16 Publications

16.1 Research group of Prof. C. Amsler

Articles

- **Spatial Distribution of Cold Antihydrogen Formation**
  N. Madsen et al. (ATHENA Collaboration), Phys.Rev.Lett.94 (2005) 033403.

- **A measurement of the Lorentz angle in silicon strip sensors at cryogenic temperature**
  I. Johnson, C. Amsler et al., Nucl.Instr.Meth.A 540 (2005) 113.

- **Dynamics of antiproton cooling in a positron plasma during antihydrogen formation**
  M. Amoretti, C. Amsler et al. (ATHENA Collaboration), Phys.Rev.Lett.B 590 (2004) 133.

- **Study of antiproton annihilation on neutrons into** $\omega\pi^-\pi^0$
  C. Amsler et al. (Crystal Barrel Collaboration), Nucl.Phys.A740 (2004) 130.

- **Design and test of the CMS pixel readout chip**
  M. Barbero et al., Nucl.Instr.Meth.A 517 (2004) 349.

- **A Gaussian-sum filter for vertex reconstruction**
  R. Frühwirth, T. Speer, Nucl.Instr.Meth.A 534 (2004) 217.

- **Review of Particles Physics**
  S. Eidelman et al. (Particles Data Group), Phys.Lett.B 592 (2004) 1.

- **Quark Model**
  C. Amsler, Phys. Lett. B 592 (2004) 154.

- **The** $\eta(1405)$**,** $\eta(1475)$**,** f_1**(1420), and** f_1**(1510)**
  C. Amsler, Phys. Lett. B 592 (2004) 549.

- **Non** $q\bar{q}$ **candidates**
  C. Amsler, Phys. Lett. B 592 (2004) 848.

- **Tests of silicon sensors for the CMS pixel detector**
  A. Dhorokov, C. Amsler et al., Nucl.Instr.Meth.A 530 (2004) 71.

- **Real-time detector for plasma diagnostic in antimatter experiment**
  C. Carraro et al. (ATHENA Collaboration), Nucl.Instr.Meth.A 518 (2004) 249.

- **Production and detection of cold antihydrogen atoms**
  M. Amoretti, C. Amsler et al. (ATHENA Collaboration), Nucl.Instr.Meth.A 518 (2004) 244.

- **The first cold antihydrogen**
  M. C. Fujiwara et al. (ATHENA Collaboration), Nucl.Instr.Meth.A 532 (2004) 229.

- **Light exotic mesons**
  C. Amsler, Conf. on Quark Confinement and the Hadron Sprectrum, Gargnano, World Scientific (2003) 101.

- **Particle Physics Booklet**
  S. Eidelman et al. (Particle Data Group), Extracted from Phys. Lett. B 592 (2004) 1.

- **Position Dependence of Charge Collection in Prototype Sensors for the CMS Pixel Detector**
  T. Rohe et al., Proc. 2003 IEEE Nuclear Science Symposium, physics/0312009, IEEE-TNS 51-3 (2004) 1150.

- **Detection of antihydrogen with a silicon micro-strip and pure CsI detector**
  I. Johnson et al. (ATHENA Collaboration), Proc. 8th ICATPP Conference, physics/0401034, World Scientific (2004) 473.

Articles in press

- **ATHENA – First Production of Cold Antihydrogen and Beyond**
  A. Kellerbauer et al. (ATHENA Collaboration), Proc. of the Third Meeting on CPT and Lorentz Symmetry, Bloomington, hep-ex/040904, World Scientific.

- **Electric field measurement in heavily irradiated pixel sensors**
  A. Dorokhov, Y. Allkofer et al., Proc. Vertex 2004 Conference, physics/0412036, Nucl.Instr.Meth.A.

- **Fluence dependence of charge collection in irradiated pixel sensors**
  T. Rohe et al., Proc. 5th International Conference on Radiation Effects on Semiconductor Materials Detectors and Devices, physics/0411214, Nucl.Instr.Meth.A.

- **Simulation of Heavily Irradiated Silicon Pixel Sensors and Comparison with Test Beam Measurements**
  V. Chiochia, et al., Proc. 2004 IEEE Nuclear Science Symposium, physics/0411143, IEEE Transactions on Nuclear Science.

- **Final results on the neutrino magnetic moment from the MUNU experiment**
  Z. Daraktchieva et al. (MUNU Collaboration), Phys. Lett. B.

- **Vertex reconstruction in CMS**
  E. Chabanat et al., Nucl.Instr.Meth.

- **The effect of highly ionizing particles on the CMS silicon strip tracker**
  W. Adam et al. (CMS Collaboration), Nucl.Instr.Meth.A .

- **A Gaussian/sum filter for vertex reconstruction**
  T. Speer, Proc. of CHEP 2004, Interlaken.

- **A kinematic fit and a decay chain reconstruction library**
  K. Prokofiev and T. Speer, Proc. of CHEP 2004, Interlaken.

PhD thesis

- **Performance of Radiation Hard Pixel Sensors for the CMS Experiment**
  A. Dorokhov, PhD Thesis, Universität Zürich, (2005).

Invited Lectures

- V. Chiochia: **Simulation of irradiated pixel sensors and comparison with test beam data**
  Invited talk, IEEE Nuclear Science Symposium, Rome, 20.10.04.
- A. Dorokhov: **Pixel sensors under heavy irradiation**
  Invited talk, Vertex 2004 Conf., Menaggio, 16.09.04.
- A.Dorokhov: **Spatial resolution of the CMS pixel detector barrel module**
  Seminar, Paul Scherrer Institut, 04.03.05.
- I. Johnson: **Modeling and measuring the Lorentz deflection in silicon sensors**
  Seminar, CMS tracker workshop, CERN, 19.01.05.
- C. Regenfus: **The CMS pixel detector : a status report**
  Invited talk, Vertex 2004 Conf. , Menaggio, 15.09.04.
- T. Speer: **A kinematic fit library**
  Invited talk, CMS workshop on b/tau Physics, Bari, 28.05.04.
- T. Speer: **A Gaussian-sum filter for Vertex reconstruction**
  Invited talk, CHEP 2004 Conf., Interlaken, 30.09.04.
- T. Speer: **Kinematic fit and decay chain reconstruction library**
  Invited talk, CHEP 2004 Conf., Interlaken, 30.09.04.

ATHENA Collaboration:

M. Amoretti, C. Amsler, G. Bonomi, A. Bouchta, P. Bowe, C. Carraro, C. L. Cesar, M. Charlton, M. Doser, V. Filippini, A. Fontana, M. C. Fujiwara, R. Funakoshi, P. Genova, J. S. Hangst, R. S. Hayano, L. V. Joergensen, I. Johnson, V. Lagomarsino, R. Landua, E. Lodi Rizzini, M. Macri, N. Madsen, G. Manuzio, M. Marchesotti, P. Montagna, H. Pruys, C. Regenfus, P. Riedler, J. Rochet, A. Rotondi, G. Rouleau, G. Testera, A. Variola, D.P. van der Werf

MUNU Collaboration:

Z. Daraktchieva, C. Amsler, M. Avenier, C. Broggini, J. Busto, C. Cerna, F. Juget, D.H. Koang, J. Lamblin, D. Lebrun, O. Link, G. Puglierin, A. Stutz, A. Tadsen, J.-L. Vuilleumier, V. Zacek

CRYSTAL BARREL Collaboration:

C. Amsler, A.V. Anisovich, C.A. Baker, B.M. Barnett, C.J. Batty, M. Benayoun, P. Blüm, K. Braune, T. Case, V. Credé, K.M. Crowe, M. Doser, W. Dünnweber, D. Engelhardt, M.A. Faessler, R.P. Haddock, F.H. Heinsius, N.P. Hessey, P. Hidas, D. Jamnik, H. Kalinowsky, P. Kammel, J. Kisiel, E. Klempt, H. Koch, M. Kunze, U. Kurilla, R. Landua, H. Matthäy, C.A. Meyer, F. Meyer-Wildhagen, R. Ouared, K. Peters, B. Pick, M. Ratajczak, C. Regenfus, J. Reinnarth, A. Sarantsev, U. Strohbusch, M. Suffert, J.S. Suh, U. Thoma, I. Uman, S. Wallis-Plachner, D. Walther, U. Wiedner, K. Wittmack

PARTICLE DATA Group:

S. Eidelman, K.G. Hayes, K.A. Olive, M. Aguilar-Benitez, C. Amsler, D. Asner, K.S. Babu, R.M. Barnett, J. Beringer, P.R. Burchat, C.D. Carone, C. Caso, G. Conforto, O. Dahl, G. D'Ambrosio, M. Doser, J.L. Feng, T. Gherghetta, L. Gibbons, M. Goodman, C. Grab, D.E. Groom, A. Gurtu, K. Hagiwara, J.J. Hernandez-Rey, K. Hikasa, K. Honscheid, H. Jawahery, C. Kolda, Y. Kwon, M.L. Mangano, A.V. Manohar, J. March-Russell, A. Masoni, R. Miquel, K. Monig, H. Murayama, K. Nakamura, S. Navas, L. Pape, C. Patrignani, A. Piepke, G. Raffelt, M. Roos, M. Tanabashi, J. Terning, N.A. Tornqvist, T.G. Trippe, P. Vogel, C.G. Wohl, R.L. Workman, W.-M. Yao, P.A. Zyla

16.2 Research group of Prof. H.-W. Fink

Articles in print

- **Time-resolved spectroscopic fluorescence imaging, transient absorption and vibrational spectroscopy of intact and photoinhibited plant tissue**
  P.B. Lukins, S. Rehman, G.B. Stevens and D.F. George, Luminescence.

- **Axisymmetric Liquid Hanging Drops**
  E.Meister and T.Yu.Latychevskaia, Journal of Chemical Education.

Conference report

- **Using FIB for Sample Preparation in Low Energy Electron Point Source (LEEPS) Microscopy**
  Michael Krüger, poster, 8th European FIB Users Group Meeting (EFUG 2004), EMPA, Dübendorf, Switzerland, 04.10.2004.

Invited Lectures

- Conrad Escher: **Energetics of an individual DNA molecule bound to a solid surface**
  symposium on surface science 2005, Les Arcs (France), 18-03-05.

- Michael Krüger: **Nanostrukturierung mit einem fokussierten Ionenstrahl**
  Raith Lithography User workshop: Regensburg, Germany, 09.03.2004.

16.3 Research group of Prof. H. Keller

Articles

- **Metallic phase in lightly doped $La_{2-x}Sr_xCuO_4$ observed by electron paramagnetic resonance**
  A. Shengelaya, M. Bruun, B.K. Kochelaev, A. Safina, K. Conder, and K.A. Müller, Phys.Rev.Lett.**93**, 017001-1-4 (2004).

- **Absence of a boron isotope effect in the magnetic penetration depth of MgB_2**
  D. Di Castro, M. Angst, D.G. Eschenko, R. Khasanov, J. Roos, I.M. Savić, A. Shengelaya, S.L. Bud'ko, P.C. Canfield, K. Conder, J. Karpinski, S.M. Kazakov, R.A. Ribeiro, and H. Keller, Phys. Rev. B **70**,014519-1-5 (2004).

- **Formation and dynamics of muonium centres in semiconductors – a new approach**
  V.G. Storchak, D.G. Eshchenko, and J.H. Brewer, J. Phys.: Condens. Matter **16**, S4761 - S4778 (2004).

- **Nano-scale thin film investigations with slow polarized muons**
  E. Morenzoni ,T. Prokscha, A. Suter, H. Luetkens, and R. Khasanov, J. Phys.: Condens. Matter **16**, S4583S4601 (2004).

- **The oxygen isotope effect on the in-plane penetration depth in cuprate superconductors**
  R. Khasanov, A. Shengelaya, E. Morenzoni, K. Conder, I.M. Savić, and H. Keller, J. Phys.: Condens. Matter **16**, S4439S4455 (2004).

- **Anisotropic properties of MgB_2 by torque magnetometry**
  M. Angst, D. Di Castro, R. Puzniak, A. Wisniewski, J .Jun, S.M. Kazakov, J. Karpinski, S. Kohout, and H. Keller, Physica C **408-410**, 88-89 (2004).

- **Implications evinced by the phase diagram, anisotropy, magnetic penetration depths, isotope effects and conductivities of cuprate superconductors**
  T. Schneider and H. Keller, New Journal of Physics **6**, 144-1-18 (2004).

- **Anisotropy and internal-field distribution of MgB_2 in the mixed state at low temperatures**
  M. Angst, D. Di Castro, D.G. Eshchenko, R. Khasanov, S. Kohout, I.M. Savić, A. Shengelaya, S.L. Budko, P.C. Canfield, J. Jun, J. Karpinski, S.M. Kazakov, R.A. Ribeiro, and H. Keller,
  Phys. Rev. B **70**, 224513-1-5 (2004).

- **Pressure effects on the transition temperature and the magnetic field penetration depth in the pyrochlore superconductor $RbOs_2O_6$**
  R. Khasanov, D.G. Eshchenko, J. Karpinski, S.M. Kazakov, N.D. Zhigadlo, R. Brütsch, D. Gavillet, D.Di Castro, A. Shengelaya, F.La Mattina, A. Maisuradze, C. Baines, and H. Keller,
  Phys.Rev.Lett.**93**, 157004-1-4 (2004).

- **Evidence for charged critical fluctuations in underdoped $YBa_2Cu_3O_{7-\delta}$**
  T. Schneider, R. Khasanov, and H. Keller, J. Phys.: Condens. Matter **16**, L437-L442 (2004).

- **Finite-size and pressure effects in $YBa_2Cu_4O_8$ probed by magnetic-field penetration-depth measurements**
  R. Khasanov, T. Schneider, R. Brütsch, D. Gavillet, J. Karpinski, and H. Keller, Phys. Rev. B, **70** 144515-1-7 (2004).

- **Comment on "Superconducting anisotropy and evidence for intrinsic pinning in single crystalline MgB_2**
  M. Angst, R. Puzniak, A. Wisniewski, J. Roos, H. Keller, and J. Karpinski, Phys. Rev. **70**, 226501-1-3 (2004)

- **Direct Observation of Nonlocal Effects in a Superconductor**
  A. Suter, E. Morenzoni, R. Khasanov, H. Luetkens, T. Prokscha, and N. Garifianov, Phys. Rev. Lett. **92**, 087001-1-4 (2004).

- **Long range electron spin polarization in the Ag layer of a Fe/Ag film**
  H. Luetkens, J. Korecki, E. Morenzoni, T. Prokscha, A. Suter, M. Birke, N. Garifianov, R. Khasanov, T. Slezak, and F.J. Litterst, J. Magn. Magn. Mater. **272-276**, 1128-1129 (2004).

- **Antiferromagnetic transition in epitaxial strained La_2CuO_4 thin films**
  A. Suter, J.-P. Locquet, E. Morenzoni, T. Prokscha, D.G. Eshchenko, N. Garifianov, R. Khasanov, H. Luetkens, and J.W. Seo, J. Magn. Magn. Mater. **272-276**, 110-111 (2004).

- **Two Band Superconductivity in MgB_2: Basic Anisotropic Properties and Phase Diagram**
  M. Angst and R. Puzniak, in *Focus on Superconductivity*, ed. B. P. Martines, Vol. **1** (Nova Science Publishers, New York, 2004) (pp. 1-49).

- **Relationship between and implications of the isotope and pressure effects on transition temperature, penetration depths and conductivities**
  T. Schneider, phys. stat. sol. (b) **242**, 58-77 (2005).

- **Evidence for charged critical behavior in the pyrochlore superconductor $RbOs_2O_6$**
  T. Schneider, R. Khasanov, and H. Keller, Phys. Rev. Lett. **94**, 077002-1-4 (2005).

- **Implications of the isotope effects on magnetization, magnetic torque and susceptibility**
  T. Schneider, J. Phys.: Condens. Matter **17**, L161 - L167 (2005).

Articles in press

- **Clean and Dirty Superconductivity in Pure, Al doped, and Neutron Irradiated MgB_2: a Far-Infrared Study**
  M. Ortolani, D. Di Castro, P. Postorino, I. Pallecchi, M. Monni, M. Putti, and P. Dore, Phys. Rev. B (2005).

- **Muon-Spin-Rotation Measurements of the Penetration Depth in the Infinite-Layer Electron-Doped Cuprate Superconductor $Sr_{0.9}La_{0.1}CuO_2$**
  A. Shengelaya, R. Khasanov, D. G. Eshchenko, D. Di Castro, I. M. Savić, M. S. Park, K. H. Kim, Sung-Ik Lee, K.A. Müller, and H. Keller, Phys. Rev. Lett. (2005).

- **Evidences for polaron formation in cuprates**
  A. Bussmann-Holder, H. Keller, and K.A. Müller, in *Structure and Bonding Vol. 114*, A. Bussmann-Holder and K.A. Müller, eds., Springer-Verlag Berlin Heidelberg (2005).

- **Unconventional isotope effects in cuprate superconductors**
  H. Keller, in *Structure and Bonding Vol. 114*, A. Bussmann-Holder and K.A. Müller, eds., Springer-Verlag Berlin Heidelberg (2005).

- **Essential heterogeneities in hole-doped cuprate superconductors**
  K.A. Müller, in *Structure and Bonding Vol. 114*, A. Bussmann-Holder and K.A. Müller, eds., Springer-Verlag Berlin Heidelberg (2005).

- **Polaron formation as origin of unconventional isotope effects in cuprate superconductors**
  A. Bussmann-Holder and H. Keller, European Physical Journal B (2005).

- **Pressure effect on the in-plane magnetic penetration depth in $YBa_2Cu_4O_8$**
  R. Khasanov, J. Karpinski, and H. Keller, J. Phys.: Condens. Matter (2005).

Conference reports

- **Single Crystal ^{11}B-NMR Study of Magnesium Diboride**
  J. Roos, S. Strässle, M. Mali, H. Keller, J. Karpinski,
  AMPERE/EENC joint meeting, Lille, France, 6 - 11 September 2004.

Invited lectures

- H. Keller: **Unconventional isotope effects in strongly correlated cuprate superconductors**
  Max-Planck Institute for Solid State Research, Stuttgart, Germany, May 12, 2004.

- H. Keller: **Oxygen-isotope effect on the magnetic penetration depth in cuprate superconductors**
  5th International Conference on New Theories, Discoveries and Applications of Superconductors and Related Materials, Chongqing, China, June 11-16, 2004.

- H. Keller: **Unconventional isotope effects in cuprate superconductors**
  Spectroscopies in Novel Superconductors (SNS2004), Sitges, Spain, July 11-16, 2004.

- H. Keller: **Unconventional isotope effects in cuprate high-temperature superconductors**
  Nanoscale properties of condensed matter probed by resonance phenomena, Kazan, Russia, August 15-19, 2004.

- A. Shengelaya: **Microscopic Phase Separation and Two Type of Quasiparticles in Lightly Doped $La_{2-x}Sr_xCuO_4$ Observed by Electron Paramegnetic Resonance**
  Nanoscale properties of condensed matter probed by resonance phenomena, Kazan, Russia, August 15-19, 2004.

- H. Keller: **Unconventional isotope effects in cuprate superconductors**
  2004 E-MRS Fall Meeting Warsaw, Warsaw, Poland, September 5-10, 2004.

- H. Keller: **Unconventional isotope effects in cuprate superconductors**
  4th International Conference on Nanoscale Heterogeneity & Quantum Phenomena in Complex Matter (STRIPES04), Rome, Italy, September 26 - October 2, 2004.

- D. Di Castro: **Study of the pressure and isotope effects on the magnetic penetration depth of MgB_2**
  4th International Conference on Nanoscale Heterogeneity & Quantum Phenomena in Complex Matter (STRIPES04), Rome, Italy, September 26 - October 2, 2004.

- H. Keller: **Unconventional isotope effects in cuprate superconductors**
  EPFL Lausanne, Switzerland, February 1, 2005.

- H. Keller: **What did we learn from isotope effect experiments?**
  MaNEP Topical Meeting, Neuchâtel, Switzerland, February 11, 2005.

- H. Keller: **Unconventional isotope effects in high-temperature cuprate superconductors**
  American Physical Society (APS) March Meeting 2005, Los Angeles, U.S.A., March 21-25, 2005.

16.4 Research group of Prof. P. F. Meier

Articles

- **Hybrid mean field and alloy analogy treatment of the Hubbard model**
  A. Uldry and R. J. Elliott, J. Phys.: Condens. Matter **16**, S5221 (2004).

- **Spin susceptibility in the superconducting state of cuprates**
  T. Mayer, M. Eremin, I. Eremin and P. F. Meier, Physica C **408-410**, 400 (2004).

- **Percolation, fractal behavior and high-T_c superconductors**
  E. P. Stoll, J. of Superconductivity **17**, 79 (2004).

- **From next nearest neighbor site percolation to continuum percolation: Application to high T_c superconductors**
  E. P. Stoll, Int. J. Mod. Phys. C **15**, 321 (2004).

- **Suppression of critical properties in doped cuprates**
  E. P. Stoll, J. Phys. A **38**, 125 (2005).

Conference report

- E. P. Stoll:
  Critical properties in high-T_c superconductors below the insulator-conductor transition
  SPG Tagung, Neuchâtel, 03.03-04.03.04.

Invited Lectures

- P. F. Meier: **Re-assessment of NMR data in cuprates**
  Workshop on Unconventional Superconductors, University of Miami, Coral Gables, Miami, USA, 15.01.04.

- P. F. Meier: **First-principles calculation of the charge and spin density distribution in cuprates**
  Chongqing University, Chongqing, China, 11.06.04.

16.5 Research group of Prof. J. Osterwalder

Articles

- **Spin- and angle-resolved photoemission spectroscopy study of the Au(111) Shockley surface state**
  M. Muntwiler, M. Hoesch, V. N. Petrov, M. Hengsberger, L. Patthey, M. Shi, M. Falub, T. Greber, J. Osterwalder, J. Electron Spectrosc. Relat. Phenom. 137-140, 119-123 (2004).

- **One-dimensional chains of C_{60} molecules on Cu(221)**
  A. Tamai, W. Auwärter, C. Cepek, F. Baumberger, T. Greber, J. Osterwalder, Surf. Sci. 566-568, 633-637 (2004).

- **Localization of surface states in disordered step lattices**
  F. Baumberger, M. Hengsberger, M. Muntwiler, M. Shi, J. Krempasky, L. Patthey, J. Osterwalder, T. Greber, Phys. Rev. Lett. 92, 196805-1-4 (2004).

- **On the dissociation of N_2O after electron attachment**
  H.U. Suter and T. Greber, J. Phys. Chem. B, 108, 14511-14517 (2004).

- **Spin structure of the Shockley surface state on Au(111)**
  M. Hoesch, M. Muntwiler, V. N. Petrov, H. Hengsberger, L. Patthey, M. Shi, M. Falub, T. Greber, J. Osterwalder, Phys. Rev. B 69, 241401(R)-1-4 (2004).

- **Spin-orbit coupling in the L-gap surface states of Au(111): spin-resolved photoemission experiments and first-principles calculations**
  J. Henk, M. Hoesch, J. Osterwalder, A. Ernst, P. Bruno, J. Phys.: Condens. Matter 16, 7581-7597 (2004).

- **Electron coherence in a melting lead monolayer**
  F. Baumberger, W. Auwärter, T. Greber, J. Osterwalder, Science 306, 2221-2224 (2004).

- **Applications of a new Hamiltonian of interaction to one-dimensional and two-dimensional structures**
  A. Dolocan, V. Dolocan, Int. J. Mod. Phys. 18(2), 185-209 (2004).

- **Cr-doped TiO_2 anatase: a ferromagnetic insulator**
  T. Droubay, S. M. Heald, V. Shutthanandan, S. Thevuthasan, S. A. Chambers, J. Osterwalder,
  J. Appl. Phys. 97, 046103-1-3 (2005).

- **h-BN on Pd(110): a tunable system for self-assembled nanostructures?**
  M. Corso, T. Greber, J. Osterwalder, Surf. Sci. 577, L78-L84 (2005).

- **Rocking motion induced charging of C_{60} on h-BN/Ni(111)**
  M. Muntwiler, W. Auwärter, A. P. Seitsonen, J. Osterwalder, T. Greber, Phys. Rev. B 71, 121402(R)-1-4 (2005).

Articles in press

- **Growth of Cr-doped TiO_2 films in the rutile and anatase structure by oxygen-plasma assisted molecular beam epitaxy**
  J. Osterwalder, T. Droubay, T. Kaspar, J. Williams, C. M. Wang, S. A. Chambers, Thin Solid Films, (2005).

Diploma and PhD theses

- **Hexagonal boron nitride on Pd(111): nanomesh or Moiré pattern ?**
  Martin Morscher, Diploma Thesis, Physik-Departement, ETH Zürich, 2005.

Contributed conference presentations

- **Ultraschnellen Prozessen auf der Spur: Physik auf der Skala von Nanometern und Pikosekunden (Poster)**
  M. Hengsberger, Symposium zum Forschungskredit, Universität Zürich, 26.3.04.
- **Hexagonal boron nitride on metals: how does it grow? (Poster)**
  T. Greber, Lorentz Center Workshop on Collective Phenomena, Leiden, The Netherlands, 17.6.04.
- **How steps affect the Shockley surface state on vicinal Cu(111) - and vice versa**
  T. Greber, Lorentz Workshop on Collective Phenomena, Leiden, The Netherlands, 21.6.04.
- **Bilayer nanomesh of h-BN on Rh(111) (Poster)**
  M. Corso, Nanospectra Summer School, Porquerolles, France, 20.-30.6.04.
- **Bilayer nanomesh of h-BN on Rh(111) (Poster)**
  M. Corso, 16th International Vacuum Congress, Venice, Italy, 1.7.04.
- **One-dimensional C_{60} chains: molecular arrangement and electronic properties**
  A. Tamai, 16th International Vacuum Congress, Venice, Italy, 2.7.04.
- **Spin-polarized surface states on Ni(111)**
  J. Lobo-Checa, SLS Users Meeting, PSI, 5.10.04.
- **Electronic structure of C_{60} molecular chains on a stepped Cu surface**
  A. Tamai, SLS Users Meeting, PSI, 5.10.04.
- **Time-resolved low-energy electron diffraction from large molecules on surfaces**
  C. Cirelli, DPG 69th Annual Meeting, Berlin, 4.3.05.
- **Observing enantio-selective absorption: D and L cysteine on Au(17 11 9)**
  R. Schillinger, DPG 69th Annual Meeting, Berlin, 7.3.05.
- **Chiral heterorecognition: cysteine on Au(17 11 9)**
  T. Greber, Symposium on Surface Science (3S), Les Arcs, France, 15.3.05.

Invited lectures

- M. Muntwiler: **Metal-insulator-metal interfaces based on hexagonal boron nidride on Ni(111)**
  X.-Y. Zhu Group Seminar, Department of Chemistry, University of Minnesota, Minneapolis, USA, 29.3.04.
- J. Osterwalder: **Valence band photoemission**
  6 hours of lectures, ICTP School on Synchrotron Radiation, International Center of Theoretical Physics, Trieste, Italy, 3.-7.5.04.
- J. Osterwalder: **C_{60} monolayers on nanostructured surfaces**
  Colloquium, Université de Neuchâtel, 24.5.04.
- M. Hengsberger: **Tracking ultrafast dynamics in solid surfaces: electron diffraction**
  Seminar, Physikalisch-Chemisches Institut der Universität Zürich, 27.5.04.
- J. Osterwalder: **Organizing C_{60} molecules on 1D and 2D nanotemplates**
  16th International Vacuum Congress, Venice, Italy, 1.7.04.

- J. Osterwalder: **Probing electrons confined to nanometer dimensions**
  SLS Users Meeting, PSI, 4.10.04.

- T. Greber: **Elektronen an Grenzflächen: Wie sie sich und Atome bewegen**
  Kolloquium, Université de Fribourg, 7.10.04.

- J. Osterwalder: **Spin-polarized photoemission**
  2 hours of lecture, School on Magnetism and Synchrotron Radiation, Mittelwihr, France, 12.10.04.

- T. Greber: **Hexagonal boron nitride on metals: a baseplate for molecular electronics**
  Hutter Group Seminar, Physikalisch-Chemisches Institut der Universität Zürich, 20.10.04.

- T. Greber: **Observing molecules with photoelectron waves: from forward scattering to near node photoelectron holography**
  Kolloquium, Max-Planck Institut für Festkörperforschung und Universität Stuttgart, 16.11.04.

- T. Greber: **Nanomesh: a new boron nitride allotrope with small holes**
  Seminar, EPF Lausanne, 9.3.05.

16.6 Research group of Prof. A. Schilling

Articles

- **Fluctuations and dark count rates in superconducting NbN single-photon detectors**
  A. Engel, A. Semenov, H.-W. Hübers, K. Il'in, and M. Siegel, phys. stat. sol. (c) 2, (2005) 1668.

- **Critical current of Nb and NbN thin-film structures: The cross-section dependence**
  K. Il'in, M. Siegel, A. Semenov, A. Engel, and H.-W. Hübers, phys. stat. sol. (c) 2, (2005) 1680.

- **Anisotropic field dependence of the magnetic transition in Cu2Te2O5Br2**
  A.V. Sologubenko, R. Dell'Amore, H.R. Ott, and P. Millet, Eur. Phys. J. B 42, (2004) 549.

- **Vortices in low-T_c layered Ta_xGe_{1-x}/Ge superconductors**
  A. Engel and B. J. Ruck, in *Frontiers in Superconductivity Research*, B. P. Martins, ed., Nova Science Publ. Inc. (2004) 199.

Talk

- A. Engel: **Energy Resolution of a Superconducting Quantum Detector**
  SPIE Europe International Symposium Astronomical Telescopes, Glasgow, Scotland, United Kingdom, 21.-25.6.2004.

Conference Contributions

- **Fluctuations and dark count rates in superconducting NbN single-photon detectors**
  A. Engel, poster, E-MRS 2004 Fall meeting, Warsaw, Poland, 6.-10.9.2004.

16.7 Research group of Prof. U. Straumann[6]

Articles

- **An apparatus for the investigatiuon of solid D_2 with respect to ultra-cold neutron sources**
  K. Bodek, B. van den Brandt. T. Brys, M. Daum, P. Fierlinger, P. Geltenbort, M. Giersch, P. Hautle, R. Henneck, M. Kasprzak, K. Kirch, J. A. Konter, G. Kuehne, M. Kuzniak, A. Pichlmaier, D. Raetz, A. Serebrov, J. Zmeskal, Nucl.Instr.Meth.A533, 491 (2004).

- **Search for Supersymmetry with Gauge-Mediated Breaking in Diphoton Events at DØ**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys. Rev. Lett. **94**, 041801 (2004); hep-ex/0408146; FERMILAB-Pub-04/198-E.

- **Search for New Particles in the Two-Jet Decay Channel with the DØ Detector**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys. Rev. D Rapid Comm. **69**, 111101 (2004); hep-ex/03080 33.

- **Improved Measurement of the Top Quark Mass**
  V. M. Abazov *et al.* (DØ Collaboration),
  Nature **429**, 638 (2004); hep-ex/0406031, FERMILAB-Pub-0 4/083-E.

- **Observation and Properties of the $X(3872)$ decaying to $J/\psi\pi^+\pi^-$ in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys.Rev.Lett.**93**, 162004 (2004); hep-ex/0405004, Fermilab-Pub-04/061-E.

- **Search for Pair Production of Light Scalar Top Quarks in $p\bar{p}$ Collisions at $\sqrt{s} = 1.8$ TeV**
  V. M. Abazov *et al.* (DØ Collaboration), Phys.Rev.Lett.**93**, 011801, (2004); hep-ex/0308033.

- **Search for Doubly-charged Higgs Boson Production in the Decay $H^{++}H^{--} \to \mu^+\mu^+\mu^-\mu^-$ with the DØ Detector at $\sqrt{s} = 1.96$ TeV**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys.Rev.Lett.**93**, 141801 (2004); hep-ex/040415; FERMILAB-PUB-04/045-E.

- **Search for 3- and 4-Body Decays of the Scalar Top Quark in Proton Anti-Proton Collisions at $\sqrt{s} = 1.8$ TeV**
  V. M. Abazov *et al.* (DØ Collaboration), Phys. Lett. B **581** (2004) 147-155.

- **Combination of CDF and DØ results on W boson mass and width**
  V. M. Abazov *et al.* (DØ Collaboration), Phys. Rev. D **70**, 092008 (2004);
  hep-ex/0311039v2.

- **Search for Narrow $t\bar{t}$ Resonances in $p\bar{p}$ Collisions at $\sqrt{s} = 1800$ GeV**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys.Rev.Lett.**92**, 221801 (2004); hep-ex/0307079; FERMILAB-Pub-03-225.

[6] for H1 publications see Sec. 16.8

- **Measurement of the B_s^0 lifetime in the exclusive decay channel $B_s^0 \to J/\psi\Phi$**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys.Rev.Lett.**94**, 042001 (2005); hep-ex/0409043; FERMILAB-Pub-04-225-E.
- **Measurement of the WW Production Cross Section in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys.Rev.Lett.**94**, 15180 (2005); hep-ex/0410066; FERMILAB-Pub-04-293-E.
- **Search for the Flavor-Changing Neutral Current Decay $B_s^0 \to \mu^+\mu^-$ in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV with the DØ Detector**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys.Rev.Lett.**94**, 071802 (2005); hep-ex/0410039; FERMILAB-Pub-04-215-E.
- **Search for $Wb\bar{b}$ and WH Production in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys.Rev.Lett.**94**, 091802 (2005), hep-ex/0410062, FERMILAB-Pub-04-288-E.
- **Measurement of $\sigma(p\overline{p} \to Z)\mathrm{Br}(Z \to \tau\tau)$ at $\sqrt{s} = 1.96$ TeV**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys.Rev.D **71**, 072004 (2005), hep-ex/0412020, FERMILAB-Pub-04-381-E.
- **Measurement of the Top Quark Mass In All-Jet Events**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys.Lett.B B606 (2005) 25-33, hep-ex/0410086, FERMILAB-Pub-04-305-E.
- **Investigation on Radiation Damage on Silicon Detectors for the DØ Run IIb upgrade**
  F. Lehner, Nucl.Instr.Meth.A 5300 (2004) 105.
- **Measurement of the Λ_b Lifetime in the Decay $\Lambda_b \to J/\psi\Lambda$ with the DØ Detector**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys.Rev.Lett.**94**, 102001 (2005); hep-ex/0410054; FERMILAB-Pub-04-286-E.
- **A search for anomalous heavy-flavor quark production in association with W bosons**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys.Rev.Lett.**94**, 152002 (2005); hep-ex/0411084; FERMILAB-Pub-04-359-E.
- **A Measurement of the Ratio of Inclusive Cross Sections $p\bar{p} \to Zb/p\bar{p} \to Zj$ at $\sqrt{s} = 1.96$ TeV**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys.Rev.Lett.**94**, 161801 (2005); hep-ex/0410078; FERMILAB-Pub-04-297-E.

Articles in print

- **Measurement of the Ratio of B^+ and B^0 Meson Lifetimes**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys.Rev.Lett.; hep-ex/0410052; FERMILAB-Pub-04-284-E.
- **Measurement of Dijet Azimuthal Decorrelations at Central Rapidities in $p\bar{p}$ Collisions at $\sqrt{s} = 1.96$ TeV**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys.Rev.Lett.; hep-ex/0409040; FERMILAB-Pub-04/217-E.
- **Helicity of the W Boson in lepton + jets $t\bar{t}$ events**
  V. M. Abazov *et al.* (DØ Collaboration),
  Phys.Rev.Lett.; hep-ex/0404040, FERMILAB-PUB-04-057-E.

PhD theses

- **The new CIP2k z-Vertex Trigger for the H1 Experiment at HERA**
  Max Christoph Urban, PhD Thesis, Physik-Insitut, Universität Zürich, 2004.
- **A Measurement of the QED-Compton Cross-Section in Electron-Proton Scattering with the H1 Experiment at HERA**
  Nicolas Keller, PhD Thesis, Physik-Insitut, Universität Zürich, 2004.
- **Measurement of the Charged Current Cross Section in Positron-Proton Collisions at HERA**
  Nicole Werner, PhD Thesis, Physik-Insitut, Universität Zürich,2004.

Conference reports

- Frank Lehner: **New Results from B Physics and Observation of the $X(3872)$ state at DØ**
  XII. International Workshop on Deep Inelastic Scattering, April 14-18, 2004, Strbske Pleso, Slovakia.
- Ralf Bernhard: **Search for rare B decays at the Tevatron**
  DPF 2004, UC Riverside, California, USA, Aug. 26 - 31, 2004. Proceedings submitted to Int. J. Mod. Phys. A, hep-ex/0411020.
- Ralf Bernhard: **Search for the rare decay $B_s \to \mu\mu$ with the DØ detector at the Tevatron**
  poster session, XXXII SLAC Summer Institute, Aug. 2 - 13, 2004.
- Ralf Bernhard: **Search for flavor-violating decay $B_s \to \mu\mu$**
  APS Spring Meeting, Denver, May 1-4, 2004.
- Ralf Bernhard: **Sensitivity analysis of the rare decay $B_s \to \mu\mu$ with the DØ detector**
  2004 PHENOMENOLOGY SYMPOSIUM, University of Wisconsin-Madison, April 26-28, 2004.
- Dima Volyanskyy: **A search for the Bs->J/psi eta' decay at LHCb**
  KINR Open Annual Conference, Kiev (Ukraine), January 26-30th 2004.
- DØ Collaboration: **Search for the Flavor-Changing Neutral Current Decay $B_s \to \mu\mu$ in pp collisions at $\sqrt{s}$ = 1.96 TeV with the DØ Detector**
  DØ conference note 4514, 2. August 2004
  http://www-d0.fnal.gov/Run2Physics/WWW/results/B/B06/B06.pdf
- Linus Lindfeld: **Physics with tau leptons at HERA**
  TAU'04 International Workshop on Tau Lepton Physics, Nara, Japan, 17 September, 2004. Proceedings submitted to Nuclear Physics B - Proceedings Supplements
- Peter Fierlinger: **Storage of Ultracold Neutrons**
  SPS Meeting 03.-04.03.2004, Neuchatel.
- Peter Fierlinger: **Geant4 Simulations for Ultracold Neutrons**
  Frühjahrstagung der Deutschen Physikalischen Gesellschaft, 08.-12.3.2004, Köln.
- Peter Fierlinger: **Geant4 Simulations for Ultracold Neutrons**
  International Conference on Precision Measurements with Slow Neutrons, NIST Gaithersburg, 05.-07.04.2004.

- Peter Fierlinger: **A New Experiment to Measure the Depolarization and Loss Probability of UCN on Diamond Like Carbon**
  International Conference on Precision Measurements with Slow Neutrons, NIST Gaithersburg, 05.-07.04.2004.
- Max Urban: **Design of a z-Vertex Trigger and its Operation Experience in the H1 Experiment at HERA**
  10th Workshop on Electronics for LHC and future Experiments, 13. - 17. September 2004, Boston, USA., Proceedings: CERN-LHCC-2004-030.
- Achim Vollhardt: **LHCb Silicon Tracker electronics: from R&D to Preproduction**
  10th Workshop on Electronics for LHC and future Experiments, 13. - 17. September 2004, Boston, USA., Proceedings: CERN-LHCC-2004-030.
- O.Steinkamp: **Silicon Strip Detectors for the LHCb Experiment**
  5th International Symposium on the Development and Application of Semiconductor Tracking Detectors, Hiroshima, June 14-17, 2004.

Collaboration notes

- **Update on the upper limit for the rare decay $B_s^0 \to \mu^+\mu^+$ with the DØ detector**
  R. Bernhard and F. Lehner, DØnote 4696, January 2005.
- **Sensitivity Analysis of the rare decay $B_s^0 \to \mu^+\mu^-\phi$ with the DØ detector**
  R. Bernhard and F. Lehner, DØnote 4695, January 2005.
- **Search for the Flavor-Changing Neutral Curren t Decay $B_s^0 \to \mu^+\mu^-$ in $p\bar{p}$ collisions at $\sqrt{s} = 1.96$ TeV w ith the DØ detector**
  R. Bernhard and F. Lehner DØnote 4514, July 2004.
- **Mechanical Characterization of a TT Half-Module Prototype**
  F. Lehner et al., LHCb-2005-070.
- **Laboratory Measurements on Irradiated Prototype Ladders for the LHCb Inner Tracker**
  C. Lois, R. Bernhard, M. Needham, A. Vollhardt, A. Wenger, LHCb-2004-112.
- **Quality Assurance of 100 CMS2-OB2 Sensors**
  G. Baumann et al., LHCb-2004-105.
- **Measurements on irradiated silicon sensor prototypes for the Inner Tracker of LHCb**
  F. Lehner et al., LHCb-2004-104.
- **The LHCb Silicon Tracker**
  H.Voss et al., LHCb-2004-077.
- **Tsa: Fast and Efficient Reconstruction for the Inner Tracker**
  M.Needham, LHCb-2004-075.
- **Expected Particle Fluences and Performance of the LHCb Trigger Tracker**
  M. Siegler et al., LHCb-2004-070.
- **Silicon Strip Detectors for the LHCb Experiment**
  O.Steinkamp, LHCb-2004-054.
- **The LHCb Silicon Tracker Project**
  J.Blouw et al., LHCb-2004-051.

- **Raw Data Format and Readout Partitioning for the Silicon Tracker**
  M.Needham, O.Steinkamp, U.Straumann and A.Vollhardt, LHCb-2004-051.

16.8 H1 Publications by the groups of Straumann and Truöl

Articles

- **Measurement of Dijet Production at Low Q^2 at HERA**
  H1-Collaboration, A. Aktas *et al.*,
  DESY 03 – 206, hep-ex/0401010, Eur.Phys.J.**C37** (2004), 141 - 159.

- **Search for Squark Production in R-Parity Violating Supersymmetry at HERA**
  H1-Collaboration, A. Aktas *et al.*,
  DESY 04 – 025, hep-ex/0403027, Eur.Phys.J.**C36** (2004), 425 - 440.

- **Measurement of Anti-Deuteron Photoproduction and a Search for Heavy Stable Charged Particles at HERA**
  H1-Collaboration, A. Aktas *et al.*,
  DESY 04 – 032, hep-ex/0403056, Eur.Phys.J.**C36** (2004), 413 - 423.

- **Forward π^0 Production and Associated Transverse Energy Flow in Deep-Inelastic Scattering at HERA**
  H1-Collaboration, A. Aktas *et al.*,
  DESY 04 – 051, hep-ex/0404009, Eur.Phys.J.**C36** (2004), 441 - 452.

- **Search for Bosonic Stop Decays in R-parity Violating Supersymmetry in e^+p Collisions at HERA**
  H1-Collaboration, A. Aktas *et al.*,
  DESY 04 – 084, hep-ex/0405070, Phys.Lett.**B599** (2004), 159 - 172.

- **Measurement of the Proton Structure Function F_2 at low Q^2 in QED Compton Scattering at HERA**
  H1-Collaboration, A. Aktas *et al.*,
  DESY 04 – 083, hep-ex/0406029, Phys.Lett.**B598** (2004), 159 - 171.

- **A General Search for New Phenomena in ep Scattering at HERA**
  H1-Collaboration, A. Aktas *et al.*,
  DESY 04 – 140, hep-ex/0408044, Phys.Lett.**B602** (2004), 14 - 30.

- **Measurement of Prompt Photon Cross Sections in Photoproduction at HERA**
  H1-Collaboration, A. Aktas *et al.*,
  DESY 04 – 118, hep-ex/0407018, Eur.Phys.J.**C38** (2005), 437 - 445.

- **Inclusive Production of D^+, D^0, D_s^+ and D^{*+} Mesons in Deep Inelastic Scattering at HERA**
  H1-Collaboration, A. Aktas *et al.*,
  DESY 04 – 156, hep-ex/0408149, Eur.Phys.J.**C38** (2005), 447 - 459.

Articles in print

- **Measurement of $F_2^{c\bar{c}}$ and $F_2^{b\bar{b}}$ at High Q^2 using the H1 Vertex Detector at HERA**
  H1-Collaboration, A. Aktas *et al.*, DESY 04 – 209, hep-ex/0411046, Eur.Phys.J.**C** (2005).

- **Search for Light Gravitinos in Events with Photons and Missing Transverse Momentum at HERA**
  H1-Collaboration, A. Aktas *et al.*, DESY 04 – 227, hep-ex/0501030, Phys.Lett.**B** (2005).

- **A Direct Search for Magnetic Monopoles Produced in Positron-Proton Collisions at HERA**
  H1-Collaboration, A. Aktas *et al.*, DESY 04 – 240, hep-ex/0501039, Eur.Phys.J.**C** (2005).

- **Measurement of Dijet Cross Sections for Events with a Leading Neutron in ep Interactions at HERA**
  H1-Collaboration, A. Aktas *et al.*, DESY 04 – 247, hep-ex/0501074, Eur.Phys.J.**C** (2005).

H1-collaboration

A. Aktas, V. Andreev, T. Anthonis, S. Aplin, A. Asmone, A. Astvatsatourov, A. Babaev, S. Backovic, J. Bähr, A. Baghdasaryan, P. Baranov, E. Barrelet, W. Bartel, S. Baudrand, S. Baumgartner, J. Becker, M. Beckingham, O. Behnke, O. Behrendt, A. Belousov, Ch. Berger, N. Berger, J.C. Bizot, M.-O. Boenig, V. Boudry, J. Bracinik, G. Brandt, V. Brisson, D.P. Brown, D. Bruncko, F.W. Büsser, A. Bunyatyan, G. Buschhorn, L. Bystritskaya, A.J. Campbell, S. Caron, F. Cassol-Brunner, K. Cerny, V. Chekelian, J.G. Contreras, J.A. Coughlan, B.E. Cox, G. Cozzika, J. Cvach, J.B. Dainton, W.D. Dau, K. Daum, B. Delcourt, R. Demirchyan, A. De Roeck, K. Desch, E.A. De Wolf, C. Diaconu, V. Dodonov, A. Dubak, G. Eckerlin, V. Efremenko, S. Egli, R. Eichler, F. Eisele, M. Ellerbrock, E. Elsen, W. Erdmann, S. Essenov, P.J.W. Faulkner, L. Favart, A. Fedotov, R. Felst, J. Ferencei, L. Finke, M. Fleischer, P. Fleischmann, Y.H. Fleming, G. Flucke, A. Fomenko, I. Foresti, G. Franke, T. Frisson, E. Gabathuler, E. Garutti, J. Gayler, C. Gerlich, S. Ghazaryan, S. Ginzburgskaya, A. Glazov, I. Glushkov, L. Goerlich, M. Goettlich, N. Gogitidze, S. Gorbounov, C. Goyon, C. Grab, T. Greenshaw, M. Gregori, G. Grindhammer, C. Gwilliam, D. Haidt, L. Hajduk, J. Haller, M. Hansson, G. Heinzelmann, R.C.W. Henderson, H. Henschel, O. Henshaw, G. Herrera, M. Hildebrandt, K.H. Hiller, D. Hoffmann, R. Horisberger, A. Hovhannisyan, M. Ibbotson, M. Ismail, M. Jacquet, L. Janauschek, X. Janssen, V. Jemanov, L. Jönsson, D.P. Johnson, H. Jung, M. Kapichine, J. Katzy, N. Keller, I.R. Kenyon, C. Kiesling, M. Klein, C. Kleinwort, T. Klimkovich, T. Kluge, G. Knies, A. Knutsson, V. Korbel, P. Kostka, R. Koutouev, K. Krastev, J. Kretzschmar, A. Kropivnitskaya, K. Krüger, J. Kückens, M.P.J. Landon, W. Lange, T. Laštovička, G. Laštovička-Medin, P. Laycock, A. Lebedev, B. Leißner, V. Lendermann, S. Levonian, L. Lindfeld, K. Lipka, B. List, E. Lobodzinska, N. Loktionova, R. Lopez-Fernandez, V. Lubimov, H. Lueders, D. Lüke, T. Lux, L. Lytkin, A. Makankine, N. Malden, E. Malinovski, S. Mangano, P. Marage, R. Marshall, M. Martisikova, H.-U. Martyn, S.J. Maxfield, D. Meer, A. Mehta, K. Meier, A.B. Meyer, H. Meyer, J. Meyer, S. Mikocki, I. Milcewicz-Mika, D. Milstead, A. Mohamed, F. Moreau, A. Morozov, J.V. Morris, M.U. Mozer, K. Müller, P. Murín, K. Nankov, B. Naroska, Th. Naumann, P.R. Newman, C. Niebuhr, A. Nikiforov, D. Nikitin, G. Nowak, M. Nozicka, R. Oganezov, B. Olivier, J.E. Olsson, D. Ozerov, V. Palichik, C. Pascaud, I. Panagoulias, T. Papadopolou, G.D. Patel, M. Peez, E. Perez, D. Perez-Astudillo, A. Perieanu, A. Petrukhin, D. Pitzl, R. Plačakytė, B. Portheault, B. Povh, P. Prideaux, N. Raicevic, P. Reimer, B. Reisert, A. Rimmer, C. Risler, E. Rizvi, P. Robmann, B. Roland, R. Roosen, A. Rostovtsev, Z. Rurikova, S. Rusakov, F. Salvaire, D.P.C. Sankey, E. Sauvan, S. Schätzel, F.-P. Schilling, S. Schmidt, S. Schmitt, C. Schmitz, L. Schoeffel, A. Schöning, V. Schröder, H.-C. Schultz-Coulon, K. Sedlák, F. Sefkow, I. Sheviakov, L.N. Shtarkov, Y. Sirois, T. Sloan, P. Smirnov, Y. Soloviev, D. South, V. Spaskov, A. Specka, B. Stella, J. Stiewe, I. Strauch, U. Straumann, V. Tchoulakov, G. Thompson, P.D. Thompson, F. Tomasz, D. Traynor, P. Truöl, I. Tsakov, G. Tsipolitis, I. Tsurin, J. Turnau, E. Tzamariudaki, M. Urban, A. Usik, D. Utkin, S. Valkár, A. Valkárová, C. Vallée, P. Van Mechelen, N. Van Remortel, A. Vargas Trevino, Y. Vazdik, C. Veelken, A. Vest, S. Vinokurova, V. Volchinski, B. Vujicic, K. Wacker,

J. Wagner, G. Weber, R. Weber, D. Wegener, C. Werner, N. Werner, M. Wessels, B. Wessling, C. Wigmore, Ch. Wissing, R. Wolf, E. Wünsch, S. Xella, W. Yan, V. Yeganov, J. Žáček, J. Zálešák, Z. Zhang, A. Zhelezov, A. Zhokin, J. Zimmermann, H. Zohrabyan, and F. Zomer

16.9 Research group of Prof. P. Truöl [7]

Articles

- **Limits for the Central Production of θ^+ and Ξ^{--} Pentaquarks in 920-GeV pA Collisions**
  HERA-B Collaboration, I. Abt *et al.*,
  DESY-04-148, hep-ex/0408048, Phys.Rev.Lett.**93** (2004), 212003 - 212007.
- **Search for the Flavor Changing Neutral Current Decay $D^0 \to \mu^+\mu^-$ with the HERA-B Detector**
  HERA-B Collaboration, I. Abt *et al.*,
  DESY-04-086, hep-ex/0405059, Phys.Lett.**B596** (2004), 173-183.
- **Physics with Low-Energy Muons at a Neutrino Factory Complex**
  J. Aysto, A. Baldini, A. Blondel, A. de Gouvea, J. Ellis, W. Fetscher, G.F. Giudice, K. Jungmann, S. Lola, V. Palladino, K. Tobe, A. Vacchi, A. van der Schaaf, K. Zuber, (Stopped Muons Working Group) in: *ECFA/CERN Studies of a European Neutrino Factory Complex*, A. Blondel *et al.* (ed.), CERN-2004-002, ECFA-04-230, Apr 2004, 47pp.

Report

- **ECFA/CERN Studies of a European Neutrino Factory Complex**
  Edited by A. Blondel, G. Buchalla, M. Campanelli, J. Ellis, J.J. Gomez-Cadenas, G. Giudice, P. Gruber, H. Haseroth, P. Hernandez, A. Kataev, S. Kraml, M. Mangano, M. Mezzetto, W.J. Murray, A. van der Schaaf, CERN-2004-002, ECFA-04-230, Apr 2004, 379pp.

PhD Thesis

- **A Multitrack Method for b-Tagging**
  Ilaria Foresti, PhD Thesis, Universität Zürich, 2004.

[7] for H1 publications see Sec.16.8