

# Beschleuniger

### Veröffentlichungen

Yu.N. ADISHCHEV, A.V. VUKOLOV, D.V. KARLOVETS,  
A.P. POTYLITSYN, G. KUBE  
Monochromaticity of the Smith-Purcell Optical Radiation  
Generated by a 75-keV Electron Beam.  
JETP Lett. 82 (2005) 174

V. AYVAZYAN et al.  
First Operation of a Free-Electron Laser Generating GW Power  
Radiation at 32 nm Wavelength.  
Eur. Phys. J. D37 (2005) 297

M. BACAL, A. HATAYAMA, J. PETERS  
Volume Production Negative Hydrogen Ion Sources.  
IEEE TPS, 33, No. 6, Part 1 (2005) 1845

D.P. BARBER, J.A. ELLISON, K. HEINEMANN  
Reply to Comment on Quasiperiodic Spin-Orbit Motion and Spin  
Tunes in Storage Rings.  
Phys. Rev. ST-AB 8 (2005) 089002

D.P. BARBER, M. VOGT, R. JAGANATHAN  
Spin Tune in the Single Resonance Model with a Pair of Siberian  
Snakes.  
DESY 05-035 und physics/0502121

S. CASALBUONI, A.E. KNABBE, J. KÖTZLER, L. LILJE,  
L. v. SAWILSKI, P. SCHMÜSER, B. STEFFEN  
Surface Superconductivity in Niobium for Superconducting  
Cavities.  
Nucl. Instrum. Meth. A 538 (2005) 45

L. CATANI, A. CIANCHI, G. DI PIRRO, K. HONKAVAARA  
A Large Distributed Digital Camera System for Accelerator Beam  
Diagnostics.  
Rev. of Scientific Instruments 76 (2005) 073303

T. CZARSKI, K.T. POZNIAK, R.S. ROMANIUK, S. SIMROCK  
Cavity Parameters Identifikation for TESLA Control System  
Development.  
Zur Veröffentl. in Nucl. Instrum. Meth. A (2005)

G. GELONI, E.L. SALDIN, E.A. SCHNEIDMILLER,  
M.V. YURKOV  
Theory of Space-Charge Waves on Gradient-Profile Relativistic  
Electron Beam: An Analysis in Propagating Eigenmodes.  
Nucl. Instrum. Meth. A554 (2005) 20

Paraxial Green's Functions in Synchrotron Radiation Theory.  
DESY 05-032 und physics/0502120

Understanding Transverse Coherence Properties of X-Ray Beams  
in Third Generation Synchrotron Radiation Sources.  
DESY 05-109 und physics/0506231

Exact Solution for the Second Harmonic Generation in XFELs.  
DESY 05-137 und physics/0508046

M. HOFFMANN  
A Longitudinal Coupled Bunch Feedback for HERA-p.  
ICFA Beam Dynamics Newsletter No. 37 (2005) 109

G. KUBE  
Calculation of Smith-Purcell Radiation from a Volume Strip  
Grating.  
Nucl. Instrum. Meth. B227 (2005) 180

J. LANGNER, R. MIROWSKI, M.J. SADOWSKI,  
P. STRZZYZEWSKI, J. WITKOWSKI, S. TAZZARI, L. CATANI,  
A. CIANCHI, J. LORKIEWICZ, R. RUSSO, F. TAZZIOLI,  
D. PROCH  
Research on Deposition of Thin Superconducting Films for RF  
Accelerator Cavities.  
Elektronika, Vol. 50, Nos 7 (2005) 6

J. LANGNER, M.J. SADOWSKI, K. CZAUS, R. MIROWSKI,  
J. WITKOWSKI, L. CATANI, A. CIANCHI, R. RUSSO,  
S. TAZZARI, F. TAZZIOLI, D. PROCH, N.N. KOVAL,  
Y.H. AKHMADEEV  
Superconducting Niobium Films Produced by Means of UHV Arc.  
CARE-Pub-04-004 (2005)

D.P. MOEHS, J. PETERS, J. SHERMAN  
Negative Hydrogen Ion Sources for Accelerators.  
IEEE TPS, 33, No. 6, Part 1 (2005) 1786,  
Special Issue on Ion Sources.

G. MOORTGAT-PICK et al.  
The Role of Polarized Positrons and Electrons in Revealing  
Fundamental Interactions at the Linear Collider.  
DESY-05-059 und hep-ph/0507011

B. MUKHERJEE, D. MAKOWSKI, S. SIMROCK  
Dosimetry of High Energy Electron Linac Produced Photoneutrons  
and the Bremsstrahlung Gamma Rays Using TLD-500 and  
TLD-700 Dosimeter Pairs.  
Zur Veröffentl. in Nucl. Instrum. Meth. A (2005)

E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV  
A Simple Method for the Determination of the Structure of  
Ultrashort Relativistic Electron Bunches.  
Nucl. Instrum. Meth. A539 (2005) 499

Properties of the Odd Harmonics of the Radiation from SASE FEL  
with a Planar Undulator.  
DESY 05-164, physics/0509164, zur Veröffentl. in Opt.Commun.

Statistical Properties of the Radiation from VUV FEL at DESY  
Operating at 30 nm Wavelength in the Femtosecond Regime.  
DESY 05-239, physics/0511234, zur Veröffentl. in Nucl. Instrum.  
Meth. A

J. SEKUTOWICZ et al.  
Proposed Continuous Wave Energy Recovery Operation of an  
X-Ray Free Electron Laser.  
Phys. Rev. ST-AB, 8 (2005) 010701

Preliminary Results from Single Crystal and Very Large Crystal  
Niobium Cavities.

P. KNEISEL, G. CIOVATI, G. WU, J. SEKUTOWICZ  
Testing of HOM Coupler Designs on a Single Cell Niobium  
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P. KNEISEL, G. MYNNENI, D. PROCH, W. SINGER, X. SINGER,  
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P. KNEISEL, J. SEKUTOWICZ, A. LIPSKI  
Preliminary Results from a Superconducting Photocathode Sample  
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B. KRAUSE  
Magnets for the DESY Accelerators HERA-TTF-PETRA-XFEL.

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T. LIMBERG, V. BALANDIN, R. BRINKMANN, W. DECKING,  
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Optimized Bunch Compression System for the European XFEL.

T. LIMBERG, M. DOHLUS  
Impact of Optics on CSR-Related Emittance Growth in Bunch  
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Electro-Polishing Surface Preparation for High Gradient Cavities  
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J. PETERS  
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P. PIOT, M. DOHLUS, K. FLÖTTMANN, M. MARX, S.G. WIPP  
Steering and Focusing Effects in TESLA Cavity due to High Order  
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M. PIVI, T. RAUBENHEIMER, A. GHALAM, K. HARKAY,  
K. OHMI, R. WANZENBERG, A. WOLSKI, F. ZIMMERMANN  
Single Bunch Instability Driven by the Electron Cloud Effect in the  
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J. RATHKE, A. AMBROSIO, M. COLE, E. PETERSON,  
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I. CAMPISI, E. DALY, J. HOGAN, J. MAMMOSSER,  
G.R. NEIL, J. PREBLE, R. RIMMER, C. RODE,  
T. WHITLATCH, M. WISEMAN, J. SEKUTOWICZ  
Design and Fabrication of an FEL Injector Cryomodule.

## Veröffentlichte Vorträge

### Proc. of the 2005 Particle Accelerator Conference (PAC2005), Knoxville/US,(2005)

V. AYVAZYAN, G. PETROSYAN, K. REHLICH, S. SIMROCK,  
P. VETROV  
RF Control System for the DESY VUV-FEL Linac.

K. BALEWSKI, R. WANZENBERG  
The Impedance of Selected Components of the Synchrotron Light  
Source PETRA III.

D.P. BARBER et al.  
The eRHIC Ring-Ring Collider Design.  
Development of a Superconducting Helical Undulator for a  
Polarised Positron Source.

I. BEN-ZVI et al.  
Electron Cooling of RHIC.

J. CARTER et al.  
Beam Profile Measurements and Simulations of the PETRA Laser  
Wire.

Y.H. CHIN, A. YANO, S. MIYAKE, S. CHOROBA.  
Development of Toshiba L-Band Multi-Beam Klystron for  
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G. CIOVATI, P. KNEISEL, J. SEKUTOWICZ, W. SINGER  
Effects of Electric and Magnetic Fields on the Performance of a  
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M. EBERT, F.-R. ULLRICH  
Glycol Substitute for High Power RF Waterloads.

Ch. GERTH, M. RÖHRS, H. SCHLARB  
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R.M. JONES, N. BABOI  
Emittance Dilution due to Many-Band Long-Range Dipole  
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P. KNEISEL, G. CIOVATI, G. MYNNENI, J. SEKUTOWICZ,  
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M. ROSS et al.

Cavity Alignment Using Beam Induced Higher Order Modes Signals in the TTF Linac.

M. SEIDEL

The Vacuum System for PETRA III.

J. SEKUTOWICZ, I. GONIN, T. KHABIBOULINE, N. SOLYAK, P. KNEISEL, Y. MOROZUMI, K. SAITO, K. KO, L. LEE, Z. LI, C. NG, L. XIAO

Design of a Low Loss SRF Cavity for ILC.

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Digital Low-Level RF Controls for Future Superconducting Linear Colliders.

J. SMEDLEY, T. RAO, J. SEKUTOWICZ, P. KNEISEL, R. LEFFERTS, A. LIPSKI

Progress on Lead Photocathodes for Superconducting Injectors.

N. STEINHAU-KUEHL, A. MATHEISEN, B. MEYER, B. PETERSEN, M. SCHMOEKEL

Quality Control of the Electro Polishing Process at DESY.

M. TISCHER, K. BALEWSKI, W. DECKING, M. SEIDEL, Y.-J. LI, V. KUZMINYKH, E. LEVICHEV, P. VOBLIYI,

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Damping Wigglers for the PETRA III Light Source.

A. TODD et al.

State-of-the-Art Electron Guns and Injector Designs for Energy Recovery Linacs.

C. STEIER, D. ROBIN, W. DECKING, J. LASKAR,

L.S. NADOLSKI, Y.K. WU

Measuring and Understanding the Momentum Aperture in a Storage Ring.

**Proc. of the 27th International Free Electron Laser Conference FEL 2005, Menlo Park/USA (2005)**

W. DECKING

Accelerator Layout and Physics of X-Ray Free-Electron Lasers.

M. DOHLUS, T. LIMBERG

Bunch Compression Stability Dependence on RF Parameters.

L. FRÖHLICH, O. GRIMM

Bunch Length Measurements Using a Martin-Puplett Interferometer at the VUV-FEL.

G. GELONI, E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV

Misconceptions Regarding Second Harmonic Generation in X-ray Free-Electron Lasers.

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Detector Response and Beam Line Transmission Measurements with Far-Infrared Radiation.

O. GRIMM, O. KOZLOV, E. PLOENJES, J. ROSSBACH, E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV

The Infrared Undulator Project at the VUV-FEL.

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Electron Beam Characterization at PITZ and the VUV-FEL at DESY.

K. HONKAVAARA, F.LÖHL, D. NÖLLE, S. SCHREIBER, E. SOMBROWSKI, M. SACHWITZ, M. CASTELLANO, G. DI PIRRO, L. CATANI, A. CIANCHI

Transverse Electron Beam Diagnostics at the VUV-FEL at DESY.

K. HONKAVAARA, F. LOEHL, M. SACHWITZ, E. SOMBROWSKI, D. NOELLE, S. SCHREIBER, L. CATANI, A. CIANCHI, M. CASTELLANO, G. DI PIRRO

Electron Beam Characterisation at PITZ and the VUV-FEL at DESY.

M. HÜNING, A. BOLZMANN, H. SCHLARB, J.C. FRISCH, D.J. MCCORMICK, M.C. ROSS, T.J. SMITH, J. ROSSBACH Observation of Femtosecond Bunch Length Using a Transverse Deflecting Structure.

M. ROEHRHS, A. BOLZMANN, M. HÜNING, H. SCHLARB, K. HONKAVAARA

Measurement of Slice-Emittance Using Transverse Deflecting Structure.

E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV

Properties of the Radiation from VUV-FEL at DESY (Femtosecond Mode of Operation).

Properties of the Third Harmonic of the SASE FEL Radiation. Influence of an Energy Chirp on SASE FEL Operation.

H. SCHLARB, V. AYVAZYAN, F. LUDWIG, D. NOELLE, B. SCHMIDT, S. SIMROCK, F.X. KAERTNER, A. WINTER Next Generation Synchronization System for the VUV-FEL at DESY.

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First Lasing at 32 nm of the VUV-FEL at DESY.

**Proc. of the Beschleuniger-Betriebsseminar, Grömitz/DE (2005)**

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F. EINTS, J. RANDHAHN, S. CHOROBA, M. DOHLUS,  
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R. WAGNER, M. HOFFMANN  
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G. GRYGIEL, M. BÖHNERT, J. THOMAS  
TCP/IP Based PLC Connections to DOOCS.

O. HENSLER, E. SOMBROWSKI, A. PETROSYAN, P. TEGE  
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M. HOFFMANN  
Ein breitbandiges longitudinales Dämpfungssystem für HERA-p.  
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K. HONKAVAARA  
Messungen des transversalen Phasenraums beim VUV-FEL.

M. HÜNING  
Linac Betrieb 2005.

J. KEIL  
HERA Betrieb 2005.  
HERA Orbitstabilisierung.

T. LENSCHE  
Petra-3 Machine Protection System.

F. MASCHEWSKI  
Neuer Klystronenschutz für die 500 MHz HERA Sender.

R. ONKEN  
DORIS Betrieb 2005.

J. RANDHAHN, F. EINTS, S. CHOROBA, M. DOHLUS,  
M. EBERT, N. MILDNER, P. MOROZOV, S. SIMROCK,  
R. WAGNER, M. HOFFMANN  
Kicker Cavity for Multibunch Feedback System at HERA-p.

K. REHLICH  
The TTF VUV-FEL Control System: DOOCS.

S. SCHREIBER  
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S. SIMROCK  
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M. STAACK  
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H. TIMM, F.-R. KAISER  
Die TTF Modulatoren und Klystrons.

R. WAGNER  
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S. WILKE  
PETRA II, Bericht über den Betrieb 2005.

**Proc. of Photonics Application in Industry and Research IV,  
Warschau/PL (2005)**

K. CZUBA, F. EINTS, M. FELBER, S. SIMROCK  
Fiber-Optic Link for the RF Phase Reference Distribution System  
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A. GAMP  
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W. GIERSGIEWICZ, W. JALMUZNA, K. POZNIAK,  
N. IGNASHIN, M. GRECKI, D. MAKOWSKI, T. JEZYNSKI,  
K. PERKUSZEWSKI, K. CZUBA, S. SIMROCK  
Low Latency Control Board for LLR System - Simcon 3.1.  
Frequency Conversion in Field Stabilization System for  
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W. GIERSGIEWICZ, K. KIERZKOWSKI, K.T. POZNIAK,  
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FPGA Based LLRF Control Module for X-Ray Free Electron  
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W. KOPREK, P. KALETA, J. SZEWINSKI, K.T. POZNIAK,  
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Thin Superconducting Niobium-Coatings for RF Accelerator  
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D. MAKOWSKI, B. MUKHERJEE, M. GRECKI, S. SIMROCK  
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K.T. POZNIAK, T. CZARSKI, R.S. ROMANIUK  
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K.T. POZNIAK, R.S. ROMANIUK, T. CZARSKI,  
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P. ROSZKOWSKI, W.M. ZABOLOTNY, K. KIERZKOWSKI,  
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Beam Based Feedback for Control.

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Tutorial on Optimal Controller.

### Proc. of the 7th Workshop on Beam Diagnostics and Instrumentation for Particle Accelerators, DIPAC 2005, Lyon/FR (2005)

N. BABOI et al.  
Optimization of Beam Injection into the First Accelerating Mode  
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P. CASTRO, H.-J. GRABOSCH, U. HAHN, M. SACHWITZ,  
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Wire Scanners in the Undulator Section of the VUV-FEL at DESY.

W. GOETTMANN, M. KÖRFER, J. KUHNHENN, F. WULF  
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Detailed Resolution Studies of the Synchrotron Radiation Profile  
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P. PAWLIK, M. GRECKI, S. SIMROCK  
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### Proc. of the 12th Mixed Design on Integrated Circuits and Systems, MIXDES, Krakau/PL (2005)

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M. GRECKI, T. JEZYNSKI, A. BRANDT  
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T. JEZYNSKI, M. GRECKI  
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B. MUKHERJEE, D. MAKOWSKI, A. KALICKI, D. RYBKA,  
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P. SEKALSKI, M. GRECKI, C. ALBRECHT  
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**Proc. of the 12th Workshop on RF Superconductivity (SRF 2005), Cornell Univ., Ithaka/USA (2005)**

A. BRINKMANN, J. IVERSEN, D. RESCHKE, J. ZIEGLER  
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J.A. DAMMANN, J. BURGER, L. HAGGE, J. IVERSEN,  
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Design and Analysis of 45 MV/M Superconducting Structure.

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Report on SRF Activities.

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**Proc. of the 5th International Workshop on Personal  
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The Conceptual Design of the Control System for the Future  
Low-Emissance Light Source PETRA III at DESY.

R. BACHER, P. DUVAL, H. WU  
Common Device Access for Accelerator Controls.

P.K. BARTKIEWICZ, P. DUVAL, S.W. HERB  
Automatic Console Screen Management for Accelerator Control  
Room Applications.

P. DUVAL, M. CLAUSEN, Z. KAKUCS  
EPICS to TINE Translator Release 2.0.

P. DUVAL, U. LAUSTRÖER, R. SCHMITZ  
Fault Identification in Accelerator Control.

P. DUVAL, J. WILGEN  
Writing TINE Servers in Java.

H. EHRLICHMANN  
The Users' Perspective.

G. GRYGIEL, M. BÖHNERT  
TCP/IP Based PLC Connection to DOOCS.

R. KAMMERING, O. HENSLER, A. PETROSYAN,  
K. REHLICH  
The Electronic Logbook @ the TTF VUV-FEL – Making the Next Step.

H. KELLER, O. HENSLER  
Experience with the Data Archiver in DOOCS.

V. KOCHARYAN, K. REHLICH  
WDOOCS: Porting DOOCS to Windows PC.  
WDOOCS: FireWire Cameras Support for DOOCS.

M. KOLLEWE, V. RYBNIKOV  
Orbit Data Processing Using the Data Acquisition System DAQ at the TTF VUV-FEL.

J. MAASS, S.W. HERB, P.K. BARTKIEWICZ  
Automation and Stabilisation of HERA Operation.

G. PETROSYAN, V. AYVAZYAN, K. REHLICH,  
S.N. SIMROCK, P. VETROV  
Hardware and Software Design for the DSP Based LLRF Control.

V. PETROSYAN, S. WEISSE, H. LEICH, T. GREVSMUEHL,  
P. DUVAL  
An Advanced Klystron Interlock Solution Based on NIOS-II Processor.

K. REHLICH  
Status of the TTF VUV-FEL Control System.

V. RYBNIKOV, A. AGABABYAN, G. GRYGIEL,  
B. FOMINYKH, O. HENSLER, R. KAMMERING,  
K. REHLICH, L. PETROSYAN, A. ASOVA, G. DIMITROV,  
G. TROWITZSCH, M. WINDE, T. WILKSEN  
Data Acquisition System for VUV-FEL Linac.

E. SOMBROWSKI, V. RYBNIKOV, O. HENSLER, K. REHLICH  
Wire Scanner Control and Display Software.

R. BACHER  
MVL - A Tool to Enhance Accelerator Availability.  
ILC Mini-Workshop "Design for High Availability"  
Grömitz/DE (2005)

R. BACHER, M. SEEBACH  
Virtual Instrumentation Integration into the MVL Framework.  
GANMVL-Workshop, Frascati/IT (2005)

MVL-Supported Virtual Instrument Specifications.  
GANMVL-Workshop, Hamburg/DE (2005)

IVI-Standard Based Virtual Instrument Integration.  
GANMVL-Workshop, Triest/IT (2005)

Existing Industrial Solutions and Virtual Instrumentation Integration into GANMVL.  
High Energy High Intensity Hadron Beams: Novel Methods for Beam Instrumentation Workshop, Hirschberg/DE (2005)

G. BASSI, T. AGOH, M. DOHLUS, L. GIANNESCI, R. HAJIMA,  
A. KABEL, T. LIMBERG, M. QUATTOMINI  
Overview of CSR Codes.  
32nd Advanced ICFA Beam Dynamics Workshop on Energy Recovering Linacs (ERL 2005), Newport News/USA, Nucl. Instrum. Meth. A557 (2005) 189

M. BIELER  
The HERA Turn Around Time.  
Superconducting Quadrupols inside the HERA Experiments.  
2nd CARE-HHH-APD Workshop on Scenarios for the LHC Luminosity Upgrade, Arcidoso/IT (2005)

Y. BOZHKO, H. LIERL, B. PETERSEN, D. SELLMANN,  
A. ZOLOTOV  
Requirements for the Cryogenic Supply of the European XFEL-Project at DESY  
Proc. of the CEC/ICMC, Keystone/USA (2005), zur Veröffentl. in Advances of Cryogenic Engineering, Vol.51

P. DUVAL, M. LOMPERSKI  
Availability Statistics using TINE Central Server.  
ILC Mini-Workshop "Design for High Availability"  
Grömitz/DE (2005)

M. FERRARIO, W.D. MOELLER, J.B. ROSENZWEIG,  
J. SEKUTOWICZ, G. TRAVISH  
Optimization and Beam Dynamics of an SRF Gun.  
ICFA Workshop on Energy Recovery Linac, Newport News/USA (2005)

On the Preference of Cold RF Technology for the International Linear Collider.  
Proc. of the 7th International High Density and High Power RF Workshop, Kalamata/GR (200) und DESY-TESLA 2005-23

V. GHARIBYAN, N. MEYNERS, P. SCHÜLER

Upstream Polarimetry with 4-Magnet Chicane.

Proc. of LCWS 2005, Stanford/USA (2005)

M. GRECKI, A. NAPIERALSKI, S. SIMROCK,

B. MUKHERJEE

A Distributed System for Radiation Monitoring at Linear Accelerators.

RADiation and its Effects on Component and Systems RADECS, Cap d'Agde/FR (2005)

H. HENSCHEL, M. KÖRFER, J. KUHNHENN, U. WEINAND, F. WULF

Fiber Optic Sensor Solutions for Particle Accelerators.

Optical Fiber Sensors Conference (OFS 17), Bruges/BE (2005)

S. HERB

Accelerator Control System Simulation.

ILC Mini-Workshop "Design for High Availability"

Grömitz/DE (2005)

J. LANGNER, L. CATANI, A. CIANCHI, R. MIROWSKI,

J. LORKIEWICZ, D. PROCH, R. RUSSO, M.J. SADOWSKI,

P. STRZYZEWSKI, S. TAZZARI, J. WITKOWSKI

Research on the Use of UHV Arc Discharges for Deposition of Superconducting Layers.

Internatl. Conf. PLASMA-2005, Opole/PL (2005)

H. LEICH, S. CHOROBA, P. DUVAL, T. GREVSMÜHL,

V. PETROSYAN, S. WEISSE, R. WENNDORFF

An Advanced Interlock Solution for TTF2/XFEL RF Stations.

Proc. 14th IEEE NPSS Real Time Conference, Stockholm/SE (2005)

H. LEICH, S. CHOROBA, P. DUVAL, T. GREVSMÜHL,

A. KRETZSCHMANN, U. SCHWENDICKE, R. WENNDORFF

The Design of a Technical Interlock for TTF2/XFEL RF Stations.

Proc. of NEC 2005, 20th International Symposium on Nuclear Electronics & Computing, Dubna/RU (2005)

H. LIERL for the Plan-Approval Group at DESY

The Planning of the Cryogenic Supply Infrastructure for the

Superconducting Cavities of the European XFEL Linear

Accelerator.

Proc. of the CEC/ICMC, Keystone/USA (2005), zur Veröffentl. in Advances of Cryogenic Engineering, Vol. 51

D. MAKOWSKI, M. GRECKI, B. MUKHERJEE, S. SIMROCK,

B. SWIERCZ, A. NAPIERALSKI

The Application of SRAM Chip as a Novel Neutron Detector.

NSTI Nanotechnology Conference and Trade Show Nanotech 2005, Anaheim/USA (2005)

J. PETERS

New Developments in RF-Driven Multicusp H<sup>-</sup> Ion Sources.

Rev. Sci. Instrum. (2005), 11th International Conference on Ion Sources (ICIS 05), Caen/FR (2005)

B. PETERSEN

Some Aspects of the Layout and Optimization for the Cryogenic Supply of Superconducting Linacs.

Proc. of the 32nd ICFA Beam Dynamics Workshops on Energy Recovering Linacs ERL2005, Newport News/USA (2005) and Nucl. Instrum. Meth. A (2005)

K. REHLICH, A. AGABABYAN, A. ASOVA, G. DIMITROV,

G. GRYGIEL, B. FOMINYKH, O. HENSLER,

R. KAMMERING, L. PETROSYAN, V. RYBNIKOV,

G. TROWITZSCH, M. WINDE, T. WILKSE

Integrating a Fast Data Acquisition System into the DOOCS

Control System.

Proc. of the 10th International Conference on Accelerator and Large Experimental Physics control Systems (ICALEPCS 2005), Geneva/CH (2005)

K. REHLICH

GAN-MVL Overall Architecture.

Workshop on Remote Diagnostics and Maintenance of Beam Instrumentation Devices, Hirschberg/DE (2005)

K. REHLICH, D. SERTORE

Experience with Remote Operations at the TTF VUV-FEL.

Workshop on Accelerator Operations, 2005, Fermilab/USA (2005)

J. SEKUTOWICZ

Superconducting Photo-Injectors: An Overview.

ICFA Workshop on the Physics and Application of High Brightness Electron Beams, Sicily/IT (2005)

F. TORAL, P. ABRAMIAN, H. BRUECK, J. CALERO,

L. GARCA-TABARS, J.L. GUTIERREZ, W. MASCHMANN,

E. RODRIGUEZ, S. SANZ, M. STOLPER, C. VAZQUEZ

Fabrication and Testing of a Combined Superconducting Magnet

for the TESLA Test Facility.

Proc. of 19th International Conference on Magnet Technology, Genoa/IT (2005)

M. WERNER

A Fast Magnet Current Change Monitor for Machine Protection in HERA and the LHC.

Contribution to the ICALEPCS 2005, Genf/CH (2005)

S. WILKE

PETRA III RF System Controls: A Radiation Resistant Approach.

Proc. of 9th European Synchrotron Light Source RF Meeting, Aarhus/DK (2005)

### K. WITTENBURG

Quench Levels and Transient Beam Losses at HERA.  
CARE AMT Workshop on Beam Generated Heat Deposition and  
Quench Levels for LHC Magnets, Genf/CH (2005)

### Vorträge

#### N. BABOI

Measurement Methods and Applications of Wakefields.  
Vorlesung. Teil des Kurses Fundamentals of Wakefields and  
Impedances: From Physical-Mathematical Analysis to Practical  
Applications, von Dr. R.M. Jones, US Particle Acc. School,  
Ithaka/USA (2005)

#### D.P. BARBER

Electron Ring Polarisation.  
Presentation to the RHIC Machine Advisory Committee, Long  
Island/USA (2005)

#### P. CASTRO

Magnets, Linear Optics, Undulator, BBA.  
ICFA Mini-Workshop on Commissioning of X-Ray Free-Electron  
Lasers, Zeuthen/DE (2005)

#### S. CHOROBA

Update of Modulator Development at DESY.  
SLAC ILC Modulator Workshop, Stanford/USA (2005)

#### The TTF RF System.

34th ICFA Advanced Beam Dynamics Workshop on High Power  
Superconducting Ion, Proton, and Multi-Species Linacs,  
HPSL 2005, Naperville/USA (2005)

#### Status of the 10MW Klystron Development.

Status of the Industrial Modulators at DESY.  
Summary Klystrons.

2005 International Linear Collider Physics and Detector Workshop  
and 2nd ILC Accelerator Workshop, Snowmass/USA (2005)

#### W. DECKING

Damping Wigglers in PETRA III.  
Mini-Workshop on Wiggler Optimization for Emittance Control,  
Frascati/IT (2005)

Commissioning of Beam Collimation, Distribution, Dumps.  
ICFA Mini-Workshop on Commissioning of X-Ray FELs,  
Zeuthen/DE (2005)

Accelerator Layout and Physics of X-Ray Free Electron Lasers.  
Center for Beam Physics Seminar, LBL, Berkeley/USA (2005)

#### M. EBERT

ELWIS - an Unconventional Concept for Automation and Control  
of RF Systems.  
ILC Mini-Workshop "Design for High Availability"  
Grömitz/DE (2005)

### H. EHRLICHMANN

Ground Vibration Measurements.  
EuroTeV WP6-Kickoff-Meeting, Annecy/FR (2005)

#### Ground Motion Measurements.

Institute for High Energy Physics, IHEP, Beijing/CN (2005)

#### One Knob Operation at PETRA.

WAO 2005, Bloomingdale/USA (2005)

#### Some Timing Aspects at TESLA and ILC.

ILC Workshop, Snowmass/USA (2005)

### O. GRIMM

Coherent Radiation Diagnostics at TTF.  
Mini-Workshop on Commissioning of X-Ray Free-Electron  
Lasers, Zeuthen/DE (2005)

### B. HOLZER

Transverse Beam Dynamics.  
Insertions in Storage Ring Lattices.  
Lattice Design in Particle Storage Rings.  
Linear / Nonlinear Imperfections in Accelerators.  
Storage Ring Design using MAD-X.  
Intermediate Accelerator School CAS, Triest/IT (2005)

### K. HONKAVAARA

Measurements of Transverse Emittance at the VUV-FEL at DESY.  
ICFA Workshop: The Physics and Applications of High Brightness  
Electron Beams. Erice/IT (2005)

Measurements of Transverse Emittance at TTF VUV-FEL  
ICFA Mini-Workshop on Commissioning of X-Ray Free Electron  
Lasers. Zeuthen/DE (2005)

### J. KEIL

Beta-Beat Measurement and Correction at HERA.  
Workshop LHC Lumi 2005, Arcidosso/IT (2005)

### H. LIERL

Design Review Auxiliary Systems of W7X.  
Summary talk given at the Design Review Meeting Auxiliary  
Systems, IPP, Greifswald/DE (2005)

Cryogenic Systems for s.c. Accelerators: A Brief Introduction and  
Overview.

Report on the Results of the Discussion Meeting about the  
Cryogenic System for the PKU-SCAF Project.  
Institute of Heavy Ion Physics, PKU, Beijing/CN (2005)

Cryogenic Systems for s.c. Accelerators: Overview and  
Introduction to the Proposed PKU-SCAF Cryogenic System.  
Chinese Committee for the Evaluation and Approval of the  
Cryogenics for the PKU-SCAF Project, Beijing/CN (2005)

The HERA Cryogenic Plant at DESY.  
Cryogenic Installations of the TTF/VUV-FEL-Linac.  
Cryogenic Systems and Cryogenic Technology for  
Superconducting Accelerators.  
Beijing University, PKU, Beijing/CN (2005)

Cryogenic supply for the DESY Magnets GO & GG (HERA Lumi  
Upgrade).  
The Cryogenic Plants at DESY.  
Operational Experience of the HERA Cryogenic System.  
Cryogenic Installations for s.c. Cavities at DESY:  
TTF/VUV-FEL-Linac and XFEL Linac.  
Institute for High Energy Physics, IHEP, Beijing/CN (2005)

Review of BEPC II Cryogenics and Control.  
Summary Talk of the Review Meeting on BEPCII Cryogenics and  
Control.  
Institute for High Energy Physics, IHEP, Beijing/CN (2005)

L. LILJE  
Superconducting Cavities.  
ALCPG05, Snowmass/USA (2005)

H. MAIS  
Theoretische Probleme der Strahldynamik in Beschleunigern.  
Univ. Konstanz/DE (2005)

Stochastic Aspects of Beam Physics. Inv. talk  
Coulomb 05 Workshop, Senigallia/IT (2005)

N. MEYNERS, P. SCHÜLER  
Upstream Polarimetry with 4-Magnet Chicane.  
LCWS 2005, Stanford/USA (2005)

W.-D. MÖLLER  
High Power Input Couplers for Superconducting Cavities.  
Development of RF High Power Couplers for SC Cavities for TTF.  
Fabrication Issues on the High Power Couplers for TTF.  
Testing, Conditioning and Operating Experience of RF High  
Power Couplers for TTF.  
ERL Mini-Workshop at Beijing Univ., Beijing/CN (2005)

D. NOELLE  
Short Wavelength FELs at DESY. Betriebsseminar von MAMI,  
Mainz/DE (2005)

First Commissioning of XFEL Diagnostics.  
Machine Protection System Commissioning at XFEL.  
ICFA Workshop Miniworkshop on Commissioning of X-Ray Free  
Electron Lasers, Zeuthen/DE (2005)

XFEL Electron and Photon Diagnostics.  
China-Germany Workshop on Free-Electron-Lasers, Beijing/CN  
(2005)

F. OBIER  
TESLA Damping Ring - Injection/Ejection.  
KEK Kicker-Workshop, Tsukuba/JP (2005)

J. PETERS  
Status of DESY H- Source Experiments.  
NIS Annual Meeting, Saclay/FR (2005)

J. PRENTING  
Surrey and Alignment of the ILC - an Introduction to the Concept  
and Open Questions.  
Int. Linear Collider Phys. and Detector Workshop and 2nd ILC  
Acc. Workshop, Snowmass/USA (2005)

D. PROCH  
Report on SRF Activities.  
CARE Annual Meeting, Hamburg/DE (2005)

K. REHLICH  
Control System Integration SC-4.  
Control System Interface.  
Global Accelerator Network Multi Purpose Virtual Laboratory  
(GANMVL) Meeting, Frascati/IT (2005)

New Software Developments for the TTF VUV-FEL.  
Frascati/I (2005)

The TTF Control System: DOOCS.  
Fermilab/USA, (2005)

ATCA: A New Bus System for High Reliability.  
Reliability Workshop, Grömitz/D, (2005)

H. SCHMICKLER, R. JONES, K. WITTENBURG  
Beam Instrumentation and Diagnostics.  
CERN Accelerator School CAS, Accelerator Physics (Intermediate  
Level), Abdus Salam International Center for Theoretical Physics,  
Trieste/IT (2005)

M. SCHMITZ  
Approaches to a High Power Beam Dump for an  
(TESLA 800-Like) ILC.  
ILC-BDIR Workshop, London/GB (2005)

J. SEKUTOWICZ  
LL-ILC Cavity.  
Stanford/USA (2005)

HOM Damping.  
ILC-Meeting, London/GB (2005)

Parameter Set for Cw and Near-Cw Operation of a  
Superconducting Linac Driving XFEL.  
EuroFel Meeting, Paris/FR (2005)

## Beschleuniger

Series of Lectures on SRF Technology, Energy Recovery Linacs and SRF Photo-Injectors.

Beijing Univ., Tsinghua Univ., Academy of Technical Physics, Beijing and Tsinghua/CN (2005)

### M. SEIDEL

Accelerator Vacuum Systems at DESY.

Vacuum System Failures at HERA.

Workshop on Operation of Large Vacuum Systems, Genf/CH (2005)

Design Options for the XFEL Undulator Vacuum Chamber. Workshop on Undulator Magnets, Hamburg/DE (2005)

Zur Auslegung des Vakuumsystems in der XFEL Undulatorstrecke.

BESSY Seminar, Berlin/DE (2005)

Accelerator Vacuum Systems at DESY.

Workshop on Vacuum Systems of Synchrotron Light Sources, Barcelona/ES (2005)

### W. SINGER

Metallurgical and Technological Request for High Purity Niobium in SRF Application.

International Symposium on Hydrogen in Matter (ISOHIM 2005), Uppsala/SE (2005)

### K. SINRAM

LDC Experimental Infrastructure.

Int. Linear Collider Phys. and Detector Workshop and 2nd ILC Acc. Workshop, Snowmass/USA (2005)

### H. WEISE

TTF Status and Plans.

TESLA Technology Collaboration Meeting, Hamburg/DE (2005)

TESLA Damping Ring-Injection/Ejection.

Int. Linear Collider Phys. and Detector Workshop and 2nd ILC Acc. Workshop, Snowmass/USA (2005)

XFEL Availability Considerations.

ILC Mini-Workshop "Design for High Availability", Grömitz/DE (2005)

Status TTF/VUV-FEL Linac.

The Advantage of Having Beam at a Module Test Stand.

TESLA Technology Collaboration Meeting, Frascati/IT (2005)

### M. WERNER

GAN: Remote Operation of Accelerator Diagnosis Systems.

3. CARE-ABI-Workshop on Remote diagnostics and maintenance of beam instrumentation devices, Hirschberg/DE (2005)

High Availability Electronics Development.

ILC Mini-Workshop "Design for High Availability", Grömitz/DE (2005)

### K. WITTENBURG

Beam Profile and Beam Halo Measurements with Wire Scanners.

Blockseminar / Winterschule: Aktuelle Probleme der Beschleuniger- und Plasmaphysik

Institut für Angewandte Physik der J. W. Goethe-Univ. Frankfurt/Main, Riezler/AT (2005)

## Diplomarbeiten

### M. BORCHARD

Auslegung und Konstruktion eines Proton-Emittanz-Monitors.

Hochschule für angewandte Wissenschaften, Hamburg/DE (2005)

### L. FRÖHLICH

Bunch Length Measurements Using a Martin-Puplett Interferometer at the VUV-FEL.

Univ. Hamburg/DE (2005)

DESY-TESLA-FEL 2005-02

### F. LÖHL

Measurements of the Transverse Emittance at the VUV-FEL.

Univ. Hamburg/DE (2005)

DESY-TESLA-FEL 2005-03

### A. KALICKI

The Measuring Station for Research of Effects of Increased Radiation on CCD and CMOS Sensors (Radiation Effects on Photonics Devices).

Univ. of Technology, Warsaw/PL (2005)

DESY-TESLA 2005-18

### A. MARKOVIC

Numerical Computation of Space-Charge Fields of Electron Bunches in a Beam Pipe of Elliptical Shape.

Univ. Rostock/DE (2005)

DESY-TESLA 2005-21

### P. D. PUCYK

DOOCS Based Control System for FPGA Based Cavity Simulator and Controller in VUV FEL.

Univ. of Technology, Warsaw/PL (2005)

DESY-TESLA 2005-19

### D.K. RYBKA

Integrated Measurement Systems for Electronic Devices Operating in Radiation Environment.

Univ. of Technology, Warsaw/PL (2005)

DESY-TESLA 2005-17

## Interne Berichte

### K. ABRAHAMYAN, M. SACHWITZ, T. THON

Direct Wire Read Out Electronics for the Hasylab-Zeuthen-Wirescanner.

DESY-TESLA 2005-11

V. AYVAZYAN, S. CHOROBA, A. MATYUSHIN, G. MÖLLER,  
G. PETROSYAN, K. REHLICH, S. SIMROCK, P. VETROV  
Digital Low Level RF control System for the DESY TTF  
VUV-FEL Linac.  
DESY-TESLA-FEL 2005-06

I.V. BAZAROV, H.S. PADAMSEE  
Multivariate Optimization of ILC Parameters.  
DESY-TESLA 2005-09

W. BIALOWONS, H. EHRLICHMANN  
Ground Vibration Measurements at the Proposed ALBA Site in  
Barcelona.  
DESY-TESLA 2005-10

F. BRINKER  
Summary of the Electron Test Run at DORIS in August 2005.  
DESY M 05-01

S. CASALBUONI, H. SCHLARB, B. SCHMIDT,  
P. SCHMÜSER, B. STEFFEN, A. WINTER  
Numerical Studies on the Electro-Optic Sampling of Relativistic  
Electron Bunches.  
DESY-TESLA 2005-01

S. CASALBUONI, B. SCHMIDT, P. SCHMÜSER  
Far-Infrared Transition and Diffraction Radiation - Part I:  
Production, Diffraction Effects and Optical Propagation.  
DESY-TESLA 2005-15

P. CASTRO  
Measurement of the Relative Alignment between Wiresscanners  
and Quadrupoles in the Undulator Section of VUV FEL.  
DESY Technical Note 05-04

P. CASTRO, B. FAATZ  
Preliminary Results from Investigations of the Relative Alignment  
between the Electron Beam and Quadrupoles in the Undulator  
Section of VUV-FEL.  
DESY Technical Note 05-01

T. CZARSKI, W. KOPREK, K. POZNIAK, R. ROMANIUK,  
S. SIMROCK  
CHECHIA Cavity Driving with FPGA Controller.  
DESY-TESLA 2005-12

T. CZARSKI, K. T. POZNIAK, R. S. ROMANIUK, S. SIMROCK  
Cavity Parameters Identification for TESLA Control System  
Development.  
DESY-TESLA-FEL 2005-08

K. CZUBA, J. DOBROWOLSKI, F. EINTS, M. FELBER,  
S. SIMROCK  
First Generation of Optical Fiber Phase Reference Distribution  
System for TESLA.  
DESY-TESLA 2005-08

M. DOHLUS, I. ZAGORODNOV  
Impact of Undulator Wake Fields and Tapering on the European  
X-Ray FEL Performance.  
DESY-TESLA-FEL 2005-10

L. FRÖHLICH  
Bunch Length Measurements Using a Martin-Puplett  
Interferometer at the VUV-FEL.  
DESY-TESLA-FEL 2005-02

A. GAMP  
On the Preference of Cold RF Technology for the International  
Linear Collider.  
DESY-TESLA 2005-23

W. GIERSGIEWICZ, W. KOPREK, W. JALMUZNA,  
K.T. POZNIAK, R.S. ROMANIUK  
FPGA Based, DSP Integrated, 8-Channel SIMCON, ver. 3.0.  
Initial Results for 8-Channel Algorithm.  
DESY-TESLA 2005-14

O. GRIMM (Editor)  
Contributions to the FEL2005 Conference.  
DESY-TESLA-FEL 2005-05

K. HACKER, P. CASTRO, M. HÜNING, D. NÖLLE,  
H. SCHLARB, E. SCHNEDIMILLER, E. PLÖNIES  
TTF2 ACC5 Gradient Measurement.  
DESY-TESLA-FEL 2005-07 und DESY Technical Note 05-03

D. JANSEN  
Estimation of Field Amplitudes During the Operation of the 1.5  
Cell Photoelectron RF Gun of the PITZ Collaboration.  
DESY-TESLA-FEL 2005-01

W. KOPREK, P. KALETA, J. SZEWINSKI, K.T. POZNIAK,  
R.S. ROMANIUK  
Software Layer for SIMCON ver. 1.1., FPGA based TESLA  
Cavity Control System; User's Manual.  
DESY-TESLA 2005-05

W. KOPREK, P. PUCYK, T. CZARSKI, K.T.POZNIAK,  
R.S.ROMANIUK  
DSP Integrated Parameterized FPGA Based Cavity Simulator and  
Controller for VUV FEL - SIMCON ver.2.1. Installation and  
Configuration Procedures: User's Manual.  
DESY-TESLA 2005-06

D. KOSTIN, R. LANGE  
VUV-FEL Linac Modules 4 and 5 RF Test.  
DESY Technical Note 05-05

The MVA Team  
Flansch-Strahlrohr Schweisskonstruktion an Niobkavitäten.  
DESY Technical Note 05-02

### K. POZNIAK

INTERNAL INTERFACE, I/O Communication with FPGA  
Circuits and Hardware Description Standard for Applications in  
HEP and FEL Electronics ver. 1.0.  
DESY-TESLA 2005-22

### K.T. POZNIAK, T. CZARSKI, W. KOPREK, W. GIERGUSIEWICZ, R.S. ROMANIUK

8-Channel, FPGA Based, DSP Integrated Cavity Simulator and  
Controller for VUV-FEL SIMCON 3.0 Version 3.0. rev. 1, 06.2005  
Hardware Manual.  
DESY-TESLA 2005-20

### K.T. POZNIAK, T. CZARSKI, W. KOPREK, R.S. ROMANIUK

DSP Integrated, Parameterized, FPGA Based Cavity Simulator and  
Controller for VUV-FEL SC Cavity SIMCON version 2.1. re. 1,  
02.2005 User's Manual.  
DESY-TESLA 2005-02

### K.T. POZNIAK, R.S. ROMANIUK, W. JALMUZNA, K. OLOWSKI, K. PERKUSZEWSKI, J. ZIELINSKI, K. KIERZKOWSKI

FPGA Based, Full-Duplex, Multi-Channel, Multi-Gigabit, Optical,  
Synchronous Data Transceiver for TESLA Technology LLRF  
Control System.  
DESY-TESLA 2005-07

### K.T. POZNIAK, R.S. ROMANIUK, K. KIERZKOWSKI

Modular and Reconfigurable Common PCB-Platform of FPGA  
Based LLRF Control System for TESLA Test Facility.  
DESY-TESLA 2005-04

### P. PUCYK, W. KOPREK, P. KALETA, J. SZEWINISKI, K.T. POZNIAK, T. CZARSKI, R.S. ROMANIUK

DOOCS Environment for FPGA Based Cavity Control System and  
Control Algorithms Development.  
DESY-TESLA 2005-13

### B. RACKY

Das Personen-Interlocksystem des VUV-FEL.  
MPS-Laborbericht 02/05

### Das Personen-Interlocksystem von DORIS.

MPS-Laborbericht 11/05

### D. RAMERT

Das Personeninterlock des Linac 3.  
MPS-Laborbericht 11/05

### Das Personeninterlock des Linac 2.

MPS-Laborbericht 11/05

### J. SEKUTOWICZ, J. IVERSEN, G. KREPS, W.-D. MÖLLER, W. SINGER, X. SINGER, I. BEN-ZVI, A. BURRILL, J. SMEDLEY, T. RAO, M. FERRARIO, P. KNEISEL, J. LANGNER, P. STRZYZEWSKI, R. LEFFERTS, A. LIPSKI, K. SZALOWSKI, K. KO, L. XIAO

Nb-Pb Superconducting RF-Gun.  
DESY-TESLA-FEL 2005-09

### J. SZEWINISKI, P. KALETA, P. FAFARA, P. PUCYK, W. KOPREK, K. POZNIAK, R. ROMANIUK

Software for Development and Communication with FPGA Based  
Hardware.  
DESY-TESLA 2005-16

### K. WITTENBURG

Beam Losses and Machine Protection.  
DESY HERA 05-01

### Quench Levels and Transient Beam Losses at HERA.

DESY HERA 05-02

## Strahlenschutz

### Veröffentlichungen

A. LEUSCHNER  
The  $^{12}\text{B}$  Counter: An Active Dosimeter for High-Energy Neutrons.  
Radiation Protection Dosimetry 116 (2005) 144

### Interne Berichte

Y. ASANO, A. LEUSCHNER  
Synchrotron Radiation Shielding Calculations for PETRA-III  
Beamlines: Optics Hutch.  
Laborbericht D3-120

N. TESCH  
Ergebnisse von Strahlenschutzmessungen am DESY im Jahre  
2004.  
Innter Bericht D3-102

Radiologische Auswirkungen auf die Umwelt beim Betrieb des  
Röntgenlasers XFEL.  
Laborbericht D3-119/2