

# Beschleuniger

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### Veröffentlichungen

- V. AYVAZIAN ET AL.  
First operation of a free-electron laser generating GW power radiation at 32 nm wavelength.  
Eur. Phys. J. D 37 (2006) 297 and SLAC-PUB-12114
- D.P. BARBER, M. VOGT  
Spin Motion at and Near Orbital Resonance in Storage Rings with Siberian Snakes I: At Orbital Resonance.  
New Journal of Physics 8 (2006) 296 and DESY 06-220
- G. BASSI, T. AGOH, M. DOHLUS, L. GIANNESI, R. HAJIMA, A. KABEL, T. LIMBERG, M. QUATTROMINI  
Overview of CSR Codes.  
Nucl. Instrum. Methods A 557 (2006) 189
- P. BAUER, N. SOLYAK, G.L. CIOVATI, G. EREMEEV, A. GUREVICH, L. LILJE, B. VISENTIN  
Evidence for Non-linear BCS Resistance in SRF Cavities.  
Physica C 441 (2006) 51
- J. BÜRGER, J.A. DAMMANN, L. HAGGE, J. IVERSEN, A. MATHEISEN, W. SINGER  
Toward Industrialization: Supporting the Manufacturing Processes of Superconducting Cavities at DESY.  
Physica C 441 (2006) 268
- Toward industrialization: Supporting the manufacturing processes of superconducting cavities at DESY.  
Physica C 441 (2006) 268
- P. CRAIEVICH, T. WEILAND, I. ZAGORODNOV  
The Short-range Wakefields in the BTW Accelerating Structure of the ELETTRA LINAC.  
Nucl. Instrum. Methods A 558 (2006) 58
- A. DANGWAL, G. MÜLLER, D. RESCHKE  
DC Field Emission Scanning Measurements on Electropolished Niobium Samples.  
Physica C 441 (2006) 88
- M. EL-GHAZALY, H. BACKE, W. LAUTH, G. KUBE, P. KUNZ, A. SHARAFUTDINOV, T. WEBER  
X-ray Phase Contrast Imaging at MAMI.  
Eur. Phys. J. A 28 (2006) 208
- K. FUJITA, H. KAWAGUCHI, I. ZAGORODNOV, T. WEILAND  
Time Domain Wake Field Computation with Boundary Element Method.  
IEEE Trans. Nucl. Sci. 53 (2006) 431
- P.D. GALL, A. GOESSEL, V. GUBAREV, J. IVERSEN  
A Database for Superconducting Cavities for the TESLA Test Facility.  
Physica C 441 (2006) 272
- A. KABEL, Y. CAI, M. DOHLUS, T. SEN, R. UPLENCHWAR  
Applications of Parallel Computational Methods to Charged-Particle Beam Dynamics.  
Nucl. Instrum. Methods A 558 (2006) 163
- F. LÖHL, S. SCHREIBER, M. CASTELLANO, G. DI PIRRO, L. CATANI, A. CIANCHI, K. HONKAVAARA  
Measurements of the Transverse Emittance at the FLASH Injector at DESY.  
Phys. Rev. STAB 9 (2006) 092802
- S. MOLLOY ET AL.  
High Precision Superconducting Cavity Diagnostics with Higher Order Mode Measurements.  
Phys. Rev. STAB 9 (2006) 112802
- E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV  
Properties of the Third Harmonic of the Radiation from Self-amplified Spontaneous Emission Free Electron Laser.  
Phys. Rev. STAB 9 (2006) 030702
- Self-amplified Spontaneous Emission FEL with Energy-chirped Electron Beam and its Application for Generation of Attosecond X-ray Pulses.  
Phys. Rev. STAB 9 (2006) 050702
- Statistical Properties of the Radiation from VUV FEL at DESY Operating at 30 nm Wavelength in the Femtosecond Regime.  
Nucl. Instrum. Methods A 562 (2006) 472
- J. SEKUTOWICZ  
New Geometries: Elliptical Cavities.  
ICFA Beam Dynamics Newsletter 39 (2006) 6
- W. SINGER  
Seamless/bonded Niobium Cavities.  
Physica C 141 (2006) 89
- G. TURCHETTI, G. BASSI, A. BAZZANI, B. GIORGINI, H. MAIS  
Hamiltonian Dynamics with a Weak Noise and the Echo Effect for the Rotator Model.  
J. Phys. A 39 (2006) 11440
- I. ZAGORODNOV, T. WEILAND  
TE/TM Alternating Direction Scheme for Wake Field Calculation in 3D.  
Nucl. Instrum. Methods A 558 (2006) 95
- I. ZAGORODNOV  
Indirect Methods for Wake Potential Integration.  
Phys. Rev. STAB 9 (2006) 102002 and DESY 06-081

### Preprints und Interne Berichte

- K. BALEWSKI, I. KRUPCHENKOV, K. WITTENBURG  
Examination of the Bunch Current and Bunch Pattern Dependence of the LIBERA BPM Electronic.  
MDI internal Report Nr. 2006 1
- A.K. BANDYOPADHYAY, A. JÖSTINGMEIER, A.S. OMAR, R. WANZENBERG  
Computations of Wakefields for Beam Position Monitors of PETRA III.  
DESY M 06-02

- K.L. BANE ET AL.  
Configuration Studies and Recommendations for the ILC Damping Rings.  
Cockcroft-0604, LBNL 59449
- P. CASTRO  
A Tool to Analyse and Display the Current Stability of Magnet Power Supplies in FLASH.  
Technical Note 2006-01
- Beam Trajectory Investigations with Degaussed Quadrupoles in the Undulator Section in FLASH.  
TESLA-FEL 2006-10
- Measurements of Remanent Fields in TQG Quadrupoles by Means of Beam Position Measurements in FLASH.  
TESLA-FEL 2006-11
- E. CHIADRONI  
Bunch Length Characterization at the TTF VUV-FEL.  
TESLA-FEL 2006-09
- T. CZARSKI, K. POZNIAK, R. ROMANIUK, S. SIMROCK  
Control System Modelling for Superconducting Accelerator.  
TESLA 2006-08
- TESLA Cavity Modeling and Digital Implementation in FPGA Technology for Control System Development.  
TESLA-FEL 2001-01
- T. CZARSKI, W. KOPREK, K. POZNIAK, R. ROMANIUK, S. SIMROCK, A. BRANDT  
Superconducting Cavity Driving with FPGA Controller.  
TESLA-FEL 2006-07
- H. EHRLICHMANN  
Bunch Timing Aspects for the ILC.  
DESY M 06-01
- L. FRÖHLICH  
Thermal Load on Wire scanners in the FLASH Linac.  
Technical Note 2006-02
- G. GELONI, E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV  
Fourier Optics Treatment of Classical Relativistic Electrodynamics.  
DESY 06-127
- Longitudinal Wake Field for an Electron Beam Accelerated through a Ultra-High Field Gradient.  
DESY 06-222
- Statistical Optics Approach to the Design of Beamlines for Synchrotron Radiation.  
DESY 06-037
- R. GRACZYK, K. POZNIAK, R. ROMANIUK  
FPGA Based Modular Configurable Controller with Fast Synchronous Optical Network.  
TESLA 2006-09
- O. GRIMM, P. SCHMÜSER  
Principles of Longitudinal Beam Diagnostics with Coherent Radiation.  
TESLA FEL 2006-03
- B. GRISHANOV ET AL.  
ATF2 Proposal, Vol. 2.  
DESY 06-001
- K. HACKER, P. CASTRO, M. HUENING, D. NOELLE, H. SCHLARB, E. SCHNEIDMILLER, E. PLOENJES  
TTF2 ACC5 Gradient Measurement.  
Technical Note 05-03
- R.J. HERNANDEZ PINTO, M. OTTO, M. VALENTAN  
Radiation Measurements in the FLASH Tunnel in Summer 2006.  
Technical Note 2006-04
- M. HOFFMANN, S. SIMROCK  
Ein optimales Modulationsverfahren für Multibunch-Feedbacksysteme.  
Technical Note 2006-03
- M. HOFFMANN  
HERA-p Longitudinal.  
DESY HERA 06-03
- W. JALMUZNA  
Design and Implementation of Universal Mathematical Library Supporting Algorithm Development for FPGA Based Systems in High Energy Physics Experiments.  
TESLA 2006-01
- K. KORZUNOWICZ  
Application of a Genetic Algorithm to Unfold Thermoluminescence Dosimeter (TLD) Glow Curves for Use During Radiation Measurements for X-FEL Experiment in DESY, Hamburg.  
TESLA 2006-02
- B. LORBEER  
Stability of the Master Oscillator for FLASH at DESY.  
TESLA 2006-11
- F. MARHAUSER  
Finite Element Analyses for RF Photoinjector Gun Cavities.  
TESLA-FEL 2006-02
- M. MASLOV, V. SYTCHEV, M. SCHMITZ  
Layout Considerations on the 25GeV / 300kW Beam Dump of the XFEL Project.  
TESLA-FEL 2006-05
- K. MÜLLER, J. PETERS  
Improving the Hminus Puls Quality with an Active HV Drop Compensation.  
DESY HERA 06-02
- B. NAGORNY  
Synchrotronstrahlung und Synchrotronstrahlungsabsorber im Spinrotator im HERA e-Ring.  
DESY HERA 06-01
- K. PERKUSZEWSKI, K. POZNIAK, W. JALMUZNA, W. KOPREK, J. SZEWINSKI, R. ROMANIUK, S. SIMROCK  
FPGA Based Multichannel Optical Concentrator SIMCON 4.0 for TESLA Cavities LLRF Control System.  
TESLA 2006-07

- R. PIETRASIK  
SIMCON 3.1 LLRF System Control Board Measurements (for TESLA Test Facility).  
TESLA 2006-05
- M.T. PRICE ET AL.  
Beam Profile Measurements with the 2-D Laser-Wire.  
EUROTeV-Report-2006-046-1
- P. PUCYK  
DOOCS Patterns, Reusable Software Components for FPGA Based RF Gun Field Controller.  
TESLA 2006-10
- E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV  
Coherence Properties of the Radiation from X-Ray Free Electron Laser.  
DESY 06-137
- SASE FEL with Energy-Chirped Electron Beam and Its Application for Generation of Attosecond Pulses.  
DESY 06-051
- J. SEKUTOWICZ  
Parameter Set for CW and Near-CW Operation of Superconducting Linac Driving a FEL Facility.  
TESLA-FEL 2006-08
- E. VOGEL, V. AYVAZYAN, J. BECKER, W. KRIENS, K. REHLICH, S. SIMROCK, P. TEGE  
Timing Requirements and Proposal of a Timing Concept for the European XFEL.  
TESLA 2006-12
- M. WERNER, K. WITTENBURG  
Very Fast Beam Losses at HERA, and What Has Been Done about It.  
DESY HERA 06-04
- J.S. ZIELINSKI  
Synchronic, Optical Transmission Data Link Integrated with FPGA Circuits (for TESLA LLRF Control System).  
TESLA 2006-04
- F. ZIMMERMANN, D. SCHULTE, R. CIMINO, C. VACCAREZZA, M. ZOBOV, R. WANZENBERG  
Electron Cloud in Wigglers.  
CLIC-NOTE-650; CERN-CLIC-NOTE-650;  
EUROTEV-REPORT-2006-002
- Veröffentlichte Vorträge**
- Proc. of BIW06, Batavia/USA**  
AIP (2006)
- O.V. AFANASYEV, A.B. BALUEV, K.I. GUBRIENKO, E.A. MERKER, K. WITTENBURG, I. KROUPCHENKOW  
A Beam Shape Oscillation Monitor for HERA.  
AIP (2006) 534
- N. BABOI, J. KRUSE, J. LUND-NIELSEN, D. NOELLE, T. TRABER, W. RIESCH, M. WENDT  
Resolution Studies on Beam Position Monitors at the VUV-FEL at DESY.  
AIP (2006) 227
- G. KUBE, G. PRIEBE, CH. WIEBERS, K. WITTENBURG  
Proton Synchrotron Radiation Diagnostics at HERA.  
AIP (2006) 374
- C. SIMON ET AL.  
High Resolution BPM for the Linear Colliders.  
AIP (2006) 488
- Proc. of EPAC'06, Edinburgh/UK**  
JACOW (2006)
- A.K. BANDYOPADHYAY, A. JÖSTINGMEIER, A.S. OMAR, K. BALEWSKI, R. WANZENBERG  
Computations for the Beam Positioning Monitors of PETRA III.  
JACOW (2006) 3326
- K.L.F. BANE, I. ZAGORODNOV  
Wakefields in the LCLS Undulator Transitions.  
JACoW (2006) 2952, SLAC-PUB-11937
- V. BORISOV, E. MATYUSHEVSKY, N. MOROZOV, E. SYRESIN, O. GRIMM, M. YURKOV, J. ROSSBACH  
Simulations of Electromagnetic Undulator for Far Infrared Coherent Source of TTF at DESY.  
JACoW (2006) 3595
- A. BRINKMANN, J. IVERSEN, D. RESCHKE, J. ZIEGLER  
Dry-Ice Cleaning on SRF-Cavities.  
JACoW (2006) 418
- J.A. CLARKE ET AL.  
Status of the HeLiCal Contribution to the Polarised Positron Source for the International Linear Collider.  
JACoW (2006) 715
- H. DELSIM-HASHEMI, B. SCHMIDT, J. ROSSBACH, O. GRIMM, P. SCHMÜSER, H. SCHLARB, A.V. G VAN DER MEER  
Bunch Compression Monitor.  
JACOW (2006) 86
- M. DOHLUS  
Modelling of Space Charge and CSR Effects in Bunch Compressor Systems.  
JACoW (2006) 1897
- J.C. FRISCH ET AL.  
High Precision SC Cavity Alignment Diagnostics with HOM Measurements.  
JACoW (2006) 920
- O. GRIMM, K. KLOSE, S. SCHREIBER  
Double-pulse Generation with the FLASH Injector Laser for Pump/Probe Experiments.  
JACoW (2006) 3143
- O. GRIMM, P. SCHMÜSER  
Principles of Longitudinal Beam Diagnostics with Coherent Radiation.  
JACOW (2006) 1040

- Y. IVANYUSHENKOV ET AL.  
Development of a Superconducting Helical Undulator for the ILC Positron Source.  
JACoW (2006) 706
- H. KAPITZA, P. GÖTTLICHER, N. HEIDBROOK, H. SCHLARB  
FEL Disturbance by Ambient Magnetic Field Changes.  
JACoW (2006) 74
- J.-W. KIM, J. BURNHAM, J. CHEN, F.X. KÄRTNER,  
F.Ö. ILDAY, F. LUDWIG, H. SCHLARB, A. WINTER,  
M. FERIANIS, D. CHEEVER  
An Integrated Femtosecond Timing Distribution System for XFELs.  
JACoW (2006) 2744
- Y. LI, K. BALEWSKI, W. DECKING  
Dynamic Aperture Studies for PETRA III.  
JACoW (2006) 3320
- L. LILJE  
High-Gradient Superconducting Radiofrequency Cavities for Particle Acceleration.  
JACoW (2006) 2752
- Performance Limitations of Tesla Cavities in the FLASH Accelerator and their Relation to the Assembly Process.  
JACoW (2006) 421
- F. LÖHL, K.E. HACKER, F. LUDWIG, H. SCHLARB,  
B. SCHMIDT, A. WINTER  
A Sub 100 fs Electron Bunch Arrival-time Monitor System for FLASH.  
JACoW (2006) 2781
- G.A. MOORTGAT-PICK ET AL.  
Spin Tracking at the ILC.  
JACoW (2006) 2454
- A. PAECH, W. ACKERMANN, T. WEILAND, O. GRIMM  
Numerical Simulation of Synchrotron Radiation for Bunch Diagnostics.  
JACoW (2006) 1031
- M. PIVI, L. WANG, K. OHMI, R. WANZENBERG, A. WOLSKI,  
F. ZIMMERMANN  
Simulation of the Electron Cloud for Various Configurations of a Damping Ring for the ILC.  
JACoW (2006) 2958
- E. PRAT, W. DECKING, T. LIMBERG  
Measurement and correction of dispersion in the VUV-FEL.  
JACoW (2006) 1951
- V. PTITSYN ET AL.  
eRHIC - Future Machine for Experiments on Electron-Ion Collisions.  
JACoW (2006) 676
- J. RANDHAHN, S. CHORоба, M. DOHLUS, M. EBERT,  
F. EINTS, M. HOFFMANN, R. WAGNER  
Design and Operation of a Ferrite Loaded Kicker Cavity for the Longitudinal Coupled Bunch Feedback for HERA-p.  
JACoW (2006) 2991
- J. ROCHFORD ET AL.  
Magnetic Modelling of a Short-Period Superconducting Helical Undulator for the ILC Positron Source.  
JACoW (2006) 840
- M. RÖHRS, C. GERTH, M. HÜNING, H. SCHLARB  
Energy-Time Correlation Measurements Using a Vertically Deflecting RF Structure.  
JACoW (2006) 80
- Slice Emittance Measurements at FLASH.  
JACoW (2006) 77
- G.K. SAHOO, K. BALEWSKI, W. DECKING  
Spurious Vertical Dispersion Correction for PETRA III.  
JACoW (2006) 1954
- H. SCHLARB ET AL.  
Comparative Study of Bunch Length and Arrival Time Measurements at FLASH.  
JACoW (2006) 1049
- H. SCHLARB, N. HEIDBROOK, H. KAPITZA, F. LUDWIG,  
N. NGADA  
Precision RF Gun Phase Monitor System for the VUV-FEL.  
JACoW (2006) 1052
- A. WINTER, F. LÖHL, F. LUDWIG, H. SCHLARB, B. SCHMIDT,  
P. SCHMÜSER  
Layout of the Optical Synchronization System for FLASH.  
JACoW (2006) 1061
- A. WINTER, J. CHEN, F.Ö. ILDAY, F.X. KÄRTNER, F. LUDWIG,  
H. SCHLARB, P. SCHMÜSER  
High-Precision Laser Master Oscillators for Optical Timing Distribution Systems in Future Light Sources.  
JACoW (2006) 1064
- High-Precision Laser Master Oscillators for Optical Timing Distribution Systems in Future Light Sources.  
JACoW (2006) 2747
- I. ZAGORODNOV, K.L.F. BANE  
Wakefield Calculations for 3D Collimators.  
JACoW (2006) 2859, SLAC-PUB-11938
- I. ZAGORODNOV, M. DOHLUS, T. LIMBERG  
Impact of Undulator Wakefields and Tapering on the European FEL Performance.  
JACoW (2006) 83
- I. ZAGORODNOV, N. SOLYAK  
Wakefield Effects of New ILC Cavity Shapes.  
JACoW (2006) 2862
- V. ZIEMANN, N. JAVAHIRALY, P. VAN DER MEULEN,  
M. LARSSON, E. SALDIN, H. SCHLARB, E. SCHNEIDMILLER,  
A. WINTER, M. YURKOV  
Technical Aspects of the Integration of the Optical Replica Synthesizer for the Diagnostics of Ultra-Short Bunches in FLASH at DESY.  
JACoW (2006) 1199

V. ZIEMANN, P. VAN DER MUELEN, M. LARSSON,  
N. JAVAHIRALY, H. SCHLARB, A. WINTER, E. SALDIN,  
E. SCHNEIDMILLER, M.V. YURKOV  
Technical Aspects of the Integration of the Optical Replica  
Synthesizer for the Diagnostics of Ultra-Short Bunches in FLASH  
Facility.  
JACoW (2006) 1199

**Proc. of FEL2006, Berlin/DE**

Jacow (2006)

B. BEUTNER, W. DECKING, M. DOHLUS, T. LIMBERG,  
M. RÖHRS  
Beam Dynamics Experiments and Analysis on CSR Effects at  
FLASH.  
Jacow (2006) 56

H. DELSIM-HASHEMI, B. SCHMIDT, J. ROSSBACH, O. GRIMM,  
P. SCHMÜSER, H. SCHLARB, A.V. G VAN DER MEER  
Single-Shot Longitudinal Diagnostics with THz Radiation at the  
Free-Electron Laser Flash.  
BESSY (2006) 594

G. GELONI, E. SALDIN, E. SCHNEIDMILLER, M. YURKOV  
Fourier Optics Treatment of Classical Relativistic  
Electrodynamics.  
JACoW (2006) 501

K. HACKER, F. LOEHL, H. SCHLARB  
Beam Pickup Designs Suited for an Optical Sampling Technique.  
JACoW (2006) 451, TUPPH054

N. JAVAHIRALY, P. VAN DER MEULEN, M. LARSSON,  
E. SALDIN, H. SCHLARB, E. SCHNEIDMILLER, A. WINTER,  
M.V. YURKOV, V. ZIEMANN  
Technical Aspects of the Integration of the Optical Replica  
Synthesizer for the Diagnostics of Ultra-Short Bunches into  
FLASH at DESY.  
JACoW (2006) 296

M. RÖHRS, C. GERTH, H. SCHLARB  
Investigations of the Longitudinal Electron Bunch Structure at the  
FLASH Linac with a Transverse Deflecting RF-Structure.  
JACoW (2006) 80

E.L. SALDIN, E.A. SCHNEIDMILLER, M.V. YURKOV  
Attosecond Pulses from X-Ray FEL with an Energy-Chirped  
Electron Beam and a Tapered Undulator.  
JACoW (2006) 202

Transverse and Longitudinal Coherence Properties of the  
Radiation from X-Ray SASE FELs.  
JACoW (2006) 206

**Proc. of ICAP 2006, Chamonix/FR**

JACoW (2006)

M. DOHLUS  
Computational Needs for XFELs.  
JACoW (2006) 164

S. LANGE, M. CLEMENS, L.O. FICHTE, M. DOHLUS,  
T. LIMBERG  
Numerical Minimization of Longitudinal Emittance in Linac  
Structures.  
JACoW (2006) 124

A. MARKOVIK, G. PÖPLAU, U. VAN RIENEN, R. WANZENBERG  
Tracking Code with 3-D Space-Charge Calculations Taking into  
Account the Elliptical Shape of the Beam Pipe.  
JACoW (2006) 220

**Weitere Konferenzen**

K. ABRAHAMYAN ET AL.  
Experimental Characterization and Numerical Simulations of the  
Electron Source at PITZ.  
Proc. of ICAP 2004, St. Petersburg/RU  
Nucl. Instrum. Methods A 558 (2006) 249

G. AMATUNI, V. TSAKANOV, W. DECKING, R. BRINKMANN  
Single Bunch Emittance Preservation in XFEL Linac.  
Proc. of 37th ICFA Advanced Beam Dynamics Workshop on  
Future Light Sources, Hamburg/DE  
JACOW (2006) 33

S. ANAKHOV, X. SINGER, W. SINGER, H. WEN  
Gas and RRR Distribution in High Purity Niobium EB Welded in  
Ultra-High Vacuum.  
Proc. of ISOHIM 2005, Uppsala/SE  
American Institute of Physics (AIP) (2006) 71

H. DELSIM-HASHEMI, O. GRIMM, B. SCHMIDT, P. SCHMÜSER  
Single-Shot Longitudinal Diagnostics with THz Radiation.  
Proc. of 37th ICFA Advanced Beam Dynamics Workshop on  
Future Light Sources, Hamburg/DE  
JACoW (2006) 1

B.J. HOLZER  
Lattice Design in High Energy Particle Accelerators.  
Proc. of CAS, Zeuthen/DE  
CERN (2006) 31, CERN 2006-002

R. SCHUHMANN, I. ZAGORODNOV, T. WEILAND  
A Simplified Conformal (SC) Method for Modeling Curved  
Boundaries in FDTD Without Time Step Reduction.  
Proc. of 2006 IEEE MTT-S, International Microwave Symposium,  
San Francisco/USA  
IEEE (2006) 177

W. SINGER  
Metallurgical and Technological Request for High Purity Niobium  
in SRF Application.  
Proc. of ISOHIM 2005, Uppsala/SE  
American Institute of Physics (AIP) (2006) 51

A. WINTER, F.Ö. ILDAY, O.D. MÜCKE, R. ELL, H. SCHLARB,  
P. SCHMÜSER, F.X. KÄRTNER  
Towards High-Performance Optical Master Oscillators for Energy  
Recovery Linacs.  
Proc. of ERL 2005, Newport News/USA  
Nucl. Instrum. Methods A 557 (2006) 304



K. WITTENBURG  
Remote Diagnostics and Maintenance of Beam Instrumentation  
Devices.  
Proc. of CARE-N3-HHH-ABI, Hirschberg/DE  
ABI (2006) 1, CARE-Conf-05-044-HHH

### Vorträge

#### **37th ICFA Advanced Beam Dynamics Workshop on Future Light Sources, Hamburg/DE (05/2006)**

B. BEUTNER, M. DOHLUS, M. RÖHRS  
Beam Dynamics Experiments and Analysis in FLASH on CSR and  
Space Charge Effects.

H. DELSIM-HASHEMI, B. SCHMIDT, O. GRIMM,  
P. SCHMUESER  
Longitudinal Diagnostic Using THz Radiation.

G. GELONI, E. SALDIN, E. SCHNEIDMILLER, M.V. YURKOV  
Statistical Optics and Partially Coherent X-Ray Beams in Third  
Generation Light Sources.

K.E. HACKER, N. BABOI, F. LÖHL, D. NÖLLE, H. SCHLARB  
Chicane BPM Design and Expectations – Perpendicularly mounted  
strip-line for dispersive areas.

F. LÖHL, K.E. HACKER, F. LUDWIG, H. SCHLARB,  
B. SCHMIDT, A. WINTER  
Compact Ultra-High Precision Beam Phase Monitor System.

M. RÖHRS, B. BEUTNER, A. BOLZMANN, C. GERTH,  
M. HÜNING, H. SCHLARB  
Time-Resolved Measurements using the Transversely Deflecting  
RF-Structure LOLA at FLASH (DESY).

E. SALDIN, E. SCHNEIDMILLER, M.V. YURKOV  
Attosecond Pulses in XFELs.

Operational Experience and Recent Results from FLASH.

H. SCHLARB, F.X. KÄRTNER, J. KIM, F. LÖHL, F. LUDWIG,  
S. SIMROCK, A. WINTER  
Synchronization System for the XFEL.

A. WINTER, F.Ö. ILDAY, F.X. KÄRTNER, H. SCHLARB  
Recent Developments and Layout of the Master Laser System for  
the VUV-FEL.

V.G. ZIEMANN, M. LARSSON, P. VAN DER MEULEN,  
E. SALDIN, H. SCHLARB, E. SCHNEIDMILLER, M.V. YURKOV  
Status of the Optical Replica Synthesizer Project at DESY.

#### **DPG2006, Dortmund/DE (03/2006)**

H. DELSIM-HASHEMI, J. ROSSBACH, B. SCHMIDT, O. GRIMM,  
P. SCHMÜSER, A.V. G VAN DER MEER  
Electron Bunch Length Diagnostics Using Broadband Single Shot  
Spectrometer.

F. LÖHL, K. HONKAVAARA  
Messungen der Transversalen Emittanz am VUV-FEL.

H. WEISE  
Neue Beschleunigertechnologien am Beispiel der Freie-Elektronen  
Laser VUV-FEL und XFEL.

A. WINTER, F.Ö. ILDAY, J. CHEN, F. LUDWIG, H. SCHLARB,  
P. SCHMÜSER, F. KÄRTNER  
Femtosecond Optical Synchronization Systems for XFELs.

#### **EIFast, Hamburg/DE (05/2006)**

S. CHORоба  
Overview RF System.

H.-J. ECKOLDT  
Power Supplies for XFEL.

V. KATALEV  
Waveguide Distribution for XFEL.

D. KOSTIN  
Power Coupler Testing.

J. RANDHAHN  
Driver Amplifier for 10MW Klystrons.

K. REHLICH  
The XFEL Control System: Hardware.

The XFEL Control System: Software.

M. SEIDEL, T. WOHLBERG  
Warm Vacuum Systems.

K. ZAPPE  
Cold Vacuum Issues.

#### **EPAC'06, Edinburgh/UK (06/2006)**

R. BACHER  
The New Control System for the Future Low-Emittance Light  
Source PETRA 3 at DESY.

S. BRINKER, S.W. HERB, F.J. WILLEKE, T. LOHSE  
A Tune Feedback System for the HERA Proton Storage Ring.

H. DELSIM-HASHEMI, O. GRIMM, A. VAN DER MEER,  
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Control Path of Longitudinal Multibunch-feedback System at  
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F. FURUTA ET AL.  
Experimental Comparison at KEK of High Gradient Performance  
Different Single Cell Superconducting Cavity Designs.

O. GRIMM, K. KLOSE, S. SCHREIBER  
Double-pulse Generation with the FLASH Injector Laser for  
Pump/Probe Experiments.

O. GRIMM  
Principles of Longitudinal Beam Diagnostics with Coherent  
Radiation.

K. HACKER, F. LÖHL, H. SCHLARB

Large Horizontal Aperture BPM for Use in Dispersive Sections of Magnetic Chicanes.

M. HOFFMANN, S. CHOROBA, F. EINTS, U. HURDELBRINK,  
P. MOROZOV, J. RANDHAHN, S. RUZIN, S. SIMROCK,  
E. VOGEL, R. WAGNER

The Longitudinal Coupled Bunch Feedback for HERA-p.

H. KAPITZA, P. GÖTTLICHER, N. HEIDBROOK, H. SCHLARB  
FEL Disturbance by Ambient Magnetic Field Changes.

V.V. KATALEV, S. CHOROBA

Waveguide Distribution Systems for the European XFEL.

J. KEIL, O. KAUL, E. NEGODIN, R. NEUMANN

Design of a Local IP Orbit Feedback at HERA-e.

K. KNAACK, K. WITTENBURG, R. NEUBERT, S. NIETZSCHE,  
W. VODEL, A. PETERS

A New SQUID-based Measurement Tool for Characterization of Superconducting RF Cavities.

G. KUBE, F. WILLEKE

Direct Observation of Beam-Beam Induced Dynamical Beta Beating at HERA.

L. MONACO, P. MICHELATO, C. PAGANI, P. PIERINI,  
D. SERTORE, M. KRASILNIKOV, F. STEPHAN, J.H. HAN,  
S. SCHREIBER

Dark Current Investigation of TTF and PITS RF Guns.

A. PAECH, W. ACKERMANN, T. WEILAND, O. GRIMM  
Numerical Simulation of Synchrotron Radiation for Bunch Diagnostics.

M. PRICE ET AL.

Beam Profile Measurements with the 2-D Laser-Wire.

J. SEKUTOWICZ ET AL.

Nb-Pb Superconducting RF-Gun.

D. SERTORE, L. MONACO, P. MICHELATO, C. PAGANI,  
J.H. HAN, S. SCHREIBER

High QE Photocathodes at FLASH.

P. STRZYZEWSKI, J. LANGNER, M. SADOWSKI, J. WITKOWSKI,  
T. RAO, J. SMEDLEY, J. SEKUTOWICZ, R. RUSSO, S. TAZZARI  
Deposition of Lead Thin Films Used as Photo-Cathodes by Means of Cathodic Arc under UHV Conditions.

R. WAGNER, A. BIENKOWSKI, S. CHOROBA, A. GAMP,  
T. GREVSMUEHL, G. MOELLER

Experience with the 208 MHz and 52 MHz RF Systems for the HERA Proton Accelerator.

S. WALSTON ET AL.

Performance of a Nanometer Resolution BPM System.

#### **FEL2006, Berlin/DE (08/2006)**

H. DELSIM-HASHEMI, B. SCHMIDT, J. ROSSBACH, O. GRIMM,  
P. SCHMÜSER, H. SCHLARB, A.V. G VAN DER MEER  
Single-Shot Longitudinal Diagnostics with THz Radiation at the Free-Electron Laser FLASH.

K. HACKER, F. LOEHL, H. SCHLARB

Beam Pickup Designs Suited for an Optical Sampling Technique.

E.A. SCHNEIDMILLER, M.V. YURKOV FOR THE FLASH TEAM  
Lasing at 13 nm of the SASE FEL at FLASH.

#### **HB2006, Tsukuba/JP (05/2006)**

K. HASEGAWA, S. HENDERSON, N.V. MOKHOV, R. SCHMIDT,  
M. TOMIZAWA, K. WITTENBURG

Beam Diagnostics, Collimation, Injection/Extraction, Targetry, Accidents and Commissioning: Working Group C&G Summary Report.

M. WERNER, K. WITTENBURG

Very Fast Beam Losses at HERA, and What Has Been Done About It.

K. WITTENBURG

Overview of Recent Halo Diagnosis and Non-destructive Beam Profile Monitoring.

#### **LINAC06, Knoxville/USA (08/2006)**

H.-J. ECKOLDT

Pulse Cables for XFEL Modulators.

L. FRÖHLICH ET AL.

First Operation of the FLASH Machine Protection System with Long Bunch Trains.

P. KNEISEL, G. CIOVATI, J. SEKUTOWICZ

Coaxial HOM Coupler Designs Tested on a Single-Cell Niobium Cavity.

M. KOLLEWE, K. FLÖTTMANN

Applications of Time-of-Flight Measurements at FLASH.

S. MOLLOY ET AL.

Using Higher Order Modes in Superconducting Accelerating Cavities for Beam Monitoring.

D. RESCHKE, A. BRINKMANN, J. IVERSEN, W. SINGER,  
X. SINGER, J. ZIEGLER

Status of the XFEL Testcavity Program.

J. SEKUTOWICZ

HOM Damping and Power Extraction from Superconducting Cavities.

W. SINGER, A. BRINKMANN, J. IVERSEN, G. KREPS,  
A. MATHEISEN, D. RESCHKE, X. SINGER

Large-Grain Superconducting RF Cavities at DESY.

H. WEISE

The TTF/VUV-FEL (FLASH) as the Prototype for the European XFEL Project.

A. WINTER, J. BECKER, F. LÖHL, K. REHLICH, S. SIMROCK,  
P. TEGE

An Integrated Optical Timing and RF Reference Distribution System for Large-Scale Linear Accelerators.

**PCaPAC 2006, Newport News/USA (10/2006)**

R. BACHER

The New Control System for the Future Low-Emittance Light Source PETRA 3 at DESY: From Conceptual Design Work to Realization.

P. BARTKIEWICZ, S. HERB

The Common Application Programming Interface for Fieldbus Related Projects at PETRA 3.

M. BIELER, A. BRINKMANN, U. ZOBJACK

User Requirements for the PETRA3 Control System at DESY.

P. DUVAL, H.G. WU

The ACOP Family of Beans.

Using the Common Device Interface in TINE.

S. HERB, P. DUVAL

Device Address Redirection as a Tool in the TINE Control System.

R. KAMMERING, V. KOCHARYAN, K. REHLICH, V. RYBNIKOV  
DAQ based high level software applications using MATLAB.

A. LABUDDA

Building and Deploying Loosely Coupled Console Applications.

J. WILGEN

A Device Server Generator for Control Systems.

**TTC, Tsukuba/JP (09/2006)**

L. LILJE

ILC Short-Term R&D Issues: Cavity R&D Program.

D. RESCHKE

SRF Cavity Activities at DESY.

H. WEISE

Report from TTF/VUV-FEL (FLASH).

Status of the European XFEL Project.

**Weitere Vorträge**

N. BABOI, K. HACKER, F. LÖHL, H. SCHLARB

Large Horizontal Aperture BPM for Use in Dispersive Sections of Magnetic Chicanes.

4th CARE-N3-ABI workshop on Simulation of BPM front-end electronics and Special Mechanical Designs, Lüneburg/DE (11/2006)

N. BABOI

Using Higher Order Modes in the Superconducting TESLA Cavities for Diagnostics at FLASH at DESY.

Accelerator Physics Seminar, Darmstadt (GSI, Univ. Frankfurt)/DE (11/2006)

D.P. BARBER, M. VOGT

Spin Motion Near Snake Resonances.

SPIN2006, Kyoto/JP (10/2006)

D.P. BARBER

Spin Dynamics for the Electron Ring.

Workshop on Future Prospects in QCD at High Energy, Brookhaven/USA (07/2006)

S. CHOROBA

High Power RF.

International School for Linear Colliders, Sodenkai, Hayama/JP (05/2006)

The RF System for the European XFEL.

IVEC 2006, Monterey/USA (04/2006)

XFEL RF System.

ILC GDE Meeting, Hamburg/DE (05/2006)

W. DECKING, J. ROSSBACH

New Results from FLASH.

NATO Advanced Research Workshop on Brilliant Light Facilities and Research in Life and Material Sciences, Yerevan/AM (07/2006)

W. DECKING

The European XFEL Project.

NATO Advanced Research Workshop on Brilliant Light Facilities and Research in Life and Material Sciences, Yerevan/AM (07/2006)

XFEL Beam Dynamics.

STI Review Meeting, Hamburg/DE (03/2006)

M. EBERT

Status of the RF-System for PETRA-3.

PETRA-III Review Meeting of the Machine Advisory Committee, Hamburg/DE (11/2006)

H. HERZOG, R. KLOS, H. LIERL, S. MOLNAR, B. PETERSEN,

J. ROTHER, W. SCHROTH, M. STEPHAN

Upgrade of the Compressor System of the HERA Cryogenic Plant by the Use of Frequency Converter Power Supplies.

Cryoprague 2006, Prague/CZ (07/2006)

B.J. HOLZER

Introduction to Transverse Beam Dynamics.

CAS 2006, Zakopane/PL (10/2006)

Lecture Series: Transverse Beam Dynamics.

Post-Graduate Lecture Courses of the Cockcroft Institute, Daresbury/UK (04/2006)

P. KNEISEL, G. CIOVATI, G. MYNENI, J. SEKUTOWICZ

Development of Large Grain/Single Crystal Niobium Cavity Technology at Jefferson Lab.

Single Crystal Niobium Technology Workshop, Araxa/BR (10/2006)

D. KOSTIN

Superconducting Linear Accelerators for the Sources of the Coherent Synchrotron Radiation.

Third International Scientific Seminar „Modern Methods of Diffraction Data Analysis (X-ray Topography, Diffractometry, Electron Microscopy)“, Veliky Novgorod/RU (05/2006)

A. LABANC

Simulation and Measurement of the TTF3 Input Coupler. CST, Boppard/DE (03/2006)



J. LANGNER ET AL.  
Progress in Use of Ultra-High Vacuum Cathodic Arcs For  
Deposition of Thin Superconducting Layers.  
22nd International Symposium on Discharges in Vacuum,  
Matsue/JP (09/2006)

L. LILJE  
ILC Main Linac Design Status.  
LCWS06, Bangalore/IN (03/2006)

R&D Board Task Force on High Gradient SCRF Cavities.  
VLCW06, Vancouver/CA (07/2006)

L.I. MALYSHEVA, D.P. BARBER, I.R. BAILEY, J.A. CLARKE,  
D.J. SCOTT, J.B. DAINTON, G.A. MOORTGAT-PICK  
Depolarizing Effects at the ILC.  
SPIN2006, Kyoto/JP (10/2006)

E.L. SALDIN, E.A. SCHNEIDMILLER, H. WEISE,  
M.V. YURKOV FOR FLASH TEAM  
Free Electron Laser as a Potential Source for EUV Lithography.  
EUV Source Workshop, Barcelona/ES (10/2006)

M. SEIDEL  
The Lepton Proton Collider HERA.  
Seminarvortrag PSI, Villingen/CH (02/2006)

C. SIMON, S. CHEL, M. LUONG, O. NAPOLY, J. NOVO,  
D. ROUDIER, N. BABOI, D. NOELLE, N. MILDNER,  
N. ROUVIERE  
High Resolution Re-entrant BPM for Linear Colliders.  
4th CARE-N3-ABI workshop on Simulation of BPM front-end  
electronics and Special Mechanical Designs, Lüneburg/DE  
(11/2006)

W. SINGER, X. SINGER  
Application of High Purity Niobium for European X-Ray Laser  
Project XFEL.  
47th General Assembly of Tantalum-Niobium International Study  
Center, Innsbruck/AT (10/2006)

W. SINGER  
Advances in Large Grain/Single Crystal SC Resonators at DESY.  
CARE06 Annual Meeting, INFN-LNF, Frascati/IT (11/2006)  
Large Grain/Single Crystal R&D at DESY.  
Single Crystal Niobium Technology Workshop, Araxa/BR  
(10/2006)

H. WEISE, E.L. SALDIN, E.A. SCHNEIDMILLER,  
M.V. YURKOV  
The European X-Ray Free-Electron Laser Project.  
EUV Source Workshop, Barcelona/ES (10/2006)

H. WEISE  
The European XFEL Project.  
79th Plenary ECFA Meeting, Hamburg/DE (07/2006)  
XFEL TDR – Accelerator Complex – Linear Accelerator.  
STI Review Meeting, Hamburg/DE (03/2006)

S. WILKE  
News of the PETRA-3 RF.  
ESLS-RF 2006, Dortmund/DE (09/2006)

K. ZAPFE  
Large Systems Commissioning.

Leak Detection.  
CAS, Platja d' Aro/ES (05/2007)

### Diplomarbeiten

A. ECKHARDT  
Low Level RF Control for a Superconducting 3rd Harmonic  
Accelerating Cavity.  
Universität Hamburg (2006)

N. NGADA  
Simulation von Modulatoren mit Puls-kabeln unter besonderer  
Beachtung des EMV-Verhaltens.  
TU Hamburg-Harburg (2006)

H. SAHIN  
Simulation der Kühlwasser Temperaturstabilität für die PETRA  
Ringmagnete mit LabVIEW.  
Hochschule für Angewandte Wissenschaften, Hamburg (2006)

### Buchbeiträge

A. AGHABABYAN ET AL.  
XFEL – The European X-Ray Free-Electron Laser – Technical  
Design Report.  
DESY (2006) ISBN 3-935702-17-5

E. KEIL, W. DECKING  
Lattice Design and Simulation Codes.  
Handbook of Accelerator Physics and Engineering  
World Scientific (2006) ISBN 9810235005

### Strahlenschutz

#### Preprints und Interne Berichte

P. BILSKI ET AL.  
Complex Workplace Radiation Fields at European High-energy  
Accelerators and Thermonuclear Fusion Facilities.  
CERN-2006-007

N. TESCH  
Ergebnisse von Strahlenschutzmessungen am DESY im Jahre  
2005.  
DESY D3-103

#### Vorträge

A. KLETT, A. LEUSCHNER  
Pulsed Neutron Dose Monitoring – A New Approach.  
2006 IEEE Nuclear Science Symposium (NSS), Medical Imaging  
Conference (MIC) and 15th International Room Temperature  
Semiconductor Detector Workshop, San Diego, California/USA  
(10/2006)

S. VAN SMAALEN  
Commensurate and incommensurate magnetic order in spin-Peierls  
compounds TiOCl and TiOBr.  
APERIODIC 2006, Zao, Miyagi/JP (09/2006)