

## Publications, Conference Contributions, Internal Reports

### 1988 - 1999

#### 1988

1. W. Bialowons, M. Bieler, H. D. Bremer, F. J. Decker, H. C. Lewin, P. Schütt, G. A. Voss, R. Wanzenberg, T. Weiland: *Hollow Beam Gun for the Wake Field Experiment at DESY*. First European Particle Accelerator Conference EPAC, Rom 1988, pp. 967-969
2. W. Bialowons, M. Bieler, H. D. Bremer, F. J. Decker, H. C. Lewin, P. Schütt, G. A. Voss, R. Wanzenberg, T. Weiland: *Computer Simulations of the Wake Field Transformer Experiment at DESY*. First European Particle Accelerator Conference EPAC, Rom 1988, 902-904
3. W. Bialowons, M. Bieler, H. D. Bremer, F. J. Decker, H. C. Lewin, P. Schütt, G. A. Voss, R. Wanzenberg , T. Weiland: *Measurements of the Hollow Beam at the Wake Field Transformer Experiment at DESY*. First European Particle Accelerator Conference EPAC, Rom 1988, pp. 613-615
4. W. Bialowons, M. Bieler, H. D. Bremer, F. J. Decker, H. C. Lewin, P. Schütt, G. A. Voss, R. Wanzenberg , T. Weiland: *The Transient Wake Field Transformer Experiment at DESY*. First European Particle Accelerator Conference EPAC, Rom 1988, pp. 55-57
5. W. Bialowons, M. Bieler, H. D. Bremer, F. J. Decker, H. C. Lewin, P. Schütt, G. A. Voss, R. Wanzenberg , T. Weiland: *The Resonant Wake Field Transformer Concept for Particle Acceleration*. First European Particle Accelerator Conference EPAC, Rom 1988, pp. 490-492
6. W. Bialowons, M. Bieler, H. D. Bremer, F. J. Decker, N. Holtkamp, H. C. Lewin, P. Schütt, G. A. Voss, R. Wanzenberg, T. Weiland: *Wake Field Acceleration, a Way to TeV e+ e- Collisions*. XXIV International Conference on High Energy Physics, Munich, 1988
7. W. Bialowons, F. J. Decker, F. Ebeling, P. Schütt, R. Wanzenberg, T. Weiland, C-D Xiao: *Hollow Beam Dynamics in the DESY Wake Field Accelerator*. Linear Accelerators and Beam Optics Codes, San Diego 1988, AIP Vol. 177, pp. 173-180
8. W. Bialowons, M. Bieler, H. D. Bremer, F. J. Decker, H. C. Lewin, P. Schütt, G. A. Voss, R. Wanzenberg, T. Weiland: *Insulation of a Hollow Beam Gun*. International Conf. on Discharge effects, Paris, July 1988
9. W. Bialowons, M. Bieler, H. D. Bremer, F. J. Decker, H. C. Lewin, P. Schütt, G. A. Voss, T. Weiland, R. Wanzenberg: *The Resonant Wake Field Transformer Concept for Particle Acceleration*. ICFA Seminar on Future Accelerator Technologies, Capri, 1988, pp. 369-375

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10. W. Bialowons, M. Bieler, H. -D. Bremer, F. J. Decker, N. Holtkamp, H. C. Lewin, P. Schütt, G. -A. Voss, R. Wanzenberg, T. Weiland: *Wake Field Transformation - A New Mechanism for Particle Acceleration*. DESY 89-037, March 1989
  11. W. Bialowons, M. Bieler, F. J. Decker, N. Holtkamp, H. C. Lewin, P. Schütt, R. Wanzenberg, T. Weiland: *Status and Future Developments of the Wake Field Transformer Experiment*. Second All-Union Workshop on New Methods of Particle Acceleration, Nor Amhard, Oct. 1989, published. in Nucl. Instrum. Meth. A 298, 1990 p. 93-101
  12. W. Bialowons, M. Bieler, F.J. Decker, N. Holtkamp, H.C. Lewin, M. Nagl, U. Niemeier, R. Wanzenberg, T. Weiland: *Measurement of Modes in the Resonant Wake Field Transformer. (In German)*, DESY-M-89-05, Jul 1989 (Internal Report)
  13. Bialowons, M. Bieler, H.D. Bremer, F.J. Decker, N. Holtkamp, H.C. Lewin, P. Schütt, R. Wanzenberg, T. Weiland: *Experimental Test of a Multicell Wake Field Transformer*, DESY-M-89-24, Dec 1989 (Internal Report)
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14. W. Bialowons, M. Bieler, F. J. Decker, N. Holtkamp, H. C. Lewin, P. Schütt, R. Wanzenberg, T. Weiland: *Longitudinal Beam Dynamics of the RWT Collider*. Proc. of the European Particle Accelerator Conference EPAC, p. 676, Nizza, June 1990
15. W. Bialowons, M. Bieler, F. J. Decker, N. Holtkamp, H. C. Lewin, P. Schütt, R. Wanzenberg, T. Weiland,: *The Resonant Wake Field Transformer (RWT)-Collider*. Proc. of the European Particle Accelerator Conference EPAC,p. 31, Nizza, June 1990
16. W. Bialowons, M. Bieler, H. Bremer, F. J. Decker, N. Holtkamp, H. C. Lewin, P. Schütt, R. Wanzenberg, T. Weiland: *Thin Film Cathode for a Hollow Beam Gun*. Proc. of the European Particle Accelerator Conference EPAC, p. 670, Nizza, June 1990
17. W. Bialowons, M. Bieler, F. J. Decker, N. Holtkamp, H. C. Lewin, P. Schütt, R. Wanzenberg ,T. Weiland: *A Strong Focussing Scheme for Hollow Beams in the RWT Collider*. Proc. of the European Particle Accelerator Conference EPAC, p. 673, Nizza, June 1990
18. R. Wanzenberg: *Longitudinal Beam Dynamics in a Resonant Wake Field Accelerator. (in German)*, Doctoral Thesis, Hamburg U, July 1990, DESY-M-90-08, Aug 1990. 102pp.
19. T. Weiland, R. Wanzenberg: *Wake Fields and Impedances*, Joint US-CERN Accelerator School, Hilton Head, So. Carolina, Nov 7-14, 1990, published in CERN US PAS 1990, 39-79
20. W. Bialowons, M. Bieler, F. J. Decker, N. Holtkamp, H. C. Lewin, P. Schütt, R. Wanzenberg, T. Weiland: *Status and Future Developments of the Wake Field Transformer Experiment*. Nuclear Instruments and Methods NIM A298(1990) pp. 93-101, Proc. of the Charged Particle Optics Conference, Tolouse.
21. W. Bialowons, M. Bieler, H. D. Bremer, F. J. Decker, N. Holtkamp, H. Ch. Lewin, P. Schütt, R. Wanzenberg, T. Weiland: *Wake Field Transformation - a Novel Method for Particle Acceleration*. GSI-90-29, special issue, pp. 71-73.

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22. K. Balewski, H.G. Beyer, M. Bieler, W. Bothe, K. Bredehoft, R. Brinkmann, S. Choroba, M. Dehler, M. Dohlus, B. Dwersteg, F. Ebeling, M. Ebert, A. Febel, R. Fischer, K. Flottmann, P. Hahne, N. Holtkamp, B. Holzer, H. Jurgensen, R. Klatt, J. Kouptsidis, H. Kumpfert, F. Krawczyk, F. Loffler, M. Marx, H. Narciss, R. Neumann, F. Peters, M. Peters, P. Pillat, U. van Rienen, J. Rossbach, G. Schumann, W. Schwarz, V. Tsakanov, S. Vilcins, G.A. Voss, R. Wanzenberg, T. Weiland, M. Werner, S. Wipf, H. Wolter , H. Wumpelmann: *Status Report of a 500-GeV S Band Linear Collider Study.* DESY-91-153, Dec 1991. 39pp. and in Saariselkae 1991, Physics and experiments with linear colliders, vol.2, 663-703.
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24. H. G. Beyer, M. Drevlak, N. Holtkamp, U. v. Rienen, V. Tsakanov, R. Wanzenberg, T. Weiland, M. Zhang: *Single and Multi Bunch Instabilities in a 2x250 GeV Linear Collider.* XV International Conference on High Energy Accelerators, Hamburg, July 1992, pp. 855-857.
25. H. G. Beyer, N. Holtkamp, U. v. Rienen, V. Tsakanov, R. Wanzenberg, T. Weiland, M. Zhang: *Automatic Computer-Aided Optimization of Cavities for the Design of Accelerating Structures.* XV International Conference on High Energy Accelerators, Hamburg, 1992, Vol 2, pp. 939-941.
26. H. G. Beyer, M. Drevlak, N. Holtkamp, U. v. Rienen, V. Tsakanov, R. Wanzenberg, T. Weiland, M. Zhang: *Minimization of Multibunch-BBU in a Linac by Evolutionary Strategies.* XV International Conference on High Energy Accelerators, Hamburg, July 1992, pp. 848-850.
27. M. Drevlak, B. Dwersteg, H. Hartwig, N. Holtkamp, G. Kreps, U. v. Rienen, G. Schumann, V. Tsakanov, R. Wanzenberg, T. Weiland, M. Zhang: *Structure Work for a S-Band Linear Collider.* XV International Conference on High Energy Accelerators, Hamburg, July 1992, pp. 830-832
28. H. G. Beyer, N. Holtkamp, U. v. Rienen, V. Tsakanov, R. Wanzenberg, T. Weiland: *Wake Field Effects in Final Focus Quadrupoles for Next Linear Collider.* XV International Conference on High Energy Accelerators, Hamburg, July 1992, pp. 851-854.
29. H. G. Beyer, M. Drevlak, N. Holtkamp, U. v. Rienen, V. Tsakanov, R. Wanzenberg, T. Weiland, M. Zhang: *Attenuation of Transverse Modes by Variable Cell Geometries in Travelling Wave Tubes.* XV International Conference on High Energy Accelerators, Hamburg, July 1992, pp. 876-878.

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31. K. Balewski, H.G. Beyer, M. Bieler, T. Bockmann, W. Bothe, K. Bredehoft, R. Brinkmann, S. Choroba, M. Dehler, M. Dohlus, M. Drevlak, B. Dwersteg, M. Ebert, A. Febel, R. Fischer, K. Flottmann, P. Hahne, H. Hartwig, N. Holtkamp, B. Holzer, P. Hulsmann, H. Jurgensen, H. Kaiser, R. Klatt, H. Klein, J. Kouptsidis, F. Krawczyk, H. Kumpfert, M. Kurz, F. Loffler, M. Marx, H. Muench, H. Musfeldt, M. Nagl, H. Narciss, G. Nawrath, R. Neumann, P. Neumuller, W. Oentrich, F. Peters, J. Peters, M. Peters, P. Pillat, J. Rossbach, M. Schmitz, H.P. Scholz, G. Schumann, W. Schwarz, E. Seesselberg, K. Sinram, M. Sommerfeld, V. Tsakanov, F.R. Ullrich, U. van Rienen, S. Vilcins, G.A. Voss, R. Wanzenberg, T. Weiland, M. Werner, S. Wipf, H. Wolter, H. Wumpelmann, M. Zhang: *A 500-GeV S-Band Linear Collider Study: Status Report 1992*, ECFA Workshop on e+ e- Linear Colliders (LC 92), Garmisch Partenkirchen, Germany, 25 Jul - 2 Aug 1992. vol. 1\*, 123-153.
32. R. Wanzenberg: *Multibunch Dynamics in Detuned X Band Structures*, KEK-92-8, Jul 1992. 21pp.
33. D. Buchholz, R. Wanzenberg: *The Realm of the Vacuum*, DESY-91-025, Apr. 1991. 13pp., Published in Commun.Math.Phys.143:577-590,1992

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35. R. Wanzenberg: *A lattice for the S Band Linear Collider Test Facility*, DESY-M-93-07, Oct 1993. 16pp.

### 1994

36. M. Drevlak, R. Wanzenberg: *Single Bunch Tracking Calculations and Orbit Correction for the SBLC Study*, in London 1994, Proceedings, EPAC 94, vol. 2, 1108-1110
37. M. Drevlak, R. Wanzenberg: *Multibunch Emittance Preservation in a Linear Collider*, in London 1994, Proceedings, EPAC 94, vol. 2, 1120-1122

### 1995

38. Wanzenberg: *The Impedances of Selected Components of the Hera Proton Ring*, DESY-HERA-95-07, Nov 1995
39. Drevlak, R. Wanzenberg: *Beam Dynamics in the SBLC*, DESY - Int.Rep.M-95-05 , Apr., 1995

40. Drevlak, R. Wanzenberg: *Beam Dynamics Studies for the SBL*C, 16<sup>th</sup> IEEE Particle Accelerator Conference (PAC 95), Dallas, Texas, 1-5 May 1995, published in IEEE PAC 1995, 689-691

41. Wanzenberg, (ed.): *e+ e- Sources and Preaccelerators for Linear Colliders*. Proceedings, International Workshop, Sources '94, Schwerin, Germany, Sept. 29 -Oct. 4, 1994

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43. Brinkmann, M. Drevlak, R. Wanzenberg, *Improved Beam Stability with new Parameter Set for the S Band Linear Collider*, 18<sup>th</sup> International Linear Accelerator Conference (Linac 96), Geneva 1996, Linear accelerator, vol. 2 782-784, CERN-96-07

44. Galluccio, M.R. Masullo, F. Klefenz, B. Schwingenheuer, V.G. Vaccaro, R. Wanzenberg, M. Wendt: *Measurement of the Longitudinal Coupling Impedance of the HERA-B Vertex Detector Chamber*, 5<sup>th</sup> European Particle Accelerator Conference (EPAC 96), Sitges, Spain, 10-14 Jun 1996, pp 1356-1358

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45. Klefenz, R. Wanzenberg, M. Wendt: *First Results from Measurements of Modes in the HERA-B Vertex Chamber Excited by the Proton Beam*, Internal Report, DESY-M-97-01, Jan 1997

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46. Wanzenberg, M. Wendt: *Measurements of Modes in the HERA-B Vertex Chamber Excited by the HERA Proton Beam*, 6<sup>th</sup> European Particle Accelerator Conference (EPAC 98), Stockholm, Sweden, 22-26 Jun 1998

47. Brinkmann, C. Burnton, R. Wanzenberg, T. Weiland: *Tracking Studies in the Longitudinal Phase Space for the TESLA Damping Ring Design*, 6<sup>th</sup> European Particle Accelerator Conference (EPAC 98), Stockholm, Sweden, 22-26 Jun 1998

48. Dohlus, R. Lorenz, T. Kamps, H. Schlarb, R. Wanzenberg: *Estimation of Longitudinal Wake Field Effects in the TESLA-TTF FEL Undulator Beam Pipe and Diagnostic Section*, DESY-TESLA-FEL-98-02, Mar 1998

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49. Bieler, E. Gianfelice-Wendt, G. Hoffstaetter, B. Holzer, S. Levonian, T. Limberg, M. Lomperski, M. Minty, C. Montag, R. Wanzenberg, M. Wendt, F. Willeke, K. Wittenburg: *Recent and Past Experiences with Beam-Beam Effects at HERA*, Workshop on Beam-Beam Effects in Large Hadron Colliders, Geneva, Switzerland, 12-16 Apr 1999, p. 12-19