXIIth Intern. Symp. on Multiparticle Dynamics (ISMD03), Krakau/P (2003)

**L. JÖNSSON**

Forward Jet and Particle Production at Low x.  
Proc. of New Trends in HERA Physics (Ringberg03), Schloß Ringberg, Tegernsee, Bavaria/D

**M. KLEIN**

Structure Functions at HERA and the Measurement of  $\alpha_s$  and the Parton Distributions.  
Proc. of the Xth High Energy Physics Intern. Conf. on QCD (QCD03), Montpellier/F (2003)

Plans of the H1 Experiment at HERA II.

Proc. of New Trends in HERA Physics (Ringberg03), Schloß Ringberg, Tegernsee, Bavaria/D

**J. KROSEBERG**

Beauty in ep Collisions.  
Proc. of the Intern. Conf. on the Structure and Interactions of the Photon (Photon2003), Frascati/I (2003)

**T. LASTOVICKA**

Structure Function Measurement and what they Tell us about PDFs and  $\alpha_s$ .  
Proc. of Fundamental Interactions, Lake Louise, Alberta/Canada (2003)

**P. LAYCOCK**

Inclusive Diffraction in H1.  
Proc. of the Low x Workshop on DIS, Diffraction and Related Subjects (Lowx2003), Nafplio/G (2003)

**B. LEISSLER**

Multi-Lepton Production in ep Collisions.  
Proc. of the Intern. Conf. on the Structure and Interactions of the Photon (Photon2003), Frascati/I (2003)

**S. LEVONIAN**

Diffractive Structure Functions and QCD Fits.  
Proc. of New Trends in HERA Physics (Ringberg03), Schloß Ringberg, Tegernsee, Bavaria/D

**E. LOBODZINSKA**

Structure Functions at Low x.  
Proc. of the XXXIIth Intern. Symp. on Multiparticle Dynamics (ISMD03), Krakau/P (2003)

**N. MALDEN**

Searches for New Physics in Electron-Proton Collisions.  
Proc. of Fundamental Interactions, Lake Louise, Alberta/Canada (2003)

**P. VAN MECHELEN**

Jet Production in Electron-Proton Collisions.

Proc. of the Moriond-Conference on QCD and High Energy Hadronic Interactions (Moriond-QCD), Les Arcs/F (2003)

Diffraction in ep Collisions.

Proc. of the Moriond-Conference on QCD and High Energy Hadronic Interactions (Moriond-QCD), Les Arcs/F (2003)

Deep Inelastic Diffractive Scattering at HERA.

Proc. of the Xth High Energy Physics Intern. Conf. on QCD (QCD03), Montpellier/F (2003)

**K. MEIER**

Odd and Even – Search for the Odderon and Study of Diffractive Hadronic Final States.

Proc. of the Worksh. on Small-x and Diffractive Physics (Smallx03), Fermilab/USA

**A.B. MEYER**

Hadronic Beauty Production at HERA.

Proc. of the VIIIIf Intern. Conf. on B-Physics at Hadron Machines (Beauty2003), Carnegie-Mellon Univ., Pittsburg/USA

**D. MILSTEAD**

A Direct Search for Magnetic Monopoles at HERA.

Proc. of the Intern. Worksh. on Particle Physics and the Early Universe, (Cosmo03), Ambleside/UK (2003)

**T. NAUMANN**

Prospects for HERA II.

Proc. of the Worksh. on Small-x and Diffractive Physics (Smallx03), Fermilab/USA

**P. NEWMAN**

Deep Inelastic Scattering.

Proc. of the XXIf International Symposium on Lepton Photon Interactions at High Energies (LP2003), Fermilab, Batavia/USA

**G. NOWAK**

Forward Jet and Particle Production.

Proc. of the Low x Workshop on DIS, Diffraction and Related Subjects (Lowx2003), Nafplio/G (2003)

**B. OLIVIER**

Review of Heavy Flavour Production in ep Collisions.

Proc. of the XXXIIIf Intern. Symp. on Multiparticle Dynamics (ISMD03), Krakau/P (2003)

**M. PEEZ**

A New Object Orientated Analysis Framework for H1.

Proc. of Computing in High Energy Physics (CHEPP03), La Jolla, California/USA 2003)

**E. PEREZ**

Exotic Searches at Colliders.

Proc. of the XXIf International Symposium on Lepton Photon Interactions at High Energies (LP2003), Fermilab, Batavia/USA

**B. PORTHEAULT**

Structure Functions at High  $Q^2$ .

Proc. of New Trends in HERA Physics (Ringberg03), Schloß Ringberg, Tegernsee/D

**E. SAUVAN**

Lepton Production in ep Collisions.

Proc. of the 17th Rencontre de Physique de la Vallée d'Aoste, La Thuile/I

**H.-C. SCHULTZ-COULON**

Hard Processes in ep Scattering.

Proc. of the XXIf Physics in Collision Conf. (PIC2003), Zeuthen/D (2003)

**F. SEFKOW**

H1 Detector Potential for Heavy Quarks at HERA II.

Proc. of Heavy Quark Physics at the Upgraded HERA Collider (HQHERA2), Rehovot/IL (2003)

**J. TURNAU**

Forward Jets and Particles in ep Collisions and Parton Dynamics.

Proc. of the Intern. Conf. on the Structure and Interactions of the Photon (Photon2003), Frascati/I (2003)

**P. THOMPSON**

Experimental Results on Exclusive Vector Mesons and Heavy Quarkonium.

Proc. of New Trends in HERA Physics (Ringberg03), Schloß Ringberg, Tegernsee, Bavaria/D

**E. TZAMARIUDAKI**

Heavy Flavour Review.

Proc. of the Low x Workshop on DIS, Diffraction and Related Subjects (Lowx2003), Nafplio/G (2003)

**A. VALKAROVA**

Photon Structure as Revealed in ep Collisions.

Proc. of the Intern. Conf. on the Structure and Interactions of the Photon (Photon2003), Frascati/I (2003)

**S. VINOKUROVA**

H1 Results on Diffractive Charm Production.

Proc. of Heavy Quark Physics at the Upgraded HERA Collider (HQHERA2), Rehovot/IL (2003)

**J. WAGNER**

Heavy Hadron Production in ep Collisions.

Proc. of the Xth International conf. of Hadron Spectroscopy (Hadron2003), Aschaffenburg/D (2003)

Proc. of the Xth Internatioal conf. of Hadron Spectroscopy (Hadron2003), Aschaffenburg/D (2003)

**N. WERNER**

Structure Function Measurements at HERA and the Determination of  $\alpha_s$  and the Parton Distributions.

Proc. of the Moriond-Conference on QCD and High Energy Hadronic Interactions (Moriond-QCD), Les Arcs/F (2003)

**E.-E. WÖHRLING**

Proton Structure at High  $Q^2$ .

Proc. of the Intern. Conf. on the Structure and Interactions of the Photon (Photon2003), Frascati/I (2003)

**J. ZACEK**

Recent Results from H1.

Proc. of the XVIIf Intern. Worksh. on HEP and Quantum Field Theory (QFTHEP03), Samara-Saratov/R (2003)

## Vorträge

### DPG Frühjahrstagung Teilchenphysik, Aachen/D (2003)

T. BERNDT

Status der Odderon-Suche bei HERA.

N. BERGER

Z-Vertex Rekonstruktion mit dem schnellen Spurtrigger von H1.

G. BRANDT

$\tau$ -Identifikation und Anwendung bei der Suche nach Erzeugung einzelner Top-Quarks bei HERA.

J. DINGEFELDER

Suche nach anomaler Top-Produktion bei HERA.

L. FINKE

B-Tagging in High-P<sub>T</sub>-Jets bei HERA.

P. FLEISCHMANN

Diffraktive Photoproduktion von J/ $\Psi$  Mesonen bei HERA.

G. FLUCKE

Photoproduktion von D\* Mesonen bei HERA.

M. GÖTTLICH

Messung von Wirkungsquerschnitten für die Produktion von D\*-Mesonen über  $D^{*+} \rightarrow D^0\pi_s^+ \rightarrow K^0\pi^+\pi^-\pi_s^+$  bei H1.

L. JANAUSCHEK

Untersuchung elastisch produzierter J/ $\Psi$ -Mesonen in Photoproduktion bis zu höchsten  $\gamma$ -p-Schwerpunktsenergien am H1 Experiment bei HERA.

R. LEMRANI

Prompt Photon Production at HERA.

J. NAUMANN

Tests der dritten Stufe des H1 Fast Track Triggers.

A. PETRUKHIN

Measurement of the Inclusive DIS Cross Section at Low Q<sup>2</sup> with the H1 Detector.

S. SCHÄTZEL

Dijets in Diffractive Photoproduction at HERA.

S. SCHMIDT

Charm Jets in tief-inelastischer Streuung.

A. VARGAS TREVINO

Messung der Protonstrukturfunktion bei F<sub>2</sub> bei  $Q^2 \sim 1 \text{ GeV}^2$  mit dem H1 Detektor.

A. VEST

Suche nach dem Stop Quark bei HERA.

J. WAGNER

D\*-Muon Korrelationen in ep Streuung bei HERA.

M. WESSELS

Allgemeine Analyse seltener Prozesse bei HERA.

B. WESSLING

Messung des inklusiven bb-Wirkungsquerschnittes bei HERA.

C. WISSING

Eine Million Spurrekonstruktionen pro Sekunde mit dem H1 Fast-Track-Trigger.

V. BLOBEL

Statistische Methoden in der Datenanalyse.

10 Vorlesungen, XI. Heidelberger Graduiertenkurse, Ruprecht-Karls-Universität Heidelberg, Heidelberg/D (2003)

C. DIACONU

Beyond the Standard Model at HERA.

Particle Physics Phenomenology and Related Topics (PHEN2003), Wisconsin/USA (2003)

E. ELSEN

HERA and the Quark Structure of Hadrons and Nuclei.

Quarks in Hadrons and Nuclei II (QinHadNucII), Schloß Rothenfels, Oberwölz/A (2003)

L. FAVART

DVCS at HERA: Present and Future.

Workshop Compton Scattering from Low to High Momentum Transfer, ECT\* Trento/I

X. JANSSEN

Leading Proton Detectors at HERA; Past Experience and Future Plans.

Xth Blois Worksh. on Elastic and Diffractive Scattering (Blois2003), Hanasaari, Helsinki/Finnland (2003)

H. JUNG

HERA Results on Forward Jets and Particles at Low x and F<sub>2</sub> and F<sub>L</sub> Measurements at Low Q<sup>2</sup>.

Xth Blois Worksh. on Elastic and Diffractive Scattering (Blois2003), Hanasaari, Helsinki/Finnland (2003)

M. KAPISHIN

QCD Analysis of F<sub>2</sub><sup>D</sup> and Comparisons with Hadronic Final States at HERA and the Tevatron.

Xth Blois Worksh. on Elastic and Diffractive Scattering (Blois2003), Hanasaari, Helsinki/Finnland (2003)

C. NIEBUHR

HERA I Results.

Conf. in the Intersections of Particle and Nuclear Physics (CIPANP2003) (2003)

D. PITZL

Future HERA Physics.

Conf. in the Intersections of Particle and Nuclear Physics (CIPANP2003) (2003)

## Dissertationen

J. DINGFELDER

Search for Anomalous Production of Single Top Quarks with the H1 Experiment at HERA.

Univ. Heidelberg/D (2003)

## A. DUBAK

Measurement of the  $e^+p$  Neutral Current DIS Cross Section and the  $F_2$ ,  $F_L$ ,  $xF_S$  Structure Functions in the H1 Experiment at HERA.

MPP-2003-65

Techn. Univ. München/D (2003)

## C. DUPREL

Measurement of the Proton Structure Function  $F_2$  at low  $x$  and low  $Q^2$  with the H1 Detector at HERA.

PITHA 03/02

III. Physik. Inst. RWTH Aachen/D (2003)

DESY-THESIS-2003-027

## Y.H. FLEMING

The H1 First Level Fast Track Trigger.

Univ. of Birmingham/UK (2003)

DESY-THESIS-2003-045

## G. FRISING

Rare Phenomena and W Production in Electron-Proton Scattering at HERA.

I. Physik. Inst. RWTH Aachen/D (2003)

## J. HALLER

Search for Squark Production in R-Parity Violating Supersymmetry at HERA.

Univ. Heidelberg/D (2003)

DESY-THESIS-2003-035

## X. JANSSEN

Electroproduction diffractive de mésons  $\rho$  à HERA.

Université Libre de Bruxelles/B (2003)

DESY-THESIS-2003-004

## M. KARLSSON

A Study of Parton Dynamics from Deep Inelastic Scattering Events Containing a Jet in the Forward Direction.

Univ. Lund, Lund/S (2003)

## P.J. LAYCOCK

A Measurement of the Diffractive Reduced Cross-Section  $\sigma_r^{D(3)}$  at High  $Q^2$  with the H1 Detector at HERA.

Univ. of Liverpool/UK (2003)

## R. LEMRANI-ALAOUI

Prompt Photon Production at HERA.

Inst. f. Exp. Physik, Univ. Hamburg/D (2003)

DESY-THESIS-2003-010

## J. NAUMANN

Entwicklung und Test der dritten H1-Triggerstufe.

Univ. Dortmund/D (2003)

## M. PEEZ

Recherche de déviations au Modèle Standard dans les processus de grande énergie transverse sur le collisionneur électron - proton HERA.

Univ. Lyon/F (2003)

UCBL: 81-2003

CPPM-T-2003-04

DESY-THESIS-2003-023

## M. SCHNEIDER

Recherche d'évènements contenant un lepton isolé et de l'impulsion transverse manquante sur le collisionneur HERA avec le détecteur H1.

Univ. Strasbourg/F (2003)

ULP-4282

CPPM-T-2003-02

DESY-THESIS-2003-013

## D.M. SOUTH

Events with Isolated Leptons and Missing Transverse Momentum in  $e^+p$  Collisions at HERA.

Univ. of Manchester/UK (2003)

DESY-THESIS-2003-030

## C. WISSING

Entwicklung eines Simulationsprogramms und Implementierung schneller Spurfitalgorithmen fuer den neuen H1-Driftkammertrigger.

Univ. Dortmund/D (2003)

## Diplomarbeiten

### G.I. BRANDT

Suche nach  $\tau$ -Leptonen mit hohem Transversalimpuls aus Zerfällen einzelnen erzeugter top-Quarks bei HERA.

Univ. Heidelberg/D (2003)

### L. FINKE

Untersuchungen zum Erkennen von B-Mesonen im H1-Detektor.

I. Physik. Inst. RWTH Aachen/D (2003)

### M. GÖTTLICH

Messung von Wirkungsquerschnitten für die Produktion von  $D^{*\pm}$ -Mesonen über den Zerfall  $D^{*+} \rightarrow D^0 \pi_s^+ \rightarrow \bar{K}^0 \pi^+ \pi^- \pi_s^+$  beim H1 Experiment.

Inst. f. Exp. Physik, Univ. Hamburg/D (2003)

### J. KRETZSCHMAR

A Trigger with the BST-PAD Detector for the H1 Experiment.

Humboldt-Univ. zu Berlin, Berlin/D (2003)

### A. KROPIVNITSKAYA

Inclusive Production of Light Mesons at HERA.

Inst. f. Theoretical and Experimental Physics, ITEP, Moskau/RUS (2003)

### V. MICHELS

Diffraktive Photoproduktion von  $J/\psi$ -Mesonen im H1-Detektor bei hohen Energien,

Inst. f. Exp. Phys., Univ. Hamburg/D (2003)

### J. NOWAK

Data Distribution System for the DESY/H1 Experiment Analysis.

Univ. Krakow, Krakau/PL (2003)

### M. STOYE

Untersuchung von Endzuständen mit mehreren Elektronen in der Elektron-Proton-Streuung.

RWTH Aachen, Aachen/D (2003)

## ZEUS Experiment

### Veröffentlichungen

ZEUS KOLLABORATION, S. CHEKANOV et al.

Search for Single-Top Production in ep Collisions at HERA.  
Phys. Lett. B559 (2003) 153, hep-ex/030210 und DESY-03-012

Addendum: Search for Single-Top Production in ep Collisions at HERA (DESY-03-012)  
DESY-03-188 (2003)

Dijet angular distributions in photoproduction of charm at HERA.  
Phys. Lett. B565 (2003) 87, hep-ex/0302025 und DESY-03-015

A Search for Resonance Decays to Lepton+jet at HERA and Limits on Leptoquarks.  
Phys. Rev. D68 (2003) 052004, hep-ex/0304008 und DESY-03-041

Jet Production in Charged Current Deep Inelastic e<sup>+</sup>p Scattering at HERA.

Eur. Phys. J. C31 (2003) 149, hep-ex/0306018 und DESY-03-055

Measurement of Deeply Virtual Compton Scattering at HERA.  
Phys. Lett. B573 (2003) 46, hep-ex/0305028 und DESY-03-059

Measurement of High-Q<sup>2</sup> Charged Current Cross Sections in e<sup>+</sup>p Deep Inelastic Scattering at HERA.  
Eur. Phys. J. C32 (2003) 1, hep-ex/0307043 und DESY-03-093

Measurement of the Open-Charm Contribution to the Diffractive Proton Structure Function.

Nucl. Phys. B672 (2003) 3, hep-ex/0307068 und DESY-03-094

Observation of K<sub>s</sub><sup>0</sup>K<sub>s</sub><sup>0</sup> Resonances in Deep Inelastic Scattering at HERA.

Phys. Lett. B578 (2004) 33, hep-ex/0308006 und DESY-03-098

Measurement of D<sup>\*±</sup> Production in Deep Inelastic e<sup>±</sup>p Scattering at HERA.

Zur Veröffentl. in Phys. Rev. D, hep-ex/0308068 und DESY-03-115 (2003)

Bose-Einstein Correlations in one and two Dimensions in Deep Inelastic Scattering.

Zur Veröffentl. in Phys. Lett. B, hep-ex/0311030 und DESY-03-176 (2003)

Isolated Tau Leptons in Events with Large Missing Transverse Momentum at HERA.

Zur Veröffentl. in Phys. Lett. B, hep-ex/0311028 und DESY-03-182 (2003)

Search for QCD-Instanton Induced Events in Deep Inelastic ep Scattering at HERA.

Zur Veröffentl. in Eur. Phys. J. C, hep-ex/0312048 und DESY-03-201 (2003)

Beauty Photoproduction Measured Using Decays into Muons in Dijet Events in ep Collisions at  $\sqrt{s}=318$  GeV.

Zur Veröffentl. in Phys. Rev. D, hep-ex/0312057 und DESY-03-212 (2003)

High-Q<sup>2</sup> Neutral Current Cross Section in e<sup>+</sup>p Deep Inelastic Scattering at  $\sqrt{s}=318$  GeV.

Zur Veröffentl. in Phys. Rev. D, hep-ex/0401003 und DESY-03-214 (2003)

Search for Contact Interaction, Large Extra Dimensions and Finite Quark Radius in ep Collisions at HERA.

Zur Veröffentl. in Phys. Lett. B, hep-ex/0401009 und DESY-03-218 (2003)

Photoproduction of D<sup>\*±</sup> Mesons Associated with a Leading Neutron.

Zur Veröffentl. in Phys. Lett. B, hep-ex/0401017 und DESY-03-221 (2003)

T. ALEXOPOULUS et al.

Electron-Deuteron Scattering with HERA, a Letter of Intent for an Experimental Programme with the H1 Detector.  
DESY/03-194 (2003)

P.J. BUSSEY

Jet Physics at HERA.

Nucl. Phys. A721 (2003) 821c

Heavy Flavour Physics at HERA.

Nucl. Phys. A721 (2003) 825

T. CARLI, V. CHIOCHIA, K.H. KLIMEK

Definition and Calculation of Bottom Quark Cross Sections in Deep Inelastic Scattering at HERA and Determination of their Uncertainties.

JHEP 09 (2003) 070 und hep-ph/0305103

J. CHWASTOWSKI, J. FIGIEL, A. KOTARBA, K. OLKIEWICZ, L. SUSZYCKI

Aerogel Cherenkov Detectors for the Luminosity Measurement at HERA.

NIM A504 (2003) 222

A. COOPER-SARKAR, R. DEVENISH

The Rise and Fall of F<sub>2</sub> at low-x.

Acta Physica Polonica B34 (2003) 2911

K. LONG, K.P. Schuler

Polarisation Measurements on e<sup>±</sup> Beams.

Nucl. Instr. and Methods in Physics Research A494 (2002) 75

### Veröffentlichte Vorträge

Proc. of Lake Louise Winter Institute 2003, Lake Louise, Alberta/CDN (2003)

A. GEISER

Heavy Flavour Production in ep Interactions.

G. IACOBUCCI

Diffraction, a Comparison of Inclusive and Final State Measurements.

K. TOKUSHUKU

High p<sub>T</sub> Jet Production and  $\alpha_s$  Measurements in ep Collisions. Energy and Particle Flow Measurements at HERA.

### Proc. of HEP2003 Europhys. Conf., Aachen/D (2003)

R. BRUGNERA

Studies of Inelastic J/ $\Psi$  Production at HERA.

S. CHEKANOV

Charm Production in DIS.

J. FERRANDO

Searches for Single Top Production in ep Collisions.

M. HELBICH

Exclusive Vector Meson Production Studies with the ZEUS Detector.

T. KOOP

Studies of the Final State in ep Interactions with a Leading Baryon at ZEUS.

N. KRUMNACK

Multijet Production in DIS at ZEUS.

B. LEVTCHENKO

Strangeness Production at HERA.

L. LI

Dijet Production in ep Scattering.

M. MORITZ

Electron-Proton Cross Section Measurements at High Q<sup>2</sup>.

D.H. SAXON

Prompt Photon Production with Associated Jets at HERA.

P. SCHLEPER

Experimental Tests of QCD.

J. UKLEJA

ZEUS Studies of DVCS and the Photon Light-cone Wavefunction.

M. VAZQUEZ

Inclusive Jet Cross Section Measurements in ep Scattering.

G. WOLF

Inclusive Diffractive Deep Inelastic Scattering at ZEUS.

A. ZARNECKI

A Review of Searches for Leptoquarks and Lepton Number Violation.

### Zur Veröffentl. in Proc. of the 11th Int. Workshop on Deep Inelastic Scattering (DIS2003), St. Petersburg/RUS (2003)

H. ABRAMOWICZ

Deeply Virtual Compton Scattering.

G. BARBAGLI

Searches for Leptoquarks and Contact Interactions with ZEUS.

J.M. BUTTERWORTH

Studying QCD in the Final State of High Energy Collisions.  
hep-ex/0309063

A. CALDWELL

A New Round of Experiments for HERA.

V. CHIOCHIA

Beauty Quark Production in DIS.

J.E. COLE

Structure Function Measurements Using Radiative Events at HERA.

M. CORRADI

Beauty Photoproduction with ZEUS.

D. DANNHEIM

Search for Single-top Production with the ZEUS Detector at HERA.

R. DEVENISH

Experimental Aspects of Structure Functions, low-x and Hard Diffraction.

L. GLADILIN

Charm Dijet Distributions in  $\gamma p$  Collisions with ZEUS at HERA.

Charm Hadronisation in  $\gamma p$  Collisions with ZEUS at HERA.

R. HALL-WILTON

Inclusive Charm Production in Photoproduction and DIS at HERA.

I. KATKOV

Inelastic Photo- and Electroproduction of Charmonium.

N. KRUMNACK

Multijets in NC DIS and Jets in CC DIS at HERA.

S. LAMMERS

ZEUS Forward Jets in DIS.

D. LELAS

Isolated Tau Leptons in Events with large Missing Transverse Momentum at ZEUS.

H. LIM

Deep Inelastic Diffractive Scattering with the ZEUS Forward Plug Calorimeter.

K. OLKIEWICZ

Bose-Einstein Effects and Instanton Searches with ZEUS.

A. PARENTI

Multilepton Events at HERA.

M. SOARES

ZEUS Results on Leading Baryons and Diffractive Final States.

M. SUTTON

Rapidity Gaps and Energy Flows between Jets.

Scaling Violations and  $\alpha_s$ .

J. TANDLER

Results on Diffractive Vector Meson Production in ZEUS.

J. TERRON

Tests of Perturbative QCD with Hadronic Final States in Hadron-induced Reactions.

J. RAUTENBERG

ZEUS Results on High Q<sup>2</sup> DIS Cross-Sections and QCD Fits.  
hep-ex/0308076

A. ZIEGLER  
Strange Particle Production.

**Zur Veröffentl. in Proc. of Ringberg Workshop on New Trends  
in HERA Physics 2003, Ringberg/D (2003)**

A. CALDWELL  
Beyond HERA II.

F. CORRIVEAU  
Photo- and Electroproduction of Single Hadrons and Resonances.

E. GALLO  
Searches for Physics Beyond the Standard Model.

C. GLASMAN  
Jets in DIS.

D. KCIRA  
Structure Functions at Low  $Q^2$  (Transition from DIS to Photo-production).

S. PADHI  
Open Charm and Beauty Production.

U. STÖSSLEIN  
Effect of  $e^\pm$  Polarization on Final States at HERA.

N. VLASOV  
Diffractive jet and charm production.

R. YOSHIDA  
Plans of the ZEUS Experiment at HERA II.

**Proc. of 38th Rencontres de Moriond on QCD and High Energy  
Hadronic Interactions, Les Arcs/F (2003)**

A. BERTOLIN  
Charm in ep Collisions.

K.H. KLIMEK  
Beauty Production at HERA.

S. PAGANIS  
Confronting QCD with HERA Data.

K. VOSS  
Vector Meson Production at HERA.  
BONN-HE-2003-01 und hep-ex/0305052

**Proc. of the PHOTON2003 Int. Conf., Frascati/I (2003),  
Nucl. Phys. B (Proc. Suppl.) 126 (2004)**

M. BARBI  
Vector Mesons and Ks-Ks Final States.

P. BUSSEY  
Jet production and  $\alpha_s$  measurements at HERA.  
Virtual Photon Structure at HERA.

U. KARSHON  
Open Charm Production at HERA. hep-ex/0307007

A. MASTROBERARDINO  
Diffraction in ep Collisions.

**Proc. of the XXXIII Int. Symp. on Multiparticle Dynamics  
(ISMD03), Acta Phys. Polonica B35 (2004), Cracow/PL (2003)**

C. GWENLAN  
Review of Jet Results from HERA.

S.R. MAGILL  
Forward Jets and Particles at HERA.

M. RUSPA  
ZEUS Results on Inclusive Diffraction.

D. SZUBA  
Proton-Dissociative Vector Meson Production at HERA.

L. ZAWIEJSKI  
Bose-Einstein Correlation in DIS at HERA.

**Proc. of the Workshop on Small x and Diffraction 2003,  
Chicago/USA (2003)**

M. ARNEODO  
Diffraction: a Different Window on QCD and the Proton Structure

K. BORRAS  
Leading Baryon Production at HERA.

M. CAPUA  
Inclusive Diffraction.

E. TASSI  
 $F_2$  and Low  $Q^2$  and  $F_L$ .

M. BARBI  
ZEUS Results on  $K_s^0 - \bar{K}_s^0$  Resonances.  
Proc. of X. Int. Conference on Hadron Spectroscopy (Hadron'03),  
Aschaffenburg/D (2003)

L. BELLAGAMBA  
Searches for New Physics at HERA.  
Proc. of 17th Rencontres de Physics de la Vallee d'Aoste, La  
Thuile/I (2003)

I. BLOCH, E. BORSATO, R. CARLIN, F. DAL CORSO, D.  
DANNHEIM, B. KAHLE, K. KLIMEK, U. KÖTZ, G. KRAM-  
BERGER, A. LONGHIN, I. MELZER-PELLMANN, M. MILITE  
A Radiation Monitor for the ZEUS Detector at HERA.  
N36-23, Conf. Record IEEE Nucl. Sci. Symp., Portland, Oregon/USA (2003)

T. CARLI  
Dileptons and Isolated Leptons.  
Proc. of 38th Rencontres de Moriond, Electroweak Interactions  
and Unified Theories, Les Arcs/F (2003)

## I. GIALAS

Diffraction in ep Collisions.

Proc. of 8th Conf. on Intersections of Particle and Nucl. Physics (CIPANP2003), New York/USA (2003)

## T. HAAS

The ZEUS MVD.

Proc. of the Vertex 2003 Conf, Lake Windermere, Cumbria/CDN (2003), zur Veröffentl. in Nucl. Phys. B

U. FRICKE, C. GENTA, O. GUTSCHE, E. HEAPHY, S. HANLON, R. KACZOROWSKI, O. KIND, R. MANTEL, J. RAUTENBERG, K. WRONA

A ROOT Based Client Server Event Display for the ZEUS Experiment.

Proc. of the Conf. on Computing in High-Energy and Nuclear Physics (CHEP 03), La Jolla/USA (2003), eConf C0303241:MOLT002 und hep-ex/0305095

## B. LÖHR

Diffraction in DIS at HERA.

Proc. of New Trends in High-Energy Physics, Alushta, Crimea/UA (2003) in Ukrainian Journal of Physics, Vol.48 (2003)

## A. LONGHIN

Heavy Flavour Production in ep Collisions; QCD with Multiple Scales.

Proc. of 10th Int. QCD Conference (QCD03), Montpellier/F (2003)

## D. NOTZ

Betrieb eines supraleitenden Magneten.

Bericht der Frühjahrstagung der Studiengruppe f. elektr. Instrument., Forschungszentrum Jülich/D (2003) HMI-B592 Berlin, ISSN 0936-0891

## A. PELLEGRINO

Structure Functions at HERA.

Proc. of Int. Workshop on Quantum Chromodynamics Theory and Experiment (QCD@Work2003), Bari/I (2003)

## A. SAVIN

Jets in ep Collision and what they tell us about Parton Dynamics, Virtual Photon Structure and  $\alpha_s$ .

Proc. of 10th Int. QCD Conference (QCD03), Montpellier/F (2003)

## U. SCHNEEKLOTH

Recent ZEUS Results.

Proc. of XVIIth Int. Workshop on High Energy Physics and Quatum Field Theory, Samara-Saratov/RUS (2003)

## A. TAPPER

Probing Proton Structure in High-Energy ep Collisions.

Proc. of New Trends in High-Energy Physics, Alushta, Crimea/UA (2003) in Ukrainian Journal of Physics, Vol.48 (2003)

## G. WOLF

Diffraction studied with a hard scale at HERA.

Highlights in Subnuclear Physics, Erice/I (2003)

## K. WRONA

A Presentation Management System for Collaborative Meetings.

Proc. of the Conf. on Computing in High-Energy and Nuclear Physics (CHEP 03), La Jolla/USA (2003) und hep-ex/0305094

## R. YOSHIDA

Prospects for HERAII.

Proc. of 8th Conf. on Intersections of Particle and Nucl. Physics (CIPANP2003), New York/USA (2003)

## N. ZOTOV

Charm Quark Production at HERA with BFKL and CCFM Dynamics.

Proc. of the XVIIth Int. Workshop on High Energy Physics and Quantum Field Theory, Samara-Saratov/RUS (2003)

## Vorträge

### Int. Workshop on "Heavy Quark Physics at the Upgraded HERA Collider" (HQHERA2), Rehovot/IL (2003)

#### P. BUSSEY

Charm Production at the TEVATRON.

#### B. FOSTER

Introduction to Heavy Quark Physics at HERAII.

#### A. GEISER

Beauty Production.

ZEUS Detector Potential for Heavy Quarks at HERAII.

#### L. GLADILIN

Charm Hadronisation and D Mesons Spectroscopy at HERA.

#### D. HOCHMAN

Charm and Associated Jets.

#### U. KARSHON

Summary from Recent Talks on c and b Production in Gamma-Gamma Collisions.

#### I. KATKOV

Inelastic Onium Production at HERA.

#### A. LEVY

NLO Photon PDF Parametrization.

#### N. VLASOV

Charm Production with a Leading Baryon.

#### M. WING

Charm Production at ZEUS.

#### N. ZOTOV

Heavy Quark Production with  $k_T$  Factorization.

### DPG Frühjahrstagung Teilchenphysik, Aachen/D (2003)

#### I. BLOCH, A. GEISER

Messung des Wirkungsquerschnitts für Beauty-Produktion mit  $D^{*+}$  Myon-Ereignissen bei HERA.

#### D. DANNHEIM

Suche nach Ereignissen mit einem isolierten Elektron oder Myon und fehlendem Transversalimpuls mit dem ZEUS Detektor bei HERA.

O. GUTSCHE  
Messung des b-Quark Wirkungsquerschnitts in Photoproduktion im Muon-Jet-Kanal bei HERA.

S. HILLERT  
Suche nach QCD-Instanton-induzierten Ereignissen mit dem ZEUS-Detektor bei HERA.

B. KAHLE  
Inbetriebnahme des Mikro-Vertex-Detektors bei ZEUS.

A.E. NUNCIO QUIROZ, N.DRAGON  
Conformal Field Theory in the Manifold  $R \times S^3$ .

A. ZIEGLER  
Messung der inklusiven Produktion von s-Baryonen in der tiefinelastischen Streuung bei HERA.

#### **Workshop on Low-x Physics (Lowx03), Nafplio, GR (2003)**

A. BRUNI  
DVCS.

A. COOPER-SARKAR  
ZEUS Results on  $r m F_2$  and  $F_L$ .

A. GARFAGNINI  
Leading Baryons.

V. MONACO  
Inclusive Diffraction.

A. RAVAL  
Strange-particle Production.

M. SUTTON.  
Jets.

V. ADLER  
Simulation Studies on VXD Design Parameters in  $e^+ e^- \rightarrow t\bar{t}$ .  
4th ECFA/DESY Workshop, Amsterdam/NL (2003)

K. BORRAS, C. NIEBUHR  
Detektoren für Experimente der Teilchenphysik.  
Vorlesung an der Univ. Hamburg/D (2003)

A. COOPER-SARKAR  
The Structure of the Proton.  
Invited talk to the Royal Society of Edinburgh/GB, (2003)

T. HAAS  
An Overview of HERA I Results and Perspectives of HERA II.  
Lecture Series on Physics Prospects of HERA II.  
Univ. Catholique de Louvain/B (2003)

B. LÖHR  
Selected Results on Diffraction at HERA.  
Univ. Cosenza/I (2003)

R. MANKEL  
From Bytes to Physics: Computing in the HERA-II Era.  
Seminar, Humboldt-Univ. Berlin/D (2003)

Update on H1 and ZEUS Planning for Run II.  
HTASC Meeting, CERN, Genf/CH(2003)

A.E. NUNCIO QUIROZ  
Beauty Production and Next-to-Leading Order QCD Effects at HERA.  
2nd Latin American School of High Energy Physics, San Miguel Regla/MEX (2003)

U. STÖSSLEIN  
Highlights of DIS03 Conference - Part III.  
DESY Seminar, Hamburg/D (2003)

Review of Vector Mesons and DVCS.  
Xth Blois Workshop on Elastic and Diffractive Scattering, Helsinki/FIN (2003)

B. STRAUB  
HERA Anomalies.  
Aspen Winter 2003 Conf. on Particle Physics, Aspen/USA (2003)

M. SUTTON  
The ZEUS Global Tracking Trigger Barrel Algorithm and Performance.  
IEEE Realtime 2003 Conf., Montreal/CDN (2003)

A. TAPPER  
Constraining Particle Density Functions Using HERA Data.  
DESY Forum on  $F_2$  and QCD fits at HERA, DESY, Hamburg/D (2003)

J. WHITMORE  
DVCS and Exclusive Processes.  
4th Circum-Pan-Pacific Symp. on High Energy Spin Physics (SPIN2003), Seattle/USA (2003)

M. WING  
Heavy Flavour Production with Leptons and Hadrons.  
XXIII Physics in Collision Conf., DESY, Zeuthen/D (2003)

Recent Results and Progress from ZEUS.  
Presentation to Physics Research Council, DESY, Hamburg/D(2003)

G. WOLF  
Review of Inclusive Diffraction: New Results from HERA.  
Xth Blois Workshop on Elastic and Diffractive Scattering, Helsinki/FIN (2003)

Diffraction Studied with a Hard Scale at HERA.  
VIIth International School, Gomel/BY (2003)

Early Bubble Chamber Experiments.  
Festkolloquium f. Norbert Schmitz, Max-Planck Inst. f. Physik, München/D (2003)

Y. YAMAZAKI  
Diffraction and Vector Meson Production.  
XXI Int. Symp. on Lepton and Photon Interactions at High Energies (LP03), Batavia/USA (2003)

## Habilitationen

L. ZAWIEJSKI

The Hadronic Final States in Deep Inelastic Scattering at HERA Collider: Theory and Experiment.

Institute of Nuclear Physics, Cracow/PL (2003)  
Report INP 1909/PH

A. LONGHIN

Measurement of Beauty Production at HERA with a  $D^{*+}$  Muon Tag.

Univ. Padua/I (2003)

A.H. OCHS

Dijet Photoproduction at High Transverse Energies with the ZEUS Detector at HERA.

McGill Univ., Montreal/CDN  
DESY-THESIS-2003-005

S. PADHI

Charm Jets at HERA.

McGill Univ., Montreal/CDN (2003)

A. PARENTI

Search for Multi-Lepton Events with the ZEUS Detector at HERA and VCMVD: an Algorithm for MVD Tracking at TLT.

Univ. Padua/I (2003)

DESY-THESIS-2003-038

S. ROBINS

Charm Production in Deep Inelastic Scattering at HERA.  
Bristol Univ./GB (2003)

J. SZUBA

Photoproduction of  $J/\Psi$  Mesons at High  $W$  as Observed by ZEUS.  
AGH-Univ. of Science and Technology, Cracow/PL (2003)

J. TANDLER

Exclusive Production of  $J/\Psi$  Mesons with the ZEUS Detector.  
Univ. Bonn/D (2003)

BONN-IR-2003-06

M. TURCATO

Measurement of Beauty Photoproduction at HERA.  
Univ. Padua/I (2003)

DESY-THESIS-2003-039

M. VAZQUEZ

Jet Production in Charged Current Deep Inelastic Scattering at HERA.  
Univ. of Madrid/E (2003)

DESY-THESIS-2003-006

A. ZIEGLER

Investigation of the Scintillating Fiber SCSF-38M for the 6m-Tagger and Measurement of Inclusive  $K_s^0$  Meson and  $\Lambda$  Baryon Production in Neutral Current Deep Inelastic Scattering at HERA.

Univ. Hamburg/D (2003)

DESY-THESIS-2003-012

## Diplomarbeiten

T. GOSAU

Online-Messungen von Strahlenschäden an szintillierenden Fasern.  
Univ. Hamburg/D (2003)

K. HAJDER

Performance of Proportional Gas Counter under High Gas Gain,  
Temporary Aging Effect.  
AGH-Univ. of Science and Technology, Cracow/PL (2003)

- K. HOLUBYEV  
Study of Di-Elektron Production in  $e^\pm p$  Interactions at HERA.  
Univ. Hamburg/D (2003)
- R. HORNUNG  
Reduktion von Strahlenschäden in Plastiksintillatoren durch Beleuchtung während der Bestrahlung.  
Univ. Hamburg/D (2003)
- J. LAINESSE  
Measurement of  $\Xi$  – and  $\Sigma(1385)$  Baryon Production in DIS with the ZEUS Detector at HERA.  
McGill Univ./CDN (2003)
- D. KABAT  
Influence of the Gas Proportional Counter Geometry on the Aging Effect.  
AGH-Univ. of Science and Technology, Cracow/PL (2003)
- A. MUSZYNSKA  
Study of the Deeply Virtual Compton Scattering in the ZEUS Experiment.  
Warsaw Univ./PL (2003)
- A. SILVESTRIN  
Ricerca del Decadimento  $D^0 \rightarrow \mu^+ \mu^-$  con il Rivelatore ZEUS ad HERA.  
Univ. Padua/I (2003)
- S. SZTURÓ  
Radiation Measurements near Luminosity Monitor using the Silicon Diodes PIN.  
AGH-Univ. of Science and Technology, Cracow/PL (2003)
- N. VLASOV  
Measurement of  $D^*$  Production in Diffractive Deep Inelastic  $ep$  Scattering on HERA Collider.  
Moscow State Univ./RUS (2003)
- Double-spin Asymmetries in the Cross Section of Diffractive  $\rho^0$  and  $\phi$  Production at Intermediate Energies.  
Eur. Phys. J. C 29, 171 - 179 (2003) and DESY-02-230, hep-ex/0302012
- $Q^2$  Dependence of Nuclear Transparency for (In)coherent  $\rho^0$  production.  
Phys. Rev. Lett. 90 (2003) 052501 and DESY-02-152, hep-ex/0209072
- The  $Q^2$  Dependence of the Generalized Gerasimov-Drell-Hearn Sum Rule for the Proton and the Neutron.  
EPJ C 26 (2003) 527-538 and DESY-02-172, hep-ex/0210047
- Evidence for Quark-Hadron Duality in the Proton Spin Asymmetry A1  
Phys. Rev. Lett. 90 (2003) 092002 and DESY-02-137, hep-ex/0209018
- Erratum to K. Ackerstaff et al, Phys. Lett. B 475 (2000) 386  
Phys. Lett. B 567 (2003) 339 and DESY-02-092, hep-ex/0210067
- A. ACCARDI, V. MUCCIFORA, H.J. PIRNER  
Hadron production in deep inelastic lepton-nucleus scattering.  
Nucl. Phys. A 720 (2003) 131
- C. BAUMGARTEN et al.  
The storage cell of the polarized H/D internal gas target of the HERMES experiment at HERA.  
Nucl. Instr. Meth. A496 (2003) 277
- C. BAUMGARTEN et al.  
Measurements of atomic recombination in the HERMES polarized hydrogen and deuterium storage cell target.  
Nucl. Instr. Meth. A496 (2003) 263
- C. BAUMGARTEN et al.  
A gas analyzer for the internal polarized target of the HERMES experiment.  
Nucl. Instr. Meth. A508 (2003) 268
- M.G. VAN BEUZEKOM et al.  
The HERMES silicon project: The radiation protection system.  
Nucl. Instr. Meth. A505 (2003) 44
- M.G. VAN BEUZEKOM, G. VAN DER STEENHOVEN, J.J.M. STEIJGER  
Recoil detection at future QCD facilities.  
Nucl. Instr. Meth. A513 (2003) 79
- L. GAMBERG, G.R. GOLDSTEIN, K.A. OGANESEYYAN  
A mechanism for the T-odd pion fragmentation function.  
Phys. Rev. D68 (2003) 051501
- L. GAMBERG, G.R. GOLDSTEIN, K.A. OGANESEYYAN  
Novel Transversity Properties in Semi-Inclusive Deep Inelastic Scattering  
Phys. Rev. D67 (2003) 071504
- E. KINNEY, E. STEFFENS, D. RYCKBOSCH  
HERMES at HERA: Quark-Gluon Spin Structure of the Nucleon.  
Nuclear Physics News Vol. 13/4 (2003) 23

## HERMES Experiment

### Veröffentlichungen

HERMES COLLABORATION, A. AIRAPETIAN et al.

Quark Fragmentation to  $\pi^\pm$ ,  $\pi^0$ ,  $K^\pm$ ,  $p$  and  $\bar{p}$  in the Nuclear Environment.  
Phys. Lett. B577 (2003) 37 and DESY-03-088, hep-ex/0307023

Measurement of Single-spin Azimuthal Asymmetries in Semi-inclusive Electroproduction of Pions and Kaons on a Longitudinally Polarized Deuterium Target.  
Phys. Lett. B562 (2003) 182 and DESY-02-226, hep-ex/0212039

- A. NASS et al.  
The Hermes polarized atomic beam source.  
Nucl. Instr. Meth. A505 (2003) 633
- E. STEFFENS, W. HAEBERLI  
Polarized Gas Targets.  
Rep. Prog. Phys. 66 (2003) 1887-1935
- H. TANAKA et al.  
A gain monitoring system with Nd:YAG Laser for the Photomultipliers of the HERMES experiment.  
Nucl. Instrum. and Meth. A 515 (2003) 725

## Veröffentlichte Vorträge

### Proc. of the NEW Trends in HERA Physics, Ringberg/D (2003)

- E.C. ASCHENAUER  
Plans of the HERMES experiment at HERA II.
- M. TYTGAT  
New results from HERMES.

### Proc. of the International Europhysics Conference on High Energy Physics, Aachen/D (2003)

- E. AVETISYAN  
Single Spin Asymmetry at HERMES.
- P. LIEBING  
Polarized Quark Distributions extracted from inclusive and semi-inclusive deep inelastic scattering at HERMES.
- R. SHANIDZE  
Exclusive Vector Meson Production and DVCS at HERMES.

### Proc. of the Advanced Studies Institute: Symmetries and Spin, Prague/CZ (2003)

- I. GREGOR  
HERMES Run II.
- K. RITH  
Results from HERMES.

### Proc. of the Nuclear and Particle Physics by CEBAF at JLAB, Dubrovnik/HR (2003)

- S. BELOSTOTSKY  
Hyperon production at HERMES.
- A. BORISSOV  
Hard Exclusive Electroproduction of Resonant and Non-resonant Pion Pairs at HERMES.
- K. HAFIDI  
 $Q^2$  dependence of transparency.

- W. LORENZON  
Flavor Separated Quark Polarizations at HERMES.
- V. MUCCIFORA  
Hadron attenuation.
- B. ZIHLMANN  
Nuclear effects at HERMES.

### Proc. of the 8th Conference On The Intersections Of Particles And Nuclear Physics, New York/USA (2003)

- D. HASCH  
SSA in Exclusive Meson Production.
- E. KINNEY  
Hadron attenuation.
- W. LORENZON  
Nuclear Transparency in Exclusive  $\rho^0$  production at HERMES.
- N.C.R. MAKINS  
Spin Transfer in Hyperon Production.
- R. SEIDL  
Single Spin Azimuthal Asymmetries and Transversity.
- J. VOLMER  
DVCS on nucleon and nuclei.
- J. WENDLAND  
Polarized Parton Distributions Measured at the HERMES Experiment.

### Proc. of the ICTP 4th International Conference On Perspective In Hadronic Physics, Trieste/I (2003)

- W.-D. NOWAK  
Future of Electron Scattering in Europe.
- K. RITH  
Selected recent HERMES results.

### Proc. of the 11th International Workshop on Deep Inelastic Scattering (DIS 2003), St. Petersburg/RUS (2003)

- N. AKOPOV  
Measurement of GDH integral on proton and neutron.
- M. AMARIAN  
Measurement of DVCS on nucleon and nuclei.
- M. ANSELMINO and G. VAN DER STEENHOVEN  
Summary talk of the working group on spin physics.
- M. BECKMANN  
Polarized quark distributions.
- L. DE NARDO  
Measurement of the structure function at HERMES and NLO QCD fits to  $g_1$  world data.

- G. EBAKIAN  
Measurement of hadron attenuation at HERMES.
- U. ELSCHENBROICH  
Measurement of SSA in electroproduction of  $\rho$  mesons.
- E. GARUTTI  
Electroproduction of Scalar Mesons at HERMES.
- O. GREBENYUK  
 $\Lambda$  production at HERMES.
- A. HILLENBAND  
Tuning of the LUND Model for Fragmentation Functions and Purities.
- C. SCHILL  
Longitudinal single-spin asymmetries for pions and kaons obtained at the HERMES experiment.
- G. SCHNELL  
Measurement of Transversity at the HERMES Experiment.
- M. STANCARI  
First measurement of tensor-polarized structure function  $b_1^d$ .
- H. BOETTCHER  
NLO QCD Analysis of the Spin Structure Function  $g_1$ .  
Proc. of the 10th International QCD Conference (QCD03), Montpellier/F (2003)
- P.B. VAN DER NAT  
Attenuation of hadrons in nuclei.  
Proc. of the XXXIII International Symposium on Multiparticle Dynamics, Krakow/PL (2003)
- M. REINECKE  
A Silicon Strip Detector for Momentum Measurement and Tracking at HERMES.  
Proc. of the IEEE Nuclear Science Symposium (NSS), Portland/USA (2003)
- A. ROSTOMYAN  
Single Spin Asymmetry and Transversity.  
Proc. of the Physics in Collision, Zeuthen/D (2003)
- T.A. SHIBATA  
Measurements with polarized hadrons.  
Proc. of the Lepton/Photon 2003, Illinois/USA (2003)
- Vorträge**
- Division of Nuclear Physics of the APS, Tucson/USA (2003)**
- A. ANDRUS  
Transverse Polarization of  $\Lambda$  and  $\bar{\Lambda}$  Produced Inclusively at HERMES.
- L.A. LINDEN-LEVY  
Measurement of Polarized Quark Distributions in the Nucleon at HERMES.
- A. BRUELL AND D. GASKELL  
Measurements of Exclusive Processes at HERMES.
- E. KINNEY  
Measurements of Quark Hadronization in a Nuclear Environment.
- K. GARROW  
Observation of the  $f_0(980)$  scalar meson in deep-inelastic scattering.
- EURESCO Conference On Hadron Structure Viewed With Electromagnetic Probes, Santorini/GR (2003)**
- N. BIANCHI  
The nucleon transversity distribution - Experimental Workshop Summary.
- P. DI NEZZA  
Nuclear medium effect in DIS hadronization processes.
- A. HAYRAPETYAN  
Evidence for a narrow  $S=+1$   $Q+$  baryon state in quasi-real photoproduction at HERMES.
- R. KAISER  
Recoil detectors at HERMES-2 and COMPASS-2.
- B. MAIHEU  
The fragmentation process in the extraction of flavour separated quark helicity distributions at HERMES.
- C. RIEDL  
The measurement of the tensor structure function  $b_1^d$  of the deuteron with the HERMES experiment.
- G. VAN DER STEENHOVEN  
The quark-gluon structure of hadrons – Experimental.
- A. VAN DEN BROUCKE  
Recoil and DVCS.
- Pre-Workshops for Santorini, Athens/GR (2003)**
- C. HADJIDAKIS  
Exclusive SSA with a transverse target at HERMES.
- D. HASCH  
SSA with a longitudinal target at HERMES.
- N.C.R. MAKINS  
Measurement of transversity at HERMES.
- 10th International workshop on Polarised Sources and Targets, Novosibirsk/RU (2003)**
- P. LENISA  
The transversely polarized hydrogen target of the HERMES experiment.
- E. STEFFENS  
Concluding remarks.

### 10th International Workshop On High-Energy Spin Physics (SPIN 03), Dubna/RU (2003)

A. NAGAITSEV

The spin structure function  $b_1^d$  measured by HERMES.

S. KOROTKOV

Measurement of Transversity at HERMES.

H. MARUKYAN

Measurement of DVCS at HERMES.

D. REGGIANI

The HERMES transversely polarized hydrogen target.

### Symposium on Quarks in Hadrons and Nuclei II, Rothenfels Castle/AUS (2003)

P. LENISA

The transversely polarized hydrogen target of the HERMES experiment.

V. MEXNER

Contribution of gluons on the nucleon spin.

### Arbeitstreffen 'Hadronen und Kerne', Meissen/D (2003)

M. BECKMANN

HERMES overview.

M. HARTIG

Exclusive reactions and the HERMES recoil detector.

### The 4th Circum-Pan-Pacific Symposium On High Energy Spin Physics (PACSPIN 03), Seattle/USA (2003)

R. KAISER

Exclusive Measurements at HERMES.

P. LIEBING

Hermes, Pythia, and the Gluon Polarization.

G. SCHNELL

Transversity Measurements at HERMES.

T. SHIBATA

Experimental Results on Polarized Quark Distributions from HERMES.

W.D. NOWAK

Recent results from HERMES.

### International Conference on the Structure and Interactions of the Photon Including the 15th International Workshop on Photon-Photon Collisions, Frascati/I (2003)

A. AIRAPETIAN

Vector Meson Production at HERMES.

M. CONTALBRIGO

First measurement of the tensor-polarized structure function  $b_1^d$ .

D. HASCH

Transversity measurements at HERMES.

### Compton Scattering from Low to High Momentum Transfer, Trento/I (2003)

A. FANTONI

Generalized GDH experiments at HERMES.

B. KRAUSS

The HERMES recoil detector and future physics plans.

B. SEITZ

DVCS at HERMES.

B. SEITZ

Single spin asymmetries in semi-inclusive DIS at HERMES.

### DPG Frühjahrstagung Hadronen und Kerne, Tübingen/D (2003)

E.C. ASCHENAUER

Neueste Ergebnisse von HERMES.

M. EHRENFRIED

Messung der Spinstrukturfunktion  $g_1$ .

U. ELSCHENBROICH

Einzelspinsymmetry mit polarisiertem Leptonstrahl für Pion Produktion im HERMES Experiment.

M. HOEK

Design und Bau eines Detektors aus szintillierenden Fasern für das HERMES Recoil Projekt.

B. KRAUSS

Tiefvirtuelle Compton Streuung bei HERMES.

N. PICKERT

Testmessungen an einem Siliziumzähler für den HERMES Recoil Detector.

M. RAITHEL

Die Messung der transversalen (anti)Lambda Polarisation bei Photon-Nukleon-Streuung mit dem HERMES Experiment.

C. RIEDL

Die Messung der Tensor Strukturfunktion  $b_1^d$  des Deuterons mit dem HERMES Experimen

R. SEIDL

Single Spin Azimuthal Asymmetrien in semi-inklusiver Elektroproduktion von Pionen und Kaonen.

P. TAIT

The HERMES transversely polarised hydrogen target.

**DPG Frühjahrstagung Teilchenphysik, Aachen/D (2003)**

A. BRUELL

Die Spin Struktur des Nukleons.

M. KOPYTIN

Bau eines Silizium Detektors für das HERMES Recoil Projekt.

L. RUBACEK

Design und Bau eines Detektors aus szintillierenden Fasern für das HERMES Recoil Projekt.

Z. AKOPOV

Electroproduction of pseudoscalar mesons on nuclei at HERMES. X. International Conference on Hadron Spectroscopy, Aschaffenburg/D (2003)

E.C. ASCHENAUER

Spin Physics Lecture.

CTEQ Summer School on QCD Analysis and Phenomenology, Sant Feliu de Guixols/E (2003)

N. BIANCHI

The spin of the nucleon at HERMES.

41st International Winter Meeting on Nuclear Physics, Bormio/I (2003)

H. BOETTCHER

G1 and NLO-QCD.

10th International QCD Conference (QCD 03), Montpellier/F (2003)

M. CONTALBRIGO

First measurement of tensor-polarized structure function  $b_1^d$ .

XVII Rencontres de Physique de la Vallee d'Aoste , La Thuile/I (2003)

W. LORENZON

The HERMES Pentaquark search.

Penta-Quark 2003 Workshop, Newport News/USA (2003)

J. LU

Measurement of azimuthal asymmetries associated with DVCS on a deuterium target.

Fifth Annual Meeting of the APS Northwest Section, Portland/USA (2003)

V. MUCCIFORA

Hadronization in Deep Inelastic Scattering at HERMES.

SQM 2003 - 7th International Conference On Strangeness In Quark Matter, Atlantic Beach/USA (2003)

D. RYCKBOSCH

Recent Spin Physics at Hera.

2nd International Workshop On Quantum Chromodynamics: Theory And Experiment, Conversano/I (2003)

W. SOMMER

Particle Identification at HERMES.

Giessen-Kopenhagen graduate school on Complex Systems of Hadrons and Nuclei, Trento/I (2003)

B. ZIHLMANN

DVCS + Recoil.

Probing nucleons and nuclei via the (e,e'p) reaction, Grenoble/F (2003)

**Dissertationen**

R. FABBRI

Hard Exclusive Electroproduction of Two Pions at HERMES. Univ. Ferrara/I (2003)

E. GARUTTI

Nuclear Effects in Semi-Inclusive Deep Inelastic Scattering off  $^{84}\text{Kr}$  and other nuclei.

Univ. Amsterdam/NL (2003)

D. HEESBEEN

Quasi-real photo-production of hyperons on polarized  $^{1,2}\text{H}$  targets. Univ. Groningen/NL (2003)

B. HOMMEZ

A Study of Fragmentation Processes in the HERMES experiment using a Ring Imaging Cerenkov Detector. Univ. Gent/B (2003)

D. REGGIANI

Precision Polarization Measurement of the HERMES H/D Gas Target.

Univ. Ferrara/I (2003)

J. WENDLAND

Polarized Parton Distributions Measured at the HERMES Experiment.

Simon Fraser Univ. Vancouver/CAN (2003)

DESY-THESIS-2003-032

**Diplomarbeiten**

H.C. CHIANG

Lambda Hyperon Production Mechanisms and Longitudinal Spin transfer at HERMES.

Univ. of Illinois at Urbana-Champaign/USA (2002)

N. PICKERT

Vorbereitende Untersuchungen an Silizium Streifenzählern für den HERMES Rueckstoss-Detektor.

Univ. Erlangen-Nürnberg/D (2003)

G. YBELES SMIT

Monte Carlo studies of  $D^*$ - production and semi-leptonic decay. Univ. Amsterdam/NL (2003)

W. SOMMER

Identifikation von Pionen und Protonen mit einem Detektor aus szintillierenden Fasern.

Univ. Giessen/D (2003)

C. VOGEL

Auslese eines Silizium-Testdetektors für das HERMES Experiment.

Univ. Erlangen-Nürnberg/D (2003)

Z. YE

Target Calibrations in HERMES 2002 Running and Study of the Influence of the New Correction Coil to the HERMES Acceptance.

Univ. of Hefei/ CHINA (2003)

V. AMARAL, S. HELMER, G. MOERKOTTE

A Visual Query Language for HEP Analysis.

Proc. of the IEEE Conf. NSS, Portland/USA (2003)

V. AMARAL, S. HELMER, G. MOERKOTTE

A Domain Specific Visual Query Language for the High Energy Physics Environment. Proc. of the IIIrd OOPSLA Workshop on Domain-Specific Modeling (DSM), Anaheim/USA (2003)

P. CONDE

$b\bar{b}$  Production Cross Section in 920 GeV pN Collisions.

Proc. of the XXXVIIth Rencontres de Moriond – QCD and Hadronic Interactions at High Energy (2003) und hep-ex/0305020

U. HUSEMANN et al.

A RICH Multiplicity Veto for the HERA-B Experiment.

IEEE Trans. Nucl. Sci. 50 (2003) 1059 und Preprint SI-2003-1 und hep-ex/0304033

V. RYBNIKOV, V. EGORYTCHEV, J. M. HERNANDEZ, F. SANCHEZ, A. ZHELEZOV

The Run Control System and Recovery Tools for the HERA-B Experiment.

Proc. of the XIIIth IEEE NPSS Real Time Conf. 2003, Montreal/CAN (2003)

V. RYBNIKOV, V. EGORYTCHEV, J. M. HERNANDEZ, F. SANCHEZ, S. ESSENOV, A. ZHELEZOV

HERA-B Data Acquisition System (Architecture).

Proc. of the XIIIth IEEE NPSS Real Time Conf. 2003, Montreal/CAN (2003)

## HERA-B Experiment

### Veröffentlichungen

HERA-B KOLLABORATION, I. ABT et al.

Inclusive  $V^0$  Production Cross Sections from 920 GeV Fixed-Target Proton-Nucleus Collisions.

Eur. Phys. J. C29 (2003) 181 und DESY 02-213, Hep-ex/0212040

$J/\psi$  Production via  $\chi_c$  Decays in 920 GeV pA Interactions.

Phys. Lett. B561 (2003) 61 und DESY 02-187, Hep-ex/0211033

I. ABT, T. PERSCHKE, S. SCHALLER, S. MASCIOCCHI, C. BAUER, M. BRÄUER, W. HOFMANN, T. JAGLA, K.T. KNÖPFLE, M.A. PLEIER, K. REEVES, M. SCHMELLING, B. SCHWINGENHEUER, F. SCIACCA

Update on the Performance of the HERA-B Vertex Detector System.

Nucl. Instrum. Methods A511 (2003) 24

C. BAUER, M. BRÄUER, T. GLEBE, W. HOFMANN, T. JAGLA, K.T. KNÖPFLE, M.A. PLEIER, V. PUGATCH, M. SCHMELLING, B. SCHWINGENHEUER, F. SCIACCA, U. TRUNK,

M. ZAVERTIAEV, I. ABT, M. DRESSEL, I. KISEL, S. MASCIOCCHI, T. PERSCHKE, M. SANG, S. SCHALLER

Performance of the HERA-B Vertex Detector System.

Nucl. Instrum. Methods A501 (2003) 39

V. RYBNIKOV, V. EGORYTCHEV, J.M. HERNANDEZ, F. SANCHEZ, S. ESSENOV, A. ZHELEZOV

Architecture of the HERA-B Data Acquisition System.

IEEE TNS Vol. 50, N4 (2003) 859

B. SCHMIDT

Recommendations for Building and Testing the next Generation of Gaseous Detectors.

Nucl. Instrum. Methods A515 (2003) 364

J. SPENGLER

Summary of Session 2: Experience with large Systems.

Nucl. Instrum. Methods A515 (2003) 70

### Veröffentlichte Vorträge

V. AMARAL, S. HELMER, G. MOERKOTTE

Designing and Implementing a New Abstraction Layer to Optimize the HEP Analysis Process.

Proc. of the IEEE Conf. NSS, Portland/USA (2003)

### Vorträge

M. FUNCKE

Strahlphysikalische Aspekte des Targetbetriebs bei HERA-B.  
DPG-Tagung, Aachen/D (2003)

U. HUSEMANN

Charmonium A-Dependence at HERA-B.  
IIInd Int. Workshop on Heavy Quarkonium,  
Fermi Nat. Accelerator Lab./USA (2003)

U. HUSEMANN

Charmonium-Physik mit dem HERA-B-Detektor.  
DPG-Tagung, Aachen/D (2003)

U. HUSEMANN

The Suppressed Charm of HERA-B.  
Forschungsseminar Physik, Univ. Siegen/D (2003)

C. KRAUSS

Charmonium Production in pA Collisions at HERA-B.  
VIIth CMS – Heavy Ion Meeting, Int. Workshop on Physics and  
Techn. for the LHC and RHIC Exp., Delphi/GR (2003)

J.G. SHIU

Search for  $D^0 \rightarrow \mu^+ \mu^-$  Flavor-Changing Neutral Current Decay  
with the HERA-B Detector in 920 GeV/c Proton-Nucleus Collisions.

Univ. of Maryland/USA (2003)

R. WOLF  
 Multiplizitätsmessungen bei HERA-B.  
 DPG-Tagung, Aachen/D (2003)

G. DEYANOVA  
 Automating the Calibration and Alignment Revision Process in  
 Hera-B.  
 Univ. Sofia/E (2003)

## Dissertationen

J. BASTOS  
 Measurement of the Luminosity and of the Branching Ratio for  
 the Muonic Decay of the  $\omega(782)$  Meson in Fixed-Target Proton-  
 Nucleus Collisions.  
 Univ. of Coimbra/P (2003)

M. FUNCKE  
 Strahlphysikalische Aspekte des Targetbetriebs bei Hera-B.  
 Univ. Dortmund/D (2003)  
 DESY-THESIS-2003-049

A. GORIŠEK  
 Cross Section Measurement of  $D^0$  and  $D^{*+}$  Meson Production in  
 Inelastic Collisions of 920 GeV Protons with Nuclei.  
 Univ. of Ljubljana/SL (2003)

S. GRADL  
 Qualitätssicherung beim Bau des Inneren Spurkammersystems von  
 HERA-B und Studien zu einem Open-Charm-Trigger.  
 Univ. Heidelberg/D (2003)

T. JAGLA  
 Die Rohdatenüberwachung des Siliziumvertexdetektors von  
 HERA-B und die A-Abhängigkeit des  $\phi$ -Produktionsquerschnitts  
 in Proton-Kern-Kollisionen bei 920 GeV Protonenstrahlenergie.  
 MPI-K Heidelberg/D (2003)

M. MEVIUS  
 Beauty at Hera-B; Measurement of the  $b\bar{b}$  Cross Section in pN  
 Collisions at  $\sqrt{(s)}=41.6$  GeV.  
 NIKHEF/Utrecht Univ./NL (2003)

M. NÖRENBERG  
 Tracking Efficiency of the HERA-B First Level Trigger in the  
 Single Lepton Mode.  
 Univ. Hamburg/D (2003)

D. PERALTA  
 Measurement of the  $b\bar{b}$  Production Cross-section in p(920GeV/c)-  
 Nucleon Collisions using the HERA-B 2000 Data.  
 Univ. of Barcelona/E (2003)

J.-G. SHIU  
 Search for  $D^0 \rightarrow \mu^+\mu^-$  Flavor-Changing Neutral Current Decay  
 with the HERA-B Detector in 920 GeV/c Proton-Nucleus Collisions.  
 Wayne State Univ./USA (2003)

R. WOLF  
 Studien zur Bestimmung der Zentralität von Proton-Kern-Stößen  
 am HERA-B Detektor.  
 Univ. Heidelberg/D (2003)

## Forschung an Lepton Collidern

### Veröffentlichungen

OPAL COLLABORATION, G. ABBIENDI et al.

Search for chargino and neutralino production at  $s^{**}(1/2) = 192$ -GeV – 209-GeV at LEP.  
 hep-ex/0401026

W boson polarisation at LEP2.  
 hep-ex/0312047

Measurement of the partial widths of the Z into up- and down-type  
 quarks.  
 hep-ex/0312043

Search for R-parity violating decays of scalar fermions at LEP.  
 hep-ex/0310054

Experimental studies of unbiased gluon jets from e+ e- annihilations  
 using the jet boost algorithm.  
 Phys. Rev. D69 (2004) 032002, hep-ex/0310048

Study of Z pair production and anomalous couplings in e+ e-  
 collisions at  $s^{**}(1/2)$  between 190-GeV and 209-GeV.  
 Eur. Phys. J. C32 (2003) 303, hep-ex/0310013

Tests of the standard model and constraints on new physics from  
 measurements of fermion-pair production at 189-GeV to 209-GeV  
 at LEP.  
 hep-ex/0309053

Search for anomalous production of di-lepton events with missing  
 transverse momentum in e+ e- collisions at  $s^{**}(1/2) = 183$ -GeV  
 – 209-GeV.  
 Eur. Phys. J. C32 (2004) 453, hep-ex/0309014

A study of W+ W- gamma events at LEP.  
 Phys. Lett. B580 (2004) 17, hep-ex/0309013

Measurement of charged current triple gauge boson couplings  
 using W pairs at LEP.  
 hep-ex/0308067

## Diplomarbeiten

M. BRITSCH  
 Hyperon Production in Proton-Nucleus Collisions at 42 GeV Center  
 of Mass Energy.  
 MPI-K Heidelberg/D (2003)

Search for the single production of doubly-charged Higgs bosons and constraints on their couplings from Bhabha scattering.  
 Phys. Lett. B577 (2003) 93, hep-ex/0308052

Measurement of heavy quark forward-backward asymmetries and average B mixing using leptons in hadronic Z decays.  
 Phys. Lett. B577 (2003) 18, hep-ex/0308051

A study of charm production in beauty decays with the OPAL detector at LEP.  
 hep-ex/0308050

Tests of models of color reconnection and a search for glueballs using gluon jets with a rapidity gap.  
 hep-ex/0306021

Measurement of isolated prompt photon production in photon-photon collisions at  $s(ee)^{**}(1/2) = 183\text{-GeV} - 209\text{-GeV}$ .  
 Eur. Phys. J. C31 (2003) 491, hep-ex/0305075

Search for pair-produced leptoquarks in e+ e- interactions at  $s^{**}(1/2) = 189\text{-GeV}$  to 209-GeV.  
 Eur. Phys. J. C31 (2003) 281, hep-ex/0305053

Search for stable and long-lived massive charged particles in e+ e- collisions at  $s^{**}(1/2) = 130\text{-GeV}$  to 209-GeV.  
 Phys. Lett. B572 (2003) 8, hep-ex/0305031

Test of non-commutative QED in the process e+ e- → gamma gamma at LEP.  
 Phys. Lett. B568 (2003) 181, hep-ex/0303035

Bose-Einstein correlations of pi0 pairs from hadronic Z0 decays.  
 Phys. Lett. B559 (2003) 131, hep-ex/0302027

Di-jet production in photon-photon collisions at  $s(ee)^{**}(1/2) =$  from 189-GeV to 209-GeV.  
 Eur. Phys. J. C31 (2003) 307, hep-ex/0301013

Flavour Independent Search for a Hadronically Decaying Higgs Bosons in e+e- Collisions.  
 OPAL Physics Note PN507

K. DESCH, A. IMHOFF, Z. WAS, M. WOREK  
 Probing the CP nature of the Higgs boson at linear colliders with tau spin correlations: The case of mixed scalar pseudoscalar couplings.  
 Phys. Lett. B579 (2004) 157

K. DESCH, Z. WAS, M. WOREK  
 Measureing the Higgs boson parity at a linear collider using the tau impact parameter and tau → rho nu decay.  
 Eur. Phys. J. C29 (2003) 491

K. DESCH, J. KALINOWSKI, G. MOORTGAT-PICK, M.M. NOJIRI, G. POLESELLO  
 SUSY parameter determination in combined analyses at LHC/LC.  
 hep-ph/0312069, zur Veröffentlichung in JHEP

K. DESCH, U. WILHEMSEN  
 Unterwegs zu den Anfängen des Universums.  
 HGF Jahresheft 2003

K. DESCH, U. WILHEMSEN  
 Mit TESLA zu den Anfängen des Universums.  
 yousee, Magazin der Uni Hamburg, Nr 03 (2003)

### Veröffentlichte Vorträge

**EPS Conference, Aachen/D (2003), Eur. Phys. J. C**  
 J. BÖHME  
 Precision measurement of positron beam polarisation at HERA II.

K. BÜSSER  
 Instrumentation of the Forward Region of the TESLA Detector.  
 T. KRAEMER  
 Measurement of Heavy Quark Forward-Backward Asymmetries Using a Lepton Tag in Hadronic Z Decays at LEP.

T. BEHNKE  
 Detector R&D.  
 Zur Veröffentlichung in Proc. of LP2003, Chicago/USA (2003)  
 F. GAEDE, T. BEHNKE, N. GRAF, T. JOHNSON  
 LCIO: A persistency framework for linear collider simulation studies.  
 eConf C0303241, TUKT001 (2003), hep-ex/0306114

P. BECHTLE  
 Interpretation of the Search for Neutral Higgs Bosons in a CP-Violating MSSM Scenario.  
 Proc. of the International School of Subnuclear Physics, Erice/IT (2002), ISBN 981-238-613-0

K. DESCH  
 Higgs boson precision studies at a linear collider.  
 Zur Veröffentlichung in Proc. of the Extended ECFA/DESY Workshop, Amsterdam/NL (2003), hep-ph/0311092

K. DESCH  
 Electron-Positron Linear Collider.  
 Zur Veröffentlichung in Proc. of the 9th Adriatic Meeting on Particle Physics, Dubrovnik/CR (2003)

K. DESCH  
 Searches for mSugra and related SUSY at LEP.  
 Proc. of SUGRA20, Boston/USA (2003)

V. KORBEL  
 A hadronic tile calorimeter for the TESLA detector.  
 Nucl. Instr. Meth. A518 (2004) 49

T. KUHL  
 Vertex detector as a physics tool for TESLA.  
 Nucl. Instrum. Meth. A511 (2003) 221

P. WIENEMANN  
 A TPC for a Future Linear Collider.  
 Zur Veröffentlichung in IEEE Trans. Nucl. Sci.

B.A. KNIEHL, F. SEFKOW  
 Summary of the heavy flavour session, DIS03.  
 hep-ph/0312054.

**Extended Joint ECFA-DESY Study on Physics and Detectors  
 for a Linear Electron-Positron Collider, Fourth Workshop,  
 Amsterdam/NL (2003)**

## Vorträge

### DPG Frühjahrstagung Teilchenphysik, Aachen/D (2003)

#### P. BECHTLE

Searches for neutral Higgs bosons in the MSSM and interpretations at LEP.

Higgs-Bosonen in supersymmetrischen Modellen mit CP-Verletzung bei OPAL.

#### J. BÖHME

Präzisionsmessung der Polarisation bei HERA II.

#### K. BÜSSER

Instrumentation of the Forward Region of the TESLA Detector.

#### F. FRANCO-SOLLOVA

A study of triple-gauge-couplings in W-pair production at TESLA using transverse polarization.

#### M. GROLL

Suche nach der Einzelproduktion doppelt geladener Higgs Bosonen.

#### M. HAMANN

Suche nach schweren langlebigen geladenen Teilchen bei OPAL.

#### A. IMHOF

Bestimmung des CP-Eigenwertes von Higgs-Bosonen aus  $e^+e^-$ -Kollisionen bei TESLA.

#### T. KLIMKOVICH

Experimental Study of Higgs Bosons in MSSM at TESLA.

#### T. KRAEMER

Messung der b- und c-Quark Vorwärts-Rückwärts-Asymmetrien mittels semileptonischer Zerfälle bei OPAL.

#### T. KUHL

Suche nach charm und beauty bei TESLA

#### T. LUX

Eine Zeit-Projektions-Kammer mit GEM Auslese fuer Messungen in hohen Magnetfeldern.

#### W. MENGES

Messung der Drei-Eichboson-Kopplungen im vier Jet-Kanal bei OPAL.

#### N. MEYER

Suche nach Technicolor bei OPAL.

#### A. RASPIREZA

Study of  $HA \rightarrow b\bar{b}\tau^+\tau^-$  Process at TESLA.

#### P. WIENEMANN

Eigenschaften von GEM-Folien zur TPC-Auslese in hohen Magnetfeldern.

#### T. BEHNKE

Status of Tools.

MOKKA and LCDG4.

#### K. BÜSSER

Beamstrahlung on the Septum Blade.

#### K. DESCH

Summary of Higgs Working Group.

#### A. IMHOF

Higgs parity from  $H \rightarrow \tau\tau$  - experimental part.

#### T. KLIMKOVICH

Analysis of the Process  $e^+e^- \rightarrow HA \rightarrow b\bar{b}b\bar{b}$  at TESLA.

#### V. KORBEL

The Tile-HCAL, studies and time plans.

#### T. KUHL

Topological Flavour Tagging at TESLA.

$H \rightarrow b\bar{b}, c\bar{c}, gg$  branching ratio analysis with ZVTOP.

#### F. POIRIER

Luminosity Spectrum Measurements.

#### P. WIENEMANN

TPC R&D Activities in Hamburg.

### **ECFA Study on Physics and Detectors for a Linear Collider, First Workshop Montpellier/F (2003)**

#### P. BECHTLE

SFitter: An iterative approach to fit SUSY parameters to the observables.

#### T. BEHNKE

The Simulation Framework.

#### K. BÜSSER

The Native BRAHMS Event Display.

Mask Design Update.

Report from the BDIR Sessions.

#### E. GARUTTI

New results from minical studies at DESY.

#### V. KORBEL

Studies for a Tile\_HCAL Calorimeter Physics Prototype.

The Tile-HCAL Physics Prototype, concept, status, time plan.

#### T. KUHL

Simulation of hadronic Higgs branching ratios.

#### T. LUX

Status of TPC R&D in Hamburg.

F. POIRIER Luminosity Spectrum Unfolding.	Status of TESLA. DPF-Meeting, Philadelphia/USA (2003)
A. RASPEREZA Study of HA production at a Future LC.	The Electron Positron Linear Collider – Probing the Secrets of the Universe. RHIC/AGS Users Meeting Colloquium BNL Upton/USA (2003)
Tail Catcher Study for HCAL Physics Prototype.	Planning for Future Accelerators. Pisa Meeting Advanced Detectors, Elba/I (2003)
P. WIENEMANN Simulation of Machine Background in the TPC with GEANT4.	Mit dem Teilchenbeschleuniger TESLA auf der Suche nach dem Bauplan des Universums. Kolloquium, Wuppertal/D (2003)
<b>Arlington Linear Collider Workshop, Arlington/USA (2003)</b>	Mit dem Teilchenbeschleuniger TESLA auf der Suche nach dem Bauplan des Universums. Kolloquium, Paderborn/D (2003)
T. BEHNKE Event Reconstruction.	Planning for Future Accelerators. QFTHEP, Samara/RU (2003)
The EU simulation framework.	Der Teilchenbeschleuniger TESLA ...auf der Suche nach dem Bauplan des Universums. INTERGEO, Hamburg/D (2003)
K. BÜSSER News from the TESLA Machine Detector Interface.	The TESLA TPC Proposal. TPC-Symposium, LBNL Berkeley/USA (2003)
Report from the Zeuthen Workshop on Forward Calorimetry and Luminosity Measurement in the TESLA Detector.	Planning for Future Accelerators. Seminar Univ. of Victoria, Victoria/CAN (2003)
F. SEFKOW TPC R&D news from DESY.	Was macht Masse? – Die Suche nach dem Higgs-Boson. Kolloquium Univ. Giessen, Giessen/D (2003)
P. BECHTLE Searches for Higgs Bosons in CP conserving and CPviolating MSSM scenarios with OPAL. University of Siegen/D (2003)	The Linear Collider – Why, How, When. Annual UK Theory Meeting, Durham/UK (2003)
The FLC group. Seminar Universität Hamburg, Hamburg/D (2003)	A. IMHOF Bestimmung des CP-Eigenwertes von Higgs-Bosonen aus $e^+e^-$ -Kollisionen bei TESLA. Herbstschule für Hochenergiephysik Maria Laach/D (2003)
K. BÜSSER Die Suche nach dem Ursprung der Masse. 94. MNU-Zentraltagung, Frankfurt/D (2003)	V. KORBEL A Tile-HCAL for the TESLA Detector, concept, results from R&D, projects. 9. Pisa Meeting on Advanced Detectors, Pisa/I (2003)
Highlights from EPS and Letpon-Photon. DESY Seminar, Hamburg/D (2003)	T. KLIMKOVICH Untersuchung von MSSM Higgs-Bosonen bei TESLA. Herbstschule für Hochenergiephysik, Maria Laach/D (2003)
Herausforderung TESLA, Ein Blick in den Aufbau der Materie. Lehrerfortbildung, Universität Bayreuth/D (2003)	H.U. MARTYN Physics at a Linear Collider. String Phenomenology, Durham/UK (2003)
K. DESCH Ongoing SUSY and Higgs Studies. LHC/LC meeting, CERN/CH (2003)	W. MENGES Measurement of Triple Gauge Couplings in the 4 Jet Channel at OPAL. International School of Subnuclear Physics, Erice/I (2003)
N. GHODBANE Diamond Detectors. Workshop on Detector Development for Synchrotron Radiation Applications, Hamburg/D (2003)	P. WIENEMANN TPC R&D Activities in Hamburg. LC TPC R&D Meeting, LBNL, Berkeley/USA (2003)
LC ongoing R&D. Seminar, Darmstadt/D (2003)	A TPC for a Future Linear Collider. IEEE Nuclear Science Symposium, Portland, Oregon/USA (2003)
The TESLA Time Projection Chamber Readout. ECFA/DESY LC Meeting, Geneva/CH (2003)	
R.-D. HEUER Planerische Herausforderungen beim Bau von TESLA. Verein der Freunde und Förderer DESY Hamburg/D (2003)	

Reconstruction of fundamental SUSY parameters with Fittino.  
3rd Meeting of the EuroGDR “Supersymmetry”, LAL, Orsay/F  
(2003)

F. SEFKOW  
Elementary Particle Physics Research.  
DESY Summer Student Lecture (2003)

An imaging calorimeter for the Linear Collider,  
Northern Illinois University, USA (2003)

N. GHODBANE, H.U. MARTYN  
The Snowmass Points and Slopes.  
LC-PHSM-2003-055

H.U. MARTYN  
Study of Sleptons – Supersymmetry Scenario SPS 1a.  
LC-PHSM-2003-071

## Diplomarbeiten

M. BALL  
Rekonstruktion von Neutralinos mit TESLA.  
Universität Hamburg (2003)

M. GROLL  
Search for the Single Production of Doubly-Charged Higgs Bosons at OPAL.  
Universität Hamburg/D (2003)  
DESY-THESIS-2003-044

## Dissertationen

G. GAYCKEN  
Flavour independent search for hadronically decaying Higgs Bosons.  
Universität Hamburg/D (2003)  
DESY-THESIS-2003-011

M. HAMANN  
Studies for a Linear Collider Drift Chamber and Search for Heavy Stable Charged Particles in  $e^+e^-$  Collisions up to  $\sqrt{s} = 209$  GeV.  
Universität Hamburg/D (2003)  
DESY-THESIS-2003-046

W. MENGES  
Measurement of Charged Triple Gauge Coupling Parameters at  $e^+e^-$  Colliders.  
Universität Hamburg/D (2003)  
DESY-THESIS-2003-043

## Linear-Collider Notes

K. BÜSSER, O. NAPOLY  
Improved TESLA Optics and Beam Induced Backgrounds Update.  
LC-M-2003-045

K. DESCH  
Physics Benefits of Positron and Transverse Polarisation at a Linear Electron Positron Collider  
LC-PHSM-2003-002

K. DESCH, N. MEYER  
Determining Resonance Parameters of Heavy Higgs Bosons at a Future Linear Collider.  
LC-PHSM-2003-066 and hep-ph/0308143

## Forschung Linearbeschleuniger

### Veröffentlichungen

M. BRUNKEN, H. GENZ, P. GÖTTLICHER, C. HESSLER, M. HÜNING, H. LOOS, A. RICHTER, H. SCHLARB, P. SCHMÜSER, S. SIMROCK, D. SUETTERLIN, M. TONUTTI, D. TÜRKE  
Electro-Optic Sampling at the TESLA Test Accelerator: Experimental Setup and First Results.  
TESLA Report 2003-11 (2003)

R. ISCHEBECK, J. FELDHAUS, CH. GERTH, E. SALDIN, P. SCHMÜSER, E. SCHNEIDMILLER, B. STEEG, K. TIEDTKE, M. TONUTTI, R. TREUSCH, M. YURKOV  
Study of the transverse coherence at the TTF free electron laser.  
Nucl. Instr. Meth. A507 (2003) 175

### Veröffentlichte Vorträge

#### Zur Veröffentlichung in Proc. of 11th Workshop on RF-Superconductivity, Travemünde/D (2003)

S. CASALBUONI, L. VON SAWILSKI AND J. KÖTZLER  
Superconductivity above  $H_{c2}$  as a Probe for Niobium RF-Cavity Surfaces.

L. VON SAWILSKI, S. CASALBUONI, J. KÖTZLER  
Surface Superconductivity of Niobium: Onset on long-range Coherence.

P. SCHMÜSER  
Basic Principles of RF Superconductivity and Superconducting Cavities.

B. STEFFEN, E.-A. KNABBE, L. LILJE, P. SCHMÜSER, S. CASALBUONI, J. KÖTZLER, L. VON SAWILSKI  
Susceptibility Measurements on Surface Treated Niobium Samples.

### Vorträge

#### Vorlesungen auf der CERN Accelerator School in Zeuthen

P. SCHMÜSER  
Basic Principles of RF Superconductivity Superconducting Cavities.

Free Electron Lasers.

Tutorial Course on Low-Gain and High-Gain FEL's.

P. SCHMÜSER

Der TTF Linac und FEL.

Graduiertenkolleg Beschleunigerphysik, TU Darmstadt.

### Dissertationen

F. LUDWIG

Nonlinear Dynamics and Far-Infrared Broadband Spectroscopy of  $\text{YBa}_2\text{Cu}_3\text{O}_7$  Josephson Junctions for the TESLA Test Facility Linac.

(In Kooperation mit dem Institut für Angewandte Physik der Universität Hamburg)

DESY-THESIS-2003-024.

R. ISCHEBECK

Transverse Coherence of a VUV Free Electron Laser.

DESY-THESIS-2003-033

### Diplomarbeit

B. STEFFEN

Bestimmung der kritischen Felder von oberflächen- und temperaturbehandeltem Niob durch Wechselfeld-Suszeptometrie.

Univ. Würzburg (2003)

DESY-THESIS-2003-014

B.C. ALLANACH et al.

SUSY Les Houches Accord: Interfacing SUSY Spectrum Calculators, Decay Packages and Event Generators.

DESY 03-166, zur Veröffentl. in JHEP, hep-ph/0311123

A. ALVES, O. EBOLI, T. PLEHN, D. RAINWATER

Robust LHC Higgs Search in Weak Boson Fusion.

Zur Veröffentl. in Phys. Rev. D, hep-ph/0309042

J. ANDERSEN et al. [SMALL X COLLABORATION]

Small x Phenomenology: Summary and Status 2002.

DESY 03-220, zur Veröffentl. in Eur. Phys. J. C

C. D'ANTONI, K. FREDENHAGEN, S. KÖSTER

Implementation of Conformal Covariance by Diffeomorphism Symmetry.

math-ph/0312017

S. ANTUSCH, J. KERSTEN, M. LINDNER, M. RATZ

Running Neutrino Masses, Mixings and CP Phases: Analytical Results and Phenomenological Consequences.

Nucl. Phys. B674 (2003) 401 und DESY 03-065, TUM-HEP-510/03

T. ASAKA, W. BUCHMÜLLER, L. COVI

Quarks and Leptons Between Branes and Bulk.

Phys. Lett. B563 (2003) 209 und DESY 03-045, hep-ph/0304142

K.S. BABU, K.R.S. BALAJI, I. SCHIENBEIN

Standard Model CP Violation in Polarised  $b \rightarrow d l^+ l^-$ .

Phys. Rev. D68 (2003) 014021 und DESY 03-046, hep-ph/0304077

D. BAHNS, S. DOPLICHER, K. FREDENHAGEN, G. PIACITELLI

Ultraviolet Finite Quantum Field Theory on Quantum Spacetime.

Commun. Math. Phys. 237 (2003) 31 und DESY 03-006, hep-th/0301100

V. BARGER, T. HAN, P.M. ZERWAS

Effects of Genuine Dimension-six Higgs Operators.

Phys. Rev. D67 (2003) 115001

J. BARTELS, M.A. BRAUN, G.P. VACCA

The Process  $\gamma(*) + p \rightarrow \eta_c + X$ : a Test for the Perturbative QCD Odderon.

DESY-03-048, zur Veröffentl. in Eur. Phys. J. C, hep-ph/0304160

J. BARTELS, V. S. FADIN, R. FIORE

The Bootstrap Conditions for the Gluon Reggeization.

Nucl. Phys. B672 (2003) 329, BUDKER-INP-2003-27 und DESY-03-083, DFCAL-TH-03-4 (2003), hep-ph/0307076

J. BARTELS, K. GOLEC-BIERNAT, K. PETERS

On the Dipole Picture in the Nonforward Direction.

Acta Phys. Polon. B34 (2003) 3051 und DESY 03-010, hep-ph/0301192

J. BARTELS, E. GOTSMAN, E. LEVIN, M. LUBLINSKY, U. MAOR

QCD Saturation and Photoproduction on Proton and Nuclei Targets.

Phys. Rev. D68 (2003) 054008 und DESY 03-050, hep-ph/0304166, TAUP-1001

## Theoretische Physik

### Veröffentlichungen

S.A. ABEL, O. LEBEDEV, J. SANTIAGO

Flavour in Intersecting Brane Models and Bounds on the String Scale.

DESY 03-203, zur Veröffentl. in Nucl. Phys. B, hep-ph/0312157

H. ABELE, S. BAESSLER, H.G. BORNER, A.M. GAGARSKI, A. WESTPHAL et al.

Measurement of Quantum States of Neutrons in the Earth's Gravitational Field. Phys. Rev. D68 (2003) 108702

A. ALI, A.Y. PARKHOMENKO

An Analysis of the Inclusive Decay  $\Upsilon(1S) \rightarrow \eta' X$  and Constraints on the  $\eta'$ -Meson Distribution Amplitudes.

Eur. Phys. J. C30 (2003) 183 und hep-ph/0304278

A. ALI, A.Y. PARKHOMENKO

The  $\eta' g * g(*)$  Vertex Including the  $\eta'$  Meson Mass.

Eur. Phys. J. C30 (2003) 367 und hep-ph/0307092

- J. BARTELS, M. LUBLINSKY  
 Quark Antiquark Exchange in  $\gamma^* \gamma^*$  Scattering.  
 DESY 03-105, hep-ph/030818, JHEP0309 (2003) 076
- U. BAUR, T. PLEHN, D. RAINWATER  
 Examining the Higgs Boson Potential at Lepton and Hadron Colliders: A Comparative Analysis.  
 Phys. Rev D68 (2003) 033001
- U. BAUR, T. PLEHN, D. RAINWATER  
 Probing the Higgs Self-coupling at Hadron Colliders Using Rare Decays.  
 Zur Veröffentl. in Phys. Rev. D, hep-ph/0310056
- K. BIERI, C. GREUB, M. STEINHAUSER  
 Fermionic NNLL Corrections to  $b \rightarrow s\gamma$ .  
 Phys. Rev. D67 (2003) 114019 und DESY 03-013
- G. BLAIR, W. POROD, P.M. ZERWAS  
 The Reconstruction of Supersymmetric Theories at High Energy Scales.  
 Eur. Phys. J. C27 (2003) 263
- S.A. BLUDMAN  
 What We Already Know About Quintessence.  
 DESY 03-196, zur Veröffentl. in Phys. Rev. D
- S.A. BLUDMAN, C. ESSEX, D.C. KENNEDY  
 Nonequilibrium Thermodynamics of Radiation and Matter.  
 Zur Veröffentl. in Variational and Extremum Principles in Macroscopic Systems, eds. S. Sieniutycz und H. Farkas, Elsevier
- S. BONDARENKO, M. KOSLOV, E. LEVIN  
 QCD Saturation in the Semi-classical Approach.  
 Nucl. Phys. A727 (2003) 139
- S. BONDARENKO, M. KOSLOV, E. LEVIN  
 gamma\* gamma\* Scattering: Saturation and Unitarization in the BFKL Approach.  
 Acta Phys. Polon. B34 (2003) 3081
- S. BONDARENKO, E. LEVIN, C.I. TAN  
 Matching of Soft and Hard Pomerons.  
 hep-ph/0306231
- E. BOOS, A. DJOUADI, A. NIKITENKO  
 Detection of the Neutral MSSM Higgs Bosons in the Intense-coupling Regime at the LHC.  
 Zur Veröffentlichung in Phys. Lett. B, hep-ph/0307079
- E. BOOS, L. DUDKO  
 Optimized Neural Networks to Search for Higgs Boson Production at the Tevatron.  
 Nucl. Instrum. Meth. A502 (2003) 486
- E. BOOS, H. U. MARTYN, G. MOORTGAT-PICK, M. SACH-WITZ, P. M. ZERWAS et al.  
 Polarization in Sfermion Decays: Determining tg(beta) and Trilinear Couplings.  
 Eur. Phys. J. C30 (2003) 395 und DESY 03-030
- E. BOOS, T. PLEHN  
 Higgs-boson Production Induced by Bottom Quarks.  
 Zur Veröffentlichung in Phys. Rev. D, hep-ph/0304034
- A. BRANDENBURG, W. BERNREUTHER, Z.G. SI, P. UWER  
 Spin Properties of Top Quark Pairs Produced at Hadron Colliders.  
 Acta Phys. Pol. B34 (2003) 4477 und DESY 03-056
- A. BRANDENBURG, M. MANIATIS  
 SUSY QCD Corrections to the Polarization and Spin Correlations of Top Quarks Produced in  $e^+e^-$  Collisions.  
 Phys. Lett. B558 (2003) 79 und DESY 03-004
- A. BRANDENBURG, P. NASON, C. OLEARI  
 On a Possible Measurement of  $\alpha_s$  from  $B - \bar{B}$  Correlations in  $Z^0$  Decay.  
 Nucl. Phys. B667 (2003) 394
- R. BRUNETTI, K. FREDENHAGEN, R. VERCH  
 The Generally Covariant Locality Principle – A New Paradigm for Local Quantum Physics.  
 Commun. Math. Phys. 237 (2003) 31, math-ph/0112041
- W. BUCHMÜLLER, P. DI BARI, M. PLÜMACHER  
 The Neutrino Mass Window for Baryogenesis.  
 Nucl. Phys. B665 (2003) 445 und DESY 03-001, hep-ph/030292
- W. BUCHMÜLLER, K. HAMAGUCHI, M. RATZ  
 Gauge Couplings at High Temperature and the Relic Gravitino Abundance.  
 Phys. Lett. B574 (2003) 156 und DESY 03-078, hep-ph/0307181
- J. CAMPBELL, R.K. ELLIS, D. RAINWATER  
 Next-to-leading Order QCD Predictions for W+2j and Z+2j Production at the CERN LHC.  
 Phys. Rev D68 (2003) 094021
- D.G. CERDEÑO, E. GABRIELLI, M. GOMEZ, C. MUÑOZ  
 Neutralino-Nucleon Cross Section and Charge and Color Breaking Constraints.  
 JHEP 0306 (2003) 030 und DESY 03-024, HIP-2002-57/TH, FTUAM 03/05, IFT-UAM/CSIC-03-09, hep-ph/0304115
- D.G. CERDEÑO, A. KNAUF, J. LOUIS  
 A Note on Effective N=1 SuperYang-Mills Theories Versus Lattice Results.  
 Eur. Phys. J. C31 (2003) 415, hep-th/0307198
- G. CHACHAMIS, K. PETERS  
 QCD Corrections to  $\gamma\gamma \rightarrow ZZ$  at Small Scattering Angles.  
 DESY 03-118, zur Veröffentl. in Phys. Lett. B, hep-ph/0309043
- D. CHAKRABORTY, J. KONIGSBERG, D. RAINWATER  
 Review of Top Quark Physics.  
 Ann. Rev. Nucl. Part. Sci. 53 (2003) 301, hep-ph/0303092
- M. CIAFALONI, D. COLFERAI, G. P. SALAM, A. M. STASTO  
 The Gluon Splitting Function at Moderately Small x.  
 DESY 03-185, zur Veröffentl. in Phys. Lett. B, DFF-409-11-03, LPTHE-03-34
- M. CIAFALONI, D. COLFERAI, G.P. SALAM, A.M. STASTO  
 Renormalization Group Improved Small x Green's Function.  
 Phys. Rev. D68 (2003) 114003 und DESY 03-060, DFF-404-05-03, LPTHE-03-20
- M. CIAFALONI, D. COLFERAI, G.P. SALAM, A.M. STASTO  
 Extending QCD Perturbation Theory to Higher Energies.  
 Phys. Lett. B576 (2003) 143 und DESY 03-064, DFF-403-05-03, LPTHE-03-15

- D.E. COSTA DA, S. WIESENFELDT  
 Proton Decay in a Consistent Supersymmetric SU(5) GUT Model.  
*Nucl. Phys.* B661 (2003) 62 und DESY 02-229
- F. CSIKOR, Z. FODOR, S.D. KATZ, T.G. KOVACS  
 Pentaquark Hadrons from Lattice QCD.  
*JHEP* 0311 (2003) 070 und DESY 03-140, hep-lat/0309090, ITP-BUDAPEST-600, WUB-03-09
- D. DEMIR, O. LEBEDEV, K.A. OLIVE, M. POSPELOV, A. RITZ  
 Electric Dipole Moments in the MSSM at Large  $\tan\beta$ .  
 DESY 03-187, zur Veröffentl. in *Nucl. Phys. B*,  
 hep-ph/0311314
- M. DIEHL, O. NACHTMANN, F. NAGEL  
 Probing Triple Gauge Couplings with Transverse Beam Polarisation  
 in  $e^+e^- \rightarrow W^+W^-$ .  
*Eur. Phys. J.* C32 (2003) 17 und DESY 03-074
- M. DIEHL, B. PIRE, L. SZYMANOWSKI  
 Probing the Partonic Structure of Pentaquarks in Hard Electro-production.  
 DESY 03-200, zur Veröffentl. in *Phys. Lett. B*
- F. DI RIENZO, A. MANTOVI, V. MICCIO, L. SCORZATO  
 Preliminary Results in Unquenched Numerical Stochastic Perturbation Theory.  
 hep-lat/0309108
- S. EJIRI, S. HANDS, L. SCORZATO, J.I. SKULLERUD  
 Lattice Simulations of 2-Colour QCD with Wilson Fermions.  
 hep-lat/0312002
- F. FARCHIONI, C. GEBERT, I. MONTVAY, E. SCHOLZ, L. SCORZATO  
 Partially Quenched Chiral Perturbation Theory and Numerical Simulations.  
*Phys. Lett. B*561 (2003) 102 und DESY 03-019, hep-lat/0302011
- F. FARCHIONI, C. GEBERT, I. MONTVAY, E. SCHOLZ, L. SCORZATO  
 Quark Mass Dependence of Pseudoscalar Masses and Coupling Constants.  
 hep-lat/0309094
- F. FARCHIONI, I. MONTVAY, E. SCHOLZ, L. SCORZATO  
 Quark Mass Dependence of Masses and Decay Constants of the Pseudo-Goldstone Bosons in QCD.  
*Eur. Phys. J. C*31 (2003) 227 und DESY 03-072, hep-lat/0307002
- I. FISCHER, W. HOLLIK, M. ROTH, D. STÖCKINGER  
 Restoration of Supersymmetric Slavnov-Taylor and Ward Identities in Presence of Soft and Spontaneous Symmetry Breaking.  
 Zur Veröffentlichung in *Phys. Rev. D*, hep-ph/0310191
- Z. FODOR, S.D. KATZ, A. RINGWALD, H. TU  
 Electroweak Instantons as a Solution to the Ultrahigh Energy Cosmic Ray Puzzle.  
*Phys. Lett. B*561 (2003) 191 und DESY 03-022, hep-ph/0303080, WUB-03-03, ITP-BUDAPEST-593
- Z. FODOR, S.D. KATZ, A. RINGWALD, H. TU  
 Bounds on the Cosmogenic Neutrino Flux.  
*JCAP* 0311 (2003) 015 und DESY 03-114, hep-ph/0309171, WUB-03-10, ITP-BUDAPEST-601
- Z. FODOR, S.D. KATZ, K.K. SZABO  
 Dynamical Overlap Fermions, Results with Hybrid Monte-Carlo Algorithm.  
 DESY 03-113, hep-lat/0311010, WUB-03-08, ITP-BUDAPEST-596
- A. FREITAS, A. von MANTEUFFEL, P.M. ZERWAS  
 Slepton Production at  $e^+e^-$  and  $e^-e^-$  Linear Colliders.  
 DESY 03-111, zur Veröffentl. in *Eur. Phys. J. C*
- C. GEBERT, I. MONTVAY  
 A Recurrence Scheme for Least-Square Optimized Polynomials.  
 DESY 03-020, zur Veröffentl. in *Comput. Phys. Commun.*
- L. GIUSTI, P. HERNÁNDEZ, M. LAINE, P. WEISZ, H. WITTIG  
 Low-energy Couplings of QCD from Topological Zero-mode Wave Functions.  
 DESY 03-195, zur Veröffentl. in *JHEP*, hep-lat/0312012
- L. GIUSTI, M. LÜSCHER, P. WEISZ, H. WITTIG  
 Lattice QCD in the Epsilon-regime and Random Matrix Theory.  
*JHEP* 0311 (2003) 023 und DESY 03-135, hep-lat/0309189
- R.M. GODBOLE, S.D. RINDANI, R.K. SINGH  
 Study of CP Property of the Higgs at a Photon Collider Using  
 $\gamma\gamma \rightarrow t\bar{t} \rightarrow 1X$ .  
*Phys. Rev. D*67 (2003) 095009-1
- R.M. GODBOLE, A. GRAU, G. PANCHERI, A. DE ROECK  
 Hadronic Cross-sections in Two Photon Processes at a Future Linear Collider.  
*JHEP* 0306 (2003) 061, hep-ph/0305071
- R.M. GODBOLE, M. GUCHAIT, K. MAZUMDAR, S. MORETTI, D.P. ROY  
 Search for ‘invisible’ Higgs Signals at LHC Via Associated Production With Gauge Bosons. *Phys. Lett. B*571 (2003) 184
- K. GOLEC-BIERNAT, A.M. STASTO  
 On Solutions of the Balitsky-Kovchegy Equation with Impact Parameter.  
*Nucl. Phys. B*668 (2003) 345 und DESY 03-075
- E. GOTSMAN, E. LEVIN, M. LUBLINSKY, U. MAOR  
 Towards a New Global QCD Analysis: Low x DIS data from Non-linear Evolution.  
*Eur. Phys. J. C*27 (2003) 411
- E. GOTSMAN, E. LEVIN, M. LUBLINSKY, U. MAOR, E. NAFTALI  
 Unitarity Effects in  $J/\psi$  Photo and DIS Production on Nucleons and Nuclei Targets.  
*Acta Phys. Pol. B*34 (2003) 3255 und DESY 03-011
- M. GRAÑA, T.W. GRIMM, H. JOCKERS, J. LOUIS  
 Soft Supersymmetry Breaking in Calabi-Yau Orientifolds with D-branes and Fluxes.  
 Zur Veröffentlichung in *Nucl. Phys. B*, hep-th/0312232
- K. HAMAGUCHI, M. KAWASAKI, T. MOROI, F. TAKAHASHI  
 Curvatons in Supersymmetric Models.  
*Phys. Rev. D* und DESY 03-097, hep-ph/0308174

- K. HAMAGUCHI, N. MARU  
 Nonanomalous Discrete R-symmetry and Light Gravitino.  
*Phys. Rev.* D67 (2003) 115003 und DESY 03-018, hep-ph/0302163
- R.V. HARLANDER, M. STEINHAUSER  
 Hadronic Higgs Production and Decay in Supersymmetry at Next-to-leading Order.  
*Phys. Lett.* B574 (2003) 258 und DESY 03-084
- R.V. HARLANDER, M. STEINHAUSER  
 Effects of SUSY-QCD in Hadronic Higgs Production at Next-to-next-to-leading Order.  
*Phys. Rev.* D68 (2003) 111701 und DESY 03-109
- A. HEBCKER  
 Grand Unification in the Projective Plane.  
 DESY 03-158, zur Veröffentlichung in *JHEP*
- A. HEBCKER, M. RATZ  
 Group-Theoretical Aspects of Orbifold and Conifold GUTs.  
*Nucl. Phys.* B670 (2003) 3 und DESY 03-069
- A. HEBCKER, C. WETTERICH  
 Spinor Gravity.  
*Phys. Lett.* B574 (2003) 269 und DESY 03-090
- S. HEINEMEYER, D. STÖCKINGER, G. WEIGLEIN  
 Two-Loop SUSY Corrections to the Anomalous Magnetic Moment of the Muon.  
 hep-ph/0312264
- S.J. HUBER, Q. SHAFI  
 Cosmological Constant, Gauge Hierarchy and Warped Geometry.  
*Phys. Rev.* D68 (2003) 023503
- S.J. HUBER, Q. SHAFI  
 Neutrino Oscillations, Rare Decays and Warped Geometry.  
*J. Phys.* G29 (2003) 1807
- S.J. HUBER  
 Flavor Violation and Warped Geometry.  
*Nucl. Phys.* B666 (2003) 269
- H.A. KASTRUP  
 Quantization of the Optical Phase Space  
 $\delta^2 = \{\varphi \bmod 2\pi, I > 0\}$  in Terms of the Group  $\text{SO}^\uparrow(1, 2)$ .  
*Fortschr. Physik* 51 (2003) 973 und DESY 03-079, quant-ph/0307069
- W. KILIAN  
 Dynamical Electroweak Symmetry Breaking.  
 Zur Veröffentlichl. in K. FUJII, D. MILLER, A. SONI (Hrsg.), Linear Collider Physics in the New Millennium, World Scientific Publishing, hep-ph/0303015
- W. KILIAN  
 Electroweak Symmetry Breaking: The Bottom-up Approach.  
 Springer Tracts in Modern Physics 198 (2003) Springer-Verlag, New York/USA
- W. KILIAN, J. REUTER  
 The Low-energy Structure of Little Higgs Models.  
 DESY 03-167, zur Veröffentlichl. in *Phys. Rev. D*, hep-ph/0311095
- M. KLASEN, B.A. KNIEHL, L. MIHAILA, M. STEINHAUSER  
 Charmonium Production in Polarized High-energy Collisions.  
*Phys. Rev.* D68 (2003) 034017 und DESY-02-168
- B.A. KNIEHL  
 Theoretical Aspects of Inclusive Light-hadron Production.  
*J. Phys. G: Nucl. Part. Phys.* 29 (2003) 111
- B.A. KNIEHL, G. KRAMER, C.P. PALISOC  
 $\chi_{c1}$  and  $\chi_{c2}$  Decay Angular Distributions at the Fermilab Tevatron.  
*Phys. Rev.* D68 (2003) 114002 und DESY 03-096
- B.A. KNIEHL, C.P. PALISOC, L. ZWIRNER  
 Associated Production of Bottomonia and Higgs Bosons at Hadron Colliders.  
 DESY 03-161, zur Veröffentlichl. in *Phys. Rev. D*
- B.A. KNIEHL, A.A. PENIN, A. PINEDA, V.A. SMIRNOV, M. STEINHAUSER  
 $M(\eta_b)$  and  $\alpha_s$  from Nonrelativistic Renormalization Group.  
 DESY 03-172, zur Veröffentlichl. in *Phys. Rev. Lett.*
- B.A. KNIEHL, L. ZWIRNER  
 Prompt  $J/\psi$  Production in Charged-current Deep-inelastic Scattering.  
 DESY 03-107, zur Veröffentlichl. in *Nucl. Phys. B*
- M. KOZLOV, E. LEVIN  
 QCD Saturation and  $\gamma^* \gamma^*$  Scattering.  
*Eur. Phys. J.* C28 (2003) 483
- G. KRAMER, H. SPIESBERGER  
 Inclusive  $D^*$  Production in  $\gamma\gamma$  Collisions: Including the Single-resolved Contribution with Massive Quarks.  
*Eur. Phys. J.* C28 (2003) 495 und DESY 03-014, MZ-TH/03-03
- G. KRAMER, H. SPIESBERGER  
 Inclusive Photoproduction of  $D^*$  with Massive Charm Quarks.  
 MZ-TH/03-18 (2003), hep-ph/0311062
- B. KUCKERT  
 Spin & Statistics in Nonrelativistic Quantum Mechanics.  
 Zur Veröffentlichl. in *Phys. Lett. A*
- C. LEHMANN, G. MACK, T. PRÜSTEL  
 Origin of Quark Masses and Cabibbo-Kobayashi-Maskawa Matrix in a Gauge Theory with Nonunitary Parallel Transporters.  
 hep-ph/0305331
- E. LEVIN, M. LUBLINSKY  
 A Linear Evolution for Non-linear Dynamics and Correlations in Realistic Nuclei.  
 DESY 03-116, zur Veröffentlichl. in *Nucl. Phys. A*
- J. LOUIS, T. MOHAUPT, M. ZAGERMANN  
 Effective Actions Near Singularities.  
*JHEP* 0302 (2003) 053, hep-th/0301125
- J. LUCIETTI, S. SCHAFER-NAMEKI, A. SINHA  
 On the Exact Open-closed Vertex in Plane-wave Light-cone String Field Theory.  
 DESY 03-186, zur Veröffentlichl. in *Phys. Rev. D*, hep-th/0311231

D.J. MILLER, R. NEVZOROV, P.M. ZERWAS  
The Higgs Sector of the Next-to-Minimal Supersymmetric Standard Model.  
DESY 03-066, zur Veröffentl. in Nucl. Phys. B

G. MÜNSTER, E.E. SCHOLZ  
Perturbation Theory for the Two-dimensional Abelian Higgs Model in the Unitary Gauge.  
DESY 03-080, zur Veröffentl. in Eur. Phys. J. C, MS-TP-03-6, hep-th/0307053

E.A. PASCHOS, D.P. ROY, I. SCHIENBEIN, J.-Y. YU  
The Muon Spectra of Quasi-Elastic and 1-Pion Production Events in LBL Neutrino Oscillation Experiments.  
Phys. Lett. B574 (2003) 232 und DESY 03-095, hep-ph/0307223

K. PETERS, G.P. VACCA  
QCD Corrections to Electroweak Vector Boson Scattering at Small Scattering Angles.  
Eur. Phys. J. C30 (2003) 345 und DESY 03-053, hep-ph/0305137

A. RINGWALD  
Production and Detection of Very Light Bosons in the HERA Tunnel.  
Phys. Lett. B569 (2003) 51 und DESY 03-057, hep-ph/0306106

A. RINGWALD  
An Upper Bound on the Total Cross-section for Electroweak Baryon Number Violation.  
JHEP 0310 (2003) 008 und DESY 03-076, hep-ph/0307034

J.I. SKULLERUD, S. EJIRI, S. HANDS, L. SCORZATO  
Lattice Simulations of 2-Colour QCD with Wilson Fermions.  
hep-lat/0312002

V.A. SMIRNOV, M. STEINHAUSER  
Solving Recurrence Relations for Multi-Loop Feynman Integrals.  
Nucl. Phys. B672 (2003) 199 und DESY 03-081

A.M. STASTO  
Physics of Ultrahigh-energy Neutrinos.  
DESY 03-171, zur Veröffentl. in Int. J. of Modern Physics A

### Veröffentlichte Vorträge

A. ALI  
CKM Phenomenology and B-meson Physics: Present Status and Current Issues.  
Proc. of 31st Int. Meeting on Fundamental Physics (IMFP 03), Soto de Cangas/E, KEK Preprint 2003-116, hep-ph/0312303

A. ALI, M. MISIAK  
Radiative Rare B Decays.  
Proc. of the CERN-CKM Workshop: The CKM Matrix and the Unitarity Triangle, CERN/CH (2003) und CERN-2003-02, hep-ph/0304132

A. ALI, A.Y. PARKHOMENKO  
The  $\eta'g*g(*)$  Vertex Function in Perturbative QCD and the  $\eta'$  Meson Mass Effects.

Proc. of the Int. Europhysics Conf. on High-Energy Physics (HEP 2003), Aachen/D und CERN-TH-2003-253, hep-ph/0310250

A. ALI, A.Y. PARKHOMENKO  
Improved  $\eta'$  Prime Meson Distribution Amplitudes from Inclusive  $\Upsilon(1S) \rightarrow \eta'X$  Decay.  
Proc. of the Int. Europhysics Conf. on High-Energy Physics (HEP 2003), Aachen/D und CERN-TH-2003-254, hep-ph/0310256

J. BARTELS  
The Photon Impact Factor in Next-to-leading Order.  
Prepared for 6th Int. Symposium on Radiative Corrections:  
Application of Quantum Field Theory Phenomenology (RADCOR 2002) and 6th Zeuthen Workshop on Elementary Particle Theory (Loops and Legs in Quantum Field Theory), Kloster Banz/D (2002)  
Nucl. Phys. Proc. Suppl. 116 (2003) 126 and in \*Staffelsein 2002,  
Application of Quantum Field Theory to Phenomenology\* 126

W. BIETENHOLZ, S. CAPITANI, T. CHIARAPPA et al.  
Extracting Physics from an Unphysical Situation: Light Mesons in a Small Box.  
DESY 03-128, zur Veröffentl. in Proc. of the NIC Symposium, Jülich/D

G. BLAIR  
Physics Potential of the High Energy  $e^+e^-$  Linear Collider.  
Institute on the LHC, Prague/CZ (2003)

G. BLAIR  
The Linear Collider Programme.  
String Phenomenology Workshop, Durham/GB (2003)

G. BLAIR, D.J. MILLER  
The Machine and Detector Chapter of Linear Collider Physics in the New Millennium.  
Buch zur Veröffentl. bei World Scientific

G. BLAIR, A. DROZHDIN, L. KELLER, W. KOZANECKI et al.  
Comparison of the TESLA, NLC and CLIC Beam-Collimation System Performance.  
FERMILAB-TM-2200

S.A. BLUDMAN  
Critique of Tracking Quintessence.  
Zur Veröffentl. in Multiwavelength Cosmology, ed. M. Plionis, Kluwer

S.A. BLUDMAN  
What We Already Know About Tracking Quintessence.  
Zur Veröffentl. in Proc. NoVe Int. Workshop on Neutrino Oscillations in Venice, ed. M. Baldo Ceolin

P. BOUCAUD, V. GIMENEZ, C.J.D. LIN, V. LUBICZ et al.  
Matrix Elements of  $\Delta I = 3/2$   $K \rightarrow \pi\pi$  Decays.  
Proc. of the 21st Int. Symposium on Lattice Field Theory (LATTICE 2003), Tsukuba/J, (2003) und hep-lat/0309128

A. BRANDENBURG  
Top Quark Physics and QCD: Progress since the TESLA TDR.  
Proc. of the 4th ECFA/DESY Workshop on Physics and Detectors for a 90-800 GeV Linear  $e^+e^-$  Collider, NIKHEF, Amsterdam/NL (2003) und DESY 03-104

- A. BRANDENBURG**  
 Predictions for Top Quark Spin Correlations at the Tevatron and the LHC at Next-to-leading Order in  $\alpha_s$ .  
 Proc. of the HEP2003 Europhysics Conf., Aachen/D (2003) und PITHA 03/10
- W. BUCHMÜLLER**  
 Baryogenesis and Leptogenesis.  
 2002 Astroparticle Physics and Cosmology, ICTP Lecture Notes 14, (2003) eds. G. Dvali et al. (2003) p. 39
- W. BUCHMÜLLER**  
 Neutrinos and Matter-antimatter Asymmetry of the Universe.  
 Proc. Neutrino Telescopes, Venice 2003, ed. M. Baldo Ceolin, p. 581 und DESY 03-068
- L. COVI**  
 Status of Observational Cosmology and Inflation.  
 Proc. of the 23rd Int. Conf. on Physics in Collision (PIC 2003), Zeuthen/D (2003), eConf C030626:THBT01, 2003 und DESY 03-152, hep-ph/0309238
- F. CSIKOR, G.I. EGRI, Z. FODOR, S.D. KATZ, K.K. SZABO, A.I. TOTH**  
 Lattice QCD at Non-vanishing Density: Phase Diagram, Equation of State.  
 Proc. of Strong and Electroweak Matter (SEWM 2002) und hep-lat/0301027.
- M. DIEHL**  
 Exclusive Two-photon Annihilation at Large Energy or Large Virtuality.  
 Proc. of the Int. Conf. on the Structure and Interactions of the Photon (PHOTON 2003), Frascati/I (2003) und DESY 03-077
- M. DIEHL**  
 Diffraction, Exclusive Processes, and Proton Structure in Three Dimensions.  
 Proc. of the 11th Int. Workshop on Deep Inelastic Scattering (DIS 03), St. Petersburg/RUS (2003) und DESY 03-125
- P. DIMOUPOULOS, J. HEITGER, C. PENA, S. SINT, A. VLADIKAS [ALPHA COLLABORATION]**  
 $B_K$  from Twisted Mass QCD.  
 DESY 03-129, zur Veröffentl. in Nucl. Phys. B (Proc. Suppl.), hep-lat/0309134
- F. FARCHIONI, C. GEBERT, I. MONTVAY, E. SCHOLZ, L. SCORZATO**  
 Quark Mass Dependence of Pseudoscalar Masses and Decay Constants.  
 Proc. of the Int. Lattice Conf., Tsukuba/J (2003) und DESY 03-148
- Z. FODOR, S.D. KATZ, A. RINGWALD, H. TU**  
 Strongly Interacting Neutrinos as the Highest Energy Cosmic Rays.  
 Proc. of the 4th Int. Conf. on Physics Beyond the Standard Model: Beyond the Desert '03, Schloss Ringberg, Tegernsee/D (2003) und DESY 03-163, hep-ph/0310112, WUB-03-11, ITP-BUDAPEST-603
- A. GELLRICH, D. POP, P. WEGNER, H. WITTIG, M. HASENBUSCH, K. JANSEN**  
 Lattice QCD Calculations on Commodity Clusters at DESY.  
 Proc. of Conf. for Computing in High-Energy and Nuclear Physics (CHEP 03), La Jolla CA/USA (2003) und DESY 03-073, physics/0306090
- R.M. GODBOLE**  
 Photon 2003: A Theorist's Summary and Outlook.  
 Proc. of Photon 2003: Int. Conf. on the Structure and Interactions of the Photon and 15th Int. Workshop on Photon-Photon Collisions, Frascati/I (2003), zur Veröffentl. in Nucl. Proc. Suppl., hep-ph/0311188
- R.M. GODBOLE**  
 CP Property of the Higgs at the  $\gamma\gamma$  Colliders Using  $\bar{t}$  Production.  
 8th Accelerator and Particle Physics Inst. (APPI 2003), Appi, Iwate/J (2003),  
 Appi 2003, Accelerator and Particle Physics, p. 126, hep-ph/0311185
- R.M. GODBOLE, A. GRAU, G. PANCHERI, Y.N. SHRIVASTAVA**  
 Photon Total Cross-sections.  
 Proc. of the Int. Conf. on the Structure and Interactions of the Photon and 15th Int. Workshop on Photon-photon Collisions, Frascati/I (2003) 7, zur Veröffentl. in Nucl. Phys. Proc. Suppl., hep-ph/0311211
- M. GUAGNELLI, J. HEITGER, C. PENA, S. SINT, A. VLADIKAS [ALPHA COLLABORATION]**  
 Nonperturbative Scale Evolution of Four-fermion Operators.  
 Nucl. Phys. B (Proc. Suppl.) 119 (2003) 436
- M. GUAGNELLI, J. HEITGER, C. PENA, A. VLADIKAS [ALPHA COLLABORATION]**  
 Quark Bilinear Step Scaling Functions and their Continuum Limit Extrapolation.  
 DESY 03-130, zur Veröffentl. in Nucl. Phys. B (Proc. Suppl.), hep-lat/0309132
- M. HASENBUSCH, K. JANSEN, D. PLEITER, H. STÜBEN, P. WEGNER, T. WETTIG, H. WITTIG**  
 Benchmarking Computer Platforms for Lattice QCD Applications.  
 Proc. of 21st Int. Symposium on Lattice Field Theory (LATTICE 2003), Tsukuba/J (2003), DESY 03-145, hep-lat/0309149
- G. HEINRICH**  
 Photoproduction of Isolated Photons, Single Hadrons and Jets at NLO.  
 Proc. of the Ringberg Workshop on New Trends in HERA Physics, Schloss Ringberg, Tegernsee/D (2003), hep-ph/0312070
- S.J. HUBER**  
 Neutrino Masses in Models of Warped Extra Dimensions.  
 AIP Conf. Proc. 655 (2003) 163
- S.D. KATZ**  
 Lattice QCD at Finite T and mu.  
 Proc. of Lattice (2003) und hep-lat/0310051, DESY-03-164, ITP-BUDAPEST-602
- M. KLASEN, B.A. KNIEHL**  
 Heavy Quarkonium Production with Polarized Hadrons and Photons.  
 Proc. of the XI Int. Workshop on Deep Inelastic Scattering. (DIS 2003), St. Petersburg/RUS (2003)

- B.A. KNIEHL, F. SEFKOW  
Summary of the Heavy Flavour Session.  
Proc. of the XI Int. Workshop on Deep Inelastic Scattering. (DIS 2003), St. Petersburg/RUS (2003)
- M. LUBLINSKY  
Hard-soft Pomeron Transition from QCD Saturation in the Dipole Picture.  
Proc. of XI Int. Workshop on Deep Inelastic Scattering. (DIS 2003), St. Petersburg/RUS (2003) und DESY 03-089
- M. MANIATIS  
Single Hadron Production in Deep Inelastic Scattering.  
Proc. of the Conf. on New Trends in HERA Physics 2003, Schloss Ringberg, Tegernsee/D (2003).
- I. MONTVAY  
Numerical Simulation with Light Wilson Quarks.  
Proc. of the Conf. "Strong and Electroweak Matter", Heidelberg/D (2002) und DESY 03-003
- C. PENA, S. SINT, A. VLADIKAS  
Twisted Mass QCD and the  $\Delta I = 1/2$  Rule.  
Nucl. Phys. B (Proc. Suppl.) 119 (2003) 368
- C. PENA, S. SINT, A. VLADIKAS  
Towards a Determination of  $g_8$  and  $g_{27}$  from Twisted Mass QCD.  
DESY 03-131, zur Veröffentlichl. in Nucl. Phys. B (Proc. Suppl.)
- A. RINGWALD  
From QCD Instantons at HERA to Electroweak B + L Violation at VLHC.  
Proc. 26th Johns Hopkins Workshop on Current Problems in Particle Theory, Heidelberg/D (2002), PRHEP-jhw2002/008, und DESY 03-008, hep-ph/0302112
- A. RINGWALD  
Boiling the Vacuum with an X-Ray Free Electron Laser.  
Proc. Workshop on Quantum Aspects of Beam Physics, Hiroshima/JP (2003) und DESY 03-039, hep-ph/0304139
- I. SCHIENBEIN, K.S. BABU, K.R.S. BALAJI  
CP Violation in Polarised  $b \rightarrow d l^+ l^-$ : A Detailed Standard Model Analysis.  
Proc. of the 2nd Int. Conf. on Flavor Physics 2003 (ICFP2003), Seoul/Korea (2003), hep-ph/0312121.
- I. SCHIENBEIN, J.-Y. YU  
Pion Absorption and Rescattering in the ANP Model Revisited.  
Proc. of the 2nd Int. Workshop on Neutrino-Nucleus Interactions in the few-GeV Region (NUINT'02), Irvine CA/USA (2002), hep-ph/0308010
- F. SCHREMPP, A. UTERMANN  
Instanton Driven Saturation at Small x.  
DESY 03-217, hep-ph/0401137, zur Veröffentlichung in Proc. of the Workshop "New Trends in HERA Physics 2003"  
Schloss Ringberg, Tegernsee/D (2003)
- M. STEINHAUSER  
Heavy Quarkonium Production and Decay to NNNLO Accuracy.  
Proc. of the Conf. on QCD and High Energy Hadronic Interactions, Les Arcs, Savoie/F (2003)
- M. STEINHAUSER  
The Impact of  $\sigma(e^+ e^- \rightarrow \text{Hadrons})$  Measurements on the Parameters of the Standard Model.  
Proc. of the Workshop on Hadronic Cross Section at Low Energy — SIGHAD03, Pisa/I (2003)
- H. WITTIG  
Status of Lattice Calculations of B-meson Decays and Mixing.  
Proc. of Int. Europhysics Conf. on High-Energy Physics (HEP 2003), Aachen/D (2003) und DESY 03-174, hep-ph/0310329
- H. WITTIG, A.A. PETROV, D.G. CASSEL  
WG V Conveners' Report: Charm Inputs for CKM Physics.  
Proc. of 2nd Workshop on the CKM Unitarity Triangle, Durham/UK (2003) und DESY 03-173, hep-ph/0310302
- J.-Y. YU, E.A. PASCHOS, D.P. ROY, I. SCHIENBEIN  
Muon Spectra of Quasi-Elastic and 1-Pion Production Events at the KEK LBL Neutrino Oscillation Experiment.  
Proc. of the 2nd Int. Conf. on Flavor Physics 2003 (ICFP2003), Seoul/Korea (2003), hep-ph/0312123

### Vorträge

- A. ALI  
Rare B Decays.  
International Workshop: QCD@Work, Conversano, Bari/I (2003)
- A. ALI  
Theoretical Interest in Rare B Decays in the LHC/(Super) B-Factory Era.  
ITP, Univ.Bern, Bern/CH (2003)  
Univ. Paris, LAL/LPT, Orsay/F (2003)
- A. ALI  
Theoretical and Experimental Perspectives in Radiative Rare B Decays in the LHC/Super-B-Factory Era.  
Joint Meeting, LHC-B/Theory Division, CERN, Genf/CH (2003)
- A. ALI  
Goals of B Physics at LHC - A Theoretical Perspective  
NIKHEF, Amsterdam/NL (2003)  
Universidad Autónoma de Madrid, Madrid/E (2003)
- A. ALI  
Radiative B Decays and SUSY.  
Ringberg Phenomenology Workshop on Heavy Flavours, Schloss Ringberg, Tegernsee/MPI München/D (2003)
- A. ALI  
Rare B Decays - Introduction and Theoretical Overview.  
Int. Workshop on Discovery Potential of a  $10^{36}$  B-factory, SLAC, Stanford Univ., CA/USA (2003)
- A. ALI  
CKM Phenomenology and B Physics - A Mini Course of Lectures (5 Vorträge).  
LAPP-LAPTH, Annecy-le-Vieux/F (2003)

- A. ALI**  
 CKM Phenomenology and B Physics - An Overview (5 Vorträge).  
 KEK, Tsukuba/J (2003)  
 Nagoya Univ., Nagoya/J (2003)
- J. BARTELS**  
 Small-x Physics - Where are We Going?  
 DIS03, St.Petersburg, RUS (2003)
- J. BARTELS**  
 Quark-Antiquark Exchange in  $\gamma^*\gamma^*$  Scattering.  
 Brookhaven Nat.Lab., Upton/USA (2003)
- J. BARTELS**  
 Theory of the Odderon in QCD.  
 Fermilab, Batavia IL/USA (2003)
- J. BARTELS**  
 Quark-Antiquark Exchange in  $\gamma^*\gamma^*$  Scattering.  
 State Univ. of New York, Stony Brook/USA (2003)
- J. BARTELS**  
 Diffraction in Deep Inelastic Scattering.  
 Columbia Univ., Irvington-on-Hudson, USA (2003)
- J. BARTELS**  
 Quark-Antiquark Exchange in  $\gamma^*\gamma^*$  Scattering.  
 Pennsylvania State Univ., PA/USA (2003)
- J. BARTELS**  
 The Small-x Message from HERA.  
 Brookhaven Nat.Lab., Upton/USA (2003)
- G. BLAIR**  
 The PETRA Laser-wire.  
 Asian Linear Collider Workshop, Mumbai/Indien (2003)
- G. BLAIR**  
 Laser-wire Simulation.  
 Laserwire Mini-Workshop, Kyoto/J (2003)
- S.A. BLUDMAN**  
 Quintessence Cosmology.  
 IAU Colloquium "Supernovae", Valencia/E (2003)
- S.A. BLUDMAN**  
 Quintessence at Dark Matter and Dark Energy.  
 Bad Honnef/D (2003)
- S.A. BLUDMAN**  
 Smooth Energy.  
 Univ. Groningen/NL (2003)
- S.A. BLUDMAN**  
 Astronomical Dating of the Birth and Death of Christ.  
 Univ. Groningen/NL (2003)
- S.A. BLUDMAN**  
 Astronomical Dating of the Birth and Death of Christ.  
 English Speaking Union, Hamburg/D (2003)
- A. BRANDENBURG**  
 Probing Fundamental Interactions with Heavy Quarks.  
 Colloquium, Univ. Liège/B (2003)
- A. BRANDENBURG**  
 News on QCD and Top Quark Physics.  
 First Workshop of the ECFA/DESY Study on Physics and Detectors  
 for a 90 to 800 GeV Linear Collider, Montpellier/F (2003)
- W. BUCHMÜLLER**  
 Neutrinos und der Ursprung der Materie.  
 Univ. Bonn/D (2003)  
 Karlsruhe/D (2003)
- W. BUCHMÜLLER**  
 Quarks and Leptons Between Branes and Bulk.  
 Ann Arbor/USA (2003)
- W. BUCHMÜLLER**  
 Baryogenesis and Leptogenesis.  
 Cargèse/F (2003)  
 Seifhennersdorf/F (2003)
- W. BUCHMÜLLER**  
 Neutrinos and GUTs.  
 Bochum/D (2003)
- W. BUCHMÜLLER**  
 Gravitinos as Cold Dark Matter.  
 Bad Honnef/D (2003)
- L. COVI**  
 New Constraints on the Running-mass Models of Inflation.  
 Univ. Bielefeld/D (2003)
- L. COVI**  
 An Orbifold SO(10) GUT in 6D.  
 IFAE, Barcelona/E (2003)
- L. COVI**  
 6D Orbifold GUTs and Anomalies.  
 XV Workshop: Beyond the Standard Model, Bad Honnef/D (2003)
- L. COVI**  
 SO(10) GUT in 6D and Fermion Masses.  
 Planck-03 Meeting: From the Planck Scale to the Electroweak Scale.  
 Madrid/E (2003)
- L. COVI**  
 SO(10) GUT in 6D, Anomalies and Fermion Masses.  
 Institut für theoretische Physik, Heidelberg/D (2003)
- L. COVI**  
 Fermion Masses and Mixings between Bulk and Branes.  
 Physikalisches Institut, Bonn/D (2003)
- L. COVI**  
 Quark and Leptons Between Branes and Bulk.  
 Institut für Theoretische Physik und Astrophysik.  
 Würzburg/D (2003)
- M. DIEHL**  
 Quarkdichte und mehr: Das Proton unter der Lupe.  
 Univ. Bochum/D (2003)

- M. DIEHL  
Imaging the Structure of the Proton.  
Vrije Univ., Amsterdam/NL (2003)
- M. DIEHL  
Spatial Interpretation of GPDs.  
Workshop on Generalized Parton Distributions and Hard Exclusive Processes, Seattle/USA (2003)
- M. DIEHL  
Recent Developments for GPDs.  
4th Circum-Pan-Pacific Symposium on High Energy Spin Physics, Seattle/USA (2003)
- M. DIEHL  
Generalized Parton Distributions.  
Research Workshop on Nonperturbative QCD, Tashkent/UZ (2003)
- K. HAMAGUCHI  
Democratic (s)Fermions and Lepton Flavor Violation.  
6th European Meeting Planck Scale 03, Madrid/E (2003)
- K. HAMAGUCHI  
Leptogenesis and Scalar Field Dynamics.  
DESY Theory Workshop GUTs & Branes, Hamburg/D (2003)
- K. HAMAGUCHI  
Gauge Couplings at High Temperature and the Relic Gravitino Abundance.  
RWTH Aachen/D (2003)
- K. HAMAGUCHI  
Lectures on Leptogenesis.  
KAIST, Taejon/Korea (2003)
- K. HAMAGUCHI  
Gauge Couplings at High Temperature and the Gravitino Abundance.  
CTP Seoul National Univ., Seoul/Korea (2003)
- A. HEBECKER  
Orbifold Grand Unified Theories.  
Univ. Bielefeld/D (2003)
- A. HEBECKER  
Extra Dimensions and Grand Unification.  
DPG-Tagung, Aachen/D (2003)
- A. HEBECKER  
Physics Beyond the Standard Model.  
DESY Theory-Jamboree, Berlin/D (2003)
- A. HEBECKER  
Power-Law Effects in Extra-Dimensional Unified Models.  
Univ. di Roma ‘La Sapienza’, Rom/I (2003)  
Univ. Autónoma Barcelona/E (2003)
- A. HEBECKER  
Theoretical Particle Physics at DESY.  
56th Meeting of the Extended Scientific Council of DESY, Zeuthen/D (2003)
- A. HEBECKER  
Calculable Power-Corrections to Grand Unification in Extra Dimensions.  
6th Europ. Meeting on Physics from the Planck to the Electroweak Scale (PLANCK 03), Madrid/E (2003)
- A. HEBECKER  
Large and Small Extra Dimensions in Cosmology and Particle Physics.  
Univ. Heidelberg/D (2003)
- A. HEBECKER  
Group-Theoretical Aspects of Orbifold and Conifold GUTs.  
Univ. Bonn/D (2003)  
2nd Conf. on String Phenomenology, Durham/GB (2003)
- A. HEBECKER  
Orbifold GUTs: Basic Structure and Phenomenology.  
Univ. Dortmund/D (2003)
- A. HEBECKER  
Fundamentals of Orbifold GUTs.  
DESY Theory Workshop, Hamburg/D (2003)
- A. HEBECKER  
Raum-Zeit-Geometrie bei  $10^{-31}$ m.  
Univ. Wuppertal/D (2003)
- A. HEBECKER  
Grand Unification and Extra Dimensions.  
Univ. Edinburgh/GB (2003)
- A. HEBECKER  
Field Theory.  
Joint Belgian-Dutch-German Summer School, Bonn/D (2003)
- S.J. HUBER  
Phenomenology of Warped Extra Dimensions.  
Univ. Würzburg/D (2003)
- H.A. KASTRUP  
Quantization of Phases and Moduli in Terms of the Group SU(1, 1).  
Humboldt Univ. Berlin/D (2003)
- H.A. KASTRUP  
Replacing the Algebraic Basis Q,P,I of Quantum Mechanics by the Lie Algebra of SO(1, 2).  
Univ. Hamburg/D (2003)
- H.A. KASTRUP  
Replacing the Algebraic Basis Q,P,I of Quantum Mechanics by the Lie Algebra of SO(1, 2).  
MPI Leipzig/D (2003)
- W. KILIAN  
Little-Higgs Phenomenology.  
IOP Conf. on Particle Physics, Durham/UK (2003)  
Univ. Hamburg/D (2003)  
Univ. Würzburg/D (2003)

**W. KILIAN**  
Strong Electroweak Symmetry Breaking.  
LHC-LC Workshop, CERN, Genf/CH (2003)

**W. KILIAN**  
The Little Higgs at the Linear Collider.  
American Linear Collider Workshop, Cornell, Ithaca NY/USA  
(2003)

**W. KILIAN**  
Dynamical Symmetry Breaking.  
Workshop on Weak Interactions and Neutrinos, Lake Geneva/USA  
(2003)

**W. KILIAN**  
Electroweak Interactions: Models and Alternatives.  
Univ. Bonn/D (2003)

**W. KILIAN**  
Tools and Programs for SPA.  
ECFA Study on Physics and Detectors for a Linear Collider,  
Montpellier/F (2003)

**W. KILIAN**  
Open Questions, New Channels.  
ECFA Study on Physics and Detectors for a Linear Collider,  
Montpellier/F (2003)

**W. KILIAN**  
Modelle der elektroschwachen Symmetriebrechung: Herausforderungen für die computergestützte Physik.  
Univ. Karlsruhe/D (2003)

**B.A. KNIEHL**  
Heavy Quark and Quarkonium Production in Hadron and Photon Collisions.  
PSI, Villigen/CH (2003)

**B.A. KNIEHL**  
Heavy Quark and Quarkonium Production at Colliders.  
Univ. Freiburg/D (2003)

**B.A. KNIEHL**  
Inclusive Hadron Production in the QCD-improved Parton Model.  
Univ. Giessen/D (2003)

**G. KRAMER**  
Inclusive Light-hadron Production in Photon-photon Collisions at NLO.  
Photon 2003, Frascati/I (2003)

**G. KRAMER**  
Inclusive D\* Production in  $\gamma\gamma$  Collisions with Massive Quarks.  
Photon 2003, Frascati/I (2003)

**G. KRAMER**  
Inclusive B Meson Production in  $p\bar{p}$  Collisions in Perturbative QCD.  
DIS 2003, St. Petersburg/RUS (2003)

**E. LEVIN**  
QCD Saturation in Semi-classical Approach.  
DIS'03, St. Petersburg/RUS (2003)

**M. LUBLINSKY**  
Quark - Antiquark Exchange in Photon Photon Scattering.  
IPPP Durham/UK (2003)  
Univ. Heidelberg/Germany (2003)  
Small x and Diffraction Workshop, Fermilab, Batavia IL/USA  
(2003)  
Argonne National Lab, Argonne IL/USA (2003)  
Univ. Minnesota, Minneapolis MN/USA (2003)

**M. LUBLINSKY**  
Reggeons in QCD.  
Columbia Univ., Irvington-on-Hudson NY/USA (2003)  
Technion, Haifa/Israel (2003)

**M. LUBLINSKY**  
New Global DIS Analysis and Hard - Soft Pomeron Transition.  
SUNY, Stony Brook NY/USA (2003)  
BNL, Upton NY/USA (2003)

**M. LUBLINSKY**  
Nuclear Shadowing from High Density QCD.  
CERN, Genf/CH (2003)

**M. LUBLINSKY**  
Phenomenology with Non-Linear QCD Evolution.  
The First III Years of Heavy-ion Physics at RHIC Program,  
INT, Seattle WA/USA (2003)

**I. MONTVAY**  
QCD Simulations with Light Wilson Quarks.  
Asia-Pacific Workshop on Lattice QCD, Tsukuba/J (2003)

**I. MONTVAY**  
Partially Quenched Chiral Perturbation Theory and Numerical Simulations.  
4th Int. Workshop on Chiral Dynamics, Bonn/D (2003)

**I. MONTVAY**  
Light Quarks are Easy.  
SciDac Workshop, Boulder CO/USA (2003)

**M. RATZ**  
Group Theory in Orbifold GUTs.  
TU München/D (2003)

**M. RATZ**  
RG Evolution of Neutrino Masses.  
Planck Conf., Madrid/E (2003)

**M. RATZ**  
Leptogenesis with Dirac Neutrinos.  
Baryogenesis Workshop, Ann Arbor MI/USA (2003)

- M. RATZ  
Gauge Couplings at High Temperature and the Relic Gravitino Abundance.  
Univ. Heidelberg/D (2003)
- M. RATZ  
Gauge Couplings at High Temperature and the Relic Gravitino Abundance.  
TU München/D (2003)
- A. RINGWALD  
From Big Bang Relic Neutrinos to the Highest Energy Cosmic Rays.  
Heidelberg/D (2003)
- A. RINGWALD  
Particle Physics with X-Ray Free Electron Lasers.  
CERN, Genf/CH (2003)  
Würzburg/D (2003)
- A. RINGWALD  
Boiling the Vacuum with Ultra-Intense Lasers.  
Rom/I (2003)
- A. RINGWALD  
Astroparticle Physics and Cosmology.  
Theory Jamboree, Berlin/D (2003)
- A. RINGWALD  
Instanton-induced Hard Scattering Processes - From HERA to Heaven.  
Zürich/CH (2003)
- A. RINGWALD  
XFEL as a Vacuum Boiler.  
Workshop Physik am XFEL, Rostock/D (2003)
- A. RINGWALD  
Strong Neutrino-Nucleon Interactions at Ultrahigh Energies as a Solution to the GZK Puzzle.  
10<sup>th</sup> Marcel Grossmann Meeting, Rio de Janeiro/BR (2003)
- A. RINGWALD  
Black Holes in Ice.  
10<sup>th</sup> Marcel Grossmann Meeting, Rio de Janeiro/BR (2003)
- A. RINGWALD  
Electroweak Baryon and Lepton Number Violation at Future Hadron Colliders.  
Int. Workshop on Future Hadron Colliders, Fermilab, Batavia IL/USA (2003)
- A. RINGWALD  
Opportunities for Subdominant Dark Matter Candidates.  
Dark Matter and Dark Energy, 315<sup>th</sup> WE-Heraeus Seminar, Bad Honnef/D (2003)
- E.E. SCHOLZ  
QCD Simulations with  $N_f = 2$  and  $N_f = 3$  Light Quark Flavours.  
DPG, Aachen/D (2003)
- E.E. SCHOLZ  
Quark Mass Dependence of Pseudoscalar Masses and Coupling Constants.  
DPG-Schule für Physik on Masses of Hadrons, Bad Honnef/D (2003)
- E.E. SCHOLZ  
QCD Simulations with Light Quark Flavours.  
Univ. Hamburg/D (2003)
- F. SCHREMPP  
Theory Group Hamburg.  
Theory Jamboree, Berlin/D (2003)
- F. SCHREMPP  
Theoretical Particle Physics at DESY.  
Evaluation, DESY-Hamburg/D (2003)
- F. SCHREMPP  
Instanton-Driven Saturation at Small x.  
Ringberg Workshop on New Trends in HERA Physics 2003, Tegernsee/D (2003)
- M. STEINHAUSER  
Applications of the Inclusive Cross Section  $\sigma(e^+e^- \rightarrow \text{hadrons})$ .  
CERN, Genf/CH (2003)
- M. STEINHAUSER  
Heavy Quarkonium Dynamics to NNNLO Accuracy.  
Univ. Mainz/D (2003)
- M. STEINHAUSER  
Determination of Heavy Quark Masses.  
Univ. of Barcelona/E (2003)
- H. TU  
Electroweak Instantons as a Solution to the Ultrahigh Energy Cosmic Ray Puzzle.  
XV Workshop Beyond the Standard Model, Bad Honnef/D (2003)
- H. WITTIG  
Random Matrix Theory and the Low-energy Regime of QCD.  
Univ. Bonn/D (2003)
- H. WITTIG  
Report from the LATFOR Evaluation Group.  
LatFor Meeting, Univ. Münster/D (2003)
- H. WITTIG  
Bericht der LatFor Evaluierungsgruppe.  
LatFor Meeting, GSI Darmstadt/D (2003)
- P.M. ZERWAS  
W and Z at LEP.  
CERN Symposium, CERN/CH (2003)
- P.M. ZERWAS  
 $e^+e^-$  Physics: From the Past to the Future.  
Fest-Colloquium, ECFA Workshop, Univ. de Montpellier/F (2003)

## Habilitation

M. DIEHL  
 Generalized Parton Distributions.  
 Hamburg/D (2003)  
 DESY-THESIS-2003-018

## Dissertationen

- S. BERGE  
 Gluino and Squark Pair Production at Future Linear Colliders.  
 Univ. Hamburg/D (2003)  
 DESY-THESIS-2003-048
- A. KYRIELEIS  
 The Real Corrections to the Photon Impact Factor.  
 Univ. Hamburg/D (2003)  
 DESY-THESIS-2003-036
- T. PRÜSTEL  
 Gauge Theories with Nonunitary Parallel Transport.  
 Univ. Hamburg/D (2003)
- A. UTERMANN  
 QCD Instanton und Saturation bei kleinem Bjorken-x.  
 Univ. Hamburg/D (2003)  
 DESY-THESIS-2003-029
- L. ZWIRNER  
 J/ $\psi$  Production in Deep Inelastic Scattering.  
 Univ. Hamburg/D (2003)  
 DESY-THESIS-2003-040

## Diplomarbeiten

- B. ANGERMANN  
 Verallgemeinerte Eichtheorien auf diskreten Mannigfaltigkeiten.  
 Univ. Hamburg/D (2003)
- T. FLACKE  
 Covariant Quantisation of N=1, D=5 Supersymmetric Yang-Mills Theories in 4D Superfield Formalism.  
 Univ. Hamburg/D (2003)
- CH. LÜDELING  
 Supergravity in Four and Five Dimensions.  
 Univ. Hamburg/D (2003)  
 DESY-THESIS-2003-034
- A. von MANTEUFFEL  
 Smuon Pair Production in  $e^+e^-$  Collisions.  
 Univ. Hamburg/D (2003)
- J.H. PICLUM  
 Zwei-Schleifen-Korrekturen der Ordnung  $\mathcal{O}(\alpha\alpha_s)$  zum Zusammenhang zwischen Yukawa-Kopplung und Polmasse.  
 Univ. Hamburg (2003)
- J. ZAHN  
 Wirkungs- und Lokalitätsprinzip für nichtkommutative skalare Feldtheorien.  
 Univ. Hamburg/D (2003)  
 DESY-THESIS-2003-041

## Forschung mit Photonen

### HASYLAB

#### Veröffentlichungen

- J. AARIK, H. MÄNDAR, M. KIRM  
 Spectroscopic Characterization of  $ZrO_2$  Thin Films Grown by Atomic Layer Deposition.  
*Proc. Estonian Acad. Sci. Phys. Math.* 52 (2003) 289–298
- S. ADAM, C. MCGINLEY, T. MÖLLER, D.V. TALAPIN, H. BORCHERT, M. HAASE, H. WELLER  
 Photoemission study of size selected InP nanocrystals: The relationship between luminescence yield and surface structure.  
*Eur. Phys. J. D* 24 (2003) 373
- A. AERTS, B. VELDE, K. JANSENS  
 Change in silica sources in Roman and post Roman glass.  
*Spectrochim. Acta B* 58 (2003) 669–680
- S. AGNELLO, R. BOSCAINO, M. CANNAS, A. CANNIZZO, F.M. GELARDI, M. LEONE, S. GRANDI  
 Spectral heterogeneity of oxygen deficient centers in Ge-doped silica.  
 Zur Veröffentl. in *Radiat. Meas.*
- S. AGNELLO, R. BOSCAINO, M. CANNAS, A. CANNIZZO, F.M. GELARDI, S. GRANDI, M. LEONE  
 Temperature and excitation energy dependence of decay processes of luminescence in Ge-doped silica.  
*Phys. Rev. B* 68 (2003) 165201-1-5
- S. AGNELLO, R. BOSCAINO, M. CANNAS, F.M. GELARDI, M. LEONE, B. BOIZOT  
 Competitive relaxation processes of oxygen deficient centers in silica.  
*Phys. Rev. B* 67 (2003) 033202-1-4
- S. AGNELLO, R. BOSCAINO, M. CANNAS, F.M. GELARDI, M. LEONE  
 UV and Vacuum UV properties of Ge related centers in gamma irradiated silica.  
 Zur Veröffentl. in *Rad. Eff. Defects Solids*
- H. AHRENS, G. PAPASTAVROU, M. SCHMIDT, C.A. HELM  
 Synchrotron X-ray Diffraction and Reflection Studies of a Polymacro-monomer Monolayers at the Air-Water Interface: Transition from Straight Aligned Molecules to Homogeneous Layer.  
 Zur Veröffentl. in *J. Phys. Chem. B*
- H. AHRENS, K. BÜSCHER, D. ECK, S. FÖRSTER, C. LUAP, G. PAPASTAVROU, J. SCHMITT, R. STEITZ, C.A. HELM  
 Poly(styrene sulfonate) adsorption: Electrostatic and Secondary Interactions.  
 Zur Veröffentl. in *Macromol. Symp.*

C. ALONSO, R.W. GURNEY, R. ELIASH, S.C. HONG, Y.R. SHEN, T.R. JENSEN, K. KJAER, O. KONOVALOV, M. LAVHAV, L. LEISEROWITZ  
A crystalline Langmuir monolayer designed as a template for selective intercalation of water soluble alpha-amino acids.

Crystal Growth & Design 3 (2003) 683–690

J.W. ANDREASEN, O. RASMUSSEN, R. FEIDENHANS'L, F.B. RASMUSSEN, A.M. MOLENBROEK, G. GOERIGK  
An in situ cell for small-angle scattering experiments on nanostructured catalysts .

J. Appl. Cryst. 36 (2003) 812–813

F. ANIA, A. FLORES, F.J. BALTA-CALLEJA  
Density fluctuations as precursors of crystallization in polyamide 6,6 using time-resolved X-ray scattering techniques.  
J. Macromol. Sci.-Phys. B42 (2003) 653–661

F. ANIA, A. FLORES, H.R. KRICHELDORF, F.J. BALTA CALLEJA  
Real time WAXS study of induced orientation in a liquid crystalline polyester under the influence of a magnetic field.  
Polymer 44 (2003) 5909–5913

I. ARCON, A. KODRE, R.M. ABRA, A. HUANG, J.J. VALLNER, D.D. LASIC  
EXAFS study of liposome encapsulated cisplatin.  
Zur Veröffentl. in Colloids Surf. B

I. ARCON, B. MALIC, M. KOSEC, A. KODRE  
EXAFS study of PZT sols.  
Materials Research Bulletin 38 (2003) 1901–1906

I. ARCON, M. MOZETIC, A. ZALAR, A. KODRE, J. JAGIELSKI  
EXAFS study of ion beam mixed Fe/Al multilayers.  
Nucl. Instrum. Methods Phys. Res. B 199 (2003) 222–226

J. ARRANZ-ANDRÉS, R. BENAVENTE, E. PÉREZ, M.L. CERRADA  
Structure and mechanical behavior of the mesomorphic form in a propylene-b-EPR copolymer and its comparison with other thermal treatments.  
Zur Veröffentl. in Polymer Journal

T. ASTHALTER, H. FRANZ, U. VAN BÜRCK, K. MESSEL, E. SCHREIER, R. DINNEBIEBER  
Structure and dynamics of octamethyl-ethinyl-ferrocene: an organometallic rotator phase.  
J. Phys. Chem. Solids 64 (2003) 677

T. ASTHALTER, I. SERGUEEV, H. FRANZ, W. PETRY, K. MESSEL, R. VERBENI  
Glass dynamics and scaling behaviour under pressure using quasielastic nuclear forward scattering.  
Hyperfine Interact. 5 (2003) 29–32

T. ASTHALTER, M. BAUER, U. VAN BÜRCK, I. SERGUEEV, H. FRANZ, A.I. CHUMAKOV  
Confined phonons in glasses. A study by nuclear inelastic absorption and Raman scattering.  
Zur Veröffentl. in Eur. Phys. J. B

M. AY, A. NEFEDOV, H. ZABEL

Growth properties and structural analysis of ZnO films and Au clusters on ZnO.  
Appl. Surf. Sci. 205 (2003) 329

M. AY, A. NEFEDOV, H. ZABEL

Structural properties of Cu clusters on the O-terminated ZnO(000-1) surface.  
Zur Veröffentl. in Appl. Surf. Sci.

V. AYVAZYAN, J.-P. CARNEIRO, P. CASTRO, B. FAATZ, A.A. FATEEV, J. FELDHAUS, CH. GERTH, V. GRETCHKO, B. GRIGORYAN, U. HAHN, K. HONKAVAARA, M. HÜNING, R. ISCHEBECK, U. JASTROW, R. KAMMERING, J. MENZEL, M. MINTY, D. NÖLLE, J. PFLÜGER, PH. PIOT, L. PLUCINSKI, K. REHLICH, J. ROSSBACH, E. L. SALDIN, H. SCHLARB, E. A. SCHNEIDMILLER, S. SCHREIBER, R. SOBIERAJSKI, B. STEEG, F. STULLE, K.P. SYTCHEV, K. TIEDTKE, R. TREUSCH, H. WEISE, M. WENDT, M. V. YURKOV  
Study of the statistical properties of the radiation from a VUV SASE FEL operating in the femtosecond regime.  
Nucl. Instrum. Methods Phys. Res. A 507 (2003) 368–372

V. AYVAZYAN, N. BABOI, I. BOHNET, R. BRINKMANN, M. CASTELLANO, P. CASTRO, L. CATANI, S. CHOROBA, A. CIANCHI, M. DOHLUS, H.T. EDWARDS, B. FAATZ, A.A. FATEEV, J. FELDHAUS, K. FLÖTTMANN, A. GAMP, T. GARVEY, H. GENTZ, CH. GERTH, V. GRETCHKO, B. GRIGORYAN, U. HAHN, C. HESSLER, K. HONKAVAARA, M. HÜNING, R. ISCHEBECK, M. JABLONKA, T. KAMPS, M. KÖRFER, M. KRASSILNIKOV, J. KRZYWINSKI, M. LIEPE, A. LIERO, T. LIMBERG, H. LOOS, M. LUONG, C. MAGNE, J. MENZEL, P. MICHELATO, M. MINTY, U.-C. MÜLLER, D. NÖLLE, A. NOVOKHATSKI, C. PAGANI, F. PETERS, J. PFLÜGER, P. PIOT, L. PLUCINSKI, K. REHLICH, I. REYZL, A. RICHTER, J. ROSSBACH, E.L. SALDIN, W. SANDNER, H. SCHLARB, G. SCHMIDT, P. SCHMÜSER, J.R. SCHNEIDER, E.A. SCHNEIDMILLER, H.-J. SCHREIBER, S. SCHREIBER, D. SERTORE, S. SETZER, S. SIMROCK, R. SOBIERAJSKI, B. SONNTAG, B. STEEG, F. STEPHAN, K.P. SYTCHEV, K. TIEDTKE, M. TONUTTI, R. TREUSCH, D. TRINES, D. TÜRKE, V. VERZILOV, R. WANZENBERG, T. WEILAND, H. WEISE, M. WENDT, I. WILL, S. WOLFF, K. WITTENBURG, M.V. YURKOV, K. ZAPFE

The TESLA test facility FEL: Its present status and future as a user facility.  
Poverkhnost 11 (2003) 25–30

F. AZZURRI, M.A. GOMEZ, G.C. ALFONSO, G. ELLIS, C. MARCO

Time resolved SAXS/WAXS studies of the polymorphic transformation of 1-butene/ethylen copolymers.  
Zur Veröffentl. in J. Macromol. Sci.-Phys.

R. BACEWICZ, J. FILIPOWICZ, S. PODSIADLO, T. SZYSZKO, M. KAMINSKI

Probing local order in (Ga,Mn)N alloys by X-ray absorption spectroscopy.  
J. Phys. Chem. Solids 64 (2003) 1469–1472

- P. BACH, A.S. BADER, C. RÜSTER, C. GOULD, C.R. BECKER, G. SCHMIDT, L.W. MOLENKAMP, W. WEIGAND, C. KUMPF, E. UMBACH, R. URBAN, G. WOLTERSDORF, B. HEINRICH  
Molecular-beam epitaxy of the half-Heusler alloy NiMnSb in (In,Ga)As/InP(001).  
*Appl. Phys. Lett.* 83 (2003) 521
- C. BAEHTZ, H. FUESS  
Organic guest molecules in zeolites.  
In: Host-Guest Systems Based on Nanoporous Crystals, F. Laeri, F. Schüth, U. Simon, M. Wark, Wiley-VCH, Weinheim (2003)
- A.N. BARANOV, V.L. SOLOZHENKO, C. LATHE, V.Z. TURKEVICH, Y.W. PARK  
Synchrotron radiation study of MgB<sub>2</sub> formation under high pressure.  
*Supercond. Sci.-Technol.* 16 (2003) 1147–1151
- V. BARBI, S.S. FUNARI, R. GEHRKE, N. SCHARNAGL, N. STRIBECK  
Nanostructure of Nafion membrane material as a function of mechanical load studied by SAXS.  
*Polymer* 44 (2003) 4853–4861
- V. BARBI, S.S. FUNARI, R. GEHRKE, N. SCHARNAGL, N. STRIBECK  
SAXS and the gas transport in polyether-block-polyamide copolymer membranes.  
*Macromol.* 38 (2003) 749–758
- CH. BARGLIK-CHORY, D. BUCHOLD, M. SCHMITT, W. KIEFER, C. HESKE, C. KUMPF, O. FUCHS, L. WEINHARDT, A. STAHL, E. UMBACH, M. LENTZE, J. GEURTS, G. MÜLLER  
Synthesis, structure and spectroscopic characterization of water-soluble CdS nanoparticles.  
*Chem. Phys. Lett.* 379 (2003) 443
- I.O. BASKIN, V.K. FEDOTOV, M.V. NEFEDOVA, V.G. TISSEN, E.G. PONYATOVSKY, A. SCHIWEK, W.B. HOLZAPFEL  
Crystal structure and superconductivity of the equiatomic TiZr alloy under pressures up to 57 GPa.  
*Phys. Rev. B* 68 (2003) 054401/1–6
- A.A. BATTISTON, H. BITTER, F.M.F. DE GROOT, A.R. OVERWEG, O. STEPHAN, J.A. VAN BOKHOVEN, P.J. KOYMAN, C. VAN DER SPEK, G. VANKO, D.C. KONINGSBERGER  
Evolution of Fe species in Over-exchanged Fe/ZSM<sub>5</sub> Obtained by Chemical Vapor Deposition of FeCl<sub>3</sub>.  
Zur Veröffentl. in *J. Catalysis*
- A.A. BATTISTON, J.H. BITTER, D.C. KONINGSBERGER  
Reactivity of Binuclear Fe-Complexes in Over-exchanged Fe/ZSM<sub>5</sub>, Studied by in situ XAFS Spectroscopy Part 2: Selective Catalytic Reduction of NO with isobutane.  
Zur Veröffentl. in *J. Catalysis*
- A.A. BATTISTON, J.H. BITTER, W.M. HEIJBOER, F.M.F. DE GROOT, D.C. KONINGSBERGER  
Reactivity of Fe-Binuclear Complexes in Over-exchanged Fe/ZSM<sub>5</sub>, Studied by in situ XAFS Spectroscopy. Part 1: Heat Treatment in He and O<sub>2</sub>.  
Zur Veröffentl. in *J. Catalysis*
- A. BECKER, U. BISMAYER, M. EPPLER, H. FABRITIUS, B. HASSE, J. SHI, A. ZIEGLER  
Structural characterisation of X-ray amorphous calcium carbonate (ACC) in sternal deposits of the crustacea *Porcellio scaber*.  
*Dalton Transactions, Society of Chemistry (London)* 2003 (2003) 551–555
- M. BECKER, E. WECKERT  
On the possibility of determining structures of membrane proteins in two-dimensional crystals using X-ray free electron lasers.  
In: Conformational Proteomics of Macromolecular Architectures, R.H. Cheng, L. Hammer, World Scientific Publ., Singapore (2003)
- S. BERA, D. K. GOSWAMI, K. BHATTACHARJEE, B. N. DEV, G. KURI, K. NOMOTO, K. YAMASHITA  
Ion irradiation induced impurity redistribution in Pt/C multilayers.  
*Nucl. Instrum. Methods Phys. Res. B* B 212 (2003) 530–534
- V. BESSERGUENEV  
The use of complex compounds in chemical vapour deposition technique.  
*J. Phys.: Condens. Matter* 15 (2003) 1–22
- V.G. BESSERGUENEV, R.J.F. PEREIRA, M.C. MATEUS, V. KHEMLINSKII, E. BURKEL, R. NICULA  
TiO<sub>2</sub> thin film synthesis from complex precursors by CVD, its physical and photocatalytic properties.  
*International Journal of Photoenergy* 5(2) (2003) 99–105
- U. BISMAYER  
Recent research activities in light scattering techniques.  
*Phase Transit.* 76 (2003) total Volume
- R. BOCA, M. BOCA, H. EHRENBERG, H. FUESS, W. LINERT, F. RENZ, I. SVOBODA  
Spin crossover in iron(II) tris(2-(2-pyridyl)benzimidazole) complex monitored by variable temperature methods: synchrotron powder diffraction, DSC, IR spectra, Moessbauer spectra and magnetic susceptibility.  
*Chem. Phys.* 293 (2003) 375–395
- S. BOCHAROV  
Principle of holography with atomic resolution employing a periodic array of external localised detectors.  
Zur Veröffentl. in *J. Appl. Phys.*
- J. BOLLMANN, S. KNACK, J. WEBER, V. KOTESKI, H.-E. MAHNKE, E. WELTER  
Limitations of electrical detection of x-ray absorption fine structure.  
*Phys. Rev. B* 68 (2003) 125206
- C. BOLM, M. MARTIN, G. GESCHEIDT, C. PALIVAN, D. NESCHCHADIN, H. BERTAGNOLLI, M. FETH, A. SCHWEIGER, G. MITRIKAS, J. HARMER  
Spectroscopic Investigations of Bis(sulfoximine) Copper(II) Complexes and their Relevance in Asymmetric Catalysis.  
*J. Am. Chem. Soc.* 125 (2003) 6222–6227
- H. BORCHERT, D.V. TALAPIN, C. MCGINLEY, S. ADAM, A. LOBO, A.R.B. DE CASTRO, T. MÖLLER, H. WELLER  
High resolution photoemission study of CdSe and CdSe/ZnS core-shell nanocrystals.  
*J. Chem. Phys.* 119 (2003) 1800–1807

- H. BORCHERT, D.V. TALAPIN, N. GRAPONIK, C. MCGINLEY, S. ADAM, A. LOBO, T. MÖLLER, H. WELLER  
Relations between the photoluminescence efficiency of CdTe nanocrystals and their surface properties revealed by synchrotron XPS.  
*J. Phys. Chem. B* 107 (2003) 9662
- C. BOSTEDT, T. VAN BUREN, T.M. WILLEY, A.J. NELSON, N. FRANCO, T. MÖLLER, L.J. TERMINELLO  
Characterization of Ge-nanocrystal films with photoelectron spectroscopy.  
*Nucl. Instrum. Methods Phys. Res. B* 199 (2003) 402
- C. BOSTEDT, T. VAN BUUREN, J.M. PLITZKO, T. MÖLLER, L.J. TERMINELLO  
Experimental evidence for cubic phase in deposite germanium nanocrystals.  
*J. Phys.: Condens. Matter* 15 (2003) 1017
- C. BOSTEDT, T. VON BUREN, N. FRANCO, T. WILLEY, L.J. TERMINELLO, T. MÖLLER  
Electronic structure of germanium nanocluster films.  
*J. Electron Spectrosc. Relat. Phenom.* 126 (2003) 117
- J. BRANDT, L. KIPP, M. SKIBOWSKI, E.E. KRASOVSKII, W. SCHATTKE, E. SPIECKER, C. DIEKER, W. JÄGER  
Charge transfer in misfit layered compounds.  
*Surf. Sci.* 532–535 (2003) 705–710
- R. BRANDT, R. PETRICEVIC, H. PRÖBSTLE, J. FRICKE  
Acetic Acid Catalyzed Carbon Aerogels.  
*Journal of Porous Materials* 10(3) (2003) 171–178
- W. BREFELD, B. FAATZ, J. FELDHAUS, M. KÖRFER, J. KRZYWINSKI, T. MÖLLER, J. PFLUEGER, E.L. SALDIN, E.A. SCHNEIDMILLER, S. SCHREIBER, M.V. YURKOV  
Scheme for time-resolved experiments based on the use of statistical properties of the third harmonic of the SASE FEL radiation.  
*Nucl. Instrum. Methods Phys. Res. A* 507 (2003) 431–434
- G. BREZESINSKI, H. MÖHWALD  
Langmuir monolayers to study interactions at model membrane surfaces.  
*Adv. in Colloid and Interface Science* 100–102 (2003) 563–584
- F.J. BRIEGER, P. GRUNDMANN, M. FRÖBA, L. CHEN, P.J. KLAR, W. HEIMBRODT, H.-A. KRUG VON NIDDA, T. KURZ, A. LOIDL  
Formation of  $Zn_{1-x}Mn_xS$  Nanowires within Mesoporous Silica of Different Pore Sizes.  
Zur Veröffentl. in *J. Am. Chem. Soc.*
- F. BRINGEZU, J. DING, G. BREZESINSKI, A.J. WARING, J.A. ZASADZINSKI  
Influence of Pulmonary Surfactant B (SP-B) on Structures of Condensed Model Lung Surfactant Monolayers.  
*Langmuir* 18 (2003) 2319–2325
- F. BRINGEZU, M. RAPPOLT, A. HICKEL, K. LOHNER  
Mechanism of the lamellar/inverse hexagonal phase transition examined by high resolution x-ray diffraction.  
*Biophys. J.* 84 (2003) 3111–3122

- TH. BRÜCKEL  
Elastic Scattering from Many-Body Systems.  
In: *Laboratory Course Neutron Scattering*, Th. Brückel, G. Heger, D. Richter, R. Zorn, Forschungszentrum, Jülich (2003)
- S. BUCHMANN, H.A. MAYER, B. SPEISER, M. SEILER, M.P. FETH, H. BERTAGNOLLI, S. STEINBRECHER, E. PLIES  
Electrochemistry of Transition Metal Complex Catalysts. Part 9. One- and Two-Electron Oxidation of Iridium Complexes with Cyclohexane-Derived Tripod Phosphine Ligands.  
*Electrochim. Acta* 48(19) (2003) 2725–2737
- R. BULLER, I. WEISSBUCH, S. COHEN, K. KJAER, M. LAHAV, L. LEISEROWITZ  
Crystalline corrugation in multilayer films on aqueous subphases.  
*Helvetica Chimica Acta* 86 (2003) 2711–2725
- H.J. BUNGE, W. WEISS, H. KLEIN, L. WCISLAK, U. GARBE, J.R. SCHNEIDER  
Orientation relationship of Widmannstätten plates in an iron meteorite measured with high-energy synchrotron radiation.  
*J. Appl. Cryst.* 36 (2003) 137–140
- H.J. BUNGE, W. WEISS, H. KLEIN, L. WCISLAK, U. GARBE, J.R. SCHNEIDER  
Texture and microstructure imaging in six dimensions with high-energy synchrotron radiation.  
*J. Appl. Cryst.* 36 (2003) 1240–1255
- O. BUNK, M.M. NIELSEN, T.I. SÖLLING, A.M. VAN DE CRAATS, N. STUTZMANN  
Induced alignment of a solution-cast discotic hexabenzocoronene derivative for electronic devices investigated by surface x-ray diffraction.  
*J. Am. Chem. Soc.* 125 (2003) 2252
- J. BÖHM, A. WANNER, R. KAMPMANN, H. FRANZ, K.-D. LISS, A. SCHREYER, H. CLEMENS  
Internal stress measurements by high-energy synchrotron X-ray diffraction at increased specimen-detector distance.  
*Nucl. Instrum. Methods Phys. Res. B* 200 (2003) 315–322
- T. BÖTTGER, D.C. MEYER, P. PAUFLER, S. BRAUN, M. MOSS, H. MAI, E. BEYER  
Thermal stability of Mo/Si multilayers with boron carbide interlayers.  
*Thin Solid Films* 444/1–2 (2003) 165–173
- M.E. CAGIAO, R.K. BAYER, D.R. RUEDA, F.J. BALTA-CALLEJA  
An X-ray scattering study of water-conditioned injection-molded starch during isothermal heating.  
*J. Appl. Polymer Sci.* 88 (2003) 17–21
- M. CANNAS, S. AGNELLO, R. BOSCAINO, F.M. GELARDI, A. TRUKHIN  
Photoluminescence in gamma-irradiated alpha-quartz investigated by synchrotron radiation.  
Zur Veröffentl. in *Radiat. Meas.*
- M. CANNAS, S. AGNELLO, R. BOSCAINO, F.M. GELARDI, M. LEONE, B. BOIZOT  
Optical properties of oxygen-deficiency related centers in amorphous  $SiO_2$  investigated by synchrotron radiation.  
Zur Veröffentl. in *Rad. Eff. Defects Solids*

- M. CANNAS, S. AGNELLO, R. BOSCAINO, F.M. GELARDI, S. GRANDI, P.C. MUSTARELLI  
Ultraviolet emission lifetime in Si and Ge oxygen deficient centers in silica.  
J. Non-Cryst. Solids 322 (2003) 129–133
- A. CANNIZZO, S. AGNELLO, R. BOSCAINO, M. CANNAS, F.M. GELARDI, S. GRANDI, M. LEONE  
Role of vitreous matrix on the optical activity of Ge-doped silica.  
J. Phys. Chem. Solids 64 (2003) 2437–2443
- C. CARDOSO, R. NIEWA, M. SCHMIDT, M. ARMBRÜSTER, M. HANFLAND, K. KLEMENTIEV, U. SCHWARZ  
Pressure-induced Changes of the Crystal Structure of Eu<sub>4</sub>P<sub>3</sub>.  
Z. Anorg. Allg. Chemie 629 (2003) 454
- C. CASTELLANO, A. PAOLONE, F. CORDERO, R. CANTELLI, M. FERRETTI  
Relation between charge ordering and local lattice disorder in manganites studied by EXAFS.  
Zur Veröffentl. in Solid State Commun.
- C. CASTELLANO, O. PALUMBO, A. PAOLONE, R. CANTELLI  
Temperature study of MnAs local structure by EXAFS.  
Solid State Commun. 125 (2003) 607
- R. CERC KOROSEC, P. BUKOVEC, B. PIHLAR, J. PADEZNIK GOMILSEK  
The role of thermal analysis in optimization of the electrochromic effect of nickel oxide thin films, prepared by the sol-gel method. Part 1.  
Thermochimica Acta 402 (2003) 57–67
- M.L. CERRADA, O. PRIETO, J.M. PEREÑA, R. BENAVENTE, E. PÉREZ  
Blends of Isotactic Polypropylenes and a Plastomer: Crystallization and Viscoelastic Behavior.  
Macromol. Symp. 198 (2003) 91–102
- W.M. CHEN, P.J. MCNALLY, J. KANATHARANA, D. LOWNEY, K. JACOBS, T. TUOMI, L. KNUUTTILA, J. RIIKONEN, J. TOIVONEN  
Tilted-wing-induced stress distribution in epitaxial lateral overgrown GaN.  
J. Mater. Sci., Mater. Electron. 14 (2003) 283–286
- W.M. CHEN, P.J. MCNALLY, YU.V. SHVYDKO, T. TUOMI, A.N. DANILEWSKY, M. LERCHE  
Dislocation analysis for heat-exchanger method grown sapphire with white beam synchrotron X-ray topography.  
J. Cryst. Growth 252 (2003) 113–119
- Y. CHEN, M. KIRM, E. NEGODIN, M. TRUE, S. VIELHAUER, G. ZIMMERER  
Zero-phonon Lines in the d→f Luminescence of LiYF<sub>4</sub>: Er<sup>3+</sup>.  
phys. stat. sol. (b) 240 (2003) R1-R3
- A. CSISZÁR, E. KLUMPP, A. BÓTA, K. SZEGEDI  
Effect of 2,4-dichlorophenol on DPPC/water liposomes studied by X-ray and freeze-fracture electron microscopy.  
Chemistry and Physics of Lipids 126 (2003) 155–166
- J. DAVAASAMBUU, A. PUCHER, V. KOCHIN, U. PIETSCH  
Atomic origin of the piezoelectric effect in α-SiO<sub>2</sub> and α-GaPO<sub>4</sub>.  
Zur Veröffentl. in Europhys. Lett.
- G. DEHLINGER, L. DIEHL, U. GENNSER, H. SIGG, E. MÜLLER, S. STUTZ, J. FAIST, J. STANGL, T. ROCH, G. BAUER, D. GRUETZMACHER  
Si/SiGe quantum cascade structures emitting in the 10 μm range.  
Zur Veröffentl. in Microelectronic Engineering
- A. DEL CAMPO, A. BELLO, E. PÉREZ, A. MEYER  
Thermal properties of non-symmetric bibenzoate liquid crystalline dimers. Zur Veröffentl. in Liquid Crystals
- A. DEL CAMPO, A. BELLO, E. PÉREZ  
Synchrotron X-ray study of liquid crystalline polyoxetanes containing two mesogenic groups connected by a flexible spacer in the side chain.  
Macromol. Chem. Phys. 204 (2003) 682–691
- M.A. DENECKE, K. DARDENNE, P. LINDQVIST-REIS, J. ROTHE,  
Grazing incidence XAFS investigations of Hf(IV) and U(VI) cations sorbed onto mineral surfaces.  
Phys. Chem. Chem. Phys. 5 (2003) 939–946
- B.N. DEV  
Synchrotron X-Radiation in Studies of Layered and Self-assembled Structures. Zur Veröffentl. in Radiat. Phys. Chem.
- N. DINGENOUTS, R. MERKLE, X. GUO, T. NARAYANAN, M. BALLAUFF, G. GOERIGK  
Use of anomalous small-angle X-ray scattering for the investigation of highly charged colloids.  
J. Appl. Cryst. 36 (2003) 578
- B. DITTRICH, ST. SCHEINS, C. PAULMANN, P. LUGER  
Transferability of atomic volumes and charges in the peptide bond region in the solid state.  
J. Phys. Chem. A 107 (2003) 7471–7474
- J. DJORDJEVIC, CH. PIETZKER, R. SCHEER  
In situ XRD study of mixed CuInSe<sub>2</sub> – CuInS<sub>2</sub> formation.  
J. Phys. Chem. Solids 64 (2003) 1843–1848
- J. DJORDJEVIC, E. RUDIGIER, R. SCHEER  
In-situ XRD studies of sequential CuIn(S, Se)<sub>2</sub> formation.  
Zur Veröffentl. in Mat. Res. Soc. Symp. Proc.
- DONG QIAN, J.Z. JIANG, P.L. HANSEN  
Preparation of ZnO nanocrystals via ultrasonic irradiation.  
Chem. Commun. – (2003) 1078
- P. DORENBOS, L. PIERRON, L. DINCA, C.W.E. VAN EJK, A. KAHN-HARARI, B. VIANA  
4f-5d spectroscopy of Ce<sup>3+</sup> in CaBPO<sub>5</sub>, LiCaPO<sub>4</sub>, and Li<sub>2</sub>CaSiO<sub>4</sub>.  
Zur Veröffentl. in J. Phys.: Condens. Matter
- W. DROZDOWSKI, A.J. WOJTOWICZ, D. WISNIEWSKI, P. SZUPRYCZYNSKI, S. JANUS, J.L. LEFAUCHEUR, Z. GOU  
VUV Spectroscopy and Low Temperature Thermoluminescence of LSO:Ce and YSO:Ce.  
Zur Veröffentl. in J. Alloys Compd.

- W. DRUBE, T.K. SHAM, A.V. SOLDATOV  
 Fine structure of unoccupied Ag d-states near the Fermi level in Ag and AgPd studied by high-resolution partial Auger yield spectroscopy at the Ag L<sub>3</sub>-Edge.  
*Phys. Rev. B* 67 (2003) 035122
- A.C. DÜRR, F. SCHREIBER, M. KELSCH, H.D. CARSTANJEN, H. DOSCH, O.H. SEECK  
 Morphology and interdiffusion behavior of evaporated metal films on crystalline diindenoperylene films.  
*J. Appl. Phys.* 93 (2003) 5201–5205
- A.C. DÜRR, N. KOCH, M. KELSCH, A. RÜHM, J. GHIJSEN, R.L. JOHNSON, J.-J. PIREAUX, J. SCHWARTZ, F. SCHREIBER, H. DOSCH, A. KAHN  
 Interplay Between Morphology, Structure and Electronic Properties at Diindenoperylene – Au – Interfaces.  
*Phys. Rev. B* 68 (2003) 115428
- C. EGE, J. MAJEWSKI, S. SATIJA, K. KJAER, K.Y.C. LEE  
 X-ray and neutron scattering from model membranes with amyloid beta.  
*Biophys. J.* 84 (2003) 577A
- H. EHRENBERG, H. PAULY, M. KNAPP, J. GROEBNER, D. MIRKOVIC  
 Tetragonal low-temperature structure of LiAl.  
 Zur Veröffentl. in *J. Solid State Chem.*
- K. ELLMER, R. MIENTUS, V. WEIß, H. ROSSNER  
 In situ Energy-Dispersive X-Ray Diffraction System for Time-Resolved Thin Film Growth Studies.  
*Measurement Science and Technology* 14 (2003) 336–345
- M. EPPLER  
 Biomaterialien und Biomineralisation.  
 Zur Veröffentl. in *Biomaterialien und Biomineralisation*
- T. ERBACHER, T. BECK, O. VÖHRINGER  
 Einfluss trockener Frikitionsbeanspruchungen auf das Schädigungsverhalten, Restfestigkeit und Oberflächeneigenspannungen von Al<sub>2</sub>O<sub>3</sub>.  
*Mat.-wiss. u. Werkstofftech.* 34 (2003) 152–161
- A.S. ETHIRAJ, N. HEBALKAR, S.K. KULKARNI, R. PASRICHA, J. URBAN, C. DEM, M. SCHMITT, W. KIEFER, L. WEINHARDT, S. JOSHI, R. FINK, C. HESKE, C. KUMPF, E. UMBACH  
 Enhancement of photoluminescence in manganese-doped ZnS nanoparticles due to a silica shell.  
*J. Chem.Phys.* 118 (2003) 8945
- T.A. EZQUERRA, A. NOGALES  
 Probing Crystallization Studying Amorphous Phase Evolution.  
 In: *Polymer Crystallization: Observations, Concepts and Interpretations*, J.-U. Sommer, G. Reiter, Springer, Berlin (2003)
- T.A. EZQUERRA, C. ALVAREZ, M.J. CAPITAN, N. LOTTI, A. MUNARI  
 Structure-Dynamics Relationships in Random Poly(butylene isophthalate-cobutylene adipate) Copolymers as revealed by dielectric loss spectroscopy and X-ray scattering.  
 Zur Veröffentl. in *Macromol.*
- T.A. EZQUERRA, I. SICS, A. NOGALES, Z. DENCHEV, C. ALVAREZ, S.S. FUNARI  
 Cold Crystallization of poly(ethylene naphthalene-2,6-dicarboxylate) by simultaneous measurements of X-ray scattering and dielectric spectroscopy.  
 Zur Veröffentl. in *Polymer*
- B. FAATZ, A.A. FATEEV, K. FLOETTMANN, D. NOELLE, PH. PIOT, E.L. SALDIN, H. SCHLARB, E.A. SCHNEIDMILLER, S. SCHREIBER, D. SERTORE, K.P. SYTCHEV, M.V. YURKOV  
 VUV FEL driven RF gun.  
*Nucl. Instrum. Methods Phys. Res. A* 507 (2003) 350–353
- C.F.J. FAUL, M. ANTONIETTI  
 Ionic Self-Assembly: Facile synthesis of supramolecular materials.  
*Adv. Mater.* 15 (2003) 673–683
- A. FEDORCHUK, YU. PROTTS, M. SCHMIDT, W. SCHNELLE, U. BURKHARDT, U. SCHWARZ, YU. GRIN  
 Novel derivates of the CaIn<sub>2</sub> type of structure: Yb<sub>1+x</sub>Mg<sub>1-x</sub>Ga<sub>4</sub>(0 < x < 0.058) and YLiGa<sub>4</sub>.  
 Zur Veröffentl. in *Z. Anorg. Allg. Chemie*
- J. FELDHAUS, E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV  
 Photon ring multi-user distribution system for soft X-ray SASE FEL laboratory.  
*Nucl. Instrum. Methods Phys. Res. A* 507 (2003) 510–514
- J. FELDHAUS, T. MÖLLER, E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV  
 Pump-probe experiments in the femtosecond regime, combining first and third harmonics of SASE FEL radiation.  
*Nucl. Instrum. Methods Phys. Res. A* 507 (2003) 435–438
- M.P. FETH, A. KLEIN, A. DOGAN, H. BERTAGNOLLI  
 Cyclooctadienemethylpalladium complexes: synthesis, structures and reactivity.  
*Inorg. Chim. Acta* 343 (2003) 189–201
- M.P. FETH, A. KLEIN, H. BERTAGNOLLI  
 Investigation of the ligand exchange behavior of square planar nickel(II) complexes by X-ray absorption spectroscopy and X-ray diffraction.  
*Europ. J. Inorg. Chem.* 5 (2003) 839–852
- M.P. FETH, A. WEBER, R. MERKLE, U. REINÖHL, H. BERTAGNOLLI  
 Investigation of the crystallisation behaviour of lead titanate (PT), lead zirconate (PZ) and lead zirconate titanate (PZT) by EXAFS-spectroscopy and X-ray diffraction.  
*J. Sol-Gel Sci. Technol.* 27 (2003) 193–204
- M.P. FETH, C. BOLM, J.P. HILDEBRAND, M. KÖHLER, O. BECKMANN, M. BAUER, R. RAMAMONJISOA, H. BERTAGNOLLI  
 Structural investigation of high valent salen manganese complexes by UV/Vis-, Raman-, XANES- and EXAFS-spectroscopy.  
*Chem. Eur. J.* 9(6) (2003) 1348–1359

E. FRANCISCO, M. BERMEJO, V.G. BAONZA, L. GERWARD, J.M. RECIO  
Spinodal equation of state for rutile TiO<sub>2</sub>.  
Phys. Rev. B 67 (2003) 064110

T. FRELLO, N.H. ANDERSEN, M. BAZILJEVICH, T.H. JOHANSEN, J.-C. GRIVEL, H.F. POULSEN, M. V. ZIMMERMANN, J.R. SCHNEIDER, R. LIANG, P. DOSANJH, W.N. HARDY, TH. WOLF  
Superconductivity in an anomalously tetragonal YBa<sub>2</sub>Cu<sub>3</sub>O<sub>6.62</sub> single crystal: A possible singularity in the structural phase diagram.  
Phys. Rev. B 67 (2003) 024509

S.S. FUNARI, F. BARCELÓ, P.V. ESCRIBÁ  
Effects of oleic acid and its congeners, elaidic and stearic acids, on the structural properties of phosphatidylethanolamine membranes.  
J. Lipid Res. 44 (2003) 567–575

A. FÖHLISCH, D. MENZEL, P. FEULNER, M. ECKER, R. WEIMAR, K.L. KOSTOV, G. TYULIEV, S. LIZZIT, R. LARCIPRETE, F. HENNIES, W. WURTH  
Energy dependence of resonant charge transfer from adsorbates to metal surfaces.  
Chem. Phys. 289 (2003) 107–115

C. GAISER, T. ZANDT, R. SEVERIN, A. KRAPF, C. JANOWITZ, R. MANZKE  
Band-gap engineering with HfS<sub>x</sub>Se<sub>2-x</sub>.  
Zur Veröffentl. in Phys. Rev. B

M.C. GARCIA GUTIERREZ, D. RUEDA, F.J. BALTA CALLEJA, N. STRIBECK, R.K. BAYER  
Nanostructure of atmospheric and high-pressure crystallized poly(ethylene-2,6-naphtalate). Part II: structure-microhardness correlations.  
Polymer 44 (2003) 451–455

S. GARCÍA-MARTÍN, M.A. ALARIO-FRANCO, H. EHRENBERG, J. RODRÍGUEZ-CARVAJAL, U. AMADOR  
Crystal structure and microstructure of some La<sub>2/3-x</sub>Li<sub>3x</sub>TiO<sub>3</sub> oxides: an example of the complementary use of electron diffraction and microscopy and synchrotron X-ray diffraction to study complex materials.

Zur Veröffentl. in J. Am. Chem. Soc.

CH. GERTH, J. FELDHAUS, K. HONKAVAARA, K.D. KAVANAGH, PH. PIOT, L. PLUCINSKI, S. SCHREIBER, I. WILL  
Bunch length and phase stability measurements at the TESLA test facility.  
Nucl. Instrum. Methods Phys. Res. A 507 (2003) 335–339

T.M. GEUE, M.G. SAPHIANNIKOVA, O. HENNEBERG, U. PIETSCH, P.L. ROCHEON, A.L. NATANSON  
X-ray investigations of formation efficiency of buried azobenzene polymer density gratings.  
J. Appl. Phys. 93(6) (2003) 3161–3166

J. GHIJSEN, R.L. JOHNSON, A. RAJAGOPAL, N. KOCH  
Photoemission studies on materials for organic light-emitting diodes.  
Physicalia Magazine 25 (2003) 55–62

H. GIEFERS, F. PORSCHE, G. WORTMANN  
High-pressure EXAFS and XRD investigation of unit cell parameters of SnO.  
Zur Veröffentl. in Phys. Scri.

H. GIES, S. GRABOWSKI, M. BANDYOPADHYAY, W. GRÜNERT, O.P. TKACHENKO, K.V. KLEMENTIEV, A. BIRKNER  
Synthesis and Characterization of Silica MCM-48 as Carrier of Size-Confining Nanocrystalline Metal Oxides Particles inside the Pore System.  
Microporous & Mesoporous Materials 60 (2003) 31–42

W. GILLE, A. BRAUN  
SAXS chord length distribution analysis and porosity estimation of activated and non-activated glassy carbon.  
J. Non-Cryst. Solids 321 (2003) 89–95

G. GOERIGK, H.-G. HAUBOLD, O. LYON, J.-P. SIMON  
Anomalous small-angle X-ray scattering in materials science.  
J. Appl. Cryst. 36 (2003) 425

A. GORBUNOV, A.A. LEVIN, E. WIESER, L. BISCHOFF, D. ECKERT, A. MENSCH, D.C. MEYER, H. REUTER, P. PAUFLE, W. POMPE  
Formation and decomposition of laser-deposited metastable Fe-Cr phases.  
Proc. SPIE 5121 (2003) 306–316

S. GRIGORIAN, J. GRENZER, S. FERANCHUK, U. ZEIMER, U. PIETSCH  
Grazing-Incidence Diffraction Study of Strain-Modulated Single Quantum-Well Nanostructures.  
Zur Veröffentl. in J. Phys. D: Applied Phys.

S. GRIGORIAN, J. GRENZER, U. PIETSCH, I.A. VARTANYANTS  
Thermal Diffuse Scattering in Grazing-Incidence Diffraction.  
Zur Veröffentl. in J. Phys. C: Solid State Phys.

J.-D. GRUNWALDT, C. KERESSZEGI, T. MALLAT, A. BAIKER  
In situ EXAFS Study of Pd/Al<sub>2</sub>O<sub>3</sub> during Aerobic Oxidation of Cinnamyl Alcohol in an Organic Solvent.  
J. Catalysis 213 (2003) 191

J.-D. GRUNWALDT, M. CARAVATI, M. RAMIN, A. BAIKER  
Probing active sites during palladium-catalysed alcohol oxidation in “supercritical” carbon dioxide.  
Catal. Lett. 90 (2003) 221

J.-D. GRUNWALDT, M. MACIEJEWSKI, A. BAIKER  
In situ X-ray absorption spectroscopy study during methane combustion over Pd/ZrO<sub>2</sub> catalysts.  
Phys. Chem. Chem. Phys. 5 (2003) 1481

D. GRÜTZMACHER, S. MENTESE, E. MÜLLER, L. DIEHL, H. SIGG, Y. CAMPIDELLI, O. KERMARREC, D. BENSAHEL, T. ROCH, J. STANGL, G. BAUER  
Strain compensated Si/SiGe quantum cascade structures grown by low temperature molecular beam epitaxy..  
J. Cryst. Growth 251 (2003) 707–717

Y. GUAN, Y. ZAKREVSKYY, J. STUMPE, M. ANTONIETTI, C.F.J. FAUL  
Perylenediimide-surfactant complexes: thermotropic liquid-crystalline materials via ionic self-assembly.  
Chem. Commun. – (2003) 894–895

F. HAASS, A.H. ADAMS, T. BUHRMESTER, G. SCHIMANKE, M. MARTIN, H. FUESS  
X-Ray absorption and X-ray diffraction studies on molybdenum doped vanadium pentoxide.  
Phys. Chem. Chem. Phys. 5 (2003) 4317–4324

A. HAGEN, E. TEGELER, A. KLEINERT, F. ROESSNER  
The modification of acid supports by solid state redox reaction. Part I: Preparation and properties.  
Zur Veröffentl. in J. Catalysis

M. HANKE, D. GRIGORIEV, M. SCHMIDBAUER, P. SCHÄFER, R. KÖHLER, U.W. POHL, R.L. SELLIN, D. BIMBERG, N.D. ZAKJAROV, P. WERNER  
Diffuse x-ray scattering of InGaAs/GaAs quantum dots.  
Zur Veröffentl. in Physica E

M. HANKE, M. SCHMIDBAUER, R. KÖHLER, H. KIRMSE, M. PRISTOVSEK  
Lateral short range ordering of step bunches in InGaAs/GaAs superlattices.  
Zur Veröffentl. in J. Appl. Phys.

M. HASIK, E. WENDA, A. BERNASIK, K. KOWALSKI, J.W. SOBCZAK, E. SOBCZAK, E. BIELAŃSKA  
Poly(o-toluidyne)as the matrix for incorporation of palladium species from  $PdCl_2$  aqueous solutions.  
Zur Veröffentl. in Polymer

P.D. HATTON, S.B. WILKINS, P.D. SPENCER, M. V. ZIMMERMANN, T. D'ALMEIDA  
High energy x-ray scattering studies of strongly correlated oxides.  
J. Phys. D: Applied Phys. 36 (2003) A157-A161

G. HEIMEL, P. PUSCHNIG, M. OEHZELT, K. HUMMER, B. KOPPELHUBER-BITSCHNAU, F. PORSCHE, C. AMBROSCH-DRAXL, R. RESEL  
Chain – length – dependent intermolecular packing in polyphenylenes: a high pressure study.  
J. Phys.: Condens. Matter 15 (2003) 3375–3389

O. HENNEBERG, TH. GEUE, M. SAPIANNIKOVA, U. PIETSCH, P. ROCHEON  
X-ray and VIS light scattering from light-induce polymer gratings.  
J. Phys. D: Applied Phys. 36 (2003) A241–A244

A. HESSE, Y. ZHUANG, V. HOLY, J. STANGL, S. ZERLAUTH, F. SCHÄFFLER, G. BAUER, N. DAROWSKI, U. PIETSCH  
X-ray grazing incidence study of inhomogeneous strain relaxation in SiGe wires.  
Nucl. Instrum. Methods Phys. Res. B 200 (2003) 267–272

W.B. HOLZAPFEL  
Comment on Energy and Pressure Versus Volume: Equations of State Motivated by the Stabilized Jellium Model.  
Phys. Rev. B 67 (2003) 026102/1–3

W.B. HOLZAPFEL  
Refinement of the Ruby Luminescence Pressure Scale.  
J. Appl. Phys. 93 (2003) 1–6

U. HOPPE, G. WALTER, G. CARL, J. NEUEFEIND, A.C. HANNON  
Structure of zinc phosphate glasses probed by neutron and X-ray diffraction of high resolving power and by Reverse Monte Carlo simulations.  
Zur Veröffentl. in J. Non-Cryst. Solids

U. HOPPE, M. KARABULUT, E. METWALLI, R.K. BROW, P. JÓVÁRI  
The Fe-O coordination in iron phosphate glasses by X-ray diffraction with high-energy photons.  
Journal of Physics: Condensed Matter 15 (2003) 6143–6153

U. HOPPE, R. KRANOLD, A. GHOSH, C. LANDRON, J. NEUEFEIND, P. JÓVÁRI  
Environments of lead cations in oxide glasses probed by X-ray diffraction.  
J. Non-Cryst. Solids 328 (2003) 146–156

U. HOPPE, R. KRANOLD, J. M. LEWIS, C.P. O'BRIEN, H. FELLER, S. FELLER, J. NEUEFEIND, A.C. HANNON  
Structure of binary alkaline earth vanadate glasses – an X-ray and neutron diffraction study.  
Phys. Chem. Glasses 44 (2003) 272–279

W. HOYER, I. KABAN, P. JÓVÁRI, E. DOST  
Crystallization behaviour and structure of amorphous Ge-Te alloys.  
Zur Veröffentl. in J. Non-Cryst. Solids

N. HUESING, B. LAUNAY, G. KICKELBICK, S. GROSS, L. ARAMELAO, G. BOTTARO, M. FETH, H. BERTAGNOLLI, G. KOTHLEITNER  
Transition metal oxide doped mesostructured silica films.  
Appl. Catalysis A – General 254 (2003) 297–310

H. HUWE, M. FRÖBA  
Iron(III) oxide nanoparticles within the pore system of mesoporous carbon CMK-1: Intra-pore synthesis and characterization.  
Microporous & Mesoporous Materials 60 (2003) 151–158

W. HÜBNER, A. PYZALLA, K. ASSMUS, E. WILD, T. WROBLEWSKI  
Phase Stability of AISI 304 Stainless Steel during Sliding Wear at Extremely Low Temperatures.  
Wear 255 (2003) 476–480

S.H. IRSEN, P. KROLL, R. DRONSKOWSKI, T.E. WEIRICH, M. EPPLE  
Chemical reactivity of tetrasulfur tetranitride: Synthesis, physical properties, and structural characterization of the amorphous phase  $Cu_7S_04N_4$ .  
Z. Anorg. Allg. Chemie 629 (2003) 1751–1759

- R. ISCHEBECK, J. FELDHAUS, CH. GERTH, E. SALDIN, P. SCHMÜSER, E. SCHNEIDMILLER, B. STEEG, K. TIEDTKE, M. TONUTTI, R. TREUSCH, M. YURKOV  
Study of the Transverse Coherence at the TTF Free Electron Laser.  
*Nucl. Instrum. Methods Phys. Res. A* 507 (2003) 175–180
- R. ISCHEBECK, J. FELDHAUS, CH. GERTH, E. SALDIN, P. SCHMÜSER, E. SCHNEIDMILLER, B. STEEG, K. TIEDTKE, M. TONUTTI, R. TREUSCH, M. YURKOV  
Study of the transverse coherence at the TTF free electron laser.  
*Nucl. Instrum. Methods Phys. Res. A* 507 (2003) 175–180
- C. JANOWITZ, R. MÜLLER, L. DUDY, R.-ST. UNGER, A. KRAPF, R. MANZKE, C. AST, H. HÖCHST  
Progress in the understanding of the ground state of the cuprates.  
*Appl. Phys. A* 76 (2003) 673–679
- C. JANOWITZ, U. SEIDEL, R.-ST. UNGER, L. DUDY, A. KRAPF, R. MANZKE  
Evolution of the electronic structure of Y-Bi-2212 from the anti-ferromagnetic to the superconducting regime.  
Zur Veröffentl. in *J. Supercond.*
- K. JANSSENS  
X-ray fluorescence analysis.  
In: *Handbook of Spectroscopy*, G. Gauglitz, T. Vo-Dinh, Wiley-VCH, Tuebingen (2003)
- K. JANSSENS, K. PROOST, I. DERAEDT, E. BULSKA, B. WAGNER, M. SCHREINER  
The use of focussed X-ray beams for nondestructive characterization of historical materials – from elemental trace analysis towards chemical state investigations.  
In: *Molecular and Structural Archaeology*, G. Tsoucaris, Kluwer, The Hague (2003)
- T.R. JENSEN, M.O. JENSEN, N. REITZEL, K. BALASHEV, G.H. PETERS, K. KJAER, T. BJØRNHOLM  
Water in contact with extended hydrophobic surfaces: Direct evidence of weak dewetting.  
*Phys. Rev. Lett.* 90 (2003) 086101.1–4
- T.R. JENSEN, K. KJAER, G. BREZESINSKI, J. RUIZ-GARCIA, H. MÖHWALD, N.N. MAKAROVA, Y.K. GODOVSKY  
Successive multilayer formation of cyclolinear polyorganosiloxanes floating at the air-water interface. A synchrotron X-ray reflectivity investigation.  
*Macromol.* 36 (2003) 7236–7243
- F.C. JENTOFT, S. KLOKISHNER, J. KRÖHNERT, J. MEHLS-HEIMER, T. RESSLER, O. TIMPE, J. WIENOLD, R. SCHLÖGL  
The Structure of Molybdenum-Heteropoly-Acids under Conditions of Gas Phase Selective Oxidation Catalysis: A Multiple-Method in situ Study.  
Zur Veröffentl. in *Appl. Catalysis A – General*
- J.Z. JIANG,  
Phase transformations in metallic glasses.  
Zur Veröffentl. in *Mater. Sci. Forum*
- J.Z. JIANG, B. YANG, K. SAKSL, H. FRANZ, N. PRYDS  
Crystallization of Cu<sub>60</sub>Ti<sub>20</sub>Zr<sub>20</sub> metallic glass with and without pressure.  
*J. Mater. Res.* 18 (2003) 895
- J.Z. JIANG, C.H. JENSEN, A.R. RASMUSSEN  
Time-dependent nucleation in Pd<sub>43</sub>Cu<sub>27</sub>Ni<sub>10</sub>P<sub>20</sub> melts.  
*J. Metastable and Nanocrystalline Mater.* 15–16 (2003) 81
- J.Z. JIANG, H. KATO, T. OHSUNA, J. SAIDA, A. INOUE, K. SAKSL, H. FRANZ, K. STÅHL  
Origin of non-detectable x-ray diffraction peaks in nanocomposite CuTiZr alloys.  
*Appl. Phys. Lett.* 83 (2003) 3299
- J.Z. JIANG, J. SAIDA, H. KATO, T. OHSUNA, A. INOUE  
Is Cu<sub>60</sub>Ti<sub>10</sub>Zr<sub>30</sub> a bulk glass-forming alloy?  
*Appl. Phys. Lett.* 82 (2003) 4041
- J.Z. JIANG, K. SAKSL  
Structural stability of Pd<sub>40</sub>Cu<sub>30</sub>Ni<sub>10</sub>P<sub>20</sub> metallic glass in super-cooled liquid region.  
Zur Veröffentl. in *Mater. Sci. Eng.*
- A A. JIANU, L. STANCIU, J.R. GROZA, CH. LATHE, E. BURKEL  
In situ analysis of phase transformation in sol-gel cogelified nanopowder mixture of Al<sub>2</sub>O<sub>3</sub> and TiO<sub>2</sub> using synchrotron X-ray radiation diffraction experiments.  
*Nucl. Instrum. Methods Phys. Res. B* 199 (2003) 44–48
- J.E. JOERGENSEN, J.M. JACOBSEN, J.Z. JIANG, L. GERWARD, J.S. OLSEN  
High-pressure x-ray diffraction study of bulk and nanocrystalline GaN.  
*J. Appl. Cryst.* 36 (2003) 920–925
- L.I. JOHANSSON, C. VIROJANADARA, TH. EICKHOFF, W. DRUBE  
Properties of the SiO<sub>2</sub>/SiC interface investigated by angle resolved studies of the Si2p and Si1s levels and the Si KLL Auger transitions.  
*Surf. Sci.* 529 (2003) 515–526
- V. JORIK, I. ONDREJKOVICOVA, R. B. VON DREELE, H. EHRENBERG  
X-ray powder diffraction structural characterization of iron(III) chloro- and bromo- complexes of triphenylphosphine oxide.  
*Cryst. Res. & Technol.* 38 (2003) 174–181
- P. JOVARI, R.G. DELAPLANE, L. PUSZTAI  
Structural models of amorphous selenium.  
*Phys. Rev. B* 67 (2003) 172201
- L. JUHA, J. KRÁSA, A. CEJNAROVÁ, D. CHVOSTOVÁ, V. VORLÍEK, J. KRZYWINSKI, R. SOBIERAJSKI, A. ANDREJCZUK, M. JUREK, D. KLINGER ET AL.  
Ablation of various materials with intense XUV radiation.  
*Nucl. Instrum. Methods Phys. Res. A* 507 (2003) 577–581

- B.-J. JUNGNICKEL, J. LIU  
 Crystallization and Morphology of Poly (Vinylidene Fluoride) / Poly (3-Hydroxybutyrate) Blends. 2. Morphology and Crystallization Kinetics by Time Resolved X-ray Scattering.  
 Zur Veröffentl. in *J. Polym. Sci. B, Polym. Phys.*
- I. KABAN, TH. HALM, W. HOYER, P. JÓVÁRI, J. NEUEFEIND  
 Short-range order in amorphous germanium-tellurium alloys.  
*J. Non-Cryst. Solids* 326–327C (2003) 120–124
- D. KACZOROWSKI, YU. PROTTS, U. BURKHARDT, YU. GRIN  
 Electronic properties of  $\text{RE}_3\text{Rh}_2\text{Ga}_2$  and  $\text{RE}_3\text{Rh}_3\text{Si}_2$  ( $\text{RE} = \text{La, Ce}$ ).  
 Zur Veröffentl. in *Intermetallics*
- A. KAHN, N. KOCH, W. GAO  
 Electronic Structure and Electrical Properties of Interfaces Between Metals and pi-conjugated Molecular Films.  
*J. Polym. Sci. B, Polym. Phys.* 41 (2003) 2529
- I. KAMENSKIKH, N. GUERASSIMOVA, C. DUJARDIN, N. GARNIER, G. LEDOUX, C. PEDRINI, M. KIRM, A. PETROSYAN, D. SPASSKY  
 Charge Transfer Fluorescence and f-f Luminescence in Ytterbium Compounds.  
*Opt. Mater.* 24 (2003) 267–274
- A. KANAEV, L. MUSEUR, F. EDERY, T. LAARMANN, T. MÖLLER  
 Isotopic effect on the cage-induced quenching of OH (A)/OD(A) inside small argon clusters.  
 Zur Veröffentl. in *J. Chem. Phys.*
- A. KANAEV, L. MUSEUR, F. FEDERY, T. LAARMANN, T. MÖLLER  
 Interface excitons in  $\text{Kr}_n\text{Ne}_m$  clusters. The role of electron affinity in building up of the electronic structure.  
 Zur Veröffentl. in *Phys. Rev. B*
- A. KANAEV, L. MUSEUR, T. LAARMAN, T. MÖLLER  
 Cage effect for the photodissociation of  $\text{H}_2\text{O}$  molecule in neon-argon clusters.  
*J. Chem. Phys.* 117 (2003) 9423
- J. KANATHARANA, J.J. PEREZ-CAMACHO, T. BUCKLEY, P.J. MCNALLY, T. TUOMI, A.N. DANILEWSKY, M. OHARE, D. LOWNEY, W. CHEN, R. RANTAMÄKI, L. KNUUTTILA, J. RIIKONEN  
 Evaluation of mechanical stresses in silicon substrates due to lead-tin solder bumps via synchrotron X-ray topography and finite element modeling.  
*Microelectron. Eng.* 65 (2003) 209–221
- J. KANATHARANA, J.J. PÉREZ-CAMACHO, T. BUCKLEY, P.J. MCNALLY, T. TUOMI, M. OHARE, D. LOWNEY, W. CHEN, R. RANTAMÄKI, L. KNUUTTILA, J. RIIKONEN  
 Mapping of mechanical stresses in silicon substrates due to lead-tin solder bump reflow process via synchrotron x-ray topography and finite element modelling.  
*J. Phys. D: Applied Phys.* 35 (2003) A60-A64
- A.I. KARASEVSKII, W.B. HOLZAPFEL  
 Equation of States and Thermodynamic Properties of Rare Gas Solids under Pressure Calculated with a Self-Consistent Statistical Method.  
*Phys. Rev. B* 67 (2003) 224301/1–9
- M. KARILAHTI, T. TUOMI, P.J. MCNALLY  
 Integrated circuit process control monitoring (PCM) data and wafer yield analysed by using synchrotron X-ray topographic measurements.  
*Semicond. Sci. Technol.* 18 (2003) 45–55
- M. KARILAHTI, T. TUOMI, R. RANTAMÄKI, P.J. MCNALLY, A.N. DANILEWSKY  
 Correlating integrated circuit process-induced strain and defects against device yield and process control monitoring.  
*J. Mater. Sci., Mater. Electron.* 14 (2003) 445–449
- T. KAYSER, A.H. OSTADRAHIMI, H. SCHLENZ, J. BECK, K. WANDEL  
 Atomic force microscopy investigations of amorphous tellurium subhalides.  
 Zur Veröffentl. in *J. Non-Cryst. Solids*
- L. KEMPENAERS, K. JANSENS, K.P. JOCHUM, L. VINCZE, B. VEKEMANS, A. SOMOGYI, M. DRAKOPOULOS, F. ADAMS  
 Micro-heterogeneity study of trace elements in USGS and NIST glass reference materials by means of synchrotron micro-XRF.  
*J. Anal. At. Spectrom.* 18 (2003) 350–357
- C. KERESSZEGI, J.-D. GRUNWALDT, T. MALLAT, A. BAIKER  
 In situ EXAFS Study on the Oxidation State of Pd/ $\text{Al}_2\text{O}_3$  and Bi – Pd/ $\text{Al}_2\text{O}_3$  during the Liquid Phase Oxidation of 1-Phenylethanol.  
 Zur Veröffentl. in *J. Catalysis*
- C. KERESSZEGI, J.-D. GRUNWALDT, T. MALLAT, A. BAIKER  
 Liquid Phase Oxidation of Alcohols with Oxygen: in situ Monitoring of the Oxidation State of Bi-Promoted Pd/ $\text{Al}_2\text{O}_3$ .  
*Chem. Comm.* no (2003) 2304
- M. KIRCHNER, W. SCHNELLE, F.R. WAGNER, R. NIEWA  
 Preparation, Crystal Structure and Physical Properties of Ternary Compounds  $(\text{R}_3\text{N})\text{In}$ , R = Rare-Earth Metal.  
*Solid State Sci.* 5 (2003) 1247
- M. KIRM, A. LUSHCHIK, CH. LUSHCHIK, S. VIELHAUER, G. ZIMMERER  
 Luminescence of pure and doped  $\text{Al}_2\text{O}_3$  and  $\text{MgO}$  single crystals under inner-shell excitation.  
*J. Lumin.* 102–103 (2003) 307–312
- M. KIRM, J.C. KRUPA, V.N. MAKHOV, E. NEGODIN, G. ZIMERER, J.Y. GESLAND  
 6d5f and 5f<sup>2</sup> configurations of  $\text{U}^{4+}$  doped into  $\text{LiYF}_4$  and  $\text{YF}_3$  crystals.  
*J. Lumin.* 104 (2003) 85
- M. KIRM, V. KISAND, E. SOMBROWSKI, B. STEEG, S. VIELHAUER, G. ZIMMERER  
 Prompt and delayed secondary excitons in rare-gas solids.  
*J. Low Temp. Phys.* 29 (2003) 822–831

- V. KISAND, M. KIRM, E. NEGODIN, E. SOMBROWSKI, B. STEEG, S. VIELHAUER, G. ZIMMERER  
Creation of Free Excitons in Solid Krypton Investigated by Time-resolved Luminescence Spectroscopy.  
J. Phys.: Condens. Matter 15 (2003) 2023–2032
- R. KLINGNER, J. SELL, T. ZIMMERMANN, A. HERZOG, U. VOGT, T. GRAULE, P. THURNER, F. BECKMANN, B. MÜLLER  
Wood-derived porous ceramics via infiltration of SiO<sub>2</sub>.  
Holzforschung 57 (2003) 440–446
- M. KNAAPILA, B.P. LYONS, K. KISKO, J.P. FOREMAN, U. VAINIO, M. MIHAYLOVA, O.H. SEECK, L.-O. PALSSON, R. SERIMAA, M. TORKKELI, A.P. MONKMAN  
X-ray diffraction studies of multiple orientation in poly(9,9-bis(2-ethylhexyl)-fluorene-2,7-diyl) thin films.  
J. Phys. Chem. B 107 (2003) 12425–12430
- M. KNAAPILA, M. TORKKELI, K. JOKELA, K. KISKO, L.E. HORSBURGH, L.-O. PÄLSSON, O.H. SEECK, I.P. DOLBYNA, W. BRAS, G. TEN BRINKE, A.P. MONKMAN, O. IK-KALA, R. SERIMAA  
Diffraction analysis of highly ordered smectic supramolecules of conjugated rodlike polymers.  
J. Appl. Cryst. 36 (2003) 702
- M. KNAPP, V. JOCO, C. BAEHTZ, H.H. BRECHT, A. BERGHAEUSER, H. EHRENBERG, H. VON SEGGERN, H. FUESS  
Position-Sensitive Detector System OBI for High Resolution X-Ray Powder Diffraction using on-site readable Image Plates.  
Zur Veröffentl. in Nucl. Instrum. Methods Phys. Res.
- A.N. KOCH, A.C. DÜRR, J. GHIJSEN, R.L. JOHNSON, J.-J. PIREAUX, J. SCHWARTZ, F. SCHREIBER, H. DOSCH, A. KAHN  
Optically Induced Electron Transfer From Conjugated Organic Molecules To Charged Metal Clusters.  
Thin Solid Films 441 (2003) 145
- N. KOCH, J. GHIJSEN, A. ELSCHNER, R.L. JOHNSON, J.-J. PIREAUX, J. SCHWARTZ, A. KAHN  
Conjugated organic molecules on metal vs. polymer electrodes: demonstration of a key energy level alignment mechanism.  
Appl. Phys. Lett. 82 (2003) 70
- J. KOEPKE, G. FALKENBERG, K. RICKERS, O. DIEDRICH  
Applications of synchrotron X-ray fluorescence microanalysis ( $\mu$ -SRXRF) in experimental geochemistry.  
Eur. J. Mineral. 15 (2003) 8338–892
- J. KOEPKE, G. FALKENBERG, K. RICKERS, O. DIEDRICH  
Trace element diffusion and element partitioning between garnet and andesite melt using synchrotron X-ray fluorescence micro-analysis ( $\mu$ -SRXRF).  
Eur. J. Mineral. 15 (2003) 883–892
- V. KOTESKI, H. HAAS, E. HOLUB-KRAPPE, N. IVANOVIC, H.-E. MAHNKE  
Bond lengths in Cd<sub>1-x</sub>Zn<sub>x</sub>Te beyond linear laws.  
Zur Veröffentl. in J. Alloys Compd.
- V. KOTESKI, H. HAAS, E. HOLUB-KRAPPE, N. IVANOVIC, H.-E. MAHNKE  
Lattice Relaxation around Arsenic and Selenium in CdTe.  
Zur Veröffentl. in Phys. Scri.
- V. KOTESKI, N. IVANOVIC, H. HAAS, E. HOLUB-KRAPPE, H.-E. MAHNKE  
Lattice relaxation around impurity atoms in semiconductors – Arsenic in Si – a comparison between experiment and theory.  
Nucl. Instrum. Methods Phys. Res. B 200 (2003) 60–65
- I.A. KOWALIK, B.J. KOWALSKI, B.A. ORLOWSKI, E. LUSAKOWSKA, S. MICKEVIČIUS, R.L. JOHNSON, I. GRZEGORY, S. POROWSKI  
Photoemission study of Mn/GaN.  
Zur Veröffentl. in Surf. Sci.
- R. KRANOLD, S. KRIESEN, M. HASELHOFF, H.-J. WEBER, G. GOERIGK  
Small-angle X-ray scattering study of the growth kinetics of CuCl nanocrystals in NaCl.  
J. Appl. Cryst. 36 (2003) 410–414
- B. KRAUSE, A.C. DÜRR, F. SCHREIBER, H. DOSCH, O.H. SEECK  
Thermal stability and partial dewetting of organic thin films: 3,4,9,10-perylenetetracarboxylic dianhydrid on Ag(111).  
J. Chem. Phys. 119 (2003) 3429
- C. KREIS, S. WERTH, R. ADELUNG, L. KIPP, M. SKIBOWSKI, E.E. KRASOVSKII, W. SCHATTKE  
Valence and conduction band states of HfS<sub>2</sub>: From bulk to a single layer.  
Zur Veröffentl. in Phys. Rev. B
- V. KRISHNAN, M.P. FETH, E. WENDEL, Y. CHEN, M. HANACK, H. BERTAGNOLLI  
EXAFS Spectroscopy – Fundamentals, Measurement techniques, Data evaluation and Applications in the Field of Phthalocyanines.  
Zur Veröffentl. in Z. Phys. Chem.
- C. KUMPF, A. MÜLLER, W. WEIGAND, E. UMBACH, J. WAGNER, V. WAGNER, S. GUNDEL, L. HANSEN, J. GEURTS, O. BUNK, J.H. ZEYSING, F. WU, R.L. JOHNSON  
Analysis of structure and vibrational dynamics of the BeTe(001) surface using X-ray diffraction, Raman spectroscopy and density functional theory.  
Phys. Rev. B 68 (2003) 035339
- M. KUMPUGDEE, J. ANDRÄ, S.S. FUNARI, R. WILLUMEIT  
Determination of the interaction between a synthetic peptide antibiotic and model membranes.  
Eur. Biophys. J. 32 (2003) 207
- A. KUPPSCH, D.C. MEYER, K. RICHTER, P. GILLE, P. PAUFLER  
DAFS and XAFS Investigation of Structural Short-Range Order of Decagonal Al-Co-Ni.  
Zur Veröffentl. in Phys. Scri.
- J.W. KURUTZ, A. GOPAL, C. JIARPINITNUN, B. LAU, C. EGE, G. WU, J. MAJEWSKI, K. KJAER, A. J. WARING, K.Y.C. LEE  
Structure and function in engineered lung surfactant peptides.  
Biophys. J. 84 (2003) 310

- R. KÖHN, M. FRÖBA  
Investigations of Reactivity and Magnetic Properties of Nanostructured Iron Oxide Within Mesoporous Silica Materials.  
*Z. Anorg. Allg. Chemie* 629 (2003) 1673–1682
- S. KÜCK, I. SOKÓLSKA, M. HENKE, M. DÖRING, T. SCHEFFLER  
Photon cascade emission in Pr<sup>3+</sup>-doped fluorides.  
*J. Lumin.* 102–103 (2003) 176–181
- S. KÜCK, I. SOKÓLSKA  
Room temperature emission from the Pr<sup>3+1</sup>S<sub>0</sub>-level in PrF<sub>3</sub>.  
*Appl. Phys. A* 77 (2003) 469–474
- M. KÜHBACHER, G. WESELOH, A. THOMZIG, J. KNEIPP, M. BEEKES, G. FALKENBERG, M. RADTKE, H. RIESEMEIER, A. KYRIAKOPOULOS, D. BEHNE,  
Analysis and Location of Metal- and Metalloid-Containing Proteins by Synchrotron-Radiation X-Ray Fluorescence.  
Zur Veröffentl. in X-Ray Spectrom.
- T. LAARMANN, K. VON HAEFTEN, H. WABNITZ, T. MÖLLER  
Energy relaxation and quenching processes of doped rare gas clusters with a shell-like geometric structure.  
*J. Chem. Phys.* 118 (2003) 3043
- J.M. LAGARON, D. CAVA, E. GIMÉNEZ, P. HERNANDEZ-MUÑOZ, R. CATALA, R. GAVARA  
On the Use of Vibrational Spectroscopy to Characterize the Structure and Aroma Barrier of Food Packaging Polymers.  
Zur Veröffentl. in Macromol. Symp.
- M.F. LAGUNA, M.L. CERRADA, R. BENAVENTE, E. PÉREZ, R. QUIJADA  
Permeation measurements in ethylene-1-hexene, ethylene-1-octene and ethylene-1-dodecene copolymers synthesized with metallocene catalysts.  
*J. Polym. Sci. B, Polym. Phys.* 41 (2003) 2174–2184
- M.F. LAGUNA, M.L. CERRADA, R. BENAVENTE, E. PÉREZ  
Effect of the comonomer content on the permeation behavior in polyolefin films synthesized with metallocene catalysts.  
*J. Membr. Sci.* 212 (2003) 167–176
- P. LE FÈVRE, H. MAGNAN, D. CHANDESIRIS, J. JUPILLE, S. BOURGEOIS, W. DRUBE, H. OGASAWARA, T. UOZUMI, A. KOTANI  
Interpretation of absorption edges by resonant electronic spectroscopies: experiment and theory.  
Zur Veröffentl. in *J. Electron Spectrosc. Relat. Phenom.*
- N.L.J. LE MASSON, A.P. VINK, P. DORENBOS, A.J.J. BOS, C.W.E. VAN EJK, J.P. CHAMINADE  
Ce<sup>3+</sup> and Pr<sup>3+</sup> 5d-energy levels in the (pseudo) perovskites KMgF<sub>3</sub> and NaMgF<sub>3</sub>.  
Zur Veröffentl. in *J. Lumin.*
- D.R. LEE, K. SHIN, O.H. SEECK, HYUNGJUNG KIM, Y.-S. SEO, M. TOLAN, M.H. RAFAILOVICH, J. SOKOLOV, S.K. SINHA  
X-ray scattering from freestanding polymer films with geometrically curved surfaces.  
*Phys. Rev. Lett.* 90 (2003) 185503
- W.T. LEE, E.K.H. SALJE, U. BISMAYER  
Domain wall diffusion and domain wall softening.  
*J. Phys. C: Solid State Phys.* 15 (2003) 1353–1366
- W.T. LEE, E.K.H. SALJE, U. BISMAYER  
Domain wall structure and domain wall strain.  
*J. Appl. Phys.* 93 (2003) 9890–9897
- W.T. LEE, E.K.H. SALJE, U. BISMAYER  
Structure and transport properties of ferroelastic domain walls in a simple model.  
*Phase Transit.* 76 (2003) 81–102
- A. LEUTERITZ, D. POSPIECH, B. KRETZSCHMAR, M. WILLEKE, D. JEHNICHEN, U. JENTZSCH, K. GRUNDKE, A. JANKE  
Progress in polypropylene-nanocomposite development.  
*Adv. Eng. Mat.* 5 (2003) 678–681
- E.B.F. LIMA, J. WEGENER, C. DALLE DONE, G. GOERIGK, T. WROBLEWSKI, T. BUSLAPS, A.R. PYZALLA, W. REIMERS  
Dependence of microstructure, residual stresses and texture of AA 6013 friction stir welds on the welding process.  
*Z. Metallkd.* 94 (2003) 908–915
- T. LIPPMANN, P. BLAHA, N.H. ANDERSEN, H.F. POULSEN, TH. WOLF, J.R. SCHNEIDER, K.-H. SCHWARZ  
Charge-density analysis of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>6.98</sub>. Comparison of theoretical and experimental results.  
*Acta Crystallogr. A* 59 (2003) 437–451
- K.-D. LISS, A. BARTELS, A. SCHREYER, H. CLEMENS  
High energy X-rays: A tool for advanced bulk investigations in materials science and physics.  
*Textures Microstruct.* 35 (2003) 219–252
- M. LOHMANN, H.J. BESCH, W.-D. DIX, J. METGE, B. REIME  
Demands on a detector for intravenous coronary angiography – experience after 379 patients.  
*Nucl. Instrum. Methods Phys. Res. A* 510 (2003) 126–137
- A. LOPEZ-RUBIO, J.M. LAGARON, E. GIMENEZ, D. CAVA, P. HERNANDEZ, T. YAMAMOTO, R. GAVARA  
Morphological alterations induced by temperature and humidity in ethylene-vinyl alcohol copolymers.  
Zur Veröffentl. in *Macromol.*
- C. LORENZ-HAAS, P. MUELLER-BUSCHBAUM, T. ITTNER, J. KRAUS, B. MAHLTIG, S. CUNIS, G. V. KROSIGK, R. GEHRKE, C. CRETON, M. STAMM  
Crack propagation and defect formation at polymer interfaces investigated by ultra-small angle X-ray scattering.  
*Phys. Chem. Chem. Phys.* 5 (2003) 1235–1241
- A. LUSHCHIK, M. KIRM, I. KUDRYAVTSEVA, CH. LUSHCHIK, I. MARTINSON, V. NAGIRNYI, E. VASILCHENKO  
Intrinsic and Impurity Luminescence and Multiplication of Excitations in Complex Oxides.  
*J. Lumin.* 102–103 (2003) 38–43

- D. LÜTZENKIRCHEN-HECHT, M. WAGEMAKER, P. KEIL, A.A. VAN WELL, R. FRAHM  
Quasi-in-situ reflection mode EXAFS at the Ti K-edge of lithium intercalated  $TiO_2$  rutile.  
*Surf. Sci.* 538 (2003) 10
- V.N. MAKHOV, N.M. KHAIDUKOV, D. LO, M. KIRM, G. ZIMMERER  
Spectroscopic properties of  $Pr^{3+}$  luminescence in complex fluoride crystals.  
*J. Lumin.* 102–103 (2003) 638–643
- C. MALGRANGE, W. GRAEFF  
Diffraction of short X-ray pulses in the general asymmetric Laue case – an analytic treatment.  
*J. Synchrotron Radiat.* 10 (2003) 248–254
- B. MALIC, I. ARCON, A. KODRE, M. KOSEC  
EXAFS study of amorphous precursors for  $Pb(Zr,Ti)O_3$  ceramics.  
In: Sol-gel science and technology : Topics in fundamental research and applications, S. Sakka, Kluwer Academic Publishers, Boston / Dordrecht (2003)
- B. MALIC, M. KOSEC, I. ARCON, A. KODRE  
Influence of the structure of precursors on the crystallization of  $PbTiO_3$  thin films.  
In: Sol-gel science and technology : Topics in fundamental research and applications, S. Sakka, Kluwer Academic Publishers, Boston / Dordrecht (2003)
- J.M. MARTÍNEZ-BURGOS, R. BENAVENTE, E. PÉREZ, M.L. CERRADA  
Effect of short glass fiber on structure and mechanical behavior of olefinic polymers synthesized with metallocene catalysts.  
*J. Polym. Sci. B, Polym. Phys.* 41 (2003) 1244–1255
- J.C. MARXEN, W. BECKER, D. FINKE, B. HASSE, M. EPPEL  
Early mineralization in *Biomphalaria glabrata*: Microscopic and structural results.  
*J. Mollusc. Stud.* 69 (2003) 113–121
- N. MATTERN, A. GEBERT  
Hydrogenation of  $Zr_{60}Ti_2Cu_{20}Al_{10}Ni_8$  Bulk Metallic Glass.  
*Appl. Phys. Lett.* 83 (2003) 1134–1135
- N. MATTERN, H.H. HERMANN, S. ROTH, J. SAKOWSKI, M.-P. MACHT, P. JOVARI, J. JIANG  
Structural Behaviour of  $Pd_{40}Cu_{30}Ni_{10}P_{20}$  Bulk Metallic Glass Below and Above the Glass Transition.  
*Appl. Phys. Lett.* 82 (2003) 1947–1951
- C. MCGINLEY, A. LOBO, M. RIEDLER, T. MÖLLER, H. BORCHERT, S. HAUBOLD, M. HAASE, T. WELLER  
Interfacial properties of a core/shell nanocrystal.  
Zur Veröffentl. in *J. Chem.Phys.*
- M. MEDUNA, J. NOVAK, G. BAUER, V. HOLY, C. V. FALUB, S. TSUJINO, E. MÜLLER, D. GRÜTZMASCHER, Y. CAMPIDELLI, O. KERMARREC, D. BENSAHEL  
Annealing studies of high Ge composition Si/SiGe multilayers.  
*Z. Kristallogr.* 218 (2003) 1–6
- M. MESSERSCHMIDT, M. MEYER, P. LUGER  
Ultra Low Temperature X-ray Data Collection with a Newly Developed 0.1 mm Kapton-Film Cylinder for a Closed Cycle Helium Cryostat.  
*J. Appl. Cryst.* 36 (2003) 1452–1454
- M. MESSERSCHMIDT, P. LUGER  
Experimentelle Ladungsdichtestudie an Strychnin bei 100 und 15 K.  
*Z. Kristallogr.* 20 (2003) 55
- D.C. MEYER, A. KUPSCH, P. PAUFLER  
Absorption and extinction correction in quantitative DAFS analysis.  
*J. Synchrotron Radiat.* 10 (2003) 144–147
- D.C. MEYER, P. PAUFLER  
X-ray Characterization of Nanolayers.  
In: Encyclopedia of Nanoscience and Nanotechnology, Hari Singh Nalwa, American Scientific Publishers, Stevenson Ranch (2003)
- B. MIHAILOVA, U. BISMAYER, B. GÜTTLER, L. TOSHEVA, J. STERTE  
Raman scattering in locally inhomogeneous oxide crystals.  
*Phase Transit.* 76 (2003) 17–32
- P. MIKULIK, D. LUEBBERT, D. KORYTAR, P. PERNOT, T. BAUMBACH  
Synchrotron area diffractometry as a tool for spatial high-resolution three-dimensional lattice misorientation mapping.  
*J. Phys. D: Applied Phys.* 36 (2003) A74–A78
- A. MISIUK, W. WIERZCHOWSKI, K. WIETESKA, L. BRYJA, W. GRAEFF  
Synchrotron topography of high temperature-pressure treated silicon implanted with helium.  
*Nucl. Instrum. Methods Phys. Res. B* 200 (2003) 358
- J.M. MONSALLIER, R. ARTINGER, M.A. DENECKE, F. SCHERBAUM, G. BUCKAU, J.I. KIM  
Spectroscopic Study (TRLFS and EXAFS) of the Kinetics of An(III)/Ln(III) Humate Interaction.  
*Radiochim. Acta* 91 (2003) 567–574
- P. MORI-SANCHEZ, M. MARQUES, A. BELTRAN, J.Z. JIANG, L. GERWARD, J.M. RECIO  
Origin of the low compressibility in super-hard nitride spinels.  
Zur Veröffentl. in *Phys. Rev. Lett.*
- B.I. MOSQUEDA-JIMÉNEZ, A. JENTYS, K. SESAN, J.A. LERCHER  
Reduction of nitric oxide by propene and propane on Ni-exchanged mordenite.  
*Appl. Catalysis B* 43 (2003) 105
- B.I. MOSQUEDA-JIMÉNEZ, A. JENTYS, K. SESAN, J.A. LERCHER  
Structure-activity relations for Ni-containing zeolites during NO reduction. Part 2 – Influence of the metal.  
*J. Catalysis* 218 (2003) 375
- H.J. MUELLER, F.R. SCHILLING, J. LAUTERJUNG, C. LATHE  
A Standard Free Pressure Calibration Using Simultaneous XRD and Elastic Property Measurements in a Multi-Anvil Device.  
*Eur. J. Mineral.* 15 (2003) 865–873

- D. MUKHERJI, R. GILLES, B. BARBIER, D. DEL GENOVESE, B. HASSE, P. STRUNZ, T. WROBLEWSKI, H. FUESS, J. RÖSLER  
Lattice Misfit Measurement in Inconel 706 Containing Coherent  $\gamma'$  and  $\gamma'$  Precipitates.  
Scr. Mater. 48 (2003) 333–339
- B.M. MURPHY, J. STETTNER, M. TRAVING, M. SPRUNG, I. GROTKOPP, M. MÜLLER, C.S. OGLESBY, M. TOLAN, W. PRESS  
Surface behaviour at the charge density wave transition in NbSe<sub>2</sub>.  
Zur Veröffentl. in Physica B
- E. MÄHLMANN, T. MATTEI, B. BRENNER, T. KRAFT  
Actin-binding properties of weak binding cross-bridges in the presence of ADP·AlF<sub>4</sub> or BDM.  
Biophys. J. 84/2 (2003) 449a
- H. MÖHWALD, H. MENZEL, C.A. HELM, M. STAMM  
Lipid and polyampholyte monolayers to study polyelectrolyte interactions and structure at interfaces.  
Zur Veröffentl. in Advances in Polymer Science
- T. MÖLLER, P. GÜRTLER, W. LAASCH, J. SCHULZ, A. SWIDERSKI, H. WABNITZ  
Intense soft X-ray matter interaction: Multiple ionization of atom clusters by free electron laser radiation.  
Europhysics News 34/4 (2003) 139
- P. MÜLLER-BUSCHBAUM  
Dewetting and pattern formation in thin polymer films as investigated in real and reciprocal space.  
J. Phys.: Condens. Matter 15 (2003) R1549
- P. MÜLLER-BUSCHBAUM  
Grazing incidence small-angle x-ray scattering – an advanced scattering technique for the investigation of nanostructured polymer films.  
Anal.Bioanal.Chem. 376 (2003) 3
- M. NAFFAKH, M.A. GOMEZ, G. ELLIS, C. MARCO  
Thermal properties, structure and morphology of PEEK/thermotropic liquid crystalline polymer blends.  
Polymer International 52 (2003) 1876–1886
- V. NAGIRNYI, M. KIRM, A. KOTLOV, A. LUSHCHIK, L. JÖNSSON  
Separation of Excitonic and Electron-Hole Processes in Tungstates of Heavy Metals.  
J. Lumin. 102–103 (2003) 597–603
- R. NICULA, M. STIR, C. SCHICK, E. BURKEL  
High-Temperature High-Pressure Crystallization and Sintering Behaviour of Brookite-Free Nanostructured Titanium Dioxide : in-situ Experiments Using Synchrotron Radiation.  
Zur Veröffentl. in Thermochimica Acta
- R. NIEWA, D.A. ZHEREBTSOV, Z. HU  
Polymorphism of Heptalithium Nitridovanadate(V) Li<sub>7</sub>[VN<sub>4</sub>].  
Inorg. Chemistry 42 (2003) 2538
- R. NIEWA, Z. HU, R. KNIEP  
Mn and Fe K-edge XAS Spectra of Manganese and Iron Nitrido Compounds.  
Europ. J. Inorg. Chem. 2003 (2003) 1632
- R. NIEWA, Z.-L. HUANG, W. SCHNELLE, Z. HU, R. KNIEP  
Preparation, Crystallographic, Spectroscopic and Magnetic Characterization of Low-valency Nitridomatalate Phases Li<sub>2</sub>[(Li<sub>1-x</sub>M<sub>x</sub>)N] with M = Cu, Ni.  
Z. Anorg. Allg. Chemie 629 (2003) 1778
- I.N. OGORODNIKOV, V.A. PUSTOVAROV, M. KIRM, V.S. CHEREMLYKH  
Low temperature time-resolved vacuum ultraviolet spectroscopy of self-trapped excitons in KH<sub>2</sub>PO<sub>4</sub> crystals.  
Opt. Spectrosc. 95 (2003) 385–390
- A.N. OGURTSOV, E.V. SAVCHENKO, E. SOMBROWSKI, S. VIELHAUER, G. ZIMMERER  
Exciton self-trapping into diatomic and triatomic molecular complexes in xenon cryocrystals.  
Low Temp. Phys. 29 (2003) 858–861
- B.A. ORLOWSKI, E. GUZIEWICZ, B.J. KOWALSKI, A. SZCZEPANSKA, Z. GOLACKI, I. GRZEGORY, S. POROWSKI, R.L. JOHNSON, I.A. KOWALIK  
Interaction between Sm and GaN(0001) – a photoemission study.  
Zur Veröffentl. in Surf. Sci.
- B.A. ORLOWSKI, I.A. KOWALIK, B.J. KOWALSKI, M. SUFFCZYNSKI, A. MYCIELSKI, S. COLONNA, C. OTTAVIANI, F. RONCI, A. CRICENTI  
Differential Reflectivity and photoemission study of ZnTe and CdTe (110) surface.  
Zur Veröffentl. in J. Alloys Compd.
- B.A. ORLOWSKI, S. MICKIEVICIUS, B.J. KOWALSKI, I.A. KOWALIK, K. KOPALKO, A. MYCIELSKI, R.L. JOHNSON  
Mn doped ZnTe (110) surface in resonant photoemission study.  
Zur Veröffentl. in J. Alloys Compd.
- B.A. ORLOWSKI, S. MICKIEVICIUS, T. STORY, A.Y. SIPATOV, M. CHERNYSHOVA, I. DEMCHENKO, R. MEDICHERLA, W. DRUBE  
Photoemission study of EuS layer buried in PbS.  
Zur Veröffentl. in J. Electron Spectrosc. Relat. Phenom.
- V. PACHECO, A. BENTIEN, W. CARRILLO-CABRERA, S. PASCHE, F. STEGLICH, YU. GRIN  
On the composition and thermal stability of the Eu<sub>8</sub>Ga<sub>16</sub><sub>16</sub>Ge<sub>30</sub> clathrates.  
Zur Veröffentl. in Phys. Rev. B
- J. PADEZNIK GOMILSEK, A. KODRE, I. ARCON, M. HRIBAR  
K-edge X-ray-absorption spectra of Cs and Xe.  
Phys. Rev. A 68 (2003) 042505
- J. PADEZNIK GOMILSEK, I. KOZJEK SKOFIC, N. BUKOVEC, A. KODRE  
X-ray absorption study of CeO<sub>2</sub> and Ce/V mixed oxide thin films obtained by sol gel deposition.  
Zur Veröffentl. in Thin Solid Films

- A. PALEARI, N. CHIODINI, D. DI MARTINO, F. MEINARDI, P. FUMAGALLI  
Ultraviolet-excited radiative decay channels of defect states in high-density sixfold-coordinated SiO<sub>2</sub>.  
*Phys. Rev. B* 68 (2003) 184107-1/4
- B. PALOSZ, E. GRZANKA, S. GIERLOTKA, S. STELMAKH, R. PIELASZEK, W. LOJKOWSKI, U. BISMAYER, J. NEUEFEIND, H.-W. WEBER, W. PALOSZ  
Application of X-ray powder diffraction to nano-materials – Determination of the atomic structure of nanocrystals with relaxed and strained surfaces.  
*Phase Transit.* 76 (2003) 171–185
- P. PANAGIOTOU, E. BAUER, S. LOI, T. TITZ, E. MAURER, P. MÜLLER-BUSCHBAUM  
Polymeric structures at interfaces: An X-ray scattering study.  
Zur Veröffentl. in *Z. Kristallogr.*
- A. PAOLONE, C. CASTELLANO, R. CANTELLI, G. ROUSSE, C. MASQUELIER  
Evidence of a splitting of the Mn-O distance and of a large lattice disorder in the charge ordered phase of LiMn<sub>2</sub>O<sub>4</sub> obtained by EXAFS.  
*Phys. Rev. B* 68 (2003) 014108
- M. PASENKIEWICZ-GIERULA, T. ROG, J. GROCHOWSKI, P. SERDA, R. CZARNECKI, T. LIBROWSKI, S. LOCHYNSKI  
Effects of a Carene Derivative Local Anesthetic on a Phospholipid Bilayer Studied by Molecular Dynamics.  
*Biophys. J.* 85 (2003) 1248–1258
- W. PASZKOWICZ, R. MINIKAYEV, P. PISZORA, M. KNAPP, C. BAEHTZ, J.M. RECIO, M. MARQUES, P. MORI-SANCHEZ, L. GERWARD, J.Z. JIANG  
Thermal Expansion of Si<sub>3</sub>N<sub>4</sub>.  
Zur Veröffentl. in *Phys. Rev. B*
- W. PASZKOWICZ, W. SZUSZKIEWICZ, E. DYNOWSKA, J.Z. DOMAGALA, F. FIRSZT, H. MĘCZYŃSKA, S. FĘGOWSKI, C. LATHE  
Lattice parameters of (Zn,Mg)Se crystals as a function of pressure.  
Zur Veröffentl. in *J. Alloys Compd.*
- G. PEPPONI, C. STRELI, P. WOBRAUSCHEK, S. ZAMINI, N. ZÖGER, G. FALKENBERG  
Geometrical optimization of SR-TXRF for samples with differing Matrices.  
Zur Veröffentl. in *Spectrochim. Acta B*
- J. PFLÜGER, B. FAATZ, M. TISCHER, T. VIELITZ  
Radiation exposure and magnetic performance of the undulator system for the VUV FEL at the TESLA Test Facility Phase-1 after 3 years of operation.  
*Nucl. Instrum. Methods Phys. Res. A* 507 (2003) 186–190
- J. PFLÜGER, U. HAHN, B. FAATZ, M. TISCHER  
Undulator system for the VUV FEL at the TESLA test facility phase-2.  
*Nucl. Instrum. Methods Phys. Res. A* 507 (2003) 228–233
- P. PISZORA, W. PASZKOWICZ, C. BAEHTZ, E. WOLSKA  
High-resolution X-ray diffraction studies on the phase transitions in the spinel lithium-manganese oxide.  
Zur Veröffentl. in *Solid State Commun.*
- E. PLÖNJES, J. FELDHAUS, T. MÖLLER  
Taking free-electron lasers into the X-ray regime.  
*Physics World* 16(7) (2003) 33–37
- U. PONKRATZ, F. PORSCHE, G. WORTMANN, W.B. HOLZAPFEL  
X-ray diffraction studies on RECo<sub>2</sub> (RE = Pr, Nd, Sm, Tb) laves phases under pressure.  
*J. Alloys Compd.* 339 (2003) 99–102
- U. PONKRATZ, W.B. HOLZAPFEL  
Equations of states for wide ranges in pressure and temperature.  
Zur Veröffentl. in *J. Phys.: Condens. Matter*
- D. POSPIECH, B. KRETZSCHMAR, A. LEUTERITZ, D. JEHNICHEN, A. JANKE  
Investigation of the exfoliation process in polypropylene nanocomposites.  
*Macromol. Symp.* 204 (2003) F48-F50
- D. POSPIECH, D. JEHNICHEN, A. GOTTWALD, L. HÄUSSLER, W. KOLLIG, K. GRUNDKE, A. JANKE, S. SCHMIDT, C. WERNER  
Surface structure of fluorinated polymers and block copolymers.  
*Surface Coatings International Part B: Coatings Transactions* 86 (2003) 43–52
- D. POSPIECH, D. JEHNICHEN, P. FRIEDEL, W. KOLLIG, K. GRUNDKE, L. HÄUSSLER, A. JANKE  
Polymere mit ungewöhnlichen Oberflächeneigenschaften.  
In: *Wiss. Beiträge der FH Lausitz*, FH Lausitz, FH Lausitz, Senftenberg/Cottbus (2003)
- W. POTZEL, U. VAN BÜRCK, P. SCHINDELmann, H. HAGN, G.V. SMIRNOV, S.L. POPOV, E. GERDAU, YU.V. SHVYD'KO, J. JÄSCHKE, H.D. RÜTER, A.I. CHUMAKOV, R. RÜFFER  
Interference effects of radiation emitted from nuclear excitons.  
Zur Veröffentl. in *Hyperfine Interact.*
- J. PRADES, S.S. FUNARI, P.V. ESCRIBÁ, F. BARCELÓ  
Effects of unsaturated fatty acids and triacylglycerols on phosphatidylethanolamine membrane structure.  
*J. Lipid Res.* 44 (2003) 1720–1726
- L.A.S. DE A. PRADO, H. WITTICH, K. SCHULTE, G. GOERIGK, VASIL M. GARAMUS, R. WILLUMEIT, S. VETTER, B. RUFFMANN, S.P. NUNES  
Anomalous Small-Angle X-Ray Scattering Characterization of Composites Based on Sulfonated Poly(ether ether ketone), Zirconium Phosphates, and Zirconium Oxide.  
*J. Polym. Sci. B, Polym. Phys.* 42 (2003) 567–575
- K. PRANZAS, R. WILLUMEIT, R. GEHRKE, J. THIEME, A. KNÖCHEL  
Characterisation of Structure and Aggregation Processes of Aquatic Humic Substances Using Small-Angle Scattering and X-Ray Microscopy.  
*Analytical and Bioanalytical Chemistry* 376 (2003) 618–625

- P.K. PRANZAS, A. KNÖCHEL, H. KNEIFEL, H. KAMUSEWITZ, T. WEIGEL, R. GEHRKE, S.S. FUNARI, R. WILLUMEIT  
Online Saks Investigations of Polymeric Hollow Fibre Membranes.  
Analytical and Bioanalytical Chemistry 376 (2003) 602–607
- K. PROOST, L. VINCZE, K. JANSSENS, N. GAO, E. BULSKA, M. SCHREINER, G. FALKENBERG  
Characterization of a polycapillary lens for use in micro-XANES experiments.  
X-Ray Spectrom. 32 (2003) 215–222
- N. PRYDS, S. LINDEROTH, J.Z. JIANG  
Undercooling in Pd<sub>40</sub>Cu<sub>30</sub>Ni<sub>10</sub>P<sub>20</sub> melt.  
J. Metastable and Nanocrystalline Mater. 15–16 (2003) 87
- A. PUIG-MOLINA, L.P. NIELSEN, A.M. MOLENBROEK, K. HERBST  
In situ EXAFS study on the chemical state of arsenic deposited on a NiMoP/Al<sub>2</sub>O<sub>3</sub> catalyst.  
Zur Veröffentl. in Catal. Lett.
- A. PUNDT, M. SULEIMAN, M.T. REETZ, C. BÄHTZ, R. KIRCHHEIM, N.M. JISRAWI,  
Hydrogen and Pd-clusters.  
Zur Veröffentl. in Mater. Sci. Eng. B
- A. PYZALLA, W. REIMERS  
Study of Stress Gradients using Synchrotron X-ray Diffraction.  
In: Analysis of Residual Stress by Diffraction using Neutron and Synchrotron Radiation, A. Lodini, M. Fitzpatrick, Taylor and Francis, New York (2003)
- E. PÉREZ, G. TODOROVA, M. KRASTEVA, J.M. PEREÑA, A. BELLO, M.M. MARUGÁN, M. SHLOUF  
Structure and phase transitions of poly(heptamethylene p, p'-bibenzoate). Time-resolved synchrotron WAXS and DSC studies.  
Macromol. Chem. Phys. 204 (2003) 1791–1799
- E. PÉREZ, R. BENAVENTE, M.L. CERRADA, A. BELLO, J.M. PEREÑA  
Synchrotron X-ray and DSC Studies of the Phase Behaviour of Poly(diethylene glycol p,p'-bibenzoate).  
Macromol. Chem. Phys. 204 (2003) 2155–2162
- B.N. RAMMEH, K.G. BRAMNIK, H. EHRENBERG, B. STAHL, H. FUESS, A. CHEIKH-ROUHOU  
Crystal structure and magnetic properties of Mo-substituted Ba<sub>2</sub>(Fe, W)<sub>2</sub>O<sub>6</sub> double-perovskites: a synchrotron diffraction, magnetization and Moessbauer study.  
Zur Veröffentl. in J. Alloys Compd.
- S.B. RASMUSSEN, S. HAGEN, S. MASTERS, A. HAGEN, K. STÅHL, K.M. ERIKSEN, P. SIMONSEN, J.N. JENSEN, M. BERG, I. CHORKENDORFF, R. FEHRMANN  
Characterization of vanadium containing boiler deposits from orimulsion.  
Power Plant Chemistry 5 (2003) 360–369
- T. RESSLER  
Application of Time-resolved In situ X-ray Absorption Spectroscopy in Solid-State Chemistry.  
Analytical and Bioanalytical Chemistry 376 (2003) 584–593
- T. RESSLER, J. WIENOLD, O. TIMPE  
Evolution of Catalyst Structure under Reaction Conditions From Time-resolved in situ XAS Investigations.  
Zur Veröffentl. in Phys. Scri.
- T. RESSLER, J. WIENOLD, R.E. JENTOFT, F. GIRGSDIES  
Evolution of Defects in the Bulk Structure of MoO<sub>3</sub> during Oxidation of Propene.  
Europ. J. Inorg. Chem. 2 (2003) 301–312
- T. RESSLER, J. WIENOLD, R.E. JENTOFT, F. GIRGSDIES  
Structure-activity relationships of heterogeneous catalysts from time-resolved X-ray absorption spectroscopy.  
Nucl. Instrum. Methods Phys. Res. B 200 (2003) 165–170
- M. RICHTER, A. GOTTWALD, U. KROTH, A.A. SOKOLOV, S.V. BOBASHEV, L.A. SHMAENOK, J. FELDHAUS, CH. GERTH, B. STEEG, K. TIEDTKE, R. TREUSCH  
Measurement of gigawatt radiation pulses from a VUV/EUV free-electron laser.  
Appl. Phys. Lett. 83 (2003) 2970–2972
- K. RICKERS, W. HEINRICH, R. THOMAS  
Trace-element analysis of individual synthetic and natural fluid inclusions with synchrotron radiation XRF using Monte Carlo simulations for quantification.  
Zur Veröffentl. in Eur. J. Mineral.
- A. RINDBY, K. JANSSENS, J. OSÁN  
Reconstruction of the three-dimensional distribution of elements in fly-ash particles by micro-XRF spectroscopy.  
X-Ray Spectrom. 32 (2003) 248–257
- A. RISTIC, N. NOVAK TUSAR, I. ARCON, N. ZABUKOVEC LOGAR, F. THIBAULT STARZYK, J. CZYZNIEWSKA, V. KAUCIC  
Large-pore FAPO-36 : synthesis and characterization.  
Chem. Mater. 15 (2003) 3643–3649
- M.S. ROGALSKY, V. BESSERGUENEV, N. BARATA, R. BALTAZAR  
CVD synthesis and CEMS study of Fe sulphide and oxide thin films.  
IEEE Transactions on Magnetics 39(5) (2003) 2696–2698
- K. ROBNAGEL, L. KIPP, M. SKIBOWSKI  
Angle-resolved photoelectron spectroscopy: From photoemission imaging to spatial resolution.  
in Solid-State Photoemission and Related Methods edited by B. Schattke and M.A. Van Hove – (2003) 159–176
- E. RUDIGIER, CH. PIETZKER, M. WIMBOR, I. LUCK, J. KLAER, R. SCHEER, B. BARCONES, C.T. JAWHARI, J. ÁLVAREZ-GARCIA, A. PEREZ-RODRIGUEZ, A. ROMANO-RODRIGUEZ  
Real-time investigations of the influence of sodium on the properties of Cu-poor prepared CuInS<sub>2</sub> thin films.  
Thin Solid Films 431–432 (2003) 110–115
- U. RUSCHEWITZ, C. BÄHTZ, M. KNAPP  
Zur Kinetik der Bildung von Na<sub>2</sub>PdC<sub>2</sub>.  
Z. Anorg. Allg. Chemie 629 (2003) 1581–1584

- J. RÖHLER  
Intraplanar couplings in the CuO<sub>2</sub> lattice of cuprate superconductors.  
Zur Veröffentl. in *Physica C*
- J. RÖHLER  
On self-protecting singlets in cuprate superconductors.  
Zur Veröffentl. in *J. Supercond.*
- J. RÖHLER  
c-axis intra-layer couplings un the CuO<sub>2</sub> planes of high-T<sub>c</sub> cuprates.  
In: *Concepts in Electron Correlation*, A.C. Hewson, V. Zlatic,  
Kluwer Academic Publishers, Dordrecht (2003)
- K. SAKSL, H. FRANZ, J.Z. JIANG, P. JOVARI, K. KLEMENTIEV, E. WELTER, A. EHNEs  
Structural evolution of Zr<sub>70</sub>Cu<sub>30</sub> and Zr<sub>70</sub>Cu<sub>29</sub>Pt<sub>1</sub> upon annealing.  
Zur Veröffentl. in *Physics Scripta*
- K. SAKSL, H. FRANZ, P. JÓVÁRI, K. KLEMENTIEV, E. WELTER, A. EHNEs, J. SAIDA, A. INOUE, J.Z. JIANG  
Evidence of icosahedral short-range order in Zr<sub>70</sub>Cu<sub>30</sub> and Zr<sub>70</sub>Cu<sub>29</sub>Pd<sub>1</sub> metallic glasses.  
*Appl. Phys. Lett.* 83 (2003) 3924
- B. SALBU, K. JANSSENS, O.C. LIND, K. PROOST, P.R. DANESI  
Oxidation states of uranium in DU particles from Kosovo.  
*J. Env. Radioact.* 64 (2003) 167–173
- P.M. SANCHEZ, M. MARQUES, A. BELTRAN, J.Z. JIANG, L. GERWARD, J.M. RECIO  
Origin of the low compressibility in super-hard nitride spinels.  
*Phys. Rev. B* 68 (2003) 064115
- M. SAPHIANNIKOVA, TH. GEUE, O. HENNEBERG, K. MORAWETZ, U. PIETSCH  
Linear viscoelastic analysis of formation and relaxation of azobenzene polymer gratings.  
Zur Veröffentl. in *J. Chem.Phys.*
- E.V. SAVCHENKO, A.N. OGURTSOV, G. ZIMMERER  
Exciton-induced lattice defect formation.  
*Low Temp. Phys.* 29 (2003) 270–273
- D. SAVYTSKII, A. SENYSHYN, K. WITESKA, W. WIERZCHOWSKI, Z. FRUKACZ, U. BISMAYER, L. VASYLECHKO, A. MATKOVSKII  
White beam synchrotron X-ray topography studies of twinning in GdFeO<sub>3</sub> type perovskite crystals.  
*Z. Kristallogr.* 218 (2003) 17–25
- D. SAVYTSKII, D. TROTS, A. MATKOVSKII, C. PAULMANN, U. BISMAYER, M. BERKOWSKI  
Real structure of LSGMO crystal studied by Laue method.  
In: *Mixed Ionic Electronic Conducting (MIEC) Perovskites for Advanced Energy Systems*, Nina Orlovskaya, Nigel Browning, Kluwer Academic Publishers, Boston/Dordrecht/London (2003)
- C. SCHILLER, C. RASCHE, M. WEHMÖLLER, F. BECKMANN, H. EUFINGER, M. EPPEL, S. WEIHE  
Geometrically structured implants for cranial reconstruction made of biodegradable polyesters and calcium phosphate/calcium carbonate.  
Zur Veröffentl. in *Biomaterials*
- H. SCHLENZ, F. REINAUER, R. GLAUM, J. NEUEFEIND, B. BRENDENBACH, J. HORMES  
High-energy X-ray diffraction study of Ni-doped sodium metaphosphate glasses.  
Zur Veröffentl. in *J. Non-Cryst. Solids*
- H. SCHLENZ, J. NEUEFEIND, S. RINGS  
High-energy x-ray diffraction study of amorphous (Si<sub>0.71</sub>Ge<sub>0.29</sub>)O<sub>2</sub>.  
*J. Phys.: Condens. Matter* 15 (2003) 4919–4926
- H. SCHLENZ, S. RINGS, M. SCHMÜCKER, K. SCHULMEISTER, W. MADER, A. KIRFEL, J. NEUEFEIND  
Short-range and medium range order in amorphous barium germanate.  
*J. Non-Cryst. Solids* 320 (2003) 133–142
- W.W. SCHMAHL, J. KHALIL-ALLAFI, B. HASSE, M. WAGNER, A. HECKMANN, CH. SOMSEN  
Investigation of the phase evolution in a superelastic NiTi shape memory alloy (50.7 at.-% Ni) under extensional load with synchrotron radiation.  
Zur Veröffentl. in *Mater. Sci. Eng.*
- A R. SCHMID, M. WILKE, R. OBERHÄNSLI, K. JANSSENS, G. FALKENBERG, L. FRANZ, A. GAAB  
Micro-XANES determination of ferric iron and its application in thermobarometry.  
*Lithos* 70 (2003) 381–392
- M. SCHMIDBAUER  
X-Ray Diffuse Scattering From Self-Organized Mesoscopic Semiconductor Structures.  
In: *X-Ray Diffuse Scattering From Self-Organized Mesoscopic Semiconductor Structures*, G. Höhler, Springer Verlag, Berlin, Heidelberg (2003)
- CH. SCHMIDT, K. RICKERS  
In-situ determination of mineral solubilities in fluids using a hydrothermal diamond-anvil cell and SR-XRF: solubility of AgCl in water as an example.  
*American Mineralogist* 88 (2003) 288–292
- E. SCHNEIDER, A. HAGEN, J.-D. GRUNWALDT, F. ROESSNER  
An alternative preparation method for ion exchanged catalysts: solid state redox reaction.  
Zur Veröffentl. in *Stud. Surf. Sci. Catal.*
- M.F. SCHNEIDER, R. ZANTL, C. GEGE, R.R. SCHMIDT, M. RAPPOLT, M. TANAKA  
Hydrophilic/Hydrophobic Balance Determines Morphology of Glycolipids with Oligolactose Head Groups.  
*Biophys. J.* 84 (2003) 306
- A. SCHNEPF, B. JEE, A.-G. SCHNOECKEL, E. WECKERT, A. MEENTS, D. LUEBBERT, E. HERRLING, B. PILAWA  
Preparation and Precise Structural Determination of a Second Ga<sub>84</sub> Cluster Compound. A First Hint for Cluster Doping and Its Fundamental Consequences in the Field of Chemistry and Physics of Nanoscaled Metalloid Cluster Material.  
Zur Veröffentl. in *Inorg. Chemistry*

- J. SCHULZ, H. WABNITZ, P. GÜRTLER, W. LAASCH, A. SWIDERSKI, A.R.B. DE CASTRO, T. MÖLLER  
 Energy absorption of free rare gas clusters irradiated by intense VUV pulses from a Free-Electron Laser.  
*Nucl. Instrum. Methods Phys. Res. A* 507 (2003) 572
- J. SCHULZ, P.H. WERNET, M. MARTINS, B. SONNTAG, R. MÜLLER, K. GODEHUSEN, P. ZIMMERMANN  
 Linear dichroism of the 4f photoemission in the giant resonance of atomic europium.  
*Phys. Rev. A* 67 (2003) 012502
- U. SCHWARZ, M. SCHMIDT, R. GUMENIUK, W. SCHNELLE, M. HANFLAND, K. KLEMENTIEV, YU. GRIN  
 Chemical Bonding and Pressure-Induced Change of the Electron Configuration of Ytterbium in  $\beta$ -YbAgGa<sub>2</sub>.  
 Zur Veröffentl. in *Z. Anorg. Allg. Chemie*
- A. SCHÜTZ, R. GOLBIK, K. TITTMANN, D.I. SVERGUN, M.H.J. KOCH, G. HÜBNER, S. KÖNIG  
 Studies on structure-function relationships of indolepyruvate decarboxylase from enterobacter cloacae – a key enzyme of the indole acetic acid pathway.  
*Eur. J. Biochem.* 270 (2003) 2322–2331
- A. SCHÜTZ, T. SANDALOVA, S. RICAGNO, G. HÜBNER, S. KÖNIG, G. SCHNEIDER  
 Crystal structure of indolepyruvate decarboxylase from Enterobacter cloacae, an enzyme involved in the biosynthesis of the plant hormone indole-3-acetic acid.  
*Eur. J. Biochem.* 270 (2003) 2312–2321
- CH. SEDLMAIR, K. SESCHAN, A. JENTYS, J.A. LERCHER  
 Elementary steps of NO<sub>x</sub> adsorption and surface reaction on a commercial storage-reduction catalyst.  
*J. Catalysis* 214 (2003) 308
- O.H. SEECK  
 Analysis by Diffraction and Fluorescence Methods.  
 In: Nanoelectronics and Information Technology, R. Waser, Wiley-VCH, Weinheim (2003)
- A. SENYSHYN, YE. PIVAK, L. VASYLECHKO, A. MATKOVSKII, M. BERKOVSKI  
 Pbnm – R-3c phase transition in La<sub>0.92</sub>Sr<sub>0.08</sub>Ga<sub>0.92</sub>Ti<sub>0.08</sub>O<sub>3</sub>.  
*Bull. Lviv Polytechn. Nat. Univ. Electr.* 482 (2003) 13–23
- R. SERIMAA, M. TORKKELLI, A. PAANANEN, M. LINDE, K. KISKO, M. KNAAPILA, O. IKKALA, E. VUORIMAA, H. LEMMETYINEN, O.H. SEECK  
 Self-assembled structure of hydrophobins HFBI and HFBII.  
*J. Appl. Cryst.* 36 (2003) 499
- A.V. SIDORENKO, P.A. RODNYI, A.J.J. BOS, P. DORENBOS, C.W.E. VAN EIJK, I.V. BEREZOVSAYA, V.P. DOTSENKO  
 Luminescence and thermoluminescence of Sr<sub>2</sub>B<sub>5</sub>O<sub>9</sub>X:Ce<sup>3+</sup>,A<sup>+</sup>(X=Cl, Br, A=Na<sup>+</sup>,K<sup>+</sup>) phosphors.  
 Zur Veröffentl. in *J. Phys.: Condens. Matter*
- M. SIKORA, CZ. KAPUSTA, D. ZAJAC, W. TOKARZ, C.J. OATES, M. BOROWIEC, D. RYBICKI, E. GOERING, P. FISCHER, G. SCHÜTZ, J.M. DE TERESA, M.R. IBARRA
- X-MCD magnetometry of CMR perovskites La<sub>0.67-y</sub>RE<sub>y</sub>Ca<sub>0.33</sub>MnO<sub>3</sub>.  
 Zur Veröffentl. in *J. Magn. Magn. Mater.*
- A.S. SOARES, D.L.D. CASPAR, E. WECKERT, A. HEROUX, K. HOELZER, K. SCHROER, D. SCHNEIDER, W. NOLAN, R.M. SWEET  
 Three beam interference is a sensitive measure of the efficacy of macromolecular refinement technique.  
*Acta Crystallogr. D* 59 (2003) 1716–1724
- C. SOLTSMANN, C. BEELI, R. LÜCK, W. GANDER  
 In-situ high-temperature powder diffraction study of reversible phase transitions in decagonal Al<sub>71.2</sub>Co<sub>12.8</sub>Ni<sub>16</sub>.  
*J. Appl. Cryst.* 36 (2003) 1030–1039
- T. SOWADE, C. SCHMIDT, F.-W. SCHÜTZE, H. BERNDT, W. GRÜNERT  
 Relations between Structure and Catalytic Activity of Ce-In-ZSM-5 Catalysts for the Selective Reduction of NO by Methane. I. The In-ZSM-5 System.  
*J. Catalysis* 214 (2003) 100–112
- C. SPIES, A. LORENC, R. GEHRKE, H.R. KRICHELDORF  
 Charge transfer interactions of N-(4-carboxyphenyl)trimellitimide dibutyl ester.  
*J. Phys. Chem. A* 107 (2003) 456–463
- C. SPIES, A. LORENC, R. GEHRKE, H.R. KRICHELDORF  
 Fluorescence of copoly(ester-imides)containing 2,6-naphthoate units.  
*Macromol. Chem. Phys.* 204 (2003) 813–822
- J. STANGL, A. HESSE, T. ROCH, V. HOLY, G. BAUER, T. SCHUELLI, T.H. METZGER  
 Structural investigation of semiconductor nanostructures by X-ray techniques.  
*Nucl. Instrum. Methods Phys. Res. B* 200 (2003) 11–23
- J. STANGL, A. HESSE, V. HOLY, Z. ZHONG, G. BAUER, U. DENKER, O.G. SCHMIDT  
 Effect of overgrowth temperature on shape, strain, and composition of buried Ge islands deduced from x-ray diffraction.  
*Appl. Phys. Lett.* 82 (2003) 2251
- U. STEINER, W. REICHELT, M. SCHMIDT, W. SCHNELLE  
 Synthese und Eigenschaften der Schicht-Perowskit-Phase Sr<sub>3</sub>Mo<sub>1.5</sub>Zn<sub>0.5</sub>O<sub>7–8</sub>.  
 Zur Veröffentl. in *Z. Anorg. Allg. Chemie*
- M. STIR, T. TRAYKOVA, R. NICULA, E. BURKEL, C. BAEHTZ, M. KNAPP, C. LATHE  
 In-Situ High-Pressure and High-Temperature Diffraction Experiments on Pure and Ag-doped TiO<sub>2</sub> Nanopowders.  
*Nucl. Instrum. Methods Phys. Res. B* 199 (2003) 59–63
- N. STRIBECK  
 Condensation thermoplastic elastomers under load: Methodological studies of nanostructure evolution by X-ray scattering.  
 In: Condensation Thermoplastic Elastomers, S. Fakirov, Wiley-VCH, Weinheim (2003)

**N. STRIBECK**

Extraction, representation and interpretation of nanoscale domain structure information from small-angle scattering patterns.  
Zur Veröffentl. in *Fibr. Text. EE*

**N. STRIBECK**

Nanostructure evolution studies of bulk polymer materials with synchrotron radiation. Progress in method development.  
*Anal. Bioanal. Chem.* 376 (2003) 608–617

**N. STRIBECK, R. ANDROSCH, S.S. FUNARI**

Nanostructure evolution of homogeneous poly(ethylene-co-1-octene) as a function of strain.  
*Macromol. Chem. Phys.* 204 (2003) 1202–1216

**N. STRIBECK, S. FAKIROV, A.A. APOSTOLOV, Z. DENCHEV, R. GEHRKE**

Deformation behavior of PET, PBT and PBT-based thermoplastic elastomers as revealed by SAXS from synchrotron.  
*Macromol. Chem. Phys.* 204 (2003) 1000–1013

**N. STRIBECK, S.S. FUNARI**

Nanostructure evolution in a poly(ether ester) elastomer during drawing and the displacement of hard domains from lamellae.  
*J. Polym. Sci. B, Polym. Phys.* 41 (2003) 1947–1954

**N. STRIBECK, V. BARBI, S. FUNARI, R. GEHRKE, N. SCHARNAGL**

Nanostructure of Nafion membrane material as a function of mechanical load studied by SAXS.  
*Polymer* 44 (2003) 4853–4861

**M. SULEIMAN, N.M. JISRAWI, O. DANKERT, M. T. REETZ, C. BÄHTZ, R. KIRCHHEIM, A. PUNDT**

Phase transition and lattice expansion during hydrogen loading of nanometer sized palladium clusters.  
*J. Alloys Compd.* 356–357 (2003) 644

**J.P. SUTTER, U. KUETGENS, G. MATERLIK, A. ROSTOMYAN**

Initial tests of a new Michelson interferometer.  
Zur Veröffentl. in *J. Appl. Cryst.*

**J.P. SUTTER, U. KUETGENS, G. MATERLIK, A. ROSTOMYAN**

Initial tests of a new X-ray Michelson interferometer.  
*J. Appl. Cryst.* 36(6) (2003) 1432–1439

**A. SWIDERSKA-SRODA, J.A. KOZUBOWSKI, A. MARENDA-NIEDBALA, E. GRZANKA, B.F. PALOSZ, A. PRESZ, S. GIERLOTKA, S. STELMAKH, G. KALISZ, N. HERLIN-BOIME, C. LATHE**

Investigation of the Microstructure of SiC-Zn Nanocomposite by Microscopic Methods: SEM, AFM and TEM.  
Zur Veröffentl. in *Mat. Lett.*

**C. SÜRGERS, M. GAJDZIK, G. FISCHER, H.V. LÖHNEYSEN, E. WELTER, K. ATTEMKOFER**

Preparation and structural characterization of ferromagnetic Mn<sub>5</sub>Si<sub>3</sub>C<sub>x</sub> films.

*Phys. Rev. B* 68 (2003) 174423

**D. TADIC, F. BECKMANN, K. SCHWARZ, M. EPPLER**

A novel method to produce hydroxyapatite objects with interconnecting porosity that avoids sintering.

Zur Veröffentl. in *Biomaterials*

**D. TADIC, M. EPPLER**

A thorough physicochemical characterisation of 14 calcium phosphate-based bone substitution materials in comparison to natural bone.

Zur Veröffentl. in *Biomaterials*

**M. TANAKA, M.F. SCHNEIDER, G. BREZESINSKI**

In-plane Structures of Synthetic Oligolactose Lipid Monolayers – Impact of Saccharide Chain Length.

Zur Veröffentl. in *Chem. Phys. Chem.*

**M. TANAKA, M.F. SCHNEIDER, R. ZANTL, C. GEGE, R.R. SCHMIDT, M. RAPPOLT**

Hydrophilic/hydrophobic balance determines morphology of glycolipids with oligolactose head groups.

Zur Veröffentl. in *Biophys. J.*

**D. TATCHEV, R. KRANOLD, S. ARMYANOV**

Characterization of Amorphous Ni-P Coatings by Small Angle X-Ray Scattering.

*J. Electrochem. Soc.* 150 (2003) C502–C506

**D. TATCHEV, R. KRANOLD**

Maximum entropy method as a routine tool for determination of particle size distributions by small-angle scattering.

Zur Veröffentl. in *J. Appl. Cryst.*

**C. TEXTOR, P.M. SACHS, H.F. GRAF, T.H. HANSTEEN**

The Laacher See eruption: Estimation of volatiles in magma and simulation of their fate in the plume.

*Geolog. Soc. London Spec. Publ.* 213 (2003) 307

**T. THEYE, T. PARRA, C. LATHE**

Room temperature compressibility of clinochlore and chamosite.

*Eur. J. Mineral.* 15 (2003) 465–468

**G. THORKILDSEN, H.B. LARSEN, E. WECKERT, D. SEMMINGSEN**

Three-beam X-ray Diffraction – Profile analysis.

*J. Appl. Cryst.* 36 (2003) 1324–1333

**P. THURNER, B. MÜLLER, F. BECKMANN, T. WEITKAMP, C. RAU, R. MÜLLER, J. A. HUBBELL, U. SENNHAUSER**

Tomography studies of 3T3 and human foreskin fibroblasts on polymer yarns.

*Nucl. Instrum. Methods Phys. Res. B* 200 (2003) 397

**O.P. TKACHENKO, K.V. KLEMENTIEV, E. LÖFFLER, I. RITZ-KOPF, F. SCHÜTH, M. BANDYOPADHYAY, S. GRABOWSKI, H. GIES, V. HAGEN, M. MUHLER, LIANHAI LU, R.A. FISCHER, W. GRÜNERT**

The structure of zinc and copper oxide species hosted in porous siliceous matrices.

*Phys. Chem. Chem. Phys.* 5 (2003) 4325–4334

**J. TOIVONEN, T. TUOMI, J. RIIKONEN, L. KNUUTILA, T. HAKKARAINEN, M. SOPANEN, H. LIPSANEN, P.J. MCNALLY, W. CHEN, D. LOWNEY**

Misfit dislocations in GaAsN/GaAs interface.

*J. Mater. Sci., Mater. Electron.* 14 (2003) 267–270

F.J. TORRE, M.M. CORTAZAR, M.A. GOMEZ, G. ELLIS, C. MARCO  
Isothermal crystallization of iPP/Vectra blends by DSC and simultaneous SAXS and WAXS measurements employing synchrotron radiation.  
*Polymer* 44 (2003) 5209–5217

V.R. TROLL, H.-U. SCHMINCKE  
Magma mixing and crustal recycling recorded in ternary feldspar in compositionally zoned peralkaline ignimbrite Å.  
*Gran Canaria J Petrol* 43 (2003) 243–270

V.R. TROLL, P.M. SACHS, H.-U. SCHMINCKE, M. SUMITA  
REE mineral perrierite/ chevkinite in comenditic magmas from Gran Canaria, Spain: a SXRF-probe study.  
*Contr. Mineral. Petro.* 145 (2003) 730–741

V.G. TSIRELSON, S.V. GORFMAN, U. PIETSCH  
X-ray scattering amplitude of an atom in a permanent external electric field.  
*Acta Crystallogr. A* 59 (2003) 221–227

S. TÖRÖK, J. OSÁN, L. VINCZE, B. ALFÖLDY, A. KERKÁPOLY, N. VAJDA, C.A. PÉREZ, G. FALKENBERG  
Comparison of nuclear and X-ray techniques for environmental hot particle analysis.  
*J. Anal. At. Spectrom.* 18 (2003) 1202–1209

A.M. VAN DE CRAATS, N. STUTZMANN, O. BUNK, M.M. NIELSEN, M. WATSON, K. MÜLLEN, H.D. CHANCY, H. SIRRINGHAUS, R.H. FRIEND  
Meso-epitaxial solution-growth of self-organising discotic liquid-crystalline semiconductors.  
*Adv. Mater.* 15 (2003) 495

N. VAN HUNG, N. BA DUC, R. FRAHM  
A new anharmonic factor and EXAFS including anharmonic contributions.  
*J. Phys. Soc. Jpn.* 72 (2003) 1254

E.V.D. VAN LOEF, P. DORENBOS, C.W.E. VAN EIJK, K.W. KRÄMER, H.U. GÜDEL  
Influence of the anion on the spectroscopy and scintillation mechanism in pure and Ce<sup>3+</sup>-doped K<sub>2</sub>LaX<sub>5</sub> and LaX<sub>3</sub> (X=Cl, Br, I).  
Zur Veröffentl. in *Phys. Rev. B*

V. VASHOOK, L. VASYLECHKO, J. ZOSEL, U. GUTH  
Synthesis, crystal structure and transport properties of La<sub>1-x</sub>Ca<sub>x</sub>Cr<sub>0.5</sub>Ti<sub>0.5</sub>O<sub>3-d</sub>.  
*Solid State Ion.* 159(3–4) (2003) 279–292

V. VASHOOK, L. VASYLECHKO, M. KNAPP, H. ULLMANN, U. GUTH  
Lanthanum doped calcium titanates: synthesis, crystal structure, thermal expansion and transport properties.  
*J. Alloys Compd.* 354(1–2) (2003) 13–23

L. VASYLECHKO, A. SENYSHYN, YE. PIVAK, M. BERKOWSKI, V. VASHOOK, H. ULLMANN, C. BÄHTZ, U. BISMAYER  
LSGM Single Crystals: Crystal Structure, Thermal Expansion, Phase Transitions and Conductivity.

In: Mixed Ionic Electronic Conducting (MIEC) Perovskites for Advanced Energy Systems, Nina Orlovskaya, Nigel Browning, Kluwer Academic Publishers, Boston/Dordrecht/London (2003)

L. VASYLECHKO, D. SAVYTSKII, A. SENYSHYN, A. MATKOVSKII, C. BÄHTZ, M.L. SANJUÁN, U. BISMAYER, M. BERKOWSKI  
Low-temperature structural and Raman studies on rare-earth galates.  
*Phys. Rev. B* 68 (2003) 024101-1-8

L. VASYLECHKO, D. SAVYTSKII, A. SENYSHYN, R. NIEWA, M. KNAPP, H. ULLMANN, M. BERKOWSKI, A. MATKOVSKII, U. BISMAYER  
Crystal structure, thermal expansion and conductivity of anisotropic La<sub>1-x</sub>Sr<sub>x</sub>Ga<sub>1-2x</sub>Mg<sub>2x</sub>O<sub>3</sub> (x=0.05, 0.1) single crystals.  
*J. Solid State Chem.* 172(2) (2003) 396–411

L. VASYLECHKO, W. SCHNELLE, M. SCHMIDT, U. BURKHARDT, H. BORRMANN, YU. GRIN  
Synthesis and Crystal Structure of YbNiGa<sub>4</sub>.  
Zur Veröffentl. in *J. Alloys Compd.*

L. VASYLECHKO, W. SCHNELLE, U. BURKHARDT, R. RAMLAU, R. NIEWA, H. BORRMANN, K. HIEBL, Z. HU, YU. GRIN  
Crystal structure, magnetic behaviour and valence state of ytterbium in the Yb<sub>4</sub>Ni<sub>10+x</sub>Ga<sub>21-x</sub> phase.  
*J. Alloys Compd.* 350 (2003) 9

A.P. VINK, P. DORENBOS, C.W.E. VAN EIJK  
Observation of the photon cascade emission process under 4f<sup>1</sup>5d<sup>1</sup> and host excitation in several Pr<sup>3+</sup>-doped materials.  
Zur Veröffentl. in *J. Solid State Chem.*

T. VÄÄNÄNEN, T. IKONEN, K. JOKELA, R. SERIMAA, L. PIETILÄ, E. PEHU  
X-Ray scattering study on three different potato cultivars during winter storage.  
*Carbohydrate Polymers* 54 (2003) 499–507

M. WAGEMAKER, D. LÜTZENKIRCHEN-HECHT, P. KEIL, A.A. VAN WELL, R. FRAHM  
Quasi-in-situ reflection mode EXAFS at the Ti K-edge of lithium intercalated rutile and mixed anatase/rutile TiO<sub>2</sub> thin films.  
*Physica B* 336 (2003) 119

S. WAKIMOTO, R.J. BIRGENEAU, Y. FUJIMAKI, N. ICHIKAWA, T. KASUGA, Y.J. KIM, K.M. KOJIMA, S.-H. LEE, H. NIKO, J.M. TRANQUADA, S. UCHIDA, M.V. ZIMMERMANN  
Effect of a magnetic field on the spin- and charge-density wave order in La<sub>1.45</sub>Nd<sub>0.4</sub>Sr<sub>0.15</sub>Cu<sub>2</sub>O<sub>4</sub>.  
*Phys. Rev. B* 67 (2003) 184419

G. WALTER, J. VOGEL, U. HOPPE, P. HARTMANN  
Structural study of magnesium polyphosphate glasses.  
*J. Non-Cryst. Solids* 320 (2003) 210–222

G. WALTER, R. KRALDOL, D. ENKE, G. GOERIGK  
Small-angle X-ray scattering characterization of porous glasses.  
*J. Appl. Cryst.* 36 (2003) 592–596

- G. WALTER, U. HOPPE, J. VOGEL, G. CARL, P. HARTMANN  
The structure of zinc polyphosphate glass studied by diffraction methods and  $^{31}\text{P}$  NMR.  
Zur Veröffentl. in *J. Non-Cryst. Solids*
- L. WANG, A. PYZALLA, W. STADLBAUER, E.A. WERNER  
Changes in the microstructure on the rolling surface of railway rails.  
*Mater. Sci. Eng. A* 273 (2003) 31–43
- L. WCISLAK, H.J. BUNGE, H. KLEIN, U. GARBE, J.R. SCHNEIDER  
High-resolution texture imaging with hard synchrotron radiation in the moving area detector technique.  
*Nucl. Instrum. Methods Phys. Res. B* 199 (2003) 38–43
- R. WEBER, I. GROTKOPP, J. STETTNER, M. TOLAN, W. PRESS  
Embedding of Gold Nanoclusters on Polystyrene Surfaces: Influence of the Surface Modification on the Glass Transition.  
Zur Veröffentl. in *Macromol.*
- W. WEIGAND, A. MÜLLER, L. KILIAN, T. SCHALLENBERG, P. BACH, G. SCHMIDT, L.W. MOLENKAMP, O. BUNK, R.L. JOHNSON, C. KUMPF, E. UMBACH  
Structural investigation of the ZnSe(001)-c(2x2) surface.  
Zur Veröffentl. in *Phys. Rev. B*
- N. WEIHER, E.A. WILLNEFF, C. FIGULLA-KROSCHEL, M. JANSEN, S.L.M. SCHROEDER  
Extended X-ray Absorption Fine-Structure (EXAFS) of a Complex Oxide Structure: A Full Multiple Scattering Analysis of the Au L<sub>3</sub>-Edge EXAFS of Au<sub>2</sub>O<sub>3</sub>.  
*Solid State Commun.* 125 (2003) 317–322
- I. WEISSBUCH, H. ZEPIK, G. BOLBACH, E. SHAVIT, M. TANG, T.R. JENSEN, K. KJAER, L. LEISEROWITZ, M. LAHAV  
Homochiral oligopeptides by chiral amplification within two-dimensional crystalline self-assemblies at the air-water interface; Relevance to biomolecular handedness.  
*Chem. Eur. J.* 9 (2003) 1782–1794
- E. WELTER  
Direct Speciation of Solids: X-ray Absorption Fine Structure Spectroscopy for Species Analysis in Solid Samples.  
In: *Handbook of Elemental Speciation*, Rita Cornelis, Joe Caruso, Helen Crews, Klaus Heumann, John Wiley & Sons Ltd., Chichester (2003)
- G. WESELOH, M. KÜHBACHER, H. BERTELMANN, M. ÖZ-ASLAN, A. KYRIAKOPOULOS, A. KNÖCHEL, D. BEHNE  
Analysis of Metal-containing Proteins by Gel Electrophoresis and Synchrotron Radiation X-ray Fluorescence.  
Zur Veröffentl. in *J. Radioanal. Nucl. Ch.*
- A. WESEMANN, R. STEITZ, H. AHRENS, S. FÖRSTER, C.A. HELM  
Internal Interface of a Compressed PEE-PEO Diblock Copolymer Monolayer.  
*Langmuir* 19 (2003) 709–716
- J. WIENOLD, O. TIMPE, T. RESSLER  
In Situ Investigations of Structure – Activity Relationships in Heteropolyoxomolybdates as Partial Oxidation Catalysts.  
Zur Veröffentl. in *Chem. Eur. J.*
- J. WIENOLD, O. TIMPE, T. RESSLER  
Structural Investigation of the Thermal Decomposition of Ammonium Heptamolybdate by *in situ* XAFS and XRD.  
*Europ. J. Inorg. Chem.* 6 (2003) 1058–1071
- W. WIERZCHOWSKI, K. WIETESKA, W. GRAEFF, A. TUROS, R. GROETZSCHEL  
X-Ray studies of AlGaAs implanted with 1.5 MeV As ions.  
*Vacuum* 70 (2003) 115–121
- K. WIETESKA, W. WIERZCHOWSKI, W. GRAEFF, M. LEFELD-SOSNOWSKA, M. REGULSKA  
Bragg-case section topography of growth defects in Si:Ge crystals.  
*J. Phys. D: Applied Phys.* 36 (2003) A133–A138
- E. WILD, L. WANG, B. HASSE, T. WROBLEWSKI, G. GOERIGK, A. PYZALLA  
Microstructure alterations at the surface of a heavily corrugated rail with strong ripple formation wear.  
*Wear* 254 (2003) 876–883
- S.B. WILKINS, P.D. SPENCER, T.A.W. BEALE, P.D. HATTON, M. V. ZIMMERMANN, S.D. BROWN, D. PRABHAKARAN, A.T. BOOTHROYD  
Charge ordering and structural distortions at low temperature in La<sub>2-2x</sub>Sr<sub>1+2x</sub>Mn<sub>2</sub>O<sub>7</sub> with x = 0.475 and 0.5.  
*Phys. Rev. B* 67 (2003) 205110
- H.C. WILLE, M. GERKEN, E. GERDAU, YU.V. SHVYDK'KO, H.D. RÜTER, H. FRANZ  
Excitation of the nuclear resonance in  $^{61}\text{Ni}$  at 67.4 keV by synchrotron radiation.  
*Hyperfine Interact.* C5 (2003) 1–4
- H. WILMER, M. KURTZ, K.V. KLEMENTIEV, O.P. TKA-CHENKO, W. GRÜNERT, O. HINRICHSEN, A. BIRKNER, S. RABE, K. MERZ, M. DRIESS, C. WÖLL, M. MUHLER  
Methanol synthesis over ZnO – a structure-sensitive reaction ?  
*Phys. Chem. Chem. Phys.* 5 (2003) 4736–4742
- D. WISNIEWSKI, A.J. WOJTOWICZ, W. DROZDOWSKI, J.M. FARMER, L.A. BOATNER  
Scintillation and Luminescence Properties of Ce-Activated K<sub>3</sub>Lu(PO<sub>4</sub>)<sub>2</sub>.  
*Cryst. Res. & Technol.* 38 (2003) 275–282
- E. WOLSKA, P. PISZORA, J. DARUL, W. NOWICKI  
Synchrotron X-ray diffraction studies on the phase transitions in the spinel Li<sub>x</sub>Mn<sub>3-x</sub>O<sub>4</sub> intercalation compounds.  
Zur Veröffentl. in *J. Phys. Chem. Solids*
- G. WORTMANN, K. RUPPRECHT, H. GIEFERS  
Studies of Magnetism and Lattice Dynamics by Nuclear Resonant Scattering of Synchrotron Radiation High-Pressure.  
*Hyperfine Interact.* 144/145 (2003) 103–117

T. WROBLEWSKI, A. BJEOUMIKHOV

Small Angle X-ray Imaging.

Zur Veröffentl. in Nucl. Instrum. Methods Phys. Res.

A S.-B. YI, H.-G. BROKMEIER, R.E. BOLMARO, K.U. KAINER, T. LIPPMANN

In-situ measurements of texture variations during a tensile loading of Mg-alloy AM20 using synchrotron X-ray radiation.

Zur Veröffentl. in Scr. Mater.

D. ZAJAC, CZ. KAPUSTA, P.C. RIEDI, M. SIKORA, C.J. OATES, D. RYBICKI, J. BLASCO, D. SERRATE, J.M. DE TERESA, M.R. IBARRA

NMR and X-MCD study of  $\text{Sr}_{1-3x}\text{Ba}_{1+x}\text{La}_{2x}\text{FeMoO}_6$ .

Zur Veröffentl. in J. Magn. Magn. Mater.

U. ZEIMER, J. GRENZER, S. GRIGORIAN, J. FRICKE, S. GRAMLICH, F. BUGGE, U. PIETSCH, M. WEYERS, G. TRÄNKLE

Influence of lateral patterning geometry on lateral carrier confinement in strain-modulated InGaAs nanostructures.

Zur Veröffentl. in phys. stat. sol. (a)

X. ZHAI, J. LI, G. BREZESINSKI, Q. HE, H. MÖHWALD, L. LAI, Y. LIU, L. LIU, Y. GAO

Direct observation of the cleavage reaction of an L-DPPC monolayer catalyzed by phospholipase A2 and inhibited by an indole inhibitor at the air/water interface.

Chem. Bio. Chem. 4 (2003) 299–305

Y. ZHANG, S.G. EBBINGHAUS, A. WEIDENKAFF, T. KURZ, H.-A. KRUG VON NIDDA, P.J. KLAR, M. GÜNGERICH, A. RELLER

Controlled Iron-Doping of Macrotextured Nanocrystalline Titania.

Chem. Mater. 15 (2003) 4028–4033

ZH. ZHONG, GANG CHEN, J. STANGL, TH. FROMHERZ, F. SCHÄFFLER, G. BAUER

Two-dimensional lateral ordering of self-assembled Ge islands on patterned substrates.

Zur Veröffentl. in Physica E

ZH. ZHONG, J. STANGL, F. SCHÄFFLER, G. BAUER

Annealing studies of high Ge composition Si/SiGe multilayers.

Appl. Phys. Lett. 83 (2003) 3695

M.V. ZIMMERMANN, J.R. SCHNEIDER, T. FRELLA, N.H. ANDERSEN, J. MADSEN, M. KÄLL, H.F. POULSEN, R. LIANG, P. DOSANJH, W.N. HARDY

Oxygen Ordering Superstructures in Underdoped  $\text{YBa}_2\text{Cu}_3\text{O}_{6+x}$   
Studied by Hard X-ray Diffraction.

Phys. Rev. B 68 (2003) 104515

N. ZOTOV, H. SCHLENZ, B. BRENDENBACH, H. MODROW, J. HORMES, F. REINAUER, R. GLAUM, A. KIRFEL, C. PAULMANN

Effects of MnO doping on the Structure of Sodium Metaphosphate Glasses.

Z. Nat.forsch. A 58a (2003) 419–428

## Veröffentlichte Vorträge

I. ARCON, A. RISTIC, N. NOVAK TUSAR, A. KODRE, V. KAUCIC

XAS investigation of iron substitution in triclinic FeAPO-34 .

Zur Veröffentl. in Phys. Scri.

I. ARCON, B. MALIC, A. KODRE, M. KOSEC

Zr K-edge EXAFS study of PZT thin film formation from sols.

Zur Veröffentl. in Phys. Scri.

I. ARCON, J. PADEZNIK GOMILSEK, A. KODRE, M. HRIBAR, A. MIHELIC

Cs L-edge EXAFS atomic absorption background.

Zur Veröffentl. in Phys. Scri.

I. ARCON, N. NOVAK TUSAR, A. RISTIC, A. KODRE, V. KAUCIC

XAS studies of the incorporation of Mn and Co into silicalite-1.

Zur Veröffentl. in Phys. Scri.

F. BECKMANN, T. DONATH, T. LIPPMAN, A. SCHREYER, H. CLEMENS

Synchrotron-radiation based microtomography of new materials for lightweight construction.

DGZfP-Proceedings BB 84 CD (2003) 299–204

F. BECKMANN, T. LIPPMANN, J. METGE, T. DOSE, T. DONATH, M. TISCHER, K.D. LISS, A. SCHREYER

HARWI-II, The New High-Energy Beamline for Materials Science at HASYLAB/DESY.

Zur Veröffentl. in AIP Conf. Proc. Series

W. BREFELD, K. BALEWSKI, W. DECKING, Y. LI, G.K. SAHOO

Accelerator Physical Issues of PETRA III – A New Low Emissivity Light Source.

Zur Veröffentl. in AIP Conf. Proc. Series

K. BRUDER, P. KEIL, D. LÜTZENKIRCHEN-HECHT, R. FRAHM

In situ investigations of thin film formation by reactive sputtering.

Zur Veröffentl. in Phys. Scri.

A. BYTCHKOV, A.A. FATEEV, J. FELDHAUS, U. HAHN, N.I. LEBEDEV, E.A. MATYUSHEVSKIY, E.L. SALDIN,

E.A. SCHNEIDMILLER, A.V. SHABUNOV, K.P. SYTCHEV, K. TIEDTKE, R. TREUSCH, M.V. YURKOV

Development of MCP-based photon diagnostics for TTF FEL, Phase 2.

Zur Veröffentl. in Nucl. Instrum. Methods Phys. Res.

A G.C. CAPITANI, M. MELLINI

Le modulazioni strutturali dell' antigorite.

Proc. of GEOITALIA 2003 – 4 Forum Italiano di Scienze della Terra (2003) 616–617

P.M. CATTANEO, M. DALSTRA, F. BECKMANN, B. MELSEN

Bone remodelling around orthodontically loaded dental implants.

Proc. of International Association of Science and Technonoly for Development – International Conference on Biomechanics, 30.06.03–02.07.03, Rhodes/Greece (2003)

- M. DALSTRA, P.M. CATTANEO, F. BECKMANN, E.M. HAUGE  
Microtomography of cortical bone using a synchrotron source.  
Proc. of the IASTED International Conference on Biomechanics 1 (2003) 283–287
- J. DANGER, P. LE FEVRE, H. MAGNAN, D. CHANDESRIS, S. BOURGEOIS, J. JUPILLE, T. EICKHOFF, W. DRUBE  
Resonant Auger for the detection of quadrupolar transitions.  
AIP Conf. Proc. Series 652 (2003) 267–272
- T. DONATH, F. BECKMANN, R. ZETTLER, J. DOS SANTOS, D. LOHWASSER, T. LIPPMAN, H. CLEMENS, A. SCHREYER  
Investigation of Material Flow in Friction Stir Welding using Computed Microtomography.  
Zur Veröffentl. in AIP Conf. Proc. Series
- W. DRUBE, TH. EICKHOFF, H. SCHULTE-SCHREPPING, J. HEUER  
High-energy photoemission at HASYLAB.  
Zur Veröffentl. in AIP Conf. Proc. Series
- C. EGE, J. MAJEWSKI, G. WU, K. KJAER, S.K. SATIJA, K.Y.C. LEE  
X-ray and neutron scattering from model membranes with beta-amyloid peptides..  
Abstracts of papers. ACS national meeting, New Orleans, LA (USA), 23–27 Mar 2003 COL51 (2003) COLL-051
- C. EGE, J. MAJEWSKI, S. SATIJA, K. KJAER, K.Y.C. LEE  
X-ray and neutron scattering from model membranes with amyloid beta.  
Biophys. J. 84 (2003) 577A
- TH. EICKHOFF, V. MEDICHERLA, W. DRUBE  
Final state contribution to the Si 2p binding energy shift in SiO<sub>2</sub>/Si(100).  
Zur Veröffentl. in J. Electron Spectrosc. Relat. Phenom.
- B. FAATZ, THE TTF-FEL TEAM  
The SASE FEL at the TESLA Test Facility as user facility.  
FREE ELECTRON LASERS (2003) II-55
- J.I. FLEGE, TH. SCHMIDT, G. MATERLIK, J. FALTA  
Dry etching characteristics and surface reconstruction of Cl/Si(113).  
Zur Veröffentl. in Surf. Sci.
- R. FRAHM, M. RICHWIN, D. LÜTZENKIRCHEN-HECHT  
Recent advances and new applications of time-resolved X-ray absorption spectroscopy.  
Zur Veröffentl. in Phys. Scri.
- H. FRANZ, M. SEEBACH, A. EHNES, M. WERNER  
Parasitic bunch measurement in e+/e- storage rings.  
Proc. of DIPAC 2003 (2003) 149–151
- S. GIERLOTKA, B.F. PALOSZ, A. SWIDERSKA-SRODA, E. GRZANKA, G. KALISZ, K. FIETKIEWICZ, S. STELMAKH, C. LATHE  
Synthesis of metal-ceramic nanocomposites by high-pressure infiltration.
- Proc. of European Materials Research Society – 2003 Fall Meeting, 15.09.03–19.09.03, Warsaw/Poland (2003)
- U. HAAKE, D. LÜTZENKIRCHEN-HECHT, R. FRAHM  
Electrochemical lithium intercalation into transition metal oxides.  
Zur Veröffentl. in Phys. Scri.
- M. HAHN, H. BEHRENS, J. KOEPKE, K. RICKERS, G. FALKENBERG  
Trace element diffusion and viscous flow in peralkaline melts – preliminary results.  
Eur. J. Mineral. 15 (2003) 74
- U. HAHN, H. SCHULTE-SCHREPPING  
Crystal Monochromator based Emittance Measurements at the PETRA Undulator Beamline.  
Zur Veröffentl. in AIP Conf. Proc. Series
- U. HAHN, M. HESSE, H. REMDE, K. ZAPFE  
A new Cleaning Facility for Particle Free UHV Components.  
Zur Veröffentl. in Vacuum
- G. HEIMEL, P. PUSCHNIG, M. OEHZELT, K. HUMMER, B. KOPPELKUBER-BITSCHNAU, F. PORSCHE, C. AMBROSCH-DRAXL, R. RESEL  
High pressure studies on the packing forces and intermolecular interaction in polyphenyles.  
Proc. of Materials Research Society – Spring Meeting, Symposium L, 21.04.03–26.04.03, San Francisco, California/USA (2003)
- R. HEINEMANN, H. KROLL, A. KIRFEL, B. BARBIER  
Die Temperaturabhängigkeit der Fe, Mg-Verteilung in Olivinen.  
Proc. of 81. Jahrestagung der Deutschen Mineralogischen Gesellschaft, 22.09.03–25.09.03, Bochum/D (2003)
- T. ISHII, L. KÖVER, Z. BERENYI, I. CSERNY, H. IKENO, H. ADACHI, W. DRUBE  
First-principles calculation of the KLL Auger transition energy in 3d transition metals.  
Zur Veröffentl. in J. Electron Spectrosc. Relat. Phenom.
- L.I. JOHANSSON, C. VIROJANADARA, TH. EICKHOFF, W. DRUBE  
Angle resolved studies of SiO<sub>2</sub>/SiC samples.  
Mater. Sci. Forum 433(6) (2003) 539–542
- L.I. JOHANSSON, C. VIROJANADARA, TH. EICKHOFF, W. DRUBE  
Photoemission study of polar and non-polar SiC surfaces oxidized in N<sub>2</sub>O.  
Proc. of 10th International Conference on Silicon Carbide and Related Materials, 05.10.03–10.10.03, Lyon/France (2003)
- P. KEIL, D. LÜTZENKIRCHEN-HECHT, R. FRAHM  
Calculation of grazing incidence EXAFS: Fresnel theory versus DWBA.  
Zur Veröffentl. in Phys. Scri.

- A. KIRFEL, T. LIPPmann  
Electron density distribution in Fayalite,  $\text{Fe}_2\text{SiO}_4$ : a high-energy synchrotron radiation study.  
Proc. of 11. Jahrestagung der Deutschen Gesellschaft für Kristallographie, 10.03.03–13.03.03, Berlin/D (2003)
- A. KIRFEL, T. LIPPmann  
Electron density distribution in Fayalite,  $\text{Fe}_2\text{SiO}_4$ : a high-energy synchrotron radiation study.  
Proc. of 81. Jahrestagung der Deutschen Mineralogischen Gesellschaft, 22.09.03–25.09.03, Bochum/D (2003)
- N. KOCH, B. NICKEL, J. GHIJSEN, A. ELSCHNER, J. SCHWARTZ, J.-J. PIREAUX, A. KAHN  
Metal versus Polymer Electrodes in Organic Devices: Energy Level Alignment, Hole Injection, and Structure.  
Mater. Res. Soc. Symp. Proc. 711 (2003) L 3.6
- J.W. KURUTZ, A. GOPAL, C. JIARPINITNUN, B. LAU, C. EGE, G. WU, J. MAJEWSKI, K. KJAER, A.J. WARING, K.Y.C. LEE  
Structure and function in engineered lung surfactant peptides.  
Biophys. J. 84 (2003) 310
- M. LOHmann, W.-R. DIX, J. METGE, B. REIME  
Instrumentation for diffraction enhanced imaging experiments at HASYLAB.  
Zur Veröffentl. in AIP Conf. Proc. Series
- D. LÜTZENKIRCHEN-HECHT, J.-D. GRUNWALDT, M. RICHWIN, B. GRIESEBOCK, A. BAIKER, R. FRAHM  
Monitoring of fast transformations in solid state chemistry and heterogeneous catalysis by QEXAFS in the second scale.  
Zur Veröffentl. in Phys. Scri.
- D. LÜTZENKIRCHEN-HECHT, M. WAGEMAKER, A.A. VAN WELL, R. FRAHM  
Reflection mode EXAFS at the Ti K-edge of lithium intercalated  $\text{TiO}_2$  electrodes.  
Zur Veröffentl. in Phys. Scri.
- M. MESSERSCHMIDT, P. LUGER  
Experimentelle Ladungsdichtestudie an Strychnin bei 100 und 15K.  
Z. Kristallogr. 20 (2003) 55
- B.A. ORLOWSKI, E. GUZIEWICZ, B.J. KOWALSKI, T. STORY, S. MICKEVICIUS, A.Y. SIPATOV, M. CHERNYSHOVA, I. DEMCHENKO, N. BARRETT, M. TANIGUCHI, A. KIMURA, H. SATO, C.A. SEBENNE, J. P. LACHARM, R. MEDICHERLA, W. DRUBE  
Photoemission study of EuS/PbS electronic structure.  
Zur Veröffentl. in J. Alloys Compd.
- B.A. ORLOWSKI, S. MICKEVICIUS, M. CHERNYSHOVA, I. DEMCHENKO, A.Y. SIPATOV, T. STORY, V. MEDICHERLA, W. DRUBE  
Photoemission study of EuS layer buried in PbS.  
Zur Veröffentl. in J. Electron Spectrosc. Relat. Phenom.
- J. PADEZNIK GOMILSEK, U. LAVRENCIC STANGAR, A. SURCA VUK, G. BRATINA, I. ARCON, A. KODRE
- EXAFS study of  $\text{Sn}(\text{O}_2)$  xerogel doped with Sb and PTCDA.  
Zur Veröffentl. in Phys. Scri.
- L. PALATINUS, S. VAN SMAALEN  
The ferroelectric phase transition and modulated valence electrons in the incommensurate phase of ammonium tetrafluoroberyllate.  
Proc. of International Conference on Aperiodic Crystals, 08.09.03–13.09.03, Belo Horizonte/Brasil (2003)
- P. PISZORA  
Temperature dependent structural studies on  $\text{LiMn}_2\text{O}_4$ .  
Proceedings of the XIX Conference, H. Morawiec & D. Stroz, World Scientific Publ. Co., Krakow (2003)
- E. PLÖNjes  
Layout and photon beam diagnostics for the VUV-FEL user facility at DESY.  
Zur Veröffentl. in Laser and Particle Beams
- M. POULSEN, A. EGEBJERG, O. BUNK M. NIELSEN, M.M. NIELSEN, R. FEIDENHANSL, F. JENSEN  
Towards a Microscopic Understanding of Plasma Activated Bonding.  
In: Semiconductor Wafer Bonding: Science, Technology, and Applications VII, The Electrochemical Society, Inc., Paris (2003)
- V.A. PUSTOVAROV, I.N. OGORODNIKOV, M. KIRM  
Intrinsic ultraviolet luminescence of single crystals  $\text{LiB}_3\text{O}_5$  under inner-shell excitation .  
Proc. of the 12th Internation Conference on Radiation Physics and Chemistry of Inorganic Materials, D.B. Chepin, Tomsk Polytechnic University, Tomsk (2003)
- V.A. PUSTOVAROV, V.S. CHEREMNYKH, B.V. SHULGIN E.I. ZININ  
Luminescence and radiation defects in crystals of alcali-earth metals.  
Proc. of the 12th Internation Conference on Radiation Physics and Chemistry of Inorganic Materials, D.B. Chepin, Tomsk Polytechnic University, Tomsk (2003)
- V.A. PUSTOVAROV, V.S. CHEREMNYKH, B.V. SHULGIN, E.I. ZININ  
Luminescence of  $\text{Na}_2\text{ZrSiO}_5$  and  $\text{Na}_2\text{HfSiO}_5$  crystals under pulse excitation by synchrotron radiation.  
Proc. of the 12th Internation Conference on Radiation Physics and Chemistry of Inorganic Materials, D.B. Chepin, Tomsk Polytechnic University, Tomsk (2003)
- G. REICHENAUER, J. FRICKE, J. MANARA, J. HENKEL  
Switching silica aerogels from transparent to opaque.  
Zur Veröffentl. in J. Non-Cryst. Solids
- G. REICHENAUER, J. FRICKE  
Effects of Boiling Silica Gels in Water.  
Zur Veröffentl. in J. Non-Cryst. Solids
- R. REININGER, J. FELDHAUS, E. PLÖNjes, R. TREUSCH, M.D. ROPER, F.M. QUINN, M.A. BOWLER  
Spectrometer Based on a VLS Grating for Diagnostics of a Vacuum-Ultraviolet Free Electron Laser.  
Zur Veröffentl. in AIP Conf. Proc. Series

- K. RICKERS, R. THOMAS, W. HEINRICH  
Chemical evolution of a pegmatite-hydrothermal system: results from SRXRF, EMPA and Raman analyses of single melt and fluid inclusions.  
Acta Mineralogica-Petrologica 2 (2003) 167–168
- K. RICKERS, R. THOMAS, W. HEINRICH  
SR XRF trace element analyses of single melt and fluid inclusions: results from the Ehrenfriedersdorf Complex, Germany.  
Beihefte zum European Journal of Mineralogy 15 (2003) 159
- W. SKROTZKI, B. KLOEDEN, R.TAMM, C.-G. OERTEL, L. WCISLAK, E. RYBACKI  
Grain Refinement and Texture Formation during High-Strain Torsion of NiAl.  
Proc. of 2nd International Conference on “Nanomaterials by Severe Plastic Deformation: Fundamentals-Processing-Application – NanoSPD2”, 09.12.02–13.12.02, Wien/Austria (2003)
- R. SOBIERAJSKI, J. KRZWINSKI, A. ANDREJCZUK, B. FAATZ, F.FELTEN, S. JACOBI, L. JUHA, M. JUREK, A. KAUCH, D.KLINGER, J.B. PELKA, E. SALDIN, E. SCHNEIDMILLER, M. SIKORA, B. STEEG, M. YURKOV  
Structural changes at solid surfaces irradiated with femtosecond intense XUV pulses generated by TTF-FEL.  
In: K.-J. Kim, S.V. Milton, E. Gluskin, Elsevier Science B.V., Argonne (2003)
- C. SOLTmann, C. BEELI, R. LÜCK, M. KNAPP, W. GANDER  
High-temperature synchrotron measurements of decagonal Al-Co-Ni quasicrystal powders.  
Acta Crystallogr. A 58 (2003) C183
- B. STEEG, S. JACOBI, R. SOBIERAJSKI, C. MICHAELSEN, J. FELDHAUS  
Total reflection mirrors for VUV Free Electron Lasers.  
Proc. of the 12th Internation Conference on Radiation Physics and Chemistry of Inorganic Materials, D.B. Chepin, Tomsk Polytechnic University, Tomsk (2003)
- A. SWIDERSKA-SRODA, J.A. KOZUBOWSKI, A. MARENDA-NIEDBALA, E. GRZANKA, B.F. PALOSZ, A. PRESZ, S. GIERLOTKA, S. STELMAKH, G. KALISZ, N. HERLIN-BOIME, C. LATHE  
Investigation of the Microstructure of SiC-Zn Nanocomposite by Microscopic Methods: SEM, AFM and TEM.  
Zur Veröffentl. in Mat. Lett.
- M. TANAKA  
Unique Physics of Carbohydrate Complexes at the Interface.  
Zur Veröffentl. in Proc. Theor. Phys. Inst., Kyoto Univ.
- K. TIEDTKE, J. FELDHAUS, CH. GERTH, U. HAHN, U. JASTROW, E. PLÖNJES, B. STEEG, R. TREUSCH  
The SASE FEL at DESY: Photon Beam Diagnostics for the User Facility.  
Zur Veröffentl. in AIP Conf. Proc. Series
- M. TISCHER, J. PFLÜGER  
A Compact Damping Wiggler for the PETRA III Light Source.  
Zur Veröffentl. in AIP Conf. Proc. Series
- M. TISCHER, P. ILINSKI, U. HAHN, J. PFLÜGER, H. SCHULTE-SCHREPPING  
Commissioning of multi-segmented undulators at the TESLA X-ray FEL.  
FREE ELECTRON LASERS (2003) II-33
- R. TREUSCH, J. FELDHAUS  
SASE free electron lasers as short wavelength coherent sources: From first results at 100 nm to a 1Å X-ray laser.  
Eur. Phys. J. D 26 (2003) 119–122
- A. TWAROG, R. BACEWICZ, A. KOZANECKA, W. WRÓBEL, F. KROK, I. ABRAHAMS  
XAFS study of BIMEVOXionic conductors for ME=Mg, Si, Zr, and Zn.  
Zur Veröffentl. in Phys. Scri.
- S. VAN SMAALEN, L. PALATINUS  
Applications of the Maximum Entropy Method in Superspace.  
Zur Veröffentl. in Ferroelectrics
- S. WARREN, J. ZEGENHAGEN, T.L. LEE, A. KAZIMIROV, A. REITZLE, D.-M. KOLB, F. MAROUN, P. ALLONGUE  
X-ray Structural Analysis of Semiconductor Electrolyte Interfaces.  
In: B.N. Dev, World Scientific, Puri (2003)
- E. WECKERT, K. BALEWSKI, W. BREFELD, W. DECKING, W. DRUBE, H. FRANZ, P. GUERTLER, U. HAHN, J. PFLÜGER, H. SCHULTE-SCHREPPING, M. TISCHER, J. SCHNEIDER  
PETRA III: A New High Brilliance Synchrotron Radiation Source at DESY.  
Zur Veröffentl. in AIP Conf. Proc. Series
- P. WEGNER, M. BEVER, V. SCHÜNEMANN, A.X. TRAUTWEIN, C. SCHMIDT, H. BÖNISCH, M. GNIDA, W. MEYER-KLAUCKE  
Iron-Sulfur Proteins Investigated by EPR-, Mössbauer- and EXAFS-Spectroscopy.  
Hyperfine Interact. – (2003) T4-10
- L.C. WITJENS, J.H. BITTER, A.J. VAN DILLEN, F.M.F. DE GROOT, D.C. KONINGSBERGER AND K.P. DE JONG  
X-Ray Studies of Pd/Ag Membranes for Hydrogen Separation.  
Zur Veröffentl. in Phys. Scri.
- L.C. WITJENS, J.H. BITTER, A.J. VAN DILLEN, F.M.F. DE GROOT, D.C. KONINGSBERGER, K.P. DE JONG  
X-Ray Studies of Pd/Ag Membranes for Hydrogen Separation.  
Zur Veröffentl. in Phys. Scri.
- F. WITTE, H.-A. CROSTACK, J. NELLESEN, C. VOGT, F. BECKMANN  
Subtraktions-Mikrotomographie – eine zerstörungsfreie Methode zur elementspezifischen 3D-Verteilungsmessung in Implantat- und Knochenvolumina.  
Zeitschrift für Orthopädie und ihre Grenzgebiete 141 (2003) 123
- F. WITTE, H.-A. CROSTACK, J. NELLESEN, H. WINDHAGEN, F. BECKMANN  
Characterization of a Magnesium Alloy as a Degradable Bone Implant Material by Synchrotron-based Microtomography.  
ESB 2003 Proceedings 1 (2003) T067

F. WITTE, J. NELLESEN, C. VOGT, H.-A. CROSTACK,  
F. BECKMANN

Spatial Distribution of Rare Earth Elements Detected by Synchrotron-based Subtraction-Micromotography. A New Method to Determine Particles of Degradable Implants in Bone.

Proc. of 18th European Conference on Biomaterials, 01.10.03–04.10.03, Stuttgart/Germany (2003)

E. WOLSKA, W. NOWICKI, J. DARUL, P. PISZORA, M. KNAPP  
Effect of double substitution with  $\text{Li}^+$  and  $\text{Fe}^{3+}$  ions in  $\text{LiMn}_2\text{O}_4$  on its low-temperature phase transitions..

Proc. of the XIX Conference, H. Morawiec & D. Stroz, World Scientific Publ. Co., Singapore, New Jersey, London, Hong Kong (2003)

G. WU, C. EGE, J. MAJEWSKI, K. KJAER, K.Y.C. LEE  
Interaction between poloxamers and lipid membranes.  
Biophys. J. 84 (2003) 514A

S.-B. YI, H.-G. BROKMEIER, K.U. KAINER, T. LIPPMANN  
Texture development of AM20 tensile samples under load.  
Proc. of 6th International Conference on Magnesium alloys and their application, 18.11.03–20.11.03, Wolfsburg/Germany (2003)

S.B. YI, H.-G. BROKMEIER, K.U. KAINER, T. LIPPMANN  
Texture Development on Am20 Tensile Samples under Load.  
Proc. of 6th International Conference on Magnesium alloys and their application, 18.11.03–20.11.03, Wolfsburg/ Germany (2003)

L. ZHANG, A. FREUND, TH. TSCHENTSCHER, H. SCHULTE-SCHREPPING  
Performance studies of cryogenically cooled monochromator crystals under extreme heatload.  
Proc. of SRI-2003, 25.08.03–29.08.03, San Francisco/USA (2003)

### Weitere Vorträge wurden von HASYLAB-Mitarbeitern auf folgenden Konferenzen und Tagungen gehalten:

Frühjahrstagung der DPG – Fachbereiche Kurzzeit- und Plasmaphysik, Aachen/Germany (2003)

3rd European Charge Density Meeting and ESF Exploratory Workshop, Aarhus-Sandbjerg Estate/Denmark (2003)

EUROFILLERS 03 Fillers for Formulations, Alicante/Spain (2003)

4th European Biophysics Congress, Alicante/Spain (2003)

GEFTA Jahrestagung, Augsburg/Germany (2003)

10th International Workshop on Oxide Electronics, Augsburg/Germany (2003)

WE-Heraeus-Seminar on New Approaches and Perspectives in Polymer Physics, Bad Honnef/Germany (2003)

2. Interfaces and Interphases in Multicomponent Materials, Balatonfüred/Hungary (2003)

2nd Merged Meeting of ICCI and IPCM on Interfaces and Interphases in Multicomponent Materials, Balatonfüred/Hungary (2003)

50th International Symposium of the American Vacuum Society, 10th Topical Conference on Quantitative Surface Analysis, Baltimore, Maryland/USA (2003)

8th Pacific Polymer Conference, Bangkok/Thailand (2003)

Bayreuth Polymer Symposium (41st Biennial Meeting of the German Colloid Society), Bayreuth/Germany (2003)

Workshop on X-ray Science with Coherent Radiation: Satellite Meeting of SRI 2003, Berkeley/USA (2003)

Bilateral Symposium of the Max Planck Institute Golm and the Chinese Academy of Science, Berlin/Germany (2003)

China-Germany Bilateral Symposium on Amphiphiles at Interfaces” (AI-SCP), Berlin/Germany (2003)

11. Jahrestagung der DGK, Berlin/Germany (2003)

Int. Conf. on Dynamic Inhomogeneities in Complex Oxides, Bled/Slovenia (2003)

81. Jahrestagung der DMG, Bochum/Germany (2003)

Conference on Non-crystalline Inorganic Materials, Bonn/Germany (2003)

19. AIPAPT and 41. EHPRG High-Pressure Conference, Bordeaux/France (2003)

Sagamore XIV Conference, Broome/Australia (2003)

1st FRM-II Workshop on Neutron Scattering – Advanced Materials, Burg Rothenfels/Germany (2003)

SCOOTMO RTN Opening Meeting, Caen/France (2003)

Workshop on catalysis by oxide-supported metallic nanoclusters, California/USA (2003)

10th European Meeting on Ferroelectricity, Cambridge/United Kingdom (2003)

12th Annual Fibre Diffraction and Non-Crystalline Diffraction Meeting, Cambridge/UK (2003)

13th International Conference on Microscopy, Cambridge/UK (2003)

Ultrafast X-ray Science Summer School, Cargese/France (2003)

17th International Congress on X-ray Optics and Microanalysis, Chamonix/France (2003)

33rd danske krystallograf and 5th DANSYNC meeting, Copenhagen/Denmark (2003)

Glass & Optical Materials Division Fall Meeting, Corning, NY/USA (2003)

ESFRI FEL WORKSHOPS: R&D Challenges of 2nd Generation FELs, Daresbury/England (2003)

Phelix users meeting, Darmstadt/Germany (2003)

Denver X-ray Conference, Denver/USA (2003)

AKF-Frühjahrstagung der Deutschen Physikalischen Gesellschaft, Dresden/Germany (2003)

Euregionale, Dresden/Germany (2003)

- Hochdruckkristallographie und -synthese, Dresden/Germany (2003)
- Workshop Kristallographie und Synthese bei hohen Drücken, Dresden/Germany (2003)
- XII International Conference on Selected Problems of Modern Physics, Dubna/Russia (2003)
- 21st European Crystallographic Meeting, Durban/South Africa (2003)
- Euro Summer School on High-Pressure Crystallography, Erice/Italia (2003)
- 11th Int. Symp. on relations between homogeneous and heterogeneous catalysis, Evanston/USA (2003)
- 11th Int. Conference on Colloid and Surface Science, Foz do Iguacu/Brazil (2003)
- Freiburger Makromolekulares Kolloquium, Freiburg i.Br./Germany (2003)
- 5th Int. Conf. on f-Elements, Geneva/Switzerland (2003)
- 30th Annual Meeting & Exposition of the Controlled Release Society, Glasgow/United Kingdom (2003)
- EURESCO Conference on Nanobiotechnology, Granada/Spain (2003)
- International Workshop on Hard X-ray Photoelectron Spectroscopy, Grenoble/France (2003)
- XAS at Third Generation Sources: Highlights and Future Perspectives, Grenoble/France (2003)
- Jahrestreffen FA Eigenspannungen, Hamburg/Germany (2003)
- PETRA III Workshop on Experimental Stations, Hamburg/Germany (2003)
- Particulate Systems Analysis, Harrogate/Great Britain (2003)
- EU COST Action E20, Final Workshop Building a Wall, Helsinki/Finland (2003)
- ESOPS 15, Heraklion (Crete)/Greece (2003)
- SRSES2003, Hiroshima/Japan (2003)
- Physics of high energy density in matter, Hirschgasse/Austria (2003)
- Gordon Research Conference on Antimicrobial Peptides, Il Ciocco/Italy (2003)
- EuropaCat-VI, Innsbruck/Austria (2003)
- Current Topics in Advanced Materials, Istanbul/Turkey (2003)
15. Deutsche Zeolith-Tagung, Kaiserlautern/Germany (2003)
- Jülich Soft Mater Days, Kerkrade/Netherlands (2003)
- 12th ROLDUC Polymer Meeting Crossing length scales and disciplines, Kerkrade/Netherlands (2003)
- 6th International Conference Physics Phenomena in Condensed Matter, Kharkov/Ukraine (2003)
- Bunsentagung 2003, Kiel/Germany (2003)
- 3rd International Workshop on Polymer/Metal Nanocomposites, Kiel/Germany (2003)
- XIX Conference on Applied Crystallography, Kraków/Poland (2003)
- XXXV Polish Catalytic Symposium, Kraków/Poland (2003)
- NATO Advanced Research Workshop Mixed Ionic Electronic Conducting (MIEC) Perovskites for Advanced Energy Systems, Kyiv/Ukraine (2003)
- Physics of Soft Matters, Kyoto/Japan (2003)
- XV International Symposium on the Reactivity of Solids, Kyoto/Japan (2003)
- Silicate Melt Workshop, La Petite Pierre/France (2003)
- 7th Silicate Melt Workshop, La Petite Pierre/France (2003)
- ChemKrist Workshop-Konferenz: Strukturbestimmung – Methodenkombination – Datenbanken, Leipzig/Germany (2003)
- 14th Int. Conf. on Solid State Compounds of Transition Elements, Linz/Austria (2003)
- Sub-Picosecond X-ray Experiments Development Workshop, Lisboa/Portugal (2003)
- Austrian Gene Research Network Workshop, Litschau/Linz/Austria (2003)
- XLVI Meeting of Polish Chemical Society, Lublin/Poland (2003)
- 16th Annual users meeting at MAX-Lab, Lund/Sweden (2003)
- International Congress on Operando Spectroscopy, Lunteren/Netherlands (2003)
- 9th International Conference on the Formation of Semiconductor Interfaces, Madrid/Spain (2003)
- 12th International Conference on X-ray Absorption Fine Structure, Malmö/Sweden (2003)
- Conference on Integrated Systems in Dental Health Care, Milan/Italy (2003)
- European Polymer Conference, Milano/Italy (2003)
- 3rd European Conference on Neutron Scattering, Montpellier/France (2003)
- Ultrafast science with X-rays and electrons, Montreux/Switzerland (2003)
- Conference on Lasers and Electro-Optics Europe, München/Germany (2003)
- GDCh-Tagung, München/Germany (2003)
- 1st MagneTUM workshop – nanoscale magnetism as seen by x-rays and neutrons, München/Germany (2003)
- Nanobiotech Forum, Münster/Germany (2003)
- 1st GSC-SIGMA-ALDRICH Workshop on Materials Chemistry, Münster/Germany (2003)

- The 11th International Conference on Modulated Semiconductor Structures, Nara/Japan (2003)
- 226th ACS National Meeting, New York/USA (2003)
- 11th International Conference on II-VI Compounds, Niagara Falls, NY /USA (2003)
- Netherlands" catalysis and chemistry conference, Noordwijkerhout/Netherlands (2003)
- 13th International Symposium Spectroscopy in Theory and Practice, Nova Gorica/Slovenia (2003)
- VIII Warsztaty Fizyki Półprzewodników Półmagnetycznych, Obory/Poland (2003)
- II Congreso Nacional de Ciencia y Tecnología de Alimentos, Orihuela/Spain (2003)
- SCOOTMO RTN Meeting, Oxford/UK (2003)
- Journées Thématiques Serpentines, Paris/France (2003)
- 203rd Electrochemical Society Meeting, Paris/France (2003)
- X International Conference on the Physics of Non-crystalline Solids, Parma/Italy (2003)
- Advanced Infrared Technology & Applications, Pisa/Italy, (2003)
- 12th International Symposium on Intercalation Compounds, Poznan/Poland (2003)
- European Conf. on Surface Science, Prague/Czech Republic (2003)
- IVAX Meeting: Training of Medical Representatives from UK, Mexico, Croatia, Lithuania, Latvia, Russia and Ukraine, Prague/Czech Republic (2003)
- 1st IVAX Transplantation Academy – Focus on Early Posttransplant Events, Prague/Czech Republic (2003)
- 5th European Conference on Luminescent Detectors and Transformers of Ionizing Radiation, Prague/Czech Republic (2003)
- American Chemical Society Middle-Atlantic Regional Meeting, Princeton, NJ/USA (2003)
- VII Congreso National de la Sociedad Mexicana de Transplantes, Puerto Morelos, Cancun/Mexico (2003)
- 7th Int. Conf. on Materials and Mechanisms of Superconductivity and High Temperature Superconductors, Rio de Janeiro/Brazil (2003)
- ESF LESC Exploratory Workshop: Gases in magmatic evolution, Rome/Italy (2003)
- International Conference on Magnetism, Rome/Italy (2003)
8. Rudolstädter Kunststofftag „Nanocomposites und Flammenschutz“, Rudolstadt/Germany (2003)
- 47th Annual Meeting – Biophysical Society, San Antonio/USA (2003)
- Eighth International Conference on Synchrotron Radiation Instrumentation, San Francisco/USA (2003)
- 3rd World Congress Nanocomposites 2003, San Francisco/USA (2003)
- 13th Conference of Slovak Physicists, Smolenice/Slovakia (2003)
- International Conference on Coordination Chemistry, Smolenice-Bratislava/Slovakia (2003)
- International Conference on Modified Polymers, Stará Lesná/Slovakia (2003)
- XXIII. International Conference on Photonic, Electronic and Atomic Collisions, Stockholm/Sweden (2003)
- 9th European Conference on Solid State Chemistry, Stuttgart/Germany (2003)
- NATO Advanced Research Workshop Frontiers in Spectroscopy of Emergent Materials: Recent Advances towards New Technologies, Sudak/Ukraine (2003)
- 16th Int. Symp. on Plasma Chemistry, Taormina/Italy (2003)
- GEP2003, Tarragona/Spain (2003)
- 25th International Free Electron Laser Conference & 10th FEL Users Workshop, Tsukuba/Japan (2003)
- 9th International Conference on Electron Spectroscopy and Structure, Uppsala/Sweden (2003)
- 32nd International School on Physics of Semiconducting Compounds, Ustroñ-Jaszowiec/Poland (2003)
- 21st IAPRI Symposium, Valencia/Spain (2003)
- 7th International Conference on Inorganic Scintillators and Industrial Applications, Valencia/Spain (2003)
- Ultrashort high-energy radiation and matter, Varenna /Italy (2003)
- 3rd Int. Workshop on designing of interfacial structures in advanced materials and their joints, Vienna/Austria (2003)
- E-MRS Fall Meeting, Warsaw/Poland (2003)
- XXXVI Jahrestreffen Deutscher Katalytiker, Weimar/Germany (2003)
- Current Topics in Materials Research, Wroclaw/Poland (2003)
- 4th International Spring Workshop on Spectroscopy, Structure and Synthesis of Rare Earth Systems, Wroclaw-Ladek Zdroj/Poland (2003)
3. Wuppertaler Materialwissenschaftliche Forum, Wuppertal/Germany (2003)
- ICFA Future Light Sources Sub-Panel Mini Workshop on Start-to-End Simulations of X-RAY FELs, Zeuthen/Germany (2003)

**Habilitationen****C. JANOWITZ**Photoemission an 3-, 2- und (2- $\delta$ )-dimensionalen Festkörpern.  
Humboldt-Univ. Berlin/Germany (2003)**W.M. KWIATEK**

Analiza materiałów biomedycznych wybranymi metodami spektroskopowymi (Analysis of bio-medical materials by means of synchrotron radiation).

Inst. of Nuclear Physics, Polish Acad. of Sciences of Kraków/Poland (2003)

**A.N. OGURTSOV**

Electronic excitations in cryocrystals: Localization and elementary inelastic processes.

Inst. of Low Temperature Physics and Engineering of Khar'kov/Ukraine (2003)

**H. SCHLENZ**

Der Einsatz moderner Beugungsmethoden und Strukturanalyseverfahren zur Charakterisierung von Ordnungszuständen in Festkörpern mit und ohne Translationssymmetrie.

Univ. Bonn/Germany (2003)

**S. SCHRADER**

Electronic Structure and Excitation Processes of Organic Semiconductors.

Univ. of Potsdam/Germany (2003)

**TH. TRÖSTER**Optical Studies on Non-Metallic Compounds under Pressure.  
Univ. Paderborn/Germany (2003)**Dissertationen****W. BABIK**Grenzflächenmorphologie von GMR- und TMR-Schichtsystemen.  
RWTH Aachen/Germany (2003)**J. BRANDT**Geometric and electronic structure of misfit layered compounds and epitaxial thin films of PbS on transition metal dichalcogenides.  
Christian-Albrechts-Univ. zu Kiel/Schleswig-Holstein (2003)**P.M. CATTANEO**Orthodontic Aspects of Bone Mechanics and Bone Remodelling.  
Univ. of Aarhus/Denmark (2003)**W.M. CHEN**White Beam Synchrotron X-ray Topography and micro-Raman Spectroscopy Characterization of Crystal Materials.  
Dublin City Univ./Ireland (2003)**A. CSISZAR**Effect of 2,4-dichlorophenol on biological model membranes.  
RWTH Aachen (2003)**J. DAVAASAMBUU**Temperaturabhängige Untersuchungen der Strukturfaktoränderungen von piezoelektrischen Kristallen unter dem Einfluss von äußeren elektrischen Feldern.  
Universität Potsdam/Germany (2003)**M.P. FETH**Röntgenabsorptionsspektroskopische Untersuchungen an katalytisch aktiven Metallkomplexen und nanostrukturierten anorganisch-organischen Hybridmaterialien.  
Univ. Stuttgart (2003)**M.-C. FROMEN**Experimental study and modelling of the structure of magnetic nanoparticles: from isolated to assembled particles.  
INSA Toulouse/France (2003)**K. ISTOMIN**Interplay between Charge, Spin and Orbital Ordering in  $\text{La}_{1-x}\text{Sr}_x\text{MnO}_3$  Manganites.  
RWTH Aachen/Germany (2003)**J. KANATHARANA**Examination of Solder Bump Reflow Process and Copper Metalisation Process Induced Stress Distribution in Silicon Substrates Using Synchrotron X-Ray Topography, Micro-Raman Spectroscopy and Finite Element Modelling.  
Dublin City Univ./Ireland (2003)**A.V. KOROTAEV**Relaxation of electronic excitations in beryllium-containing oxide crystals.  
Urals State Techn. Univ. Ekaterinburg/Russia (2003)**V. KOTESKI**Local structures around impurity atoms in the II-VI compounds ZnTe and CdTe.  
Univ. of Belgrade/Serbia (2003)**C. LORENZ-HAAS**Bruchmechanik an Polymergrenzflächen .  
Univ. Mainz (2003)**M.A. MARTÍNEZ**Thermotropic polyesters and polyoxetanes: synthesis, mechanical properties and orientational phenomena.  
Alcalá de Henares Madrid/Spain (2003)**T. MATTEI**Strukturelle Charakterisierung eines neuen potenziell kraftgenerierenden ADP.Pi-Zustandes des Akto-Myosin-Komplexes.  
Univ. Hannover/Germany (2003)**B.I. MOSQUEDA JIMÉNEZ**Reduction of nitrogen oxides over zeolite supported Ni catalysts.  
Univ. of Twente/Netherlands (2003)**R. MÜLLER**Die Physik der  $\text{CuO}_2$  – Ebene am Beispiel des Modell-Hochtemperatur-Supraleiters  $\text{Bi}_{2}\text{Sr}_{2-x}\text{La}_x\text{CuO}_{6+d}$ .  
Humboldt-Univ. Berlin (2003)**E. NEGODINE**Inter- and Intraconfigurational Luminescence of  $\text{LiYF}_4 : \text{Er}^{3+}$  under Selective VUV Excitation.  
Univ. Hamburg/Germany (2003)

### R. PRAMATAROVA

The Lamellar Structure of the Shell of Patella Crenata: a Crystallographic Study.  
Univ. Hamburg/Germany (2003)

### D.V. RAIKOV

Radiation-optical and scintillation properties of materials for combination detectors of ionizing radiation .  
Urals State Techn. Univ. Ekaterinburg/Russia (2003)

### M. RICHWIN

Entwicklung und Anwendungen neuer Verfahren zur zeitaufgelösten Röntgenabsorptionsspektroskopie mit Synchrotronstrahlung.  
Bergische Univ. Wuppertal (2003)

### C. SCHILLER

Polyester und Calciumphosphate als resorbierbare Biomaterialien.  
Ruhr-Univ. Bochum (2003)

### A. SCHIWEK

Hochdruck-Röntgenpulverdiffraktometrie an Cer und Cer-Lanthanid-Legierungen zur Bestimmung von Zustandsgleichungen und Phasenumwandlungen.  
Univ. Paderborn/Germany (2003)

### M.F. SCHNEIDER

Forces, thermodynamics and structure of artificial glycocalix models in two and three dimensions.  
TU München (2003)

### C. SEDLMAIR

Elementary reaction steps of NO<sub>x</sub> trapping and SO<sub>x</sub> deactivation of NO<sub>x</sub> storage reduction catalysts.  
Univ. of Twente/Netherlands (2003)

### G.B. STRYGANYUK

Radiative core-valence and interconfigurational transitions in halide scintillation materials.  
Ivan Franko National Univ. of Lviv/Ukraine (2003)

### D. TADIC

Synthese und Charakterisierung von Knochenmineral-ähnlichen Calciumphosphaten. Herstellung eines synthetischen Biomaterials.  
Ruhr-Univ. Bochum (2003)

### E.V.D. VAN LOEF

Halide Scintillators.  
Univ. of Technology, Delft/Netherlands (2003)

### S. VIELHAUER

Innerschalenanregungen und sekundäre Exzitonen on Edelgasfestkörper.  
Univ. Hamburg/Germany (2003)

### H. WABNITZ

Interaction of intense VUV radiation from a Free-Electron Laser with rare gas atoms and clusters.  
Univ. Hamburg/Germany (2003)

### V. WEIß

In situ-Untersuchung des Wachstums von reaktiv gesputterten MoS<sub>x</sub>- und WS<sub>x</sub>-Schichten mit Hilfe der energiedispersiven Röntgenbeugung (EDXRD).  
FU Berlin/Germany (2003)

### J. WIENOLD

In situ Charakterisierung der thermischen Behandlung von Polymolybdaten mit EXAFS und XRD.  
TU Berlin/Germany (2003)

## Diplomarbeiten

### M. BAUER

Röntgenabsorptionsspektroskopie an nach dem Sol-Gel-Prozeß hergestellten Übergangsmetallociden .  
Univ. Stuttgart/Germany (2003)

### J.P. FERNÁNDEZ-BLÁZQUEZ

Synthesis and characterization of polyethers with smectic mesophases.  
Complutense Madrid/Spain (2003)

### C. GAISER

Optische und elektronische Analyse quasi-zweidimensionaler HfS<sub>x</sub>Se<sub>2-x</sub> Einkristalle .  
Humboldt-Univ. Berlin (2003)

### A. GÖTZENDORFER

Ultra-dünne Polymerfilme zwischen homogenen und nanostrukturierten Oberflächen.  
TU München (2003)

### U. HAAKE

Interkalationsprozesse in gesputterten Übergangsmetallocidschichten.  
Bergische Univ. Wuppertal (2003)

### M. KALLÄNE

Erste Abbildungs- und Fokussierungsexperimente zu Photonen-sieben als neuartige Beugungsoptiken.  
Christian-Albrechts-Univ. zu Kiel/Schleswig-Holstein (2003)

### T. SCHEFFLER

Mehrphotonenemitter auf Basis Pr-dotierter Festkörper.  
Univ. Hamburg/Germany (2003)

### S. SCHIEFER

Thermodynamics and rheology of glycocalix models at air/water interface.  
TU München (2003)

### F. SERSEN

Interaction of DNA with liposomes in the presence of Ca<sup>2+</sup> – X-ray diffraction study.  
Comenius Univ. of Bratislava/Slovakia (2003)

### T. TITZ

Gradientenproben – heterogene Polymerfilme.  
TU München (2003)

I. ZAJAC  
Interaction of bisquaternary ammonium bromides with DNA.  
Comenius Univ. of Bratislava/Slovakia (2003)

T. ZANDT  
Epitaxie auf HfS<sub>x</sub>Se<sub>2-x</sub>.  
Humboldt-Univ. Berlin (2003)

L.M. BRONSTEIN, C.N. LINTON, R. KARLINSEY, E. ASHCRAFT, B.D. STEIN, D.I. SVERGUN, M. KOZIN, I.A. KHOTINA, R.J. SPONTAK, U. WERNER-ZWANZIGER, J.W. ZWANZIGER

Controlled Synthesis of Novel Metalated Poly(aminohexyl)-(aminopropyl)silsesquioxane Colloids.  
*Langmuir*, 19, 7071–7083 (2003)

K.A. BROWN, E.P. CARPENTER, K.A. WATSON, J.R. COGGINS, A.R. HAWKINS, M.H.J. KOCH, D.I. SVERGUN  
Twists and turns: a tale of two shikimate-pathway enzymes.  
*Biochem. Soc. Trans.*, 31, 543–547 (2003)

H. BUNJES, M.H.J. KOCH, K. WESTESEN  
Influence of emulsifiers on the crystallization of solid lipid nanoparticles.  
*J. Pharm. Sci.*, 92, 1509–1520 (2003)

A. DE MEIJERE, C. LEE, B. BENGTSON, E. POHL, S. KOZHUSHKOV, P. SCHREINER, R. BOESE, T. HAUMANN  
Preparation and Properties of Centrally Bridgehead-Substituted Hexacyclo[4.4.0.0,2,1.03,5.04,8.07,9] decanes ("Diademanes") and Related (CH)<sub>10</sub> Hydrocarbons.  
*Chemistry*, 9, 5481–5488 (2003)

F.J. ENGUITA, L. RODRIGUES, M. ARCHER, L. SIEKER, A. RODRIGUES, E. POHL, D.L. TURNER, H. SANTOS, M.A. CARRONDO  
Crystallization and preliminary X-ray characterization of cytochrome c' from the obligate methylotroph *Methylophilus methylotrophus*.  
*Acta Cryst. D*, 59, 580–583 (2003)

V. EVERAERT, G. GROENINCKX, M.H.J. KOCH, H. REYNNAERS  
Influence of Fractionated Crystallization on the Semicrystalline structure of Poly(methylene oxide)/(Polystyrene /Poly(2,6-dimethyl-1,4 phenylene ether) (POM/(PS/PPE)) Blends.  
*Polymer*, 44, 3491–5308 (2003)

R.I. GEARBA, M. LEHMANN, J. LEVIN, M.H.J. KOCH, Y.H. GEERTS, D.A. IVANOV  
Tailoring discotic mesophases: columnar order enforced with hydrogen bonds.  
*Adv. Mater.*, 15, 1614–1618 (2003)

M. GNIDA, R. FERNER, L. GREMER, O. MEYER, W. MEYER-KLAUCKE  
A novel binuclear [CuSMo] cluster at the active site of carbon monoxide dehydrogenase: characterization by X-ray absorption spectroscopy.  
*Biochemistry*, 42, 222–30 (2003)

M. HAUMANN, A. PORTHUN, T. BUHRKE, P. LIEBISCH, W. MEYER-KLAUCKE, B. FRIEDRICH, H. DAU  
Hydrogen-induced structural changes at the nickel site of the regulatory [NiFe] hydrogenase from *Ralstonia eutropha* detected by X-ray absorption spectroscopy.  
*Biochemistry*, 42, 13786 (2003)

## EMBL

### Veröffentlichungen

C.J. ACKERMAN, M.M. HARNETT, W. HARNETT, S.M. KELLY, D.I. SVERGUN, O. BYRON  
19 Å solution structure of the filarial nematode immunomodulatory protein, ES-62  
*Biophys. J.*, 84, 489–500 (2003)

A. ARMBRÜSTER, S.M. BAILER, M.H.J. KOCH, J. GODOVAC-ZIMMERMANN, G. GRÜBER  
Dimer Formation of subunit G of the Yeast V-ATPase.  
*FEBS Lett.*, 546, 395–400 (2003)

I. ASCONE, W. MEYER-KLAUCKE, L. MURPHY  
Experimental aspects of biological X-ray absorption spectroscopy.  
*J. Synchrotron Radiation*, 10, 16–22 (2003)

L. BANCI, I. BERTINI, R. DEL CONTE, S. MANGANI, W. MEYER-KLAUCKE  
X-ray absorption and NMR spectroscopic studies of CopZ, a copper chaperone in *Bacillus subtilis*: the coordination properties of the copper ion.  
*Biochemistry*, 42, 2467–74 (2003)

S. BERNOCCO, B.M. STEIGLITZ, D.I. SVERGUN, M.V. PETOUKHOV, F. RUGGIERO, S. RICARD-BLUM, C. EBEL, C. GEOURJON, G. DELÉAGE, B. FONT, D. EICHENBERGER, D.S. GREENSPAN, H.D.J.S.  
Low resolution structure determination shows procollagen C-proteinase enhancer to be an elongated multi-domain glycoprotein.  
*J. Biol. Chem.*, 278, 7199–7205 (2003)

K. BRANDENBURG, P. GARIDEL, J. ANDRÄ, G. JÜRGENS, M. MÜLLER, A. BLUME, M. H. J. KOCH, J. LEVIN  
Cross-linked hemoglobin converts endotoxically inactive pentaacyl endotoxins into a physiologically active conformation.  
*J. Biol. Chem.*, 278, 47660–47669 (2003)

K. BRANDENBURG, F. WAGNER, M. MÜLLER, H. HEINE, J. ANDRÄ, M. H. J. KOCH, U. ZÄHRINGER  
Physicochemical characterization and biological activity of a glycoglycerolipid from *Mycoplasma fermentans*.  
*Eur. J. Biochem.*, 270, 3271–3279 (2003)

- S. HOCQUET, M. DOSIÈRE, A. THIERRY, T.B. LOTZ, M.H.J. KOCH, N. DUBREUIL, D.A. IVANOV  
Morphology and Melting of Truncated Single Crystals of Linear Polyethylene.  
Macromolecules, 36, 8376–8384 (2003)
- M.H.J. KOCH, P. VACHETTE, D.I. SVERGUN  
Small angle scattering: a view on the properties, structures and structural changes of biological macromolecules in solution.  
Quart. Rev. Biophys., 36, 147–227 (2003)
- P.V. KONAREV, V.V. VOLKOV, A.V. SOKOLOVA, M.H.J. KOCH, D.I. SVERGUN  
PRIMUS – a Windows-PC based system for small-angle scattering data analysis.  
J. Appl. Cryst., 36, 1277–1282 (2003)
- L. LI, M.H.J. KOCH, W.H. DE JEU  
Crystalline structure and morphology in nylon 12: a small and wide-angle X-ray scattering study.  
Macromolecules, 36, 1626–1632 (2003)
- L. LI, Y. SÉRÉRO, M.H.J. KOCH, W.H. DE JEU  
Micro-phase separation and crystallization in an asymmetric diblock copolymer: coupling and competition.  
Macromolecules, 36, 529–532 (2003)
- A. LINDEN, O. MAYANS, W. MEYER-KLAUCKE, G. ANTRANIKIAN, M. WILMANNS  
Differential regulation of a hyperthermophilic alpha-amylase with a novel (Ca,Zn) two-metal center by zinc.  
J. Biol. Chem., 278, 9875–84 (2003)
- E. LORENTZEN, T. KNURA, H. AHMED, R. HENSEL, E. POHL  
Structural basis of allosteric regulation and substrate specificity of the nonphosphorylating glyceraldehyde-3-phosphate dehydrogenase from *T. tenax*.  
J. Mol. Biol., (2003)
- E. LORENTZEN, E. POHL, P. ZWART, A. STARK, R. RUSSELL, T. KNURA, R. HENSEL, B. SIEBERS  
Crystal Structure of an Archaeal Class I Aldolase and the Evolution of  $(\beta\alpha)8$  Barrel Proteins.  
J. Biol. Chem., 278, 47253–47260 (2003)
- E. LORENTZEN, B. SIEBERS, R. HENSEL, E. POHL  
Function and Evolution of the Archaeal Class I Fructose 1,6-bisphosphate Aldolase.  
Biochemical Society Transactions, (2003)
- S. MANGANI, W. MEYER-KLAUCKE, A.J.G. MOIR, M. RANIERI-RAGGI, D. MARTINI, A. RAGGI  
Characterization of the Zn binding site of the HPRG protein associated with rabbit skeletal muscle AMP deaminase.  
J. Biol. Chem., 278, 3176–3184 (2003)
- J.A. MÁRQUEZ, E.C.I. SMITH, M.V. PETOUKHOV, P. LOSURDO, PT. MATTSSON, M. KNECKT, A. WESTLUND, K. SCHEFFZEK, M. SARASTE, D.I. SVERGUN  
Conformation of full-length Bruton tyrosine kinase (Btk) from synchrotron X-ray solution scattering.  
EMBO J., 2, 4616–1282 (2003)
- A. MIJOVILOVICH, W. MEYER-KLAUCKE  
Simulating the XANES of metalloenzymes – a case study.  
J. Synchrotron Radiation, 10, 64–8 (2003)
- M. NIEBUHR, A. GABRIEL, M.H.J. KOCH  
Analysis of fluorescence effects in a position sensitive gas detector using a time-stamp time-to-digital converter.  
Nuclear Instrum. and Methods, 510, 309–317 (2003)
- O. ORUN, M.H.J. KOCH, B. KAN, D.I. SVERGUN, M.V. PETOUKHOV, Z. SAYERS  
Structural characterisation of T-protein of the *Escherichia coli* glycine cleavage system by X-ray small angle scattering.  
Cell. Mol. Biol., 49, OL453–OL459 (2003)
- M.V. PETOUKHOV, D.I. SVERGUN  
New methods for domain structure determination of proteins from solution scattering data.  
J. Appl. Cryst., 36, 540–544 (2003)
- M.V. PETOUKHOV, D.I. SVERGUN, P.V. KONAREV, S. RAVASIO, R.H.H. VAN DEN HEUVEL, B. CURTI, M.A. VANONI  
Quaternary structure of *Azospirillum brasiliense* NADPH-dependent glutamate synthase in solution as revealed by synchrotron radiation X-ray scattering.  
J. Biol. Chem., 278, 29933–29939 (2003)
- E. POHL, J. HALLER, A. MIJOVILOVICH, W. MEYER-KLAUCKE, E. GARMAN, M. VASIL  
Architecture of a protein central to iron homeostasis: crystal structure and spectroscopic analysis of the ferric uptake regulator.  
Mol Microbiol., 47, 903–15 (2003)
- S. RABIEJ, B. GODERIS, J. JANICKI, V.B.F. MATHOT, M.H.J. KOCH, H. REYNAERS, A. WŁOCHOWICZ  
Influence of thermal treatment on the supermolecular structure of homogeneous polyethylene-1-octene copolymers.  
Fibres & Textiles, 11, 28–31 (2003)
- O. SCHILLING, N. WENZEL, M. NAYLOR, A. VOGEL, M. CROWDER, C. MAKAROFF, W. MEYER-KLAUCKE  
Flexible metal binding of the metallo-beta-lactamase domain: glyoxalase II incorporates iron, manganese, and zinc *in vivo*.  
Biochemistry, 42, 11 777–86 (2003)
- A. SCHMIDT, C. JELSCH, P. OESTERGAARD, W.R. RYPNIEWSKI, V.S. LAMZIN  
Trypsin revisited: Crystallography at (sub)atomic resolution and quantum chemistry revealing details of catalysis.  
J. Biol. Chem., 278, 43357–43362 (2003)
- A. SCHÜTZ, R. GOLBIK, K. TITTMANN, D.I. SVERGUN, M.H.J. KOCH, G. HÜBNER, S. KÖNIG  
Studies on structure-function relationships of indolepyruvate decarboxylase from *Enterobacter cloacae* – a key enzyme of the indole acetic acid pathway.  
Eur. J. Biochem., 270, 2322–2331 (2003)

U. SEYDEL, L. HAWKINS, A.B. SCHROMM, H. HEINE, O. SCHEEL, M.H.J. KOCH, K. BRANDENBURG  
The generalized endotoxic principle.  
*Eur. J. Immunol.*, 33, 1586–1592 (2003)

E.V. SHTYKOVA, E.V.J. SHTYKOVA, V.V. VOLKOV, P.V. KONAREV, A.T. DEMBO, E.E. MAKHAEVA, I.A. RONOVA, A.R. KHOKHLOV, H. REYNAERS, D.I. SVERGUN  
Small-angle X-ray scattering reveals hollow nanostructures in native i- and k-carrageenan/surfactant complexes.  
*J. Appl. Cryst.*, 36, 669–673 (2003)

A.V. SOKOLOVA, V.V. VOLKOV, D.I. SVERGUN  
Prototype of database for rapid protein classification based on solution scattering data.  
*J. Appl. Cryst.*, 36, 865–868 (2003)

D.I. SVERGUN, M.H.J. KOCH  
Small angle scattering studies of biological macromolecules in solution.  
*Rep. Prog. Phys.*, 66, 1735–1782 (2003)

T.C. TERWILLIGER, M.S. PARK, G.S. WALDO, J. BERENDZEN, L.W. HUNG, C.Y. KIM, C.V. SMITH, J.C. SACCHETINI, M. BELLINZONI, R. BOSSI, E. DE ROSSI, A. MATTEVI, A. MILANO, G. RICCARDI, M. RIZZI, M.M. ROBERTS, A.R. COKER, G. FOSSATI, P. MASCAGNI, A.R. COATES, S.P. WOOD, C.W. GOULDING, M.I. APOSTOL, D.H. ANDERSON, H.S. GILL, D.S. EISENBERG, B. TANEJA, S. MANDE, E. POHL, V. LAMZIN, P. TUCKER, M. WILMANNS, C. COLOVOS, W. MEYER-KLAUCKE, A.W. MUNRO, K.J. MCLEAN, K.R. MARSHALL, D. LEYS, J.K. YANG, H.J. YOUNG, B.I. LEE, M.G. LEE, J.E. KWAK, B.W. HAN, J.Y. LEE, S.H. BAEK, S.W. SUH, M.M. KOMEN, V.L. ARCUS, E.N. BAKER, J.S. LOTT, W. JACOBS, JR., T. ALBER, B. RUPP

The TB structural genomics consortium: a resource for Mycobacterium tuberculosis biology.  
*Tuberculosis (Edinb)*, 83, 223–49 (2003)

P. VACHETTE, M.H.J. KOCH, D.I. SVERGUN  
Looking behind the beamstop: X-ray solution scattering studies of the structure and conformational changes of biological macromolecules.  
*Methods Enzymol.*, 374, (2003)

R.H.H. VAN DEN HEUVEL, D.I. SVERGUN, M.V. PETOUKHOV, A. CODA, B. CURTI, S. RAVASIO, M.A. VANONI, A. MATTEVI  
The Active Conformation of Glutamate Synthase and its binding to Ferredoxin.  
*J. Mol. Biol.*, 330, 113–128 (2003)

V.V. VOLKOV, R.L. KAYUSHINA, V.A. LAPUK, E.V. SHTYKOVA, E.Y. VARLAMOVA, M. MALFOIS, D.I. SVERGUN  
Solution structures of immunoglobulins IgG and IgM and rheumatoid factor IgM-RF.  
*Kristallographia*, 48, 98–105 (2003)

V.V. VOLKOV, V.A. LAPUK, R.L. KAYUSHINA, E.V. SHTYKOVA, E.Y. VARLAMOVA, M. MALFOIS, D.I. SVERGUN  
Low Resolution Structure of Immunoglobulins IgG, IgM and Rheumatoid Factor IgM-RF from Solution X-ray Scattering Data.  
*Journal of Applied Crystallography*, 36, 503–508 (2003)

V.V. VOLKOV, D.I. SVERGUN  
Uniqueness of ab initio shape determination in small angle scattering.  
*J. Appl. Cryst.*, 36, 860–864 (2003)

P. ZOU, M. GAUTEL, M. GEERLOF, M. WILMANNS, M.H.J. KOCH, D.I. SVERGUN  
Cross-linking function of telethonin in the complex with titin suggested by solution scattering.  
*J. Biol. Chem.*, 278, 2636–2644 (2003)

## Max-Planck-Gesellschaft

### Veröffentlichungen

I. AGMON, T. AUERBACH, D. BARAM, H. BARTELS, A. BASHAN, R. BERISIO, P. FUCINI, H.A. HANSEN, J. HARMS, M. KESSLER, M. PERETZ, F. SCHLUENZEN, A. YONATH, R. ZARIVACH  
On peptide bond formation, translocation, nascent protein progression and the regulatory properties of ribosomes.  
*Eur J Biochem.* 270 (2003) 2543

A. BASHAN, I. AGMON, R. ZARIVACH, F. SCHLUENZEN, J. HARMS, R. BERISIO, H. BARTELS, F. FRANCESCHI, T. AUERBACH, H.A. HANSEN, E. KOSSOY, M. KESSLER, A. YONATH  
Structural basis of the ribosomal machinery for peptide bond formation, translocation, and nascent chain progression.  
*Mol Cell.* 11 (2003) 91

A. BASHAN, R. ZARIVACH, F. SCHLUENZEN, I. AGMON, J. HARMS, T. AUERBACH, D. BARAM, R. BERISIO, H. BARTELS, H.A. HANSEN, P. FUCINI, D. WILSON, M. PERETZ, M. KESSLER, A. YONATH  
Ribosomal crystallography: peptide bond formation and its inhibition.  
*Biopolymers.* 70 (2003) 19

E. BEN-ZEEV, R. ZARIVACH, M. SHOHAM, A. YONATH, M. EISENSTEIN  
Prediction of the structure of the complex between the 30S ribosomal subunit and colicin E3 via weighted-geometric docking.  
*J Biomol Struct Dyn.* 20 (2003) 669

R. BERISIO, J. HARMS, F. SCHLUENZEN, R. ZARIVACH, H.A. HANSEN, P. FUCINI, A. YONATH  
Structural insight into the antibiotic action of telithromycin against resistant mutants.  
*J Bacteriol.* 185 (2003) 4276

R. BERISIO, F. SCHLUENZEN, J. HARMS, A. BASHAN, T. AUERBACH, D. BARAM, A. YONATH  
Structural insight into the role of the ribosomal tunnel in cellular regulation.  
*Nat Struct Biol.* 10 (2003) 366

- J. BIERNAT, E.-M. MANDELKOW  
 MARK/Par-1, a kinase phosphorylating the repeat domain of tau protein, is involved in neurite outgrowth and neuronal polarity.  
 In: Alzheimer's Disease and Related Disorders: Research Advances, K. Iqbal, B. Winblad (Ed.) Ana Aslan International Academy of Aging, (2003) 309
- S. GANZER, S. ARLT, V. SCHODER, C. BUHMANN, E.-M. MANDELKOW, U. FINCKH, U. BEISIEGEL, D. NABER, T. MÜLLER-TOMSEN  
 CSF-tau, CSF-Abeta1-42, ApoE-genotype and clinical parameters in the diagnosis of Alzheimer's disease: Combination of CSF-tau and MMSE yields highest sensitivity and specificity.  
*J. Neural Transm.*, 110 (2003) 1149
- M. GROLL, H. BRANDSTETTER, H. BARTUNIK, G. BOURENKOV, R. HUBER  
 Investigations on the maturation and regulation of archaeabacterial proteasomes.  
*J Mol Biol.* 327 (2003) 75
- C.H. HAGEMEIER, S. SHIMA, R.K. THAUER, G. BOURENKOV, H.D. BARTUNIK, U. Ermler  
 Coenzyme F420-dependent methylenetetrahydromethanopterin dehydrogenase (Mtd) from *Methanopyrus kandleri*: a methanogenic enzyme with an unusual quaternary structure.  
*J Mol Biol.* 332 (2003) 1047
- J.M. HARMS, H. BARTELS, F. SCHLUNZEN, A. YONATH  
 Antibiotics acting on the translational machinery.  
*J Cell Sci.* 116 (2003) 1391
- S. HENRICH, A. CAMERON, G.P. BOURENKOV, R. KIEFER-SAUER, R. HUBER, I. LINDBERG, W. BODE, M.E. THAN  
 The crystal structure of the proprotein processing proteinase furin explains its stringent specificity.  
*Nat Struct Biol.* 10 (2003) 520
- A. JACOBS, V. LIPKA, R. BURTON, R. PANSTRUGA, N. STRIZHOV, P. SCHULZE-LEFERT, G. FINCHER  
 An *Arabidopsis* callose synthase, GSL5, is required for wound and papillary callose formation.  
*Plant Cell* 15 (2003) 2503
- R. JAUCH, G.P. BOURENKOV, H.R. CHUNG, H. URLAUB, U. REIDT, H. JACKLE, M.C. WAHL  
 The zinc finger-associated domain of the *Drosophila* transcription factor grauzone is a novel zinc-coordinating protein-protein interaction module.  
*Structure* 11 (2003) 1393
- D. KSIAZEK, H. BRANDSTETTER, L. ISRAEL, G.P. BOURENKOV, G. KACHALOVA, K.P. JANSSEN, H.D. BARTUNIK, A.A. NOEGEL, M. SCHLEICHER, T.A. HOLAK  
 Structure of the N-terminal domain of the adenylyl cyclase-associated protein (CAP) from *Dictyostelium discoideum*.  
*Structure* 11 (2003) 1171
- Y. LI, M. ROSSO, N. STRIZHOV, P. VIEHOEVER, B. WEISS-HAAR  
 GABI-Kat SimpleSearch: a flanking sequence tag (FST) database for the identification of T-DNA insertion mutants in *Arabidopsis thaliana*.  
*Bioinformatics* 19 (2003) 1441
- E.-M. MANDELKOW, K. STAMER, R. VOGEL, E. THIES, E. MANDELKOW  
 Clogging of axons by tau, inhibition of axonal traffic and starving of synapses.  
*Neurobiol. Aging* 24 (2003) 1079
- A.N. POPOV, G.P. BOURENKOV  
 Choice of data-collection parameters based on statistic modelling.  
*Acta Crystallogr D* 59 (2003) 1145
- M. ROSSO, Y. LI, N. STRIZHOV, B. REISS, K. DEKKER, B. WEISSHAAR  
 An *Arabidopsis thaliana* T-DNA mutagenized population (GABI-Kat) for flanking sequence tag-based reverse genetics.  
*Plant Mol Biol.* 53 (2003) 247
- F. SCHLUNZEN, J.M. HARMS, F. FRANCESCHI, H.A. HANSEN, H. BARTELS, R. ZARIVACH, A. YONATH  
 Structural basis for the antibiotic activity of ketolides and azalides.  
*Structure (Camb).* 11 (2003) 329
- Y. SKINOTIS, T. SURREY, S. ALTMANN, H. GROSS, Y.-H. SONG, E. MANDELKOW, A. HOENGER  
 An SH3 domain engineered between the kinesin linker and neck allows a detailed localization of the neck-linker region by cryo-electron microscopy.  
*EMBO J.*, 22 (2003) 1518
- Y.-H. SONG, A. MARX, E. MANDELKOW  
 Structures of kinesin motor domains: Implications for conformational switching involved in mechanochemical coupling.  
 In: Molecular Motors, M. Schliwa (Ed.) Wiley-VCH, Weinheim (2003) 287
- N. STRIZHOV, Y. LI, M. ROSSO, P. VIEHOEVER, K. DEKKER, B. WEISSHAAR  
 High-throughput generation of sequence indexes from T-DNA mutagenized *Arabidopsis thaliana* lines.  
*Biotechniques* 35 (2003) 1164
- T. TIMM, X.Y. LI, J. BIERNAT, J. JIAO, E. MANDELKOW, J. VANDEKERCKHOVE, E.-M. MANDELKOW  
 MARKK, a Ste-20-like kinase, activates the polarity-inducing kinase MARK/PAR-1.  
*EMBO J.*, 22 (2003) 5090
- A. YONATH  
 Ribosomal tolerance and peptide bond formation.  
*Biol Chem.* 384 (2003) 1411
- A. YONATH  
 Structural insight into functional aspects of ribosomal RNA targeting.  
*Chembiochem.* 4 (2003) 1008

# DESY Zeuthen

## Veröffentlichungen

### ALPHA COLLABORATION

M. DELLA MORTE et. al.

Static Quarks with Improved Statistical Precision.  
hep-lat/0309080

Simulating the Schrödinger Functional with Two Pseudo-Fermions.  
hep-lat/0307008

J. HEITGER, M. KURTH, R. SOMMER

Non-Perturbative Renormalization of the Static Axial Current in Quenched QCD.  
Nucl. Phys. B669 (2003) 173 und hep-lat/0302019

J. HEITGER, R. SOMMER

Non-Perturbative Heavy Quark Effective Theory.  
hep-lat/0310035

F. KNECHTLI et al.

Simulating the Schrödinger Functional with Two Pseudofermions: Algorithmic Study and the Running Mass.  
DESY-03-137, hep-lat/0309074

### ALPHA-CP-PACS-JLQCD COLLABORATIONS

R. SOMMER et al.

Large Cutoff Effects of Dynamical Wilson Fermions.  
DESY-03-154, hep-lat/0309171

### AMANDA COLLABORATION

J. AHRENS et al.

Search for Point Sources of High Energy Neutrinos.  
Astrophys. J. 583 (2003) 1040 und astro-ph/0208006

Search for Neutrino-Induced Cascades with the AMANDA Detector.  
Phys. Rev. D67 (2003) 012003 und astro-ph/0206487

Limits on the Diffuse Fluxes of High Energy Extraterrestrial Neutrinos with the Amanda-B10 Detector.  
Phys. Rev. Lett. 90 (2003) 251101 und astro-ph/0303218

Search for Extraterrestrial Point Sources with Amanda-II.  
Akzeptiert von Phys. Rev. Lett. und astro-ph/0309585

### APENEXT COLLABORATION

F. BODIN et al.

APENEXT: A Multi – TFlops Computer For Simulations In LATTICE Gauge Theory.  
eConf C030626:FRAP15, 2003 und hep-lat/0309007

### BAIKAL AND NEMO COLLABORATION

V. BALKANOV et al.

Simultaneous Measurement of Water Optical Properties in Lake Baikal.  
Nucl. Instr. Meth. A498 (2003) 231 und astroph-0207553

### H1 COLLABORATION

T. ALEXOPOULOS et al.

Electron–Deuteron Scattering with HERA, a Letter of Intent for an Experimental Programme with the H1 Detector.  
DESY 03-194 (2003)

### L3 COLLABORATION

P. ACHARD et al.

Study of the  $e^+e^- \rightarrow Z e^+e^-$  Process at LEP.  
Phys. Lett. B561 (2003) 73

Measurement of W Polarisation at LEP.

Phys. Lett. B557 (2003) 147

Search for Colour Reconnection Effects in  $e^+e^- \rightarrow W^+W^- \rightarrow$  Hadrons Through Particle–Flow Studies at LEP.  
Phys. Lett. B561 (2003) 202

Proton–Antiproton Pair Production in Two–Photon Collisions at LEP.

Phys. Lett. B571 (2003) 11

Search for Excited Leptons at LEP.

Phys. Lett. B568 (2003) 23

Measurement of Exclusive  $\rho^0\rho^0$  Production in Two–Photon Collisions at High  $Q^2$  at LEP.

Phys. Lett. B568 (2003) 21

Measurement of Branching Fractions of Tau Hadronic Decays.  
CERN-EP/2003-019, zur Veröffentl. in Phys. Lett. B

Search for the Standard Model Higgs Boson at LEP.  
Phys. Lett. B565 (2003) 61

Search for Colour Singlet and Colour Reconnection Effects in Hadronic Z Decays at LEP.

CERN-EP/2003-047, akzeptiert zur Veröffentl. in Phys. Lett. B.

Z Boson Pair–Production at LEP.  
Phys. Lett. B572 (2003) 133

Search for Scalar Leptons and Scalar Quarks at LEP.  
CERN-EP/2003-059, akzeptiert zur Veröffentl. in Phys. Lett. B

Inclusive Jet Production in Two–Photon Collisions at LEP.  
CERN-EP/2003-055, zur Veröffentl. in Phys. Lett. B

Search for Charged Higgs Bosons at LEP.  
Phys. Lett. B575 (2003) 208

Measurement of the Z–Boson Mass Using Z Gamma Events at Centre–of–Mass Energies above the Z Pole.  
CERN-EP/2003-074, zur Veröffentl. in Phys. Lett. B

- Single- and Multi-Photon Events with Missing Energy in  $e^+e^-$  Collisions at LEP.  
CERN-EP/2003-068, zur Veröffentl. in Phys. Lett. B
- Flavour Independent Search for Neutral Higgs Bosons at LEP.  
CERN-EP/2003-069, zur Veröffentl. in Phys. Lett. B
- Muon-Pair and Tau-Pair Production in Two-Photon Collisions at LEP.  
CERN-EP/2003-080, zur Veröffentl. in Phys. Lett. B
- Study of Spin and Decay-Plane Correlations of W Bosons in the  $e^+e^- \rightarrow W^+W^-$  Process at LEP.  
CERN-EP/2003-072, zur Veröffentl. in Phys. Lett. B
- Inclusive Lambda Production in Two-Photon Collisions at LEP.  
CERN-EP/2003-085, zur Veröffentl. in Phys. Lett. B
- Measurement of Triple-Gauge-Boson Couplings of the W Boson at LEP.  
CERN-EP/2003-086, zur Veröffentl. in Phys. Lett. B
- LHPC COLLABORATIONS AND SESAM COLLABORATIONS**
- P. DREHER et al.  
Continuum Extrapolation of Moments of Nucleon Quark Distributions in Full QCD.  
Nucl. Phys. Proc. Suppl. 119:392-394,2003 und DESY-03-161, hep-lat/0310028
- SPQCDR COLLABORATION**
- P. BOUCAUD et al.  
Matrix Elements Of Delta I = 3/2 K → PI PI Decays.  
DESY-03-161, hep-lat/0310028
- QCDSF-UKQCD COLLABORATION**
- D. GALLELY et al.  
Quark Spectra and Light Hadron Phenomenology from Overlap Fermions with Improved Gauge Field Action.  
DESY-03-161, hep-lat/0310028
- A.A. KHAN et al.  
Chiral Perturbation Theory and Finite Size Effects on the Nucleon Mass in Unquenched QCD.  
DESY-03-143, hep-lat/0309133
- ZERO COLLABORATION**
- M. GUAGNELLI et al.  
Nonperturbative Renormalization of Moments of Parton Distribution Functions.  
DESY-03-151, hep-lat/0309181
- Pion Parton Distribution Functions from LATTICE QCD.  
DESY-03-149, hep-lat/0309126
- LATTICE QCD: THE Case of Parton Densities.  
Eur. Phys. J. A17 (2003) 365-368
- A. ALI KHAN et al.  
Accelerating Hasenbusch's Acceleration of Hybrid Monte Carlo.  
DESY-03-142, hep-lat/0309078
- R. AMMENDOLA et al.  
Status of the APENEXT Project.  
Nucl. Phys. Proc. Suppl. 119:1038-1040,2003 und hep-lat/0211031
- M. AWRAMIK et al.  
Precise Prediction for the W-Boson Mass in the Standard Model.  
hep-ph/0311148
- L.S. BARABASCH et al.  
The 'IHEP-JINR Neutrino Detector' at Neutrino Beams of the U-70 Accelerator.  
Instrum. Exp. Tech. 46 (2003) 300-326,  
Prib. Tekh. Eksp. 46 (2003) 20-48
- K. BERKHAN et al.  
Observations on Cathode Aging (Malter effect) in Honeycomb Drift Chambers under High Irradiation Load.  
Nucl. Instr. Meth. A 515 (2003) 185
- Z. BERN, A. DE FREITAS, L. DIXON  
Two Loop Helicity Amplitudes for Quark Gluon Scattering in QCD and Gluino Gluon Scattering in Supersymmetric Yang-Mills Theory.  
JHEP 0306 (2003) 02 und DESY 03-034, hep-ph/304168,
- W. BIETENHOLZ et al.  
Extracting Physics from an Unphysical Situation: Light Mesons in a Small Box.  
DESY-03-128, physics/0309072
- J. BLÜMLEIN  
Algebraic Relations Between Harmonic Sums and Associated Quantities.  
DESY 03-134, hep-ph/031104
- J. BLÜMLEIN, H. BÖTTCHER  
New Polarized Parton Distributions.  
J. Phys. G29 (2003) 1959-1961
- J. BLÜMLEIN, H. KAWAMURA  
 $O(\alpha^2 L)$  Radiative Corrections to Deep Inelastic ep Scattering.  
Phys. Lett. B553 (2003) 242-250
- J. BLÜMLEIN, V. RAVINDRAN, W.L. van NEERVEN  
Twist-2 Heavy Flavor Contributions to the Structure Function  $g_2(x, Q^2)$ .  
Phys. Rev. D68 (2003) 114004 und DESY 03-49, hep-ph/0304292
- F. BODIN et al.  
The APENEXT Project.  
eConf C0303241:THIT005,2003 und hep-lat/0306018
- V. BORNYAKOV et al.  
Heavy Quark Potential in LATTICE QCD at Finite Temperature.  
Gargnano 2002, Quark confinement and the hadron spectrum 294-296 und hep-lat/0301002

- M. CASELLE, M. HASENBUSCH, M. PANERO  
Effective String Picture for Confinement at Finite Temperature:  
Theoretical Predictions and High Precision Numerical Results.  
DESY-03-122, hep-lat/0309147
- T. CHIRAPPA et al.  
Meson Correlation Functions in the Epsilon Regime.  
DESY-03-146, hep-lat/0309083
- G. COLANGELO, S. DÜRR  
The Pion Mass in Finite Volume.  
hep-lat/0311023
- P.H. DAMGAARD et al.  
Vector and Axial Vector Propagators in the Epsilon Regime of  
QCD.  
DESY-03-191, hep-lat/0309015
- A.I. DAVYDYCHEV, M.Y. KALMYKOV  
Massive Feynman Diagrams and Inverse Binomial Sums.  
hep-th/0303162
- M. DELLA MORTE  
Lattice HQET with Exponentially Improved Statistical Precision.  
hep-lat/0307021
- M. DUBININ, H.J. SCHREIBER, A. VOLOGDIN  
Measurement of the  $HZ\gamma$  Coupling at the Future Linear Collider.  
LC-PHYS-2003-004, EPJ C30, 337 (2003)  
und DESY 03-117, hep-ph/0302250
- S. DÜRR, C. HOELBLING  
Staggered Versus Overlap Fermions: A Study in the Schwinger  
Model with  $N(f) = 0, 1, 2$ .  
hep-lat/0311002
- B. FEUCHT, J.H. KÜHN, S. MOCH  
Fermionic and Scalar Corrections for the Abelian Form Factor at  
Two Loops.  
Phys. Lett. B561 (2003) 111-118 und DESY 03-021,  
hep-ph/0303016
- J. FLEISCHER, F. JEGERLEHNER, O.V. TARASOV  
A new Hypergeometric Representation of One-Loop Scalar Integrals in d Dimensions.  
Nucl. Phys. B672, 303 (2003) und hep-ph/0307113
- J. FLEISCHER et al.  
Electroweak One-Loop Corrections for  $e^+e^-$  Annihilation into  $t\bar{t}$   
Including Hard Bremsstrahlung.  
Eur. Phys. J. C31 (2003) 37  
und DESY-02-204, hep-ph/0302259
- A. GELLRICH et al.  
LATTICE QCD Calculations on Commodity Clusters at DESY.  
eConf C0303241:TUIT003,2003,  
eConf C0303241:TUIT002,2003,  
eConf C0303241:TUIT001,2003  
und DESY-03-073, physics/0306090
- S. GHIZZI, F. JEGERLEHNER  
Isospin Violating Effects in  $e^+e^-$  vs.  $\tau$  Measurements of the Pion  
form Factor  $|F_\pi|^2(s)$ .  
hep-ph/0310181
- J. GLUZA et al.  
Measuring the FSR-Inclusive  $\pi^+\pi^-$  Cross Section.  
Eur. Phys. J. C28, 261 (2003) und hep-ph/0212386
- M. GÖCKELER et al.  
Vacuum Polarization and the Muon G-2 in LATTICE QCD.  
DESY-03-141, hep-lat/0310027
- Hadron Spin Structure on the LATTICE.  
Nucl.Phys.Proc.Suppl.119:1038-1040,2003  
und hep-lat/0211031
- U. HAHN et al.  
Waveguide Monitors – a New Type of Beam Position Monitor for  
the TTF FEL.  
TESLA-FEL report 2003-04
- M. HASENBUSCH et al.  
Benchmarking Computer Platforms for LATTICE QCD Applications.  
DESY-03-145, hep-lat/0309149
- Full QCD Algorithms Towards the Chiral Limit.  
DESY-03-124, hep-lat/0310029
- J.N. HEDDITCH et al.  
Hybrid and Exotic Mesons from Flic Fermions.  
hep-lat/0309119
- J.M. HERNÁNDEZ, V. RYBNIKOV, F. SÁNCHEZ  
Offline Mass Data Processing using Online Computing Resources  
at HERA-B.  
Nucl. Instr. Meth. A 502 (2003) 471
- A. HOEFER et al.  
A Model-Independent Treatment of FSR in Low Energy  $\sigma_{had}$   
Measurements.  
hep-ph/0302258
- F. JEGERLEHNER, M.Y. KALMYKOV  
The  $O(\alpha\alpha_s)$  Correction to the Pole Mass of the t-Quark within  
the Standard Model.  
Nucl. Phys. B676, 365 (2004) und hep-ph/0308216
- F. JEGERLEHNER, M.Y. KALMYKOV, O. VERETIN  
 $\overline{MS}$  vs. Pole Masses of Gauge Bosons II: Two-Loop Electroweak  
Fermion Corrections.  
Nucl. Phys. B658, 49 (2003) hep-ph/0212319
- G. JORJADZE, G. WEIGT  
Correlation Functions and Vertex Operators of Liouville Theory.  
hep-th/0311202
- Zero Mode Problem of Liouville Field Theory.  
Theor. Mat. Fiz. in print.
- H. KAWAMURA et al.  
Transverse Momentum Distribution in B Mesons in the Heavy  
Quark Limit: Wandzura-Wilczek Limit.  
Mod. Phys. Lett. A18 (2003) 799–805
- J. KODAIRA H. YOKOYA  
Lepton Helicity Distributions in Polarized Drell-Yan Process.  
Phys. Rev. D67 (2003) 074008

- H. KOLANOSKI  
Summary of Session 3: Materials and Gases.  
Nucl. Instr. Meth. A 515 (2003) 152
- K. KOŁODZIEJ, F. JEGERLEHNER  
ee4f $\gamma$ : A Program for  $e^+e^-$  to 4f, 4f $\gamma$  with Nonzero Fermion Masses.  
hep-ph/0308014
- D.B. LEINWEBER et al.  
Observing Chiral Nonanalytic Behavior with Flic Fermions.  
nucl-th/0308083
- W. LOHMANN, S. RIEMANN  
Proc of the 23th Phys. in Collision, Editors,  
Zeuthen/D (2003)
- R. LORENZ et al.  
Cavity-type Beam Position Monitor for the SASE FEL at the  
TESLA Test Facility.  
TESLA-FEL report 2003-03
- V. MAKARENKO, K. MÖNIG, T. SHISHKINA  
Measuring the Luminosity of a  $\gamma\gamma$  Collider with  
 $\gamma\gamma \rightarrow l^+l^-\gamma$  Events.  
EPJdirect DOI: 10.1140/epjcd/s2003-01-011-7
- A. McDONALDS et al.  
Astrophysical Neutrino Telescopes.  
Review of Scientific Instr. 72, 2 (2004) 1  
und astro-ph/0311343
- K. MÖNIG et al.  
Physics of Electroweak Gauge Bosons.  
To appear in Linear Collider Physics in the New Millennium,  
edited by K. Fujii, D. Miller and A. Soni, World Scientific,  
hep-ph/0303023
- Y. MORI et al.  
Structure of the Bar Yonic Flux Tube in  
 $N(F) = 2$  LATTICE QCD at Finite Temperature.  
DESY-03-144, hep-lat/0309176
- Finite Temperature Phase Transition in LATTICE QCD with  
 $N(F)=2$  Nonperturbatively Improved Wilson Fermions at  $N(T)=8$ .  
Nucl. Phys. A 721 (2003) 930-933
- N.A. MOROZOV, H.J. SCHREIBER  
Magnetic Field Calculation for the Technical Proposal of the  
TESLA Spectrometer Magnet.  
Preprint E9-2003-65, JINR, 2003
- K.I. NAGAI et al.  
Simulations in the Epsilon Regime of Chiral Perturbation Theory.  
DESY-03-126, hep-lat/0309051
- Y. NAKAMURA et al.  
Finite Temperature Phase Transition in Full QCD with  $N(F) = 2$   
Flavors of Clover Fermion s at  
 $N(T) = 8$  and 10.  
DESY-03-117, hep-lat/0309144
- S. NECCO  
Universality and Scaling Behavior of RG Gauge Actions.  
hep-lat/0309017
- W.-D. NOWAK et al.  
DIS Structure Functions and the Double-Spin Asymmetry in  $\rho^0$   
Electroproduction within a Regge Approach.  
Phys. Rev. D67 (2003) 074014 und DESY 02-191,  
hep-ph/0211121
- P. PETRECZKY et al.  
Charmonium at Finite Temperature.  
DESY-03-119, hep-lat/0309012
- D. RICHTER, D. LIPKA  
Measurements of the Refractive Index of Silica Aerogel in Vacuum.  
Nucl. Instr. Meth. A513 (2003) 635
- V. SARGSYAN  
Cross-Talk Problems in Pill-Box Cavity.  
TESLA report 2003-01
- A. SCHREINER et al.  
Humidity Dependence of Anode Corrosion in HERA-B Outer  
Tracker Chambers Operated with Ar/CF<sub>4</sub>/CO<sub>2</sub>.  
Nucl. Instr. Meth. A 515 (2003) 146
- S. SHCHEREDIN et al.  
Random Matrix Theory and the Spectra of Overlap Fermions.  
DESY-03-127, hep-lat/0309030
- C. SPIERING  
High Energy Neutrino Astronomy: the Experimental Road.  
J. Nucl. Phys. G, Nucl. Part. Phys. 29 (2003) 843  
und astro-ph/0303068
- J. STEWART et al.  
Measurements of Atomic Recombination in the HERMES Polarized  
Hydrogen and Deuterium Storage Cell Target.  
Nucl. Instr. Meth. A496 (2003) 263
- The Storage Cell of the Polarized H/D Internal Target of the  
HERMES Experiment at HERA.  
Nucl. Instr. Meth. A496 (2003) 277
- The HERMES Polarized Atomic Beam Source.  
Nucl. Instr. Meth. A505 (2003) 633
- A Gas Analyzer for the Internal Polarized Target of the HERMES  
Experiment.  
Nucl. Instr. Meth. A508 (2003) 265
- J.M. ZANOTTI et al.  
Electromagnetic Form-Factors with Flic Fermions.  
DESY-03-157, hep-lat/0309186

**Veröffentlichte Vorträge**

**28th International Cosmic Ray Conference,  
Tsukuba/J (2003)**

AMANDA COLLABORATION

D. CHIRKIN  
Cosmic Ray Flux Measurement with AMANDA-II.

P. DESIATI  
Response of AMANDA-II to Cosmic Muons.

T. FESER  
Online Search for Neutrino Bursts from Supernovae with the AMANDA Detector.

H. GEENEN  
Atmospheric Neutrino and Muon Spectra Measured with the AMANDA-II Detector.

R. HARDTKE et al.  
Searching for High Energy Neutrinos from Gamma Ray Bursts with AMANDA.

T. HAUSCHILD, D. STEELE  
Search for Extraterrestrial Point Sources of Neutrinos with AMANDA-II.

G. HILL, M. LEUTHOLD  
Search for Diffuse Fluxes of Extraterrestrial Muon-Neutrinos with the Amanda Detector.

S. HUNDERTMARK  
AMANDA-B10 Limit in UHE Neutrinos.

L. KÖPKE  
Recent Results from the Amanda Neutrino Telescope.

M. KOWALSKI  
Search for High Energy Neutrinos of Allm. KLEIN  
Structure Functions at HERA – Status and Future.  
Nucl. Phys. B (Proc. Suppl.) 116 (2003) 91 Flavors with AMANDA-II.

M. KOWALSKI, A. GAZIZOV  
High Energy Neutrino Generator for Neutrino Telescopes.

P. OLBRECHTS  
Search for Muons from WIMP Annihilations in the Center of the Earth with the Amanda-B10 Detector.

W. WAGNER  
New Capabilities of the AMANDA-II High Energy Neutrino Detector.

#### AMANDA AND SPASE COLLABORATION

K. RAWLINS  
Measurement of the Cosmic Ray Composition at the Knee with the SPASE-2/AMANDA-B10 Detectors.

#### BAIKAL COLLABORATION

R. WISCHNEWSKI  
Results from the Baikal-Neutrino Telescope.  
astro-ph 0305302

#### IceCube COLLABORATION

S. YOSHIDA  
The IceCube High Energy Neutrino Telescope.

#### L3 COLLABORATION

M. UNGER  
Measurement of the Atmospheric Muon Spectrum from 20 to 200 GeV.

#### ALPHA COLLABORATION

F. KNECHTLI et al.  
Simulating the Schrödinger Functional with Two Pseudo-Fermions: Algorithmic Study and the Running Mass.  
hep-lat/0309074

J. ROLF et al.  
Towards a Precision Computation of  $F(B/s)$  in Quenched QCD.  
hep-lat/0309072

R. SOMMER et al.  
New Perspectives for B Physics from the Lattice.  
hep-ph/0309320

Large Cutoff Effects of Dynamical Wilson Fermions.  
hep-lat/0309171

#### AMANDA COLLABORATION

E. BERNARDINI  
Status of the AMANDA Experiment.  
zur Veröffentl. in Proc. on Incontro Nazionale di Astrofisica delle alte Energie, Rome/I (2003)

Results from the AMANDA Experiment.  
zur Veröffentl. in Proc. VLVNT Workshop,  
Amsterdam/NL (2003)

O. BOUHALI  
Search for Neutrino Point Sources with the Amanda Telescope.  
zur Veröffentl. in Proc. Int. Workshop on Astroparticle and High Energy Phys., Valencia/ES (2003)

N. BUDNEV et al.  
Measurement of Acoustic Noise in Lake Baikal.  
Workshop on Acoustic Neutrino and Highest Energy Shower Detection, Stanford/USA (2003)

P. DESIATI  
Neutrino Astronomy at the South Pole.  
zur Veröffentl. in Proc. on Rencontres de Physique,  
La Thuile/I (2003) und astro-ph/0306536.

R. HARDTKE  
The Amanda Search for High Energy Neutrinos from Gamma Ray Bursts.  
zur Veröffentl. in Proc. 2003 Gamma Ray Burst Sympos.,  
Mexico/USA (2003)

S. HUNDERTMARK  
Results from the Amanda Neutrino Telescope.  
Proc. of the 10th Int. Workshop on Neutrino Telescopes, Venice/I (2003) vol.II, 479

M. KOWALSKI  
Search for Exotic Particles with AMANDA.

Proc. of the 23th Phys. in Collision,  
Zeuthen/D (2003) 369

**K. KUEHN**

The Search for Muon Neutrinos from Gamma Ray Bursts with  
AMANDA B10 and AMANDA-II.  
zur Veröffentl. in Proc. TAUP 2003,  
Washington/USA (2003)

**P. NIJESSEN**

Recent Results from the AMANDA Experiment.  
zur Veröffentl. in Proc. 8th Rencontres de Moriond/F (2003) und  
astro-ph/0306209

**W. RHODE**

Latest Results from Amanda.  
zur Veröffentl. in Proc. EPS Conf., Aachen/D (2003)

**C. SPIERING**

Results from Amanda.  
zur Veröffentl. in Proc. BEYOND-2003, Ringberg/D (2003)

**M. STAMATIKOS**

Method for Detecting Neutrinos from Internal Shocks in GRB  
Fireballs with AMANDA.  
zur Veröffentl. in Proc. 2003 Gamma Ray Burst Sympos.,  
Santa Fe/USA (2003)

**P. STEFFEN**

AMANDA – Status and Results.  
zur Veröffentl. in Proc. TAUP 2003,  
Washington/USA (2003)

**BAIKAL COLLABORATION****I. BELOLAPTIKOV**

The Baikal Neutrino Experiment: Status and Beyond.  
zur Veröffentl. in Proc. 4th Int. Conf. on Nonaccelerator New  
Phys. (NANP) Dubna/RUS (2003)

**D. DJILKIBAEV**

The Baikal Neutrino Project: Status and Perspectives.  
zur Veröffentl. in Proc. BEYOND-2003, Ringberg/D (2003)

**C. SPIERING**

The Baikal Neutrino Telescope: Results, Plans, Lessons.  
zur Veröffentl. in Proc. VLVNT Workshop,  
Amsterdam/NL (2003)

The Baikal Experiment – Results and Plans.

zur Veröffentl. in Proc. TAUP 2003,  
Washington/USA (2003)

**CSSM LATTICE COLLABORATION****J.M. ZANOTTI et al.**

Spin 3/2 Nucleon and Delta Baryons in LATTICE QCD.  
Phys. Rev. D68 054506 (2003) und hep-lat/0304001

**DIK COLLABORATION****V.G. BORNYAKOV et al.**

Dynamics of Monopoles and Flux Tubes in Two Flavor Dynamical QCD.  
DESY-03-162, hep-lat/0310011

**H1 COLLABORATION****M. KLEIN**

Structure Functions at HERA – Status and Future.  
Nucl. Phys. B (Proc. Suppl.) 116 (2003) 91

**IceCube COLLABORATION****C. SPIERING**

The IceCube Project.  
zur Veröffentl. in Proc. VLVNT Workshop,  
Amsterdam/NL (2003)

**S. YOSHIDA**

The IceCube High Energy Neutrino Telescope.  
zur Veröffentl. in Proc. TAUP 2003,  
Washington/USA (2003)

**PAMELA COLLABORATION****R. WISCHNEWSKI**

The PAMELA Space Mission.  
zur Veröffentl. in Proc. 8th ICATPP Conf., Como/I (2003)

Status of the Flight Model Integration of the Space Telescope PAMELA.

zur Veröffentl. in Proc. 2th Int. Conf. on Particle and Fundamental Phys. in Space, Washington DC/USA (2003)

**QCDSF COLLABORATION****M. GÖCKELER et al.**

Generalized Parton Distributions from LATTICE QCD.  
DESY-03-051, hep-ph/0304249

Nucleon Electromagnetic Form-Factors on the LATTICE and in  
Chiral Effective Field Theory.  
DESY-03-032, hep-lat/0303019

**A.A. KHAN et al.**

Accelerating the Hybrid Monte Carlo Algorithm.  
Phys. Lett. B564 235-240 (2003)  
und DESY-03-040, hep-lat/0303026

**QCDSF-UKQCD COLLABORATION****T. BAKEYEV et al.**

Nonperturbative Renormalization and Improvement of the Local  
Vector Current for Quenched and Unquenched Wilson Fermions.  
DESY-03-062, hep-lat/0305014

## ZERO COLLABORATION

M. GUAGNELLI et al.

Continuous External Momenta in Nonperturbative Lattice Simulations: a Computation of Renormalization Factors.  
*Nucl. Phys.* B664 276-298 (2003)  
 und DESY-03-028, hep-lat/0303012

K. ABRAHAMYAN et al.

Transverse Emittance Measurements at the Photo Injector Test Facility at DESY Zeuthen (PITZ).  
*DIPAC 2003*, Mainz/D (2003)

M. AMARIAN

DVCS at HERMES.

Proc. of the 11th Int. Workshop on Deep Inelastic Scattering (DIS 2003), to be published, St. Petersburg/RUS (2003)

Measurement of DVCS on Nucleon and Nuclei.

Proc. of the 11th Int. Workshop on Deep Inelastic Scattering (DIS 2003), to be published, St. Petersburg/RUS (2003)

E.C. ASCHENAUER

Plans of the HERMES Experiment at HERA-II.

Proc. of New Trends in HERA Physics, to be published, Schloß Ringberg/D (2003)

R. ASSMANN et al.

Collimation at CLIC.

ICFA Advanced Beam Dynamics Workshop,  
 N.Y./USA (2003)

M. AWRAMIK, M. CZAKON, J. GLUZA

Matter to the Deepest.

27th Int. Conf. of Theor. Phys., Ustron/PL (2003)  
*Acta Phys. B34* (2003) 5193-5606

J. BAEHR et al.

Measurement of the Longitudinal Phase Space at the Photo Injector Test Facility at DESY Zeuthen.  
*DIPAC 2003*, Mainz/D (2003)

Measurement of the Longitudinal Phase Space at PITZ.

*FEL 2003*, Tsukuba/J (2003)

Optical Transmission Line for Streak Camera Measurements at PITZ.

*DIPAC 2003*, Mainz/D (2003)

R. BAKKER et al.

First Beam Measurements at the Photoinjector Test Facility at DESY Zeuthen.  
*NIM A507* (2003), 210

A.A. BELKOV, A.V. LANYOV, G. BOHM,

What we Have Learned from Direct CP Violation Studies in Kaon Decays.  
*Czech. J. Phys.* 53 (2003), Suppl. A und hep-ph/0311209

A. BIERNACIK et al.

Towards High Precision Predictions for Top Quark Pair Production and Decay at a Linear Collider.  
*Acta Phys. Polon.* B34 (2003) 5487  
 und DESY-03-178, hep-ph/0311097

W. BIETENHOLZ, K. JANSEN, S. SHCHEREDIN

Spectral Properties of the Overlap Dirac Operator in QCD.  
*JHEP* 0307:033 (2003) und DESY-03-070, hep-lat/0306022

J. BLÜMLEIN et al.

Application of Quantum Field Theory to Phenomenology.  
*Proc. of the 6th Int. Symp. (RADCOR 2002) and 6th Zeuthen Workshop, Staffelstein/D* (2002), *Nucl. Phys. B (Proc. Suppl.)* 116 (2003) 463 p

J. BLÜMLEIN, H. BÖTTCHER

Polarized Parton Distributions and QCD Analysis.  
*Nucl. Phys. A721* (2003) 333-335

J. BLÜMLEIN, H. KAWAMURA

NLL QED Corrections to Deep Inelastic Scattering.  
*Proc. of the DIS 2003* to appear und hep-ph/0309135

H. BÖTTCHER

NLO QCD Analysis of the Spin Structure Function  $g_1$ .

Proc. of the 10th Int. QCD Conf. (QCD03), to be published, Montpellier/F (2003)

I. BOHNET et al.

Dark Current Measurements at the PITZ RF-Gun.  
*DIPAC 2003*, Mainz/D (2003)

V. BORNYAKOV

The Profile of the Broken String in the Confined and Deconfined Phase in Full QCD.

*Nucl. Phys. Proc. Suppl.* 119 (2003) 712-714 Cambridge 2002, Lattice 712-714 und hep-lat/0212023

N. BUDNEV et al.

Measurement of Acoustic Noise in Lake Baikal.  
 Workshop on Acoustic Neutrino and Highest Energy Shower Detection, Stanford/USA (2003)

S. CAPITANI

LATTICE Perturbation Theory.

*Phys. Rept.* 382 113-302 (2003)  
 und DESY-02-185, hep-lat/0211036

M. CASELLE, M. HASENBUSCH, M. PANERO

String Effects in the 3-D Gauge Ising Model.  
 DESY-02-180, hep-lat/0211012

P.H. DAMGAARD et al.

Finite Size Scaling of Vector and Axial Current Correlators.  
*Nucl. Phys.* B656 226-238 (2003)  
 und DESY-02-178, hep-lat/0211020

S. DÜRR, M. DELLA MORTE

Exploring Two Non-Perturbative Definitions of  $c(A)$ .  
*hep-lat/0309169*

- D. DJILKIBAEV, A. GAZIZOV, C. SPIERING  
Comparison of OM Responses at Different Sites.  
zur Veröffentl. in Proc. VLVNT Workshop,  
Amsterdam/NL (2003)
- A. FINCH, H. NOWAK, A. SOPCZAK  
A Scalar Top Study with c-Quark Tagging at a Linear  
 $e+e-$  Collider.  
LC-PHSM-2003-075
- J. FLEISCHER, T. RIEMANN, O. TARASOV  
Analytic  $\epsilon$ -Expansion of the Scalar One-Loop Bhabha Box Function.  
Acta Phys. Polon. B34 (2003) 5345
- J. FLEISCHER, M. TENTYUKOV, O.V. TARASOV  
DIANA and Selected Applications.  
Nucl. Phys. Proc. Suppl. 116, 348 (2003)  
und hep-ph/0211209
- K. FLOETTMANN et al.  
Future Plans at the Photo Injector Test Facility at DESY Zeuthen.  
FEL 2003, Tsukuba/J (2003)
- A. FREITAS et al.  
Sfermion Precision Measurements at a Linear Collider.  
LC-PHSM-2003-019
- I.M. GREGOR  
HERMES Run II.  
Proc. of the Advanced Studies Institute: Symmetries and Spin, to  
be published, Prag/Cz (2003)
- I.M. GREGOR et al.  
A Silicon Strip Recoil Detector for Momentum Measurement and  
Tracking at HERMES (Poster).  
Proc. of the IEEE Nucl. Science Sympos. (NSS), to be published,  
Portland/USA (2003)
- T. HAHN et al.  
 $O(\alpha)$  Electroweak Corrections to the Processes  
 $e^+e^- \rightarrow \tau^-\tau^+$ ,  $c\bar{c}$ ,  $bb$ ,  $t\bar{t}$ : A Comparison.  
hep-ph/0307132
- M.V. HARTROTT et al.  
Experimental Characterization of the Electron Source at the Photo  
Injector Test Facility at DESY Zeuthen.  
PAC 2003, Portland/USA (2003)
- Characterization of the Electron Source at the Photo-Injector Test  
Facility at DESY Zeuthen.  
FEL 2003, Tsukuba/J (2003)
- M. HASENBUSCH, K. JANSEN  
Speeding up Lattice QCD Simulations with Clover Improved  
Wilson Fermions.  
Nucl. Phys. B659 299-320 (2003)  
und DESY-02-200, hep-lat/0211042
- R. HOFFMANN et al.  
Non-Perturbative Renormalization of the Axial Current with Im-  
proved Wilson Quarks.  
hep-lat/0309071
- H. ICHIE et al.  
Flux Tubes of Two and Three Quark System in Full QCD.  
Proc. of the 16th Int. Conf. on Particles and Nuclei  
(PANIC 02), Osaka/J (2002)  
Nucl. Phys. A721 899-902 (2003) und hep-lat/0212036
- The Flux Distribution of the Three Quark System in SU(3).  
Nucl. Phys. Proc. Suppl. 119 (2003) 751-753, Cambridge 2002,  
Lattice\* 751-753 und hep-lat/0301002
- K. JANSEN, K.-I. NAGAI  
Reducing Residual Mass Effects for Domain-Wall Fermions.  
JHEP 0312:038 (2003) und DESY-03-029, hep-lat/0305009
- F. JEGERLEHNER  
The Role of  $\sigma(e^+e^- \rightarrow \text{hadrons})$  in Precision Tests of the Standard  
Model.  
Prepared for Workshop on Hadronic Cross-Section at  
Low-Energy (SIGHAD03), Pisa/I (2003)  
und DESY-03-189, hep-ph/0312xxx
- Hadronic Vacuum Polarization Effects in  $\alpha_{em}(M_Z)$ .  
hep-ph/0308117
- Theoretical Precision in Estimates of the Hadronic Contributions  
to  $(g-2)_\mu$  and  $\alpha_{QED}(M_Z)$ .  
hep-ph/0310234
- F. JEGERLEHNER, M.Y. KALMYKOV  
 $O(\alpha\alpha_s)$  Relation Between Pole- and  $\overline{MS}$ -Mass of the  
t-Quark.  
Acta Phys. Polon. B34, 5335 (2003) und hep-ph/0310361
- F. JEGERLEHNER, M.Y. KALMYKOV, O. VERETIN  
Pole Masses of Gauge Bosons: 2 Loop Electroweak Corrections.  
Nucl. Instrum. Meth. A502, 618 (2003)
- Full Two-Loop Electroweak Corrections to the Pole Masses of  
Gauge Bosons.  
Nucl. Phys. Proc. Suppl. 116, 382 (2003)  
und hep-ph/0212003
- F. JEGERLEHNER, O. TARASOV  
FIRCLA, One-Loop Correction to  $e^+e^- \rightarrow v\bar{v}H$  and Basis of  
Feynman Integrals in Higher Dimensions.  
Nucl. Phys. Proc. Suppl. 116, 83 (2003) und hep-ph/0212004
- G. JORJADZE, G. WEIGT  
Quantisation of Gauged  $SL(2, R)$  WZNW Theories.  
Fortschr. Phys. 51 (2003) 753-758
- Joint Description of Periodic  $SL(2, R)$  WZNW Model and its  
Coset Theories.  
24th Int. Colloq. on Group Theor. Meth. In Phys.: GROUP-24:  
(ICGTM 2002), Paris/F und hep-th/0303130
- M. KLEIN  
Structure Functions at HERA – Status and Future.  
RADCOR02, Kloster Banz/D (2002),  
Nucl. Phys. Proc. Suppl. in print
- J. KODAIRA  
Nucleon Structure in QCD.  
Nucl. Phys. A721 (2003) 135–142

- D. KRÜCKER**  
Charmonium Production at HERA-B.  
11th Int. Workshop on Deep Inelastic Scattering (DIS 2003),  
St. Petersburg/ RUS (2003)
- P. LIEBING**  
Polarized Quark Distributions Extracted from Inclusive and Semi-Inclusive Deeply Inelastic Scattering at HERMES.  
Proc. of the Int. Europhys. Conf. on High Energy Physics (HEP 2003), to be published, Aachen/D (2003)
- W. LOHMANN**  
Physics Case and Detector of a Linear  $e^+e^-$  Collider.  
Int. School-Seminar on The actual Problems of microworld Physics,  
Gomel, Belarus/BY (2003)
- Instrumentation of the Very Forward Region of a Linear Collider Detector.  
Proc. of the IEEE Nuclear Science Symposium, Portland, Oregon/USA (2003)
- K.S. MCFARLAND, S. MOCH**  
Conventional Physics Explanations for the NuTeV  $\sin^2\theta_w$ .  
Proc. of the Workshop on Electroweak Precision Data and the Higgs Mass, DESY.  
DESY-PROC-2003-01, hep-ph/0306052
- S. MOCH, J. VERMASEREN, A. VOGT**  
Three-Loop Results and Soft-Gluon Effects in DIS.  
Proc. of the DIS 03 to appear  
und DESY 03-121, hep-ph/030905
- K. MÖNIG**  
Summary the Workshop: Electroweak Precision Data and the Higgs Mass.  
Proc. of the Workshop at Desy Zeuthen/D (2003),  
DESY-PROC-2003-01, 163 und hep-ph/0308133
- Electroweak Gauge Bosons and Alternative Theories.  
Proc. of the ECFA/DESY Workshop on linear colliders, Amsterdam/NL (2003) und hep-ph/0309021
- Studies of Electroweak Symmetry Breaking with a Linear Collider.  
Proc. of the plenary talk at QFTHEP,  
Wolga, Russia/UK (2003)
- K. MÖNIG, J. SEKARIC**  
A Study of Charged Current Triple Gauge Couplings at an  $e\gamma$  Collider.  
LC-PHSM-2003-072
- H. NIETO**  
Smuon Production at TESLA.  
LC-PHSM-2003-074
- W.-D. NOWAK**  
HERMES Run II.  
Proc. of the 4th Int. Conf. on Perspectives in Hadronic Physics,  
to be published, Trieste/I (2003)
- A. ROSCA**  
The Detector and Interaction Region of a Photon Collider at TESLA.  
EPS 2003, Aachen/D (2003), to be published in EPJC
- A. ROSCA, K. MÖNIG**  
Measurement of the Two Photon Decay Width at the TESLA Photon Collider.  
LC-PHSM-2003-084
- G. SCHNELL**  
Measuring Transversity at the HERMES Experiment.  
Proc. of the 11th Int. Workshop on Deep Inelastic Scattering (DIS 2003), to be published, St. Petersburg/RUS (2003)
- R. SOMMER**  
New Perspectives for B Physics from the Lattice.  
Proc of the 23th Physics in Collision, Zeuthen/D (2003) 151  
CERN, Genf/CH (2003) und hep-ph/0309320
- C. SPIERING**  
High Energy Neutrino Telescopes.  
Nuc. Phys. B (Proc.Suppl.) 125 (2003) 1
- Summary on Design Parameters, Simulation and Reconstruction.  
zur Veröffentl. in Proc. VLVNT Workshop,  
Amsterdam/NL (2003)
- J. STEWART**  
Measurement of the Polarized Parton Distribution Functions at HERMES.  
Eur. Phys. J. A18 (2003) 441–444
- The HERMES Recoil Silicon Detector.  
11th Int. Workshop on Vertex Detectors (VERTEX 2002), Kailua-Kona, Hawaii/USA (2002), Nucl. Instr. Meth. A511 (2003) 271-274
- J. VOLMER**  
DVCS an Nucleons and Nuclei.  
Proc. of the 8th Conf. on the Intersections of Particle and Nuclear Physics (CIPANA03), to be published, New York/USA (2003)
- I. WETZORKE**  
Thermal Dilepton Rates and In-Medium Hadron Properties from Lattice QCD.  
Proc. of the 7th Workshop on Quantum Chromodynamics, Villefranche-sur-Mer/F (2003)  
DESY-03-047, hep-lat/0305012
- M. zur NEDDEN**  
Measurement of the  $b\bar{b}$  Cross Section at HERA-B.  
Proc. of the 9th Int. Conf. on B-Physics at Hadron Machines/ BEAUTY 2003 Carnegie Mellon Univ. Pittsburgh, Pennsylvania/USA (2003)
- Vorträge**
- DPG Frühjahrstagung Teilchenphysik, Aachen/D (2003)**
- K. AFANASIEV et al.**  
Design of the TESLA Very Forward Calorimeter.
- E. BERNARDINI**  
Status of the Amanda Experiment.
- S. BÖSER**  
Untersuchungen zum akustischen Nachweis von hochenergetischen Teilchenschauern in Eis.

- T. HAUSCHILD T  
Punktquellsuche mit dem AMANDA-II Detektor.
- G. KLEMZ et al.  
Die Wechselwirkungszone eines  $\gamma\gamma$ -Colliders bei TESLA.
- M. KOPYTIN  
Bau eines Silizium Detektors für das Hermes Recoil Projekt.
- A. LORCA  
Complete  $\mathcal{O}(\alpha)$  Electroweak Corrections to the Process  $e^+e^- \rightarrow b\bar{b}(\gamma)$ .
- V. MILTCHEV  
Measurements at the Photo Injector Test Facility at DESY Zeuthen.
- K. MÖNIG, J. SEKARIC  
Measurement of TGC in  $e\gamma$  Collisions at TESLA.
- H. NIETO et al.  
Production of Smuons at TESLA Energies.
- A. ROSCA, K. MÖNIG  
Light Higgs Production at the TESLA Photon Collider.
- K. AFANACIEV  
Results on Diamond Sensors for the Very Forward Calorimeter.  
ECFA LC-Workshop, Montpellier/F (2003)
- M. AMARIAN  
An Overview of HERMES Results.  
Seminar der Univ. Bochum/D (2003)
- The HERMES Experiment: Challenges and Pitfalls.  
JLAB Seminar, Newport News/USA (2003)
- Discovery of the Pentaquark: Experimental Status.  
Seminar at the Univ. of Glasgow/UK (2003)  
DESY Zeuthen Seminar, Zeuthen/D (2003)  
DESY Forum, Hamburg/D (2003)
- E.C. ASCHENAUER  
Neuste Ergebnisse von HERMES.  
DPG, Frühjahrstagung on Hadronen und Kernes,  
Tübingen/D (2003)
- Spin Physics.  
CTEQ Summer School on QCD Analysis and Phenomenology,  
Sant Feliu de Guixols, Catalonia/E (2003)
- Physics with HERMES.  
DESY Summer Student Programme,  
Hamburg/D (2003)
- Plans of the HERMES Experiment at HERA-II.  
New Trends in HERA Physics, Schloß Ringberg/D (2003)
- E. BERNARDINI  
The AMANDA and IceCube Experiments.  
Gran Sasso Laboratory/I (2003)
- J. BLÜMLEIN  
The Theory of Deep Inelastic Scattering.  
Invited talk on the occasion of the emeritization of Prof. B. Geyer,  
Leipzig/D (2003)
- Results on Structure Functions on the Lattice and in the Continuum.  
Karlsruhe/D (2003)
- Research Activities of the Theory Group at DESY Zeuthen.  
Berlin/D (2003)
- Twist-2 Heavy Flavour Contributions to Polarized Structure Functions.  
St. Petersburg/RUS (2003)
- $O(\alpha^2 L)$  QED Corrections to Deep Inelastic ep Scattering.  
Upton/USA (2003)
- Polarized Parton Densities and QCD Analysis: A Review.  
Seattle/USA (2003)
- Mathematical Structure of Anomalous Dimensions and QCD Wilson Coefficients in Higher Order.  
Oberwölz/A (2003)  
Tsukuba/J (2003)
- Results in Perturbative Deep Inelastic Scattering.  
Berlin/D (2003)
- Algebraic Relations between Harmonic Sums and Related Quantities.  
Hiroshima/J (2003)
- 3 Introductory Lectures on QCD and the Parton Model.  
DESY Summer Student Programme, Zeuthen/D (2003)
- S. BÖSER  
Acoustic Detection of High Energy Particle Showers.  
Humboldt-Univ. Berlin/D (2003)
- I. BOHNET  
Der Photoinjektor Teststand bei DESY Zeuthen.  
Verwaltungsrat, Zeuthen/D (2003)
- The Photo Injector Test Facility at DESY Zeuthen.  
DESY Summer Student Programme, Zeuthen/D (2003)
- T. CHIARAPPA  
Investigation of the  $\epsilon$  Regime of ChPT: Meson Correlation Functions.  
4th Int. Workshop on CHIRAL DYNAMICS 2003: Theory and Experiment, Bonn/D (2003)
- A. DE FREITAS  
Two-Loop Helicity Amplitudes for  $2 \rightarrow 2$  Particle Scattering at Hadron Colliders.  
Erice/I (2003)
- M. DELLA MORTE  
Running Quark Mass in Two Flavor QCD.  
Bern/CH (2003)  
Milan/I (2003)
- Static Quarks with Improved Statistical Precision.  
Tsukuba/J (2003)  
Orsay/F (2003)
- Heavy Quarks on the Lattice. Non-Perturbative HQET and  $F_{B_s}$ .  
Southampton/UK (2003)

- Non-Perturbatively Renormalizing Fundamental Parameters of QCD.  
Berlin/D (2003)
- A. DONAT, J. MEISSNER  
Tätigkeitsprofil-Kompetenz-Partner.  
Tagung des HGF-Ausschusses Technische Dienste, Zeuthen/D (2003)  
Physikalisch-Technischen Bundesanstalt, Berlin/D (2003)
- D. DRACHENBERG et al.  
Measurement of the Charge Collection Distance in Diamond Sensors.  
Workshop on Instrumentation of the Very Forward Region, Cracow/PL (2003)
- U. DRUHAKOU  
Design and Expected Performance of a Crystal Forward Calorimeter.  
ECFA LC-Workshop, Amsterdam/NL (2003)
- Performance of LCal Using Real Beam Simulation.  
Workshop on Instrumentation of the Very Forward Region, Cracow/PL (2003)
- U. DRUHAKOU, W. LOHMANN  
Simulations with Realistic Beams.  
ECFA LC-Workshop, Montpellier/F (2003)
- S. DÜRR  
Selected Topics from Lattice 2002 (together with M. Hasenbusch).  
Zeuthen/D (2003)
- The Pion Mass in Finite Volume.  
Bern/CH (2003)  
Bonn/D (2003)
- Towards a Lattice Determination of QCD Low-Energy Constants.  
Bielefeld/D (2003)  
Trento/I (2003)  
Münster/D (2003)  
Marseille/F (2003)
- Exploring Two Non-Perturbative Definitions of  $c_A$ .  
Tsukuba/J (2003)
- Non-Perturbative HQET and  $F_B$  on the Lattice.  
Berlin/D (2003)
- Staggered Versus Overlap Fermions: a Study in the Schwinger Model with  $N_f = 0, 1, 2$ .  
Paris/F (2003)  
Edinburgh/UK (2003)
- F. ELLINGHAUS  
Generalized Parton Distributions and Measurements of Deeply-Virtual Compton Scattering at HERMES.  
LBL Seminar, Berkeley/USA (2003)
- I. EMELIANTCHIK  
Hardware Status of Forward Calorimeters.  
Worldwide Calorimeter and Forward Detector Project Day, Montpellier/F (2003)
- A. FINCH, H. NOWAK, A. SOPCZAK  
New Scalar Top Studies Using SIMDET.  
ECFA LC-Workshop, Amsterdam/NL (2003)
- A New Scalar Top Study with c-Quark Tagging.  
ECFA LC-Workshop, Montpellier/F (2003)
- J. GLUZA  
Process  $e^+e^- \rightarrow e^+e^-$  to Two-Loop Level in QED.  
Berlin/D (2003)
- Tree and One-Loop Tests of the Minimal LR-Symmetric Model.  
Amsterdam/NL (2003)
- Fitting Safely Some Nonstandard Models.  
Warsaw/PL (2003)
- J. HERNANDEZ  
The HERA-B Online Calibration and Alignment System.  
13th IEEE Nuclear and Plasma Science Symposium, Real Time Conf., Montreal/CAN (2003)
- K.-H. HILLER  
Basic Properties of the Magnetic Spectrometer Proposed for Precise Beam Energy Measurement.  
Energy Spectrometer Meeting, DESY Zeuthen/D (2003)
- I. HRISTOVA  
Testbeam Results on the First Prototype for the HERMES Silicon Recoil Detector.  
35. Herbstschule für Hochenergiephysik, Maria Laach/D (2003)
- K. JANSEN  
The LATFOR Initiative In Germany.  
Vortrag First ILDG Workshop, Edinburgh/GB (2002)
- Lattice Gauge Theory and High Performance Computing.  
Vortrag bei CHEP03, San Diego/USA (2003)
- Introduction into SciParC.  
Vortrag beim SciParC Workshop, Orsay/F (2003)
- Structure Functions on the Lattice.  
Plenarvortrag bei QCD and Hadron Structure, Durham/USA (2003)
- The SciParC Integrated Project.  
Plenarvortrag beim Informationstag der EU, Brüssel/B (2003)
- The NIC Research Group Elementary Particle Physics.  
Vortrag beim NIC WR, Jülich/D (2003)
- Progress in Lattice Gauge Theory.  
Kolloquium Karlsruhe/D (2003)
- Actions for Dynamical Fermion Simulations, are we Ready to go?  
Plenarvortrag bei Lattice 2003, Tsukuba/J (2003)
- Lattice Field Theory: Solving Non-Perturbative Problems on Supercomputers.  
Abendvortrag Maria Laach/D (2003)
- Lattice Gauge Theory and High Performance Computing.  
Vortrag Koordinierungsausschuss Höchstleistungsrechnen, Köln/D (2003)

- F. JEGERLEHNER  
Präzisionstests des Standardmodells der Elementarteilchen.  
Vorlesungen Humboldt-Univ. Berlin/D (2003)
- Das Anomale Magnetische Moment des Myons – neue Physik jenseits des Standardmodells ?  
Univ. Bielefeld/D (2002)
- Hadronic Vacuum Polarization Effects in  $\alpha_{em}(M_Z)$ .  
Mini-Workshop on Electroweak Precision Data and the Higgs Mass, DESY Zeuthen/D (2003)
- Theoretical Problems of HADRONIC CROSS SECTION Measurements at Low Energies.  
TARI program 2003, LNF/INFN, Frascati/I (2003)
- Theoretical Precision in Estimates of Hadronic Contributions to  $(g-2)_\mu$  and  $\alpha_{em}(M_Z)$ .  
Photon 2003, LNF/INFN Frascati/I (2003)
- Two-Loop Correction to Pole Masses in the SM.  
Arbeitstreffen des SFB/TR9, Humboldt-Univ.  
Berlin/D (2003)
- Yukawa in the Electroweak SM: Fermion Masses and Mixing Structure.  
Graduiertenkolleg, Klausurtagung on Flavor physics,  
Lohmen/D (2003)
- Precision Tests of the Standard Model.  
Workshop on hadronic cross sections (SIGHAD03),  
Pisa/I (2003)
- Steps Towards full Two-Loop Calculations for 2 Fermion to 2 Fermion Processes.  
9th Intern. Workshop on Advanced Computing ACAT03, Tsukuba/J (2003)
- G. JORJADZE  
Liouville Theory.  
Lecture, Int. Workshop on Gauge Fields and Strings,  
Yerevan/Armenia (2003)
- Vertex Operators and Correlation Functions of Liouville Theory.  
Wernsdorf/D (2003)
- S-Matrix, Vertex Operators and Correlation Functions of Liouville Theory.  
Golm/D (2003)
- H. KAWAMURA  
Introduction to Soft-Collinear Field Theory.  
Kyoto/J (2003)
- NLL QED Corrections to Deep DIS in Mixed Variables.  
Miyazaki/J (2003)
- M. KLEIN  
Structure Functions at HERA – Status and Future.  
RADCOR02, Kloster Banz/D (2002)
- Towards a Letter of Intent for Future eN Scatt Measurements with H1 at HERA.  
Summary of the Int. Workshop on HERA III, DESY Zeuthen/D (2003), to be published
- Proton Structure Functions and  $\alpha_s$  at HERA.  
Int. Workshop on QCD, Montpellier/F (2003), to be published
- Future eN Measurements at HERA – Two Letters of Intent.  
Int. Workshop on QCD, Montpellier/F (2003), to be published
- Inclusive Neutral Current Scattering at HERA and  $\alpha_s$ .  
DESY Forum on QCD and Parton Distributions, DESY Hamburg/D (2003)
- Physics with H1 at HERA II.  
Int. Workshop on Physics at HERA,  
Ringberg Castle/D (2003), to be published
- HERA III and Experimentation Off-Site DESY.  
KET Meeting, DESY/D (2003)
- The H1 Experiment.  
Meeting of Funding Agencies of the HERA Experiment's, DESY/D (2003)
- Structure Functions from HERA and the LHC.  
Int. Workshop on Precision Physics at the LHC,  
Binn/CH (2003)
- G. KLEMZ  
Studies for the Laser Cavity for the Proposed  $\gamma\gamma$ -Collider at TESLA.  
ECFA LC-Workshop on Status of the laser cavity,  
Amsterdam/NL (2003)
- J. KODAIRA  
B Meson Light Cone Wavefunctions in the Heavy Quark Limit.  
Leipzig/D (2003)
- K. KOUSNETZOVA  
Luminosity and Beam Calorimeter Report.  
ECFA LC-Workshop, Amsterdam/NL (2003)
- First Results from Silicon and Diamond Sensors.  
Workshop on Instrumentation of the Very Forward Region, Amsterdam/NL (2003)
- K. KOUSNETZOVA et al.  
Electrical Features of Diamond Sensors.  
Workshop on Instrumentation of the Very Forward Region, Cracow/PL (2003)
- M. KOWALSKI  
Search for High Energy Neutrinos of All Flavors with AMANDA II.  
Workshop on Methods for Open Water/Ice Neutrino Telescopes,  
Chiba/J (2003)  
DESY, Hamburg/D (2003)  
Humboldt-Univ. Berlin/D (2003)  
Univ. Würzburg/D (2003)  
Univ. Erlangen/D (2003)
- ANIS: Neutrino Generator for Neutrino Telescopes.  
Workshop on Methods for Open Water/Ice Neutrino Telescopes,  
Chiba/J (2003)
- Searching for a Flux of High Energy Neutrinos with AMANDA.  
LBNL, Berkeley/USA (2003)  
Univ. Santa Cruz/USA (2003)

- Detecting Miniature Black Holes: from AMANDA to LHC.  
Humboldt-Univ. Berlin/D (2003)
- R. KWEE et al.  
Extracting Beam Parameters from LCAL Energy Distributions.  
ECFA LC-Workshop, Montpellier/F (2003)
- W. LANGE  
Silicon Projects in Zeuthen.  
Workshop on Instrumentation of the Very Forward Region, Cracow/PL (2003)
- T. LASTOVICKA  
Structure Function Measurements and what They Tell us about PDFs and the Strong Coupling Constant.  
LLWI2003, Lake Louise/CAN (2003)
- Measurement of F2 and FL at Low Q2 in ep Interactions at HERA.  
Proc. of the Session: Hard QCD,  
EPS2003, Aachen/D (2003)
- H. LEICH et al.  
A Non-Hierarchical Interlock Design for the TESLA RF System.  
13th IEEE-NPSS Real Time Conf. 2003,  
Montreal/CAN (2003).
- M. LEUTHOLD  
The Amanda Neutrino Telescope: Status and Results.  
MPI München/D (2003)  
LBNL, Berkeley/USA (2003)  
LANL, Los Alamos/USA (2003)
- A. LIAPINE  
The Beam Position Monitor for the Energy Spectrometer.  
Energy Spectrometer Meeting, DESY Zeuthen/D (2003)
- Status of the Beam Position Monitor for the Energy Spectrometer.  
Energy Spectrometer Meeting, Dubna/RUS (2003)
- P. LIEBING  
Hermes, Pythia, and the Gluon Polarization.  
4th Circum-Pan-Pacific Symposium, on High Energy Spin Physics (PACSPIN 2003), Univ. of Washington,  
Seattle/USA (2003)
- E. LOBODZINSKA  
A Determination of  $F_L$  at Low Q2.  
Proc. of the 11th Int. Workshop on Deep Inelastic Scattering (DIS 2003) Session: Structure Functions, low-x and Diffraction
- Structure functions at low Q2.  
Proc. of the 23th Int. Symposium on Multiparticle Dynamics, Cracow/PL (2003) To appear in Acta Physica Polonica. Session: Structure functions
- W. LOHMANN  
Forward Calorimetry, Detector Plenary Report.  
ECFA LC-Workshop, Amsterdam/NL (2003)
- Overview of Forward Calorimetry R&D and Plans.  
ECFA LC-Workshop, Montpellier/F (2003)
- Instrumentation of the Very Forward region of a Linear Collider Detector.  
ECFA LC-Workshop, Montpellier/F (2003)
- Physics Case of a Linear  $e^+e^-$  Collider and Status of the TESLA Project.  
Colorado Univ. Boulder/USA (2003)
- Physics with a Linear  $e^+e^-$  Collider in the Energy Range up to 1 TeV.
- Physics at the Future Colliders, Workshop, UNESCO Regional Bureau for Science in Europe and Georgian Academy of Sciences, Tbilisi/GEO (2003)
- Elementarteilchen, Dunkle Materie und Ursprung der Masse.  
BTU Cottbus/D (2003)
- Introduction to Electroweak Physics.  
DESY Summer Student Programme, Zeuthen/D (2003)
- Elementarteilchenphysik und Kosmologie.  
Vorlesung WS 03/04 BTU Cottbus/D (2003)
- A. LORCA  
Complete  $\mathcal{O}(\alpha)$  Massive Corrections to Bhabha Scattering and Automatization with aITALC.  
Montpellier/F (2003)
- Complete  $\mathcal{O}(\alpha)$  Electro-Weak Corrections to  $f\bar{f}$  Production at LC; Automatization with DIANA.  
Dubna/RUS (2003)
- V. MILTCHEV  
Beam Measurements at PITZ.  
Humboldt-Univ., Berlin/D (2003)
- Recent Measurements at PITZ.  
BESSY-Seminar, Berlin/D (2003)
- S. MOCH  
Deep-Inelastic Structure Functions at NNLO and Beyond.  
Ringberg/D (2003)
- Status of Three-Loop Splitting Functions.  
CERN/CH (2003)
- Highlights of DIS 2003.  
St. Petersburg (Theory), Hamburg/D (2003)
- Deep-Inelastic Structure Functions at NNLO.  
Aachen/D (2003)
- K. MÖNIG  
Physics at TESLA and the LHC.  
Lecture at the Univ. Milano/I (2003)
- Gauge Boson Couplings at Present and Future Colliders.  
Particle Physics seminar at the Univ. Rostock/D (2003)
- Studies of Electroweak Symmetry Breaking with a Linear Collider.  
Particle Physics seminar at the Univ. Vienna/A (2003)
- $e^+e^-$  Physics, from LEP to TESLA.  
DESY Summer Student Programme, Zeuthen/D (2003)
- Elementarteilchenphysik  
Vorlesung WS 02/03 Univ. Leipzig/D (2003)
- K. MÖNIG, J. SEKARIC  
Measurement of TGC in  $e\gamma$  Collisions at TESLA.  
ECFA LC-Workshop, Amsterdam/NL (2003)

- W Couplings at an TESLA  $e\gamma$  Collider.  
ECFA LC-Workshop, Montpellier/F (2003)
- TGC at Photon Collider  $e\gamma$ -mode.  
Electroweak group meeting, CERN/CH (2003)
- H. MOLKE  
Improved Meson Interpolating Fields in the Schrödinger Functional.  
Zeuthen/D (2003)
- R. NAHNHAUER  
Geräusche kosmischer Neutrinos im Eis der Antarktis?  
Univ. Erlangen/D (2003)
- Cosmic Neutrino Sound in Water and Antarctic Ice?  
APC HENA-Workshop, Paris/F (2003)
- Acoustic Neutrino Detection in Antarctic Ice?  
Workshop on Acoustic Neutrino and Highest Energy Shower Detection, Stanford/USA (2003)
- Acoustic Neutrino Detection in Water and Ice?  
Univ. and FZ Karlsruhe/D (2003)
- T. NAUMANN  
Physics at HERA 2.  
Workshop on Small x Physics and Diffraction, Fermilab, Chicago/USA (2003) Published on CD
- Der Urknall und die Bausteine der Welt.  
Industrie-Verein, Potsdam/D (2003)
- The Standard Model of Elementary Particles and their Interactions.  
Vorlesungsreihe Struktur der Materie III, International Physics Studies Programme, Physikalische Fakultät der Univ. Leipzig/D (2003)
- S. NECCO  
Scaling Behavior of SU(3) Lattice Yang–Mills Theory.  
Southampton/UK (2003)
- Universality and Scaling Behavior of SU(3) Lattice Yang–Mills Theory.  
Marseille/F (2003)
- H. NOWAK  
SUSY at Linear Colliders – What Can we Detect and Measure?  
Lecture, Linear Collider Physics School 2003,  
Ambleside/UK (2003)
- Präzisionsmessungen in der Teilchenphysik oder warum 2 + 2 ungefähr 4 ist.  
Vortrag innerhalb der Wissenschaftstage am Gymnasium Eichwalde/D (2003)
- W.-D. NOWAK  
Selected Recent Results from HERMES.  
4th Circum-Pan-Pacific Symposium on High Energy Spin Physics (PACSPIN 2003), Univ. of Washington, Seattle/USA (2003)
- A. OPPELT  
The Zeuthen Photo Injector Test Facility, Extended Scientific Council.  
Zeuthen/D (2003)
- D. PLEITER  
Evaluation of Lattice QCD Computing Platforms.  
LatFor-Treffen, Darmstadt/D (2003)
- apeNEXT: a Multi-TFlops Computer for Elementary Particle Physics.  
ParCo 2003, Dresden/D (2003)
- Introduction to International Lattice Data Grid.  
LatFor-Workshop, Münster/D (2003)
- apeNEXT: a Multi-TFlops Computer for Lattice QCD Workshop, Ferrara/I (2003)
- Code Optimization on apeNEXT.  
Bielefeld/D (2003)
- T. RIEMANN  
Das Teilprojekt B1: Produktion massiver Teilchen.  
Karlsruhe/D (2003)
- Electroweak Radiative Corrections to 2–Fermion Production at Linear Collider Energies.  
Upton/USA (2003)
- Towards Automated use of DIANA–Progress Report and Applications.  
Tsukuba/J (2003)
- A. ROSCA  
Higgs Physics at a Photon Collider: Machine and Physics.  
Dienstagsseminar at RWTH Aachen/D (2003)
- A. ROSCA, K. MÖNIG  
Light Higgs Production at the TESLA Photon Collider.  
ECFA LC-Workshop, Amsterdam/NL (2003)
- G. SCHNELL  
Status and Prospects of the Transverse Target Run at HERMES.  
ESOP, Topical Workshop on Single-Spin Asymmetries, Amsterdam/NL (2002)
- Measurement of Transversity at HERMES.  
4th Circum-Pan-Pacific Symposium, on High Energy Spin Physics (PACSPIN 2003), Univ. of Washington, Seattle/USA (2003)
- Study of New Quark Distributions in the Nucleon by HERMES.  
Autumn Meeting of the Physical Society of Japan, Miyazaki/J (2003)
- H.J. SCHREIBER  
The Energy Spectrometer for TESLA.  
ECFA/DESY Workshop, Amsterdam/NL (2003)
- The Energy Spectrometer – Status Report.  
ECFA/DESY Workshop, Montpellier/F (2003)

- Energy Measurements at the LC.  
Energy Spectrometer Meeting, DESY Zeuthen/D (2003)
- Radiative Return Events for Energy Measurements.  
Energy Spectrometer Meeting, Dubna/RUS (2003)
- J. SEKARIC**  
Measurement of Trilinear Gauge Couplings in  $e\gamma$  Collisions.  
Humboldt-Univ., Berlin/D (2003)
- W Couplings at an TESLA  $e\gamma$  Collider.  
Cargese school of Physics and Cosmology, Cargese/F (2003)
- Measurement of TGC at an TESLA  $e\gamma$  Collider.  
Seminar at Institute of Nuclear Sciences,  
Belgrade/YU (2003)
- J. SEKARIC et al.  
Results for the proposed  $\gamma\gamma$ -Collider at TESLA.  
ECFA LC-Workshop on  $\gamma\gamma$  technology results from Zeuthen,  
Montpellier/F (2003)
- A. SHINDLER**  
Nonperturbative Renormalization of Moments of Parton Distribution Functions.  
41th Int. Universitätswochen für Theoretische Physik on Flavor Physics, (2003)
- Parton Distribution Functions on the Lattice.  
SFB/TR Meeting at Humboldt-Univ. Berlin/D (2003)
- R. SOMMER**  
Large Cutoff Effects of Dynamical Wilson Fermions.  
Tsukuba/J (2003)
- Actions for Lattice QCD.  
Münster/D (2003)
- Lattice QCD.  
Bonn/D (2003)
- C. SPIERING**  
Baikal, Amanda, IceCube.  
ApPEC PRC open session, München/D (2003)
- Abenteuer und Forschung am Südpol.  
Gymnasium Perleberg/D (2003)
- URANIA, Berlin/D (2003)
- Reihe „Potsdamer Köpfe“, Potsdam/D (2003)
- Amanda and IceCube: Results and Plans.  
Nestor Inst., Pylos/GR (2003)
- The Baikal Experiment: Status and Results.  
APC HENA-Workshop, Paris/F (2003)
- Neutrino-Astrophysik: Entdeckungsreise in das unsichtbare Universum.  
Festvortrag FZK, Karlsruhe/D (2003)
- Bericht zur Arbeit des ApPEC PRC.  
Treffen Astroteilchenphysik, Karlsruhe/D (2003)
- Neutrino Astrophysics.  
CERN School, Zeuthen/D (2003)
- A km<sup>3</sup> Detector in the Mediterranean: Summary of Arguments,  
Status, Recommendations.  
ApPEC PRC, Amsterdam/NL (2003).
- Physics Benchmark Parameters for a km<sup>3</sup> Detector.  
VLVNT Workshop, Amsterdam/NL (2003)
- Einführung in die Relativitätstheorie.  
6 Doppelstunden, Gymnasium Perleberg/D (2003)
- Cosmology and Astroparticle Physics.  
DESY Summerstudent Programme, Zeuthen/D (2003)
- A. STAHL**  
A New Design of the Forward Region of TESLA.  
ECFA LC-Workshop, Amsterdam/NL (2003)
- A First Investigation of the Impact of a Crossing Angle on TESLA Physics.  
ECFA LC-Workshop, Amsterdam/NL (2003)
- Precision Luminosity Measurement at TESLA.  
ECFA LC-Workshop, Amsterdam/NL (2003)
- Physik mit tau Leptonen.  
Kolloquium an der Univ. Karlsruhe/D (2003)
- Photon-Photon Kollisionen mit TESLA.  
Kolloquium an der Univ. Dortmund/D (2003)
- Physics and Detectors for Future Linear Colliders.  
ICFA school on instrumentation, Rio de Janeiro/BR (2003)
- Experimentalphysik IV, Atom-, Kern- und Teilchenphysik.  
Vorlesung SS Univ. Potsdam/D (2003)
- F. STEPHAN**  
Current Status at PITZ.  
TESLA Meeting, Frascati/I (2003)
- The Photo Injector Test Facility at Zeuthen.  
DESY MAC Meeting, Hamburg/D (2003)
- The Photo Injector Test Facility at DESY Zeuthen.  
Wissenschaftlicher Ausschuss, Hamburg/D (2003)
- Progress at PITZ.  
TESLA Meeting, Hamburg/D (2003)
- PITZ: Development of Optimized Photo Injectors for VUV and X-Ray FELs.  
ESC Subcommittee Meeting, Hamburg/D (2003)
- M. UNGER**  
Measurement of the Atmospheric Muon Spectrum with L3+C.  
FZK, Karlsruhe/D (2003)
- A. VANDENBROUCKE**  
A Recoil Detector for the HERMES Experiment.  
EURESCO Conf. on Hadron structure viewed with electromagnetic Probes, Santorini/G (2003)
- M. WALTER**  
Elementarteilchen aus dem Kosmos.  
Lehrerfortbildung, Zeuthen/D (2003)

M. WALTER, A. SPIRIDONOV  
Poster Presentation: Results of the HERA-B Experiment.  
Int. Europhys. Conf. on High Energy Physics,  
Aachen/D (2003)

G. WEIGT  
The SL(2,R) WZNW Model and its Coset Theories.  
Berlin/D (2003)

Liouville Field Theory.  
8th Int. Wigner Symp., New York/USA (2003)

R. WISCHNEWSKI  
Early Neutrino Telescopes: Baikal and Amanda.  
Festvortrag Marseille/F (2003).

H. WISSING  
Search for High Energy Cosmic Neutrinos with AMANDA and  
IceCube.  
Max Planck Inst. für Phys., München/D (2003)

E. ZAITI  
Berechnung von Schleifenkorrekturen am Beispiel von  
DIANA für Bhabha- und Moeller-Streuung.  
Maria Laach/D (2003)

### Dissertationen

M. KOWALSKI  
Search for Neutrino-Induced Cascades with Amanda-II.  
Humboldt-Univ. Berlin/D (2003)

T. LASTOVICKA  
Measurement of the Inclusive Deep Inelastic Scattering Cross  
Section at low Q<sub>2</sub>.  
Humboldt-Univ. Berlin/D (2003)

A. LIAPINE  
Strahllagemonitore für das TESLA-Energiespektrometer.  
Humboldt-Univ. Berlin/D (2003)

S. NECCO  
The Static Quark Potential and Scaling Behavior of SU(3) Lattice  
Yang–Mills Theory.  
Humboldt-Univ. Berlin/D (2003), DESY-THESIS-2003-016

V. SARGSYAN  
Cavity–Beam Position Monitor for the TESLA–Cryomodule.  
Cross–Talk Minimization.  
Humboldt-Univ. Berlin/D (2003)

I. TSURIN  
The Backward Silicon Track Trigger for the HERA Experiment  
H1.  
Humboldt-Univ. Berlin/D (2003)

M. UNGER  
Measurement of the Momentum Spectrum of Atmospheric Muons  
with the L3 Detector.  
Humboldt-Univ. Berlin/D (2003)

### Diplomarbeiten

M. COLOVIC  
Study of the Forward Silicon Tracker Performance in the H1  
Experiment at HERA.  
Univ. Podgorica, Serbia and Montenegro/YU (2003)

J. KRETZSCHMAR  
A Trigger with the BST-PAD Detector for the H1 Experiment.  
Humboldt-Univ. Berlin/D (2003)

O. TARASOVA  
Investigation of the Polarisation of Charmonium States in Proton–  
Nucleus Interactions at Proton Energies of 920 GeV Using the  
HERA-B Detector.  
Moscow State Univ., Moscow/RUS (2003)

### Interne Berichte

M. AMARIAN  
Observation of an Exotic Baryon Resonance with S=+1 at  
HERMES.  
HERMES Internal Report 03-013 (2003)

M. AMARIAN, A. AIRAPETIAN  
Summary of the Pentaquark Search at HERMES.  
HERMES Internal Report 03-018 (2003)

E.C. ASCHENAUER et al.  
Report on Monte Carlo Studies for a HERMES C3 Collimator.  
HERMES Internal Report 03-035 (2003)

S. BERNREUTHER et al.  
Manual for Rich PID Program.  
HERMES Internal Report 03-003 (2003)

U. ELSCHENBROICH, G. SCHNELL, R. SEIDL  
Single-Spin Azimuthal Asymmetries in SIDIS off a Transversely  
Polarized Proton Target – MC Studies.  
HERMES Internal Report 03-007 (2003) HERMES Internal Report  
03-008 (2003)

I.M. GREGOR et al.  
Test–Beam Results of the First Prototype for the HERMES Silicon  
Recoil Detector.  
HERMES Internal Report 02-053 (2002)

M. KARPENKO, A. SPIRIDONOV  
Effects of Matching on Signals and Backgrounds.  
HERA-B 03-019 (Software 03-05)

P. LIEBING  
Contribution of Diffractive Events to the Semi-Inclusive Data.  
HERMES Internal Report 03-020 (2003)

G. MEDIN  
Exclusive Hadron Production at HERA-B.  
HERA-B 03-060 (Physics 03-023)

# Bereich Beschleuniger

## Veröffentlichungen

V. AYVAZYAN et al.

Study of the Statistical Properties of the Radiation from a VUV SASE FEL Operating in the Femtosecond Regime.  
Nucl. Instr. Meth. A 507 (2003) 368

A. BAKKER et al.

First Beam Measurements at the Photo Injector Test Facility at DESY Zeuthen.  
Nucl. Instr. Meth. A 570 (2003) 210

W. BREFELD et al.

Scheme for Time-Resolved Experiments Based on the Use of Statistical Properties of the Third Harmonic of the SASE FEL Radiation.  
Nucl. Instr. Meth. A 507 (2003) 431

M. DOHLUS, K. FLÖTTMANN, O.S. KOZLOV, T. LIMBERG, P. PIOT, E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV  
Start-to-End Simulations af SASE FEL at the TESLA Test Facility, Phase I.  
DESY 03-197 (2003)

H.S. DUMAS, J.A. ELLISON, M. VOGT

First Order Averaging for Maps with Applications to Beam Dynamics in Particle Accelerators.  
DESY 03-169 (2003)

B. FAATZ et al.

VUV FEL Driven RF Gun.  
Nucl. Instr. Meth. A 507 (2003) 350

J. FELDHAUS, M. KÖRFER, T. MÖLLER, J. PFLÜGER, E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV  
Two-Color FEL Amplifier for Femtosecond-Resolution Pump-Probe Experiments with GW-Scale X-Ray and Optical Pulses.  
DESY-03-091 (2003)

Efficient Frequency Doubler for the Soft X-Ray SASE-FEL at the TESLA Test Facility.  
DESY-03-092 (2003)

G. GELONI, J. BOTMANN, M. de WIEL, M. DOHLUS, E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV  
Transverse Self-Interactions within an Electron Bunch in an Arc of a Circle (generalized).  
DESY-03-44 (2003)

G. GELONI, E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV  
A Method for Ultrashort Electron Pulse-Shape Measurement Using Coherent Synchrotron Radiation.  
DESY-03-031 (2003)

Misconceptions Regarding the Cancellation of Self-Forces in the Transverse Equation of Motion for an Electron in a Bunch.  
DESY-03-165 (2003)

C. GERTH et al.

Bunch Length and Phase Stability Measurements at the TESLA Test Facility.  
Nucl. Instr. Meth. A 507 (2003) 335

G.H. HOFFSTAETTER, M. VOGT, F. WILLEKE  
Experience with the HERA Beams.  
ICFA Beam Dynamics Newsletter No. 30 (2003)

M.G. MINTY, F. ZIMMERMANN  
Measurement and Control of Charged Particle Beams.  
Springer, Berlin/D (2003)

Model Independent Analysis of Beam Dynamics in Accelerators.  
SLAC-PUB-7909, Stanford/USA (2003)

E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV  
The Free Electron Laser Klystron Amplifier Concept.  
DESY-03-108 (2003)

S. SCHREIBER  
Luminosity Expectations for Electron Electron Collisions at TESLA.  
Int. J. Mod. Phys. A 18 (2003) 2827

Performance of the TTF Photoinjector for FEL Operation.  
The Physics and Applications of High Brightness Electron Beams.  
World Scientific (2003) ISBN 981-238-726-9

W.SINGER, H.-G. BROKMEIER, W. YE  
Texture Investigation of Nb/Cu Rings.  
GeNF Experimental Report 2002, Geesthacht/D (2003)

W. SINGER, X. SINGER, H. WEN  
Influence of Interstitials on Properties of High Purity Niobium for RF Cavities.

X. SINGER  
High Purity Niobium for TESLA Test Facility.  
Materiaux&Techniques No. 7-8 (2003)

## Veröffentlichte Vorträge

**Proc. of the 2003 Particle Accelerator Conference (PAC2003), Portland/USA (2003)**

V. AYVAZYAN, P. CASTRO, R. KAMMERING, H. SCHLARB, S. SCHREIBER, J. SEKUTOWICZ, S. SIMROCK, M. WENDT, M. HÜNING, M. FERRARIO  
Bunch-to-Bunch Energy Stability Test of the Nb Prototypes of the TESLA Superstructure.

V. AYVAZYAN, K. REHLICH, S. SIMROCK  
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J.-P. CARNEIRO  
Emittance Growth due to the Field Asymmetry in the TTF RF Gun.

J.-P. CARNEIRO, S. SCHREIBER, D. EDWARDS, I. GONIN  
Experimental Studies of RF Breakdowns in the Coupler of the TTF RF Gun.

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Steps Towards X-Ray Sources Based on Linac-Driven Free-Electron Lasers.

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P. CASTRO, A. GÖSSEL, S. SCHREIBER, M. WENDT, G. DEVANZ, N. BABOI, J. SEKUTOWICZ

Analysis of HOM Damping with Modulated Beam in the First Prototype of Superstructure.

G. CIOVATI, P. KNEISEL, G. MYNENI, J. SEKUTOWICZ, A. BRINKMANN, W. SINGER, J. HALBRITTER

Preliminary Studies of Electric and Magnetic Field Effects in Superconducting Niobium Cavities.

A. DROZHDIN et al.

Comparison of the TESLA, NLC and CLIC Beam-Collimation System Performance.

K. FLÖTTMANN, YUJONG KIM, T. SHINTAKE, H. KITAMURA, P. EMMA, D. SON, Y. KIM

Tolerances of TTF II First Bunch Compressor.

M. v. HARTROTT et al.

Experimental Characterization of the Electron Source at the Photo Injector Test Facility at DESY Zeuthen.

K. HONKAVAARA, A. BRENGER, R. FISCHER, D. NÖLLE, K. REHLICH, L. ACCIOTTI, M. CASTELLANO, L. CATANI, A. CIANCHI, G. di PIRRO, M. RAPARELLI, R. SORCHETTI  
Design of OTR Beam Profile Monitors for the TESLA Test Facility , Phase 2 (TTF II).

K. HONKAVAARA, S. SCHREIBER, C. GERTH, P. PIOT  
Electron Bunch Shape Measurements at the TTF FEL.

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Measurement of the Beam Energy Spread in the TTF Photo-Injector.

J.-P. JENSEN, W. MERZ

Light Triggered Thyristor Crowbar for Klystron Protection Application.

YUJONG KIM, T. SHINTAKE, H. KITAMURA, D. SON, Y. KIM

On the Realistic Gain Estimation of the CSR Microbunching Instability in Bunch Compressors.

V. PTITSYN, J. KEWISCH, B. PARKER, S. PEGGS, D. TRBOJEVIC, D.E. BERKAEV, I.A. KOOP, A.V. OTBOEV, YU.M. SHATUNOV, C. TSCHALAER, F. WANG, J.B. v.d. LAAN, D.P. BARBER

Electron-Ion Collisions at RHIC Using a High Intensity Self-Polarizing Electron Ring.

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Simulations of the Static Tuning for the TESLA Linear Collider.

D. SCHULTE, N. WALKER, G. WHITE

Simulations of the TESLA Linear Collider with a Fast Feedback System.

J. SEKUTOWICZ, A. GÖSSEL, G. KREPS, S. ZHENG

Active HOMs Excitation in the First Prototypes of Superstructure.

J. SEKUTOWICZ, P. KNEISEL, C. THOMAS, G. WU, S. ZHENG  
A Superstructure for High Current FEL Application.

J. SEKUTOWICZ et al.

Cold- and Beam Test of the First Prototypes of the Superstructure for the TESLA Collider. S. SIMROCK, G. PETROSYAN, A. FACCO, V. ZVIAGINTSEV, S. ANDREOLI, R. PAPARELLA  
First Demonstration of Microphonic Control of a Superconducting Cavity with a Fast Piezoelectric Tuner.

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Recent Progress with the HERA Lepton-Proton Collider.

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Superconducting RF Structures – Test Facilities and Results.  
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A Model of ATL Ground Motion for Storage Rings.

### Proc. of the 11th Workshop on RF Superconductivity, SRF 2003, Travemünde/D (2003)

T. EBELING, R. BANDELMANN, K. ESCHERICH, N. KRUPKA, A. MATHEISEN, B. PETERSEN, N. STEINHAU-KÜHL, F. ZHU  
Processing of TTF-Cavities at DESY. Poster

P.D. GALL, A. GOESSEL, V. GUBAREV

A Database for Superconducting Cavities for the TESLA Test Facility.

J. HAO, D. RESCHKE, A. BRINKMANN, L. LILJE

Low Temperature Heat Treatment Effect on High-Field EP Cavities.

A. HOFLER, J. DELAYEN, C. HOVATER, S. SIMROCK

RF System Modeling for the JLAB 12 GeV Upgrade and RIA.

G. ISSAROVITCH, D. PROCH, X. SINGER, D. RESCHKE, W.

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Development of Centrifugal Barrel Polishing for Treatment of Superconducting Cavities.

I. ITO, K. SAITO, H. INOUE, W. SINGER

Hot Roll Bonding Method for Nb/Cu Clad Seamless SC Cavities.

K. KOWALSKI, A. BERNASIK, W. SINGER, X. SINGER, J. CAMRA  
In Situ XPS Investigation of the Baking Effect on the Surface Oxide Structure Formed on Niobium Sheets Used for Superconducting RF Cavity Production.

L. LILJE, E. KATO, K. SAITO, T. SUZUKI, D. KOSTIN, W.-D. MÖLLER, R. LANGE, J. ESCHKE, D. RESCHKE, S. SIMROCK, P. SCHMÜSER, D. PROCH, A. MATHEISEN, P. SEKALSKI, A. BOSOTTI, R. PAPARELLA  
High Gradient Experiments in Electropolished TESLA Multi-Cell Cavities.

L. LILJE, J. HAO, A. MATHEISEN, D. RESCHKE, K. TWAROWSKI, B. HENKEL  
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L. LILJE, D. RESCHKE, K. TWAROWSKI  
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J. LORKIEWICZ, T. FADINA, A. BILINSKI, J. SOBCZAK, J. KULA, S. PSZONA, Z. YU  
Characteristics of TiN Anti-Multipactor Layers Reached by Titanium Vapor Deposition on Alumina Coupler Windows.

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Quality Control at the TTF-Cleanroom Infrastructure for Cavity Processing. Poster

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Process Control and Web Based Software Set-Up for the DESY Electropolishing Infrastructure.

G. MUELLER, B. MUELLER, F. KALDASCH, D. RESCHKE, D. PROCH  
Influence of Metal Particle Contaminations of the DC Filed Emission of Niobium.

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Electropolishing at DESY. Poster

J. SEKUTOWICZ et al.  
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J. SEKUTOWICZ et al.  
CW Energy Recovery Operation of XFELs.

J. SEKUTOWICZ, P. KNEISEL, G. WU  
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Activities at DESY with High Gradient Superconducting RF Cavities for e+/e- Linear Accelerators.

K. ZAPFE, U. HAHN, M. HESSE, H. REMDE  
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High Field Multipacting of 1.3 GHz TESLA Cavity.

**Proc. of the DIPAC 2003, Mainz/D (2003)**

K.H. BAKSHETYAN, N.M. DOBROVOLSKI, M.R. MAILIAN, H.E. SOGOHONYAN, I.E. VASINIUK, K. WITTENBURG  
First Experimental Results and Improvements on Profile Measurements with the Vibrating Wire Scanner.

K. KNAACK et al.  
Cryogenic Current Comparator for Absolute Measurement of the Dark Current of the Superconducting Cavities for TESLA.

M. KÖRFER, H. HENSCHEL, J. KUHNHENN, F. WULF  
Optical Fibre Dosimeter for SASE FEL Undulators.

G. KUBE  
Smith-Purcell Radiation in View of Particle Beam Diagnostics.

D. NÖLLE, P. GÖTTLICHER, R. NEUMANN, D. PUGACHOV, K. WITTENBURG, M. WENDT, M. WERNER, H. SCHLARB, M. STAACK, M. DESMONS, A. HAMDI, M. JABLONKA, M. LOUNG, H. SCHLARB  
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M. SEEbach, M. WERNER, H. FRANZ, A. EHNEs  
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M. WENDT, S. SCHREIBER, P. CASTRO, A. GÖSSEL, M. HÜNING, G. DEVANZ, M. JABLONKA, C. MAGNE, O. NAPOLY, N. BABOI  
Beam Based HOM Analysis of Accelerating Structures at the TESLA Test Facility LINAC.

M. WERNER  
Timing Sickesses in Control Systems: Causes, Cure and Prevention.

**Proc. of the TESLA Collaboration Workshop, Hamburg/D (2003)**

S. CHOROBA  
Status of Modulators and Klystrons.

T. KAMPS et al.  
R&D towards a Laser Based Beam Size Monitor for the FLC.

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Another Crazy Idea of a LC Dump Compared to the Water Dump Design.

### M. SCHMITZ

High Power Water Beam Dump for a LC (e.g. TESLA 800). Latest Status and News.

### Proc. of the 9th Biennial International Conference on Accelerator and Large Experimental Physics Control Systems (ICALEPCS 2003), Gyeongju/Südkorea (2003)

### M. CLAUSEN

Industrial and Collaborative Control Systems – A Complementary Symbiosis.

JoiMint Life Demo Poster – Interoperability from Control Systems to Electronic Lodbooks.

M. CLAUSEN, N. YAMAMOTA, M. KRAIMER, H. SHOAEE, L. DALESIO  
EPICS-2010 – A Visionary Look at the Evolution of a Collaborative Control Toolkit.

P. DUVAL, E. VOGEL, J. WILGEN, H.G. WU, V. SOLOVIEV  
Diagnostic System of Longitudinal Proton Beam Dynamics in HERA.

P. DUVAL, H.G. WU, M. KADUNC, J. KAMENIK, I. KRIZNAR, G. PAJOR, A. PUCELJ, G. TKACIK, I. VERSTOVSEK, D. VITAS  
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R. KAMMERING, O. HENSLER, K. REHLICH, E. SOMBROWSKI  
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### Proc. of the Cryogenic Engineering Conference CEC/ICMC 2003, Anchorage/USA (2003)

### K. JENSCH, R. LANGE, B. PETERSEN

Numerical Simulations for the Cool-Down of the X-FEL and TTF Superconducting Linear Accelerators.

H. LIERL, E. GADWINKEL, H. HERZOG, D. NOTZ, J. SCHAFFRAN, B. SCHOENEBURG  
Cryogenics for a 5 Tesla Superconducting Solenoid with Large Aperture at DESY.

### Proc. von diversen Workshops und Konferenzen (2003)

D.E. BERKAEV, A.V. OTBOEV, Yu.M. SHATUNOV, R. MILNER, C. TSCHALAER, F. WANG, B. PARKER, V. PTITSYN,

### D.P. BARBER

Status of the e-Ring Design for the EIC.  
Proc of the 15th Internatl. Spin Physics Symposium, Upton/USA (2003)

### S. CHOROBA

The TESLA RF-System.  
in: S. Gold, G. Nusinovich: High Density and High Power HF, AIP Conf. Proc. Vol 691, pp. 1-14 (2003) Inv. talk

### J.A. ELLISON, M. VOGT

A New Model for the 2D.o.F. Collective Beam-Beam Interaction.  
Proc. of HALO03, ICFA Advanced Beam Dynamics Workshop, Montauk/USA (2003)

J.A. ELLISON, H. SCOTT DUMAS, M. SALAS, A. SOBOL, T. SEN, M. VOGT  
Weak-Strong Beam-Beam: Averaging and Tune Diagrams.  
Proc. of the ICFA Advanced Beam Dynamics Workshop on the Beam-Beam Interaction (2003)

### S. HERB

Device Emulation as a Collaborative Tool.  
Third Workshop on Communication Tools for a Global Accelerator Network (COTOGAN 2003), Trieste/I (2003)

### S. SIMROCK

The RF Control System for the European X-FEL.  
XII IEEE-SPIE Symposium on Photonics and Web Engineering, Wilga/PL (2003)  
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W. SINGER, X. SINGER, J. TIESSEN, H.M. WEN, F. SCHÖLZ  
RRR Degradation and Gas Absorption in the Electron Beam Welding Area of High Purity Niobium.  
1st Internatl. Workshop on Hydrogen in Materials and Vacuum Systems, Newport News/USA (2003)

### K. WITTENBURG

Beam Tail Measurements by Wire Scanners.  
Proc. of HALO03, ICFA Advanced Beam Dynamics Workshop, Montauk/USA (2003)

### U. HAHN, M. HESSE, H. REMDE, K. ZAPFE

A New Cleaning Facility for Particle Free UHV-Components. Proc. of the 8th European Vacuum Conf., Berlin/D (2003)

### K. ZAPFE

Running Experience with the Vacuum System of the Superconducting Linac of the TESLA Test Facility.  
Proc. of the 8th European Vacuum Conf., Berlin/D (2003)

## Vorträge

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VDE-Vortrag, TU Hamburg-Harburg, Hamburg/D (2003)

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Seminar, Oak Ridge/USA (2003)

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F.-R. KAISER, S. CHOROBA, S. SIMROCK, X. TAO 150 kV Direct Switch Longpulse Modulator. Workshop der IEEE Nuclear and Plasma Science Section, Hamburg/D (2003)	Optical Smith-Purcell Radiation from 75-keV Electrons. VIth Symposium on Radiation from Relativistic Particles in Periodic Structures, Tomsk/RU (2003)
R. KAMMERING, K. REHLICH Electronic Logbook. SLAC, Palo Alto/USA (2003)	W. SINGER, I. JELEZOV, V. POUNTOUS, X. SINGER, P. KNEISEL Fabrication of Seamless Superconducting Cavities by Hydroforming. 6th European Conference on Applied Superconductivity, Sorrento/I (2003)
G. KUBE Calculation of Smith-Purcell Radiation from a Strip Grating. Optical Smith-Purcell Radiation from 75-keV Electrons. VIth Symposium on Radiation from Relativistic Particles in Periodic Structures, Tomsk/RU (2003)	W. SINGER Performance of Seamless Cavities and Fabrication Experience. 11th Workshop on RF Superconductivity SRF 2003, Travemünde/D (2003)
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D. NÖLLE Diagnostics at TTF II. Inv. talk, BESSY, Berlin/D (2003)	X. SINGER High Purity Niobium for TESLA Test Facility. International Conference on High Purity Metals UHPM 2003, Saint Etienne/F (2003)
FEL für Fußgänger. Inv. talk, Zeuthen/D (2003)	A. VUKOLOV, Yu. ADISHCHEV, A. POTYLITSYN, G. KUBE Optical Smith-Purcell Radiation from 75-keV Electrons. VIth Symposium on Radiation from Relativistic Particles in Periodic Structures, Tomsk/RU (2003)
Overview on Diagnostic Systems. TTF2 Review Meeting, Salzau/D (2003)	S. WILKE The Status of PETRA III. 7th European Synchrotron Light Source (ESLS) RF Meeting, Karlsruhe/D (2002)

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DESY Technical Note 01-03  
Monte Carlo Simulations of Emittance Measurements at TTF2.  
DESY Technical Note 03-03  
S. IVANOV, O. LEBEDEV, R. WAGNER  
Upgrading Noise Performance of 52 MHz RF Cavity No. B in the HERA-p Machine.  
DESY Technical Note 2003-02

**Interne Berichte**

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Bodenvibrationen bei DESY und Umgebung.  
DESY M 03-04  
R. WANZENBERG  
Simulation of Electron Cloud Effects in the PETRA Positron Storage Ring.  
DESY M 03-02

**DESY-TESLA Berichte**

D. ALESINI, F. MARCELLINI, P. RAIMONDI  
RF Deflectors Design for TESLA Damping Ring.  
DESY-TESLA 2003-27  
G. ARNAUD, G. DI BARTOLO, A. ROBEIRI, M. ROCH  
TESLA HF Couplers: Outgassing of Copper Plated AISI 304L Samples.  
DESY-TESLA 2003-14  
J. BAEHR, I. BOHNET, J.H. HAN, M. KRASILNIKOV, D. LIPKA, V. MILTCHEV, A. OPPELT, B. PETROSSYAN, F. STEPHAN, J.-P. CARNEIRO, K. FLÖTTMANN, O. KREBS, S. SCHREIBER, M. V. HARTROTT, F. MARHAUSER

Behavior of the TTF2 RF Gun with Long Pulses and High Repetition Rates.  
DESY-TESLA 2003-33  
V. BALANDIN, R. BRINKMANN, K. FLÖTTMANN, N. GOLUBEVA  
Studies of Electromagnetic Cascade Showers Development in the TESLA Main Linac Initiated by Electron Field Emission in RF Cavities.  
DESY-TESLA 2003-10

V. BALANDIN, K. FLÖTTMANN, N. GOLUBEVA, M. KÖRFER  
Studies of the Collimator System for the TTF Phase 2.  
DESY-TESLA 2003-17

K.L.F. BANE, P. EMMA, Z. LI, M. ROSS  
Beam Loading Generated by the LOLA-IV Structure in TTF-II.  
DESY-TESLA 2003-24

M. BRUNKEN, H. GENZ, C. HESSLER, H. LOOS, A. RICHTER, P. GÖTTLICHER, M. HÜNING, H. SCHLARB, S. SIMROCK, P. SCHMÜSER, D. SUETTERLIN, M. TONUTTI, D. TÜRKE  
Electro-Optic Sampling at the TESLA Test Accelerator: Experimental Setup and First Results.  
DESY-TESLA 2003-11

A. BURGHART, S. SIMROCK  
FPGA Based RF Control.  
DESY-TESLA 2003-16

J.P.CARNEIRO, S. SCHREIBER, D. EDWARDS, I. GONIN  
Experimental Observation of Breakdowns in the Fermilab RF Gun G4.  
DESY-TESLA 2003-13

T. CZARSKI, R.S. ROMANIUK, K.T. POZNIAK, S. SIMROCK  
Cavity Control System, Advanced Modeling and Simulation for TESLA Linear Accelerator.  
DESY-TESLA 2003-06

Cavity Control System, Essential Modeling for TESLA Linear Accelerator.  
DESY-TESLA 2003-08  
Cavity Control System, Models Simulation for TESLA Linear Accelerator.  
DESY-TESLA 2003-09

Cavity Digital Control Testing System by Simulink Step Operation Method for TESLA Linear Accelerator and Free Electron Laser.  
DESY-TESLA 2003-20  
Cavity Control System – Optimization Methods for Single Cavity Driving and Envelope Detection.  
DESY-TESLA 2003-21

T. CZARSKI, K. POZNIAK, R. ROMANIUK, S. SIMROCK  
TESLA Cavity Modeling and Digital Implementation with FPGA Technology Solution for Control System Purpose.  
DESY-TESLA 2003-28  
J. GAO  
Theoretical Analysis on the Limitation from the Nonlinear Space Charge Forces to TESLA Damping Ring.  
DESY-TESLA 2003-12

Analytical Estimation of Dynamic Apertures Limited by the Wigglers in Storage Rings.

DESY-TESLA 2003-15

S.B. VAN DER GEER, O.J. LUITEN, M.J. DE LOOS, G. PÖPLAU, U. VAN RIENEN

3D Space-Charge Model for GPT Simulations of High-Brightness Electron Bunches.

DESY-TESLA 2003-04

M. IVANYAN, V. TSAKANOV

Analytical Treatment of Resistive Wake Potentials in Round Pipe.

DESY-TESLA 2003-25

G. PÖPLAU, U. VAN RIENEN, B. VAN DER GEER, M. DE LOOS

Multigrid Algorithms for the Fast Calculation of Space-Charge Effects in Accelerator Design.

DESY-TESLA 2003-31

G. PÖPLAU, U. VAN RIENEN, M. DE LOOS, B. VAN DER GEER

A Multigrid Based 3D Space-charge Routine in the Tracking Code GPT.

DESY-TESLA 2003-03

K.T. POZNIAK, T. CZARSKI, R. ROMANIUK

Functional Analysis of DSP Blocks in FPGA Chips for Application in TESLA LLRF System.

DESY-TESLA 2003-29

K.T. POZNIAK, R.S. ROMANIUK, K. KIERZKOWSKI

Parameterized Control Layer of FPGA Based Cavity Controller and Simulator for TESLA Test Facility.

DESY-TESLA 2003-30

P. RUTKOWSKI, R. ROMANIUK, K. POZNIAK, T. JEZYNSKI, P. PUCYCY, M. PIETRUSINSKI, S. SIMROCK

DESY-TESLA 2003-32

V. SARGSYAN

Cross-Talk Problem in Pill-Box Cavity.

DESY-TESLA 2003-01

W. SINGER, X. SINGER, J. TIJSSSEN, H.M. WEN, F. SCHÖLZ  
RRR Degradation and Gas Absorption in the Electron Beam Welding Area of High Purity Niobium.

DESY-TESLA 2003-07

T. WEILAND, I. ZAGORODNOV

The Short-Range Transverse Wake Function for TESLA Accelerating Structure.

DESY-TESLA 2003-19

W.M. ZABOLOTNY, K.T. POZNIAK, R.S. ROMANIUK, T. CZARSKI, I.M. KUDLA, K. KIERZKOWSKI, T. JEZYNSKI, A. BURGHARDT

Design and Simulation of FPGA Implementation of RF Control System for TESLA Test Facility.

DESY-TESLA 2003-05

W.M. ZABOLOTNY, T. CZARSKI, T. JEZYNSKI, K.T. POZNIAK, P. RUTKOWSKI, R.S. ROMANIUK, K. BUNKOWSKI, S. SIMROCK

FPGA Based Cavity Simulator for TESLA Test Facility.  
DESY-TESLA 2003-22

W.M. ZABOLOTNY, P. ROSZKOWSKI, K. POZNIAK, R.S. ROMANIUK, K. KIERZKOWSKI, S. SIMROCK  
Distributed Embedded PC Based Control and Data Acquisition System for TESLA Cavity Controller and Simulator.  
DESY-TESLA 2003-34

I. ZAGORODNOV, T. WEILAND, K. BANE  
Numerical Calculation of Small-Angle Collimator Wakefields for Short Bunches.  
DESY-TESLA 2003-18

I. ZAGORODNOV, T. WEILAND, M. DOHLUS, M. KÖRFER  
Near-Wall Wakefields for Optimized Geometry of TTF 2 Collimator.  
DESY-TESLA 2003-23

### **DESY-TESLA-FEL Berichte**

M. DOHLUS

Two Methods for the Calculation of CSR Fields.  
DESY-TESLA-FEL 2003-05 (2003)

U. HAHN, T. KAMPS, R. LORENZ, W. RIESCH, H.J. SCHREIBER, F. TONISCH  
Waveguide Monitors – a New Type of Beam Position Monitors for the TTF FEL.  
DESY-TESLA-FEL 2003-04

T. KHABIBOULLINE, N. SOLYAK, R. WANZENBERG  
Higher Order Modes of a 3RD Harmonic Cavity with an Increased End-Cup Iris.  
DESY-TESLA-FEL 2003-01

R. LORENZ, S. SABAH, H.J. SCHREIBER, H. WALDMANN  
Cavity-Type Beam Position Monitors for the SASE FEL at the TESLA Test Facility.  
DESY-TESLA-FEL 2003-03

E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV  
Longitudinal Space Charge Driven Microbunching Instability in TTF2 Linac.

R. LORENZ, S. SABAH, H.J. SCHREIBER, H. WALDMANN  
Cavity-Type Beam Position Monitors for the SASE FEL at the TESLA Test Facility.  
DESY-TESLA-FEL 2003-02

### **Strahlenschutz**

#### **Interne Berichte**

N. TESCH  
Ergebnisse von Strahlenschutzmessungen am DESY im Jahre 2002.  
Interner Bericht D3-99

# **Zentrale Dienste**

## **Bibliothek und Dokumentation**

### **Vortrag**

D. SCHMIDT

Die Vergütung der Büchereiangestellten des gehobenen Dienstes nach dem BAT.

HGF-Arbeitskreis Bibliotheks- und Informationsmanagement, Stuttgart/D (2003)

### **Diplomarbeit**

S. VON FINTEL

Die Bibliothek des DESY Zeuthen (Institut für Hochenergiephysik) als Informationseinrichtung.

Hochsch. Angew. Wissensch. Hamburg/D (2003)

DESY L-03-01

### **Seminararbeit**

A. STANDHAFT

Wissensmanagement in Großforschungseinrichtungen.

FH Köln/D (2003)

DESY L-03-02

## **Elektronikentwicklung**

### **Veröffentlichungen**

K. HANSEN, C. RECKLEBEN

Dynamic Behavior of the Charge-to-Voltage Conversion in Si-Drift Detectors with Integrated JFETs.

IEEE Trans. Nucl. Sci. 50 (2003) 1718–1724

K. HANSEN

Thermal performance of a 61-cell Si-drift detector module with thermoelectric cooler.

Nucl. Instr. Meth. A 517 (2004) 254–263

K. HANSEN

Si-Array Drift Detector System for X-ray Spectroscopy and Imaging Applications.

Annual Report 2002 Part I, HASYLAB, Hamburg (2003) 77–80

K. HANSEN, C. RECKLEBEN

Spectral Peak Shift of Si-Drift Detectors with Integrated JFETs.

IEEE Trans. Nucl. Sci., eingereicht 2003

### **Veröffentlichter Vortrag**

M. REINECKE et al.

A Silicon Strip Detector for Momentum Measurement and Tracking at HERMES.

Proc. IEEE Nucl. Sci. Symp. NSS 2003, Portland/USA (2003) N26-5

### **Vorträge**

K. HANSEN

Si-Drift Detector Project: Overview and Experience.  
Workshop Detect. Develop. Synchr. Rad. & HEP Applic., DESY, Hamburg/D (2003)

V. GLAW, K.-D. LANG, O. EHRMANN, K. HANSEN, A. FERBER, M. SCHNEIDER-RAMELOW

Hochwertige Aufbau- und Gehäusetechnik für ein SDD-Array in der Röntgen-Spektoskopie.

MEMS/Sensor Workshop 2003, FhG-IZM, Chemnitz/D (2003)

## **Servicezentrum Mechanik (ZM)**

### **Vorträge**

J. DICKE

Wissenschaftlicher Gerätebau - Entwicklung und Trends

HGF-Ausschuß Technische Dienste

DESY Zeuthen (21.05.2003)

C. MARTENS

Status of the TTF-2 Collimator Section

TTF2 Review Meeting

Landeskulturzentrum Schloß Salzau (21.01.2003)

T. STOYE

Mögliche Anwendungen von RPT im Rahmen des TESLA-Projekts  
Gründungsveranstaltung der Rapid Prototyping Netzwerk-Gruppe  
Hamburger Hochschulen

DESY Hamburg (08.01.03)

## **Informationstechnologie**

### **Veröffentlichte Vorträge**

Proc. of Computing in High-Energy and Nuclear Physics (CHEP'03), La Jolla/USA (2003)

A. BROKMANN

Monitoring Systems and Services.

M. ERNST

D'Cache – A Versatile, Generic Cache Layer between Applications and Tertiary Storage – Review, Status and Outlook.

F. GAEDE LCIO – A persistency framework for linear collider simulation studies.	M. GASTHUBER Handling Petabytes in a Grid World. Treffen des Arbeitskreises ZKI, Hamburg/D (2003)
A. GELLRICH Lattice QCD Calculations on Commodity Clusters at DESY.	V. GÜLZOW et al Zur D-Grid-Initiative aus Desy-Sicht. 1. Treffen der D-Grid-Initiative, Bonn/D (2003)

### Vorträge

#### Computing in High Energy Physics Seminar DESY

R. BALTRUSCH  
XP and .NET – the New Windows World at DESY.

U. ENSSLIN  
Future Perspectives of Linux at DESY.

M. ERNST  
The US CMS Grid.

A. GELLRICH  
Grids@DESY.

K. OHRENBERG  
IPv6 – The New Internet Protocol.

#### Spring HEPiX-HEPNT, Amsterdam/NL (2003)

R. BALTRUSCH  
Progress of the DESY Windows Project – Building a new domain with Windows 2003 server.

T. FINNERN  
Highly Available Central Services.

#### Fall HEPiX-HEPNT, Vancouver/CAN (2003)

R. BALTRUSCH  
Management of consolidated server hardware for the DESY windows environment.

P. VAN DER REEST  
dCache.

P. VAN DER REEST, et al.  
DESY Site Report.

#### Extended Joint ECFA-DESY Study on Physics and Detectors for a Linear Electron-Positron Collider, Fourth Workshop, Amsterdam/NL (2003)

F. GAEDE  
LCIO – persistency framework: Overview.  
LCIO – persistency framework: The Data Model.

F. GAEDE  
LCIO Overview and Status.  
ECFA Study on Physics and Detectors for a Linear Collider, First Workshop Montpellier/F (2003)

P. VAN DER REEST  
DESY Site Report.  
LISA'03, San Diego/USA.

Site Report.  
AFS Workshop, Zeuthen/D (2003)

### Informationsmanagement, Prozesse und Projekte

#### Veröffentlichte Vorträge

#### Proc. 7th International Conference on Systemics, Cybernetics and Informatics (SCI2003), Orlando/USA (2003)

E. DEFFUR, M. GENNIS, L. HAGGE, J. KREUTZKAMP  
An Information System for IT Management Support.

L. HAGGE  
UML and Exploratory Prototyping for Designing Interactive Systems: Method and Applications.

L. HAGGE, J. KREUTZKAMP  
Selecting COTS Information Systems: A Case Study Using Benchmarking.

L. HAGGE, K. LAPPE  
Requirements Engineering in an Interdisciplinary Project.

#### Proc. International Conference on Computing in High Energy Physics (CHEP 2003), San Diego 2003

J. BÜRGER, L. HAGGE, J. KREUTZKAMP, K. LAPPE, A. ROBBEN  
Integrated Information Management for TESLA.

L. HAGGE, J. KREUTZKAMP, K. LAPPE  
The TESLA Requirements Database.

E. DEFFUR, A. GELLRICH, L. HAGGE, J. KREUTZKAMP, B. SCHULZ  
Experience with an IT Asset Management System.

L. HAGGE  
UML and Exploratory Prototyping.

**L. HAGGE, K. LAPPE**

Requirements im Lebenszyklus von COTS-basierten Software-Projekten mit externen Fertigern.  
Jahrestreffen FG Requirements-Engineering in der GI, Erlangen/D (2003), in: Softwaretechnik-Trends, 24,1 (2004) 11

**L. HAGGE, J. KREUTZKAMP**

A Benchmarking Method for Information Systems.  
Proc. 11th IEEE International Requirements Engineering Conference (RE03), Monterrey Bay/USA (2003)

**Vorträge****N. WELLE**

Einsatz von I-DEAS bei DESY.  
Jahrestreffen der Deutschen PLM-Benutzergruppe, SIG I-DEAS, DESY (2003)

**A. ROBBEN**

Einführung eines Geoinformations- und Facility Managementsystems. Intergeo, Hamburg/D (2003)

**Diplomarbeiten****D. SZEPIELAK**

Automatic generation of virtual worlds from architectural and mechanical CAD models.  
DESY-THESIS-2003-042

**A. SZCZYGIEL**

Synchronization of mobile databases for accelerator components and technical equipment.

**W. SKOWRON**

Providing working teams with information from distributed systems.

**R. AMMERMANN**

Zielgruppengerechte Aufbereitung und Kommunikation von Geschäftsprozessmodellen als Teil des betrieblichen Informationsmanagements.

DESY-THESIS-2003-028