

16 Publications

16.1 Research group of Prof. C. Amsler

Articles

- Test of $\bar{N}N$ potential models: Isospin relations in $\bar{p}d$ annihilations at rest and the search for quasinuclear bound states
A. Abele et al. (Crystal Barrel Collaboration)
Eur. Phys. Journal C 17 (2000) 583
- $\bar{p}p$ -annihilation into $\omega\pi^0$, $\omega\eta$ and $\omega\eta'$ at 600, 1200 and 1940 MeV/c
A. Abele et al. (Crystal Barrel Collaboration)
Eur. Phys. Journal C 12 (2000) 429
- Branching ratios for $\bar{p}p$ annihilation at rest into two-body final states
A. Abele et al. (Crystal Barrel Collaboration)
Nucl. Phys. A 679 (2001) 563
- Review of Particle Physics
D.E. Groom et al. (Particle Data Group)
Eur. Phys. Journal C 15 (2000) 1
- Particle Physics Booklet
D.E. Groom et al. (Particle Data Group)
Springer (2000)
- Hadron Spectroscopy
C.Amsler
Proc. of the XVth Particles and Nuclei International Conference (PANIC),
Nucl. Phys. A 663 (2000) 93c
- Proton-antiproton annihilation into 6γ and 7γ
C. Amsler
Proc. 8th Int. Conf. on Hadron Spectroscopy, Beijing (1999),
Nucl. Phys. A 675 (2000) 67c
- C. Regenfus
Pontecorvo reactions with strangeness production on deuterium
Proc. of the XVth Particles and Nuclei International Conference (PANIC),
Nucl. Phys. A 663 (2000) 577c

Articles in press

- Study of f_0 Decays into Four Neutral Pions
A. Abele et al. (Crystal Barrel Collaboration)
Eur. Phys. Journal C
- 4π -decays of scalar and vector mesons
A. Abele et al. (Crystal Barrel Collaboration)
Eur. Phys. Journal C
- A High Resolution Search for the Tensor Glueball Candidate $\xi(2230)$
A. Abele et al. (Crystal Barrel Collaboration)
Phys. Lett. B
- A high resolution silicon beam telescope
C. Amsler et al.
Nucl. Instr. Meth. in Physics Research A

- Temperature dependence of pure CsI scintillation light yield and decay time
C. Amsler et al.
Nucl. Instr. Meth. in Physics Research A
- Antihydrogen Production and Precision Spectroscopy with ATHENA / AD1
C. Amsler et al. (ATHENA Collaboration)
Proc. Hydrogen II Conf., Castiglione de Pescaia, Springer (2000)
- Proton-antiproton annihilation into $\pi^0\pi^0\pi^0$, $\pi^0\pi^0\eta$ and $\pi^0\eta\eta$ at 900 MeV/c
C. Amsler
Proc. of the Hirscheegg Workshop on Hadron Spectroscopy, 14 - 20 January 2001
- Lorentz-angle in irradiated silicon
R. Kaufmann and B. Henrich
Nucl. Instr. and Methods in Phys. Research A
- Performance of ultra-thin silicon detectors in a 5 MeV antiproton beam
P. Riedler
Proc. of the 9th Vienna Conference on Instrumentation, 19 - 23 February 2001
- Development of the ATHENA vertex detector
P. Riedler
Proc. Int. Conf. on the Intersections between Particle and Nuclear Physics,
Quebec City, 2000
- Detection of antihydrogen with a Si- μ -strip and CsI-crystal detector at
cryogenic temperature
C. Regenfus
Proc. of the XXXth Int. Conf. on High Energy Physics, Osaka,
27 July to 2 August 2000

Diploma and PhD theses

- Search for New Mesons in Proton-Antiproton Annihilation into $\omega\pi^0\pi^0$ and $\omega\eta\pi^0$
P. Giarritta
Dissertation, Universität Zürich (2000)
- Proton-Antiproton Annihilation into Three Pseudoscalar Mesons at 900 MeV/c
M. Heinzemann
Dissertation, Universität Zürich (2000)

Invited Lectures

- C. Amsler
Invited talk, Korean-Swiss Seminar on Particle Physics, Pohang, Republic of Korea,
25.7.00
"Particle Physics in Switzerland"
- C. Amsler
Invited talk, Korean-Swiss Seminar on Particle Physics, Pohang, Republic of Korea,
26.7.00
"Antihydrogen Production with ATHENA"
- C. Amsler
Invited talk, Hirscheegg Workshop on Hadron Spectroscopy, Hirscheegg, Austria, 18.1.01
"Proton-antiproton annihilation into $\pi^0\pi^0\pi^0$, $\pi^0\pi^0\eta$ and $\pi^0\eta\eta$ at 900 MeV/c"

- C. Regenfus
Invited talk, Korean-Swiss Seminar on Particle Physics, Pohang, Republic of Korea, 25.7.00
"Development of Silicon Pixel Detectors for CMS"
- C. Regenfus
Contributed talk, XXXth Int. Conf. on High Energy Physics, Osaka, 28.7.00
"Detection of antihydrogen with a Si-Microstrip and CsI-crystal detector"
- P. Riedler
Seminar, Cambridge University, 16.5.00
"Antihydrogen Production at ATHENA"
- P. Riedler
Development of the ATHENA vertex detector
Contributed talk, ICOHEPANS, Int. Conf. on High Energy Physics and Nuclear Structure, Quebec City, 3.6.00
"Development of the ATHENA vertex detector"
- P. Riedler
Contributed talk, 9th Vienna Conference on Instrumentation, 21.2.01
"Performance of ultra-thin silicon detectors in a 5 MeV antiproton beam"

ATHENA Collaboration:

C. Amsler, G. Bendiscioli, G. Bonomi, P. Bowe, M. Charlton, M. Collier, M. Doser, K. Fine, A. Fontana, M.C. Fujiwara, R. Funakoshi, J. Hangst, R.S. Hayano, H. Higaki, M. Holzschneider, W. Joffrain, L. Jorgensen, D. Kleppner, V. Lagomarsino, R. Landua, C. Lenz Cesar, D. Lindelöf, E. Lodi-Rizzini, M. Macri, G. Manuzio, M. Marchesotti, P. Montagna, H. Pruijs, C. Regenfus, P. Riedler, A. Rotondi, G. Rouleau, P. Salvini, T. Speer, G. Testera, D.P. van der Werf, T. Watson, T. Yamazaki, Y. Yamazaki, A. Zenoni

CRYSTAL BARREL Collaboration (Authors may vary with publication):

A. Abele, J. Adomeit, C. Amsler, D.S. Armstrong, C.A. Baker, B.M. Barnett, C.J. Batty, M. Benayoun, A. Berdoz, R. Berlich, K. Beuchert, P. Birien, S. Bischoff, J. Bistirlich, P. Blüm, R. Bossingham, K. Braune, J. Brose, D.V. Bugg, T. Case, S.U. Chung, A.R. Cooper, O. Cramer, K.M. Crowe, T. Degener, H.P. Dietz, N. Djaoshvili, S. v. Dombrowski, M. Doser, W. Dünneweber, D. Engelhardt, M. Englert, M.A. Faessler, C. Felix, P. Giarritta, R. Hackmann, R.P. Haddock, F.H. Heinsius, M. Heinzemann, M. Herz, N.P. Hessey, P. Hidas, C. Holzhausen, P. Illinger, D. Jamnik, H. Kalinowski, B. Kalteyer, B. Kämmele, P. Kammer, T. Kiel, J. Kisiel, E. Klempt, H. Koch, M. Kobel, C. Kolo, M. Kunze, M. Lakata, R. Landua, J. Lüdemann, H. Matthäy, R. McCrady, J.P. Merlo, J. Meier, C.A. Meyer, L. Montanet, A. Noble, R. Ouared, F. Ould-Saada, K. Peters, C. Pietra, C.N. Pinder, G. Pinter, S. Ravndal, C. Regenfus, J. Reißmann, S. Resag, W. Roethel, E. Schäfer, P. Schmidt, M. Schüttrumpf, I. Scott, R. Seibert, S. Spanier, H. Stöck, C. Straßburger, U. Strohmusch, M. Suffert, U. Thoma, H. Thuemmel, M. Tischhäuser, D. Urner, C. Völcker, F. Walter, D. Walther, U. Wiedner, N. Winter, J. Zoll, B.S. Zou, Č. Zupančič.

Particle Data Group (2000):

D.E. Groom, M. Aguilar-Benitez, C. Amsler, R.M. Barnett, C.D. Carone, C. Caso, G. Conforto, O. Dahl, M. Doser, S. Eidelman, J.L. Feng, L. Gibbons, M. Goodman, C. Grab, A. Gurtu, K. Hagiwara, K.G. Hayes, J.J. Hernandez, K. Hikasa, K. Honscheid, C. Kolda,

M. Mangano, A. Manohar, A. Masoni, K. Mönig, H. Murayama, K. Nakamura, S. Navas, K. Olive, L. Pape, A. Piepke, M. Roos, M. Tanabashi, N.A. Tornqvist, T.G. Trippe, P. Vogel, C.G. Wohl, R.L. Workman, W.M. Yao, B. Armstrong, J.L. Casas Serradilla, B.B. Filimonov, P.S. Gee, S.B. Logowsky, F. Nicholson

16.2 Research group of Prof. R. Engfer

Diploma and PhD theses

- Suche nach der Myon-Elektron-Konversion $\mu^- \text{Au} \rightarrow e^- \text{Au}$ mit SINDRUM II
Georg Kurz
PhD thesis, Zürich University, 2001
- Suche nach der Leptonflavor verletzenden Myon-Elektron-Konversion in Gold: $\mu^- \text{Au} \rightarrow e^- \text{Au}$
Felix Rosenbaum
PhD thesis, Zürich University, 2001

Invited lectures

- P. Wintz
Status of $\mu \rightarrow e$ Conversion at PSI
Workshop on *New Initiatives in Lepton Flavor Violation and Neutrino Oscillations with Very Intense Muon and Neutrino Sources*, East-West Center, University of Hawaii, Honolulu, Hawaii, USA, October 2-6, 2000
- A. van der Schaaf
Rare muon decays
Plenary ECFA meeting, CERN, 23-23 October 2000
- A. van der Schaaf
Rare muon decays at a neutrino factory
IPPP Workshop on *Physics at a future Neutrino Factory*, Durham, UK, March 21-23, 2001

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

Articles

- Hans-Werner Fink
Electrical conduction through DNA molecules,
In "Electronic properties of novel materials: Molecular Nanostructures"
American Institute of Physics
- Hans-Werner Fink
DNA and Conduction Electrons
Visions and Reflections Article in Cellular and Molecular Life Sciences 58 (2001) 1-3
Birkhäuser Verlag Basel

Invited Lectures

- Hans-Werner Fink
Physik mit kohärenten Elektronenwellen
Physikalische Gesellschaft Zürich, 13. 1. 2000

- Hans-Werner Fink
Electric Conduction through DNA Molecules
XIV International Winterschool on Electronic Properties of Novel Materials,
Kirchberg, Austria, 6. to 10. 3. 2000
- Hans-Werner Fink
Electric Conduction through DNA Molecules
March Meeting American Physical Society, Minneapolis, USA, 20 to 24. 3. 2000
- Hans-Werner Fink: American Physical Society Press conference on the possibilities of
DNA based electronics, Minneapolis, USA, 22. 3. 2000
- Hans-Werner Fink
Abbildung und Manipulation einzelner Moleküle mit Hilfe der Elektronenholografie
Kolloquium der Physikalischen Chemie der Universität Hannover, 29. 3. 2000
- Hans-Werner Fink
Abbildung und Manipulation einzelner Moleküle mit Hilfe der Elektronenholografie
Seminar der Physikalischen Chemie der Universität Zürich, 9. 6. 2000
- Hans-Werner Fink
DNA and Molecular Electronics
Physics Seminar of the CNRS Marseille, 4.5.2000
- Hans-Werner Fink
Transmission Holography for Imaging and Manipulating Individual Molecules
IUVSTA Workshop on Holography and other Direct Methods
Hong Kong, China, 14. to 18. 8. 2000
- Hans-Werner Fink
Coherent field electron sources and its applications
EUROFE 2000 European Field Emission Workshop
Segovia, Spain, 25. to 29. 9. 2000
- Hans-Werner Fink
Probing the Electrical Conductivity of Molecules
International Workshop on the Mesoscopic Physics
Monte Verita, Ascona, Switzerland, 8. to 13.10. 2000
- Hans-Werner Fink
A new tool to image and manipulate individual biomolecules
Pharmakologisches Seminar der Universität Zürich, 12. 12. 2000

16.4 Research group of Prof. H. Keller

Articles

- Recent experimental insights into HTSC materials
K.A. Müller
Physica C **341-348**, 11-18 (2000)
- D-XY critical behavior in cuprate superconductors
T. Schneider and J.M. Singer
Physica C **341-348**, 87-91 (2000)
- T. Schneider and J.M. Singer,
in: *Phase Transition Approach To High Temperature Superconductivity*,
Imperial College Press, London, 2000

- From phase separation to stripes
K.A. Müller
in: *Stripes and Related Phenomena*,
edited by Bianconi and Saini, Kluwer/Plenum Publishers, (New York, 2000) (pp. 1-8)
- Large isotope effect on the pseudogap in the high-temperature superconductor
 $\text{HoBa}_2\text{Cu}_4\text{O}_8$
D. Rubio Temprano, J. Mesot, S. Janssen, K. Conder, A. Furrer, H. Mutka, and
K.A. Müller
Phys. Rev. Lett. **84**, 1990-1993 (2000)
- Large copper isotope effect on the pseudogap in the high-temperature superconductor
 $\text{HoBa}_2\text{Cu}_4\text{O}_8$
D. Rubio Temprano, J. Mesot, S. Janssen, K. Conder, A. Furrer, A. Sokolov, V. Trounov,
S.M. Kazakov, J. Karpinski, and K.A. Müller
Eur. Phys. J. B **19**, 5-8 (2000)
- Magnetische Flusslinien in Hochtemperatur-Supraleitern
H. Keller
Vierteljahrsschrift der Naturforschenden Gesellschaft in Zürich, **145/4**, 153-160 (2000)
- Probing high-temperature superconductivity with positive muons
H. Keller
J. Supercond. **13**, 759-764 (2000)
- Where are we in HTSC?
K.A. Müller
J. Supercond. **13**, 863-866 (2000)
- Universal properties at the quantum superconductor-to-insulator transition of cuprates
T. Schneider and J.M. Singer,
J. Supercond. **13**, 789-791 (2000)
- Tilting mode relaxation and oxygen isotope effect in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ studied by electron
paramagnetic resonance
A. Shengelaya, H. Keller, K.A. Müller, B.I. Kochelaev, and K. Conder
J. Supercond. **13**, 955-958 (2000)
- Doping dependence of the effective mass anisotropy and oxygen-isotope effect on the
magnetic penetration depth: The role of lattice vibrations in high-temperature super-
conductivity
J. Hofer, K. Conder, T. Sasagawa, Guo-meng Zhao, T. Schneider, J. Karpinski,
M. Willemin, H. Keller, and K. Kishio
J. Supercond. **13**, 963-969 (2000)
- Oxygen-isotope effect on the in-plane penetration depth in underdoped $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$
single crystals
J. Hofer, K. Conder, T. Sasagawa, Guo-meng Zhao, M. Willemin, H. Keller, and
K. Kishio
Phys. Rev. Lett. **84**, 4192-4195 (2000)
- Torque magnetometry on single-crystal high temperature superconductors near the crit-
ical temperature: A scaling approach
J. Hofer, T. Schneider, J.M. Singer, M. Willemin, H. Keller, T. Sasagawa, K. Kishio,
K. Conder, and J. Karpinski
Phys. Rev. B **62**, 631-639 (2000)

- Small-angle scattering from the vortex lattice in high- T_c and other superconductors
S.L. Lee, P.G. Kealey, E.M. Forgan, S.H. Lloyd, T.M. Riseman, D.McK. Paul, S.T. Johnson, Ch. Simon, C. Goupil, A. Pautrat, R. Cubitt, P. Schleger, C. Dewhurst, C.M. Aegerter, and C. Ager
Physica B **276-278**, 752-755 (2000)
- Charge degree of freedom and single-spin fluid model in $\text{YBa}_2\text{Cu}_4\text{O}_8$
A. Suter, M. Mali, J. Roos, and D. Brinkmann
Phys. Rev. Lett. **84**, 4938-4941 (2000)
- Exploring glasses on the microscopic level by NMR: $x\text{LiF} \cdot (1-x)\text{LiPO}_3$
D. Brinkmann, S. Berger, and J. Roos
Proceedings of the 7th Conference of the Asian Society for Solid State Ionics, Fuzhou, China, 29 Nov. - 4 Dec. 2000, in: *Solid State Ionics, Materials and Devices*, edited by B.V.R. Chowdari and Wenji Wang, World Scientific (Singapore, New Jersey, London, Hong Kong, 2000) (pp. 167-176)
- Muon-spin rotation study of the magnetic correlations in $\text{La}_{2-x}\text{Ca}_{1+x}\text{Cu}_2\text{O}_{6+d}$ superconductors
P.W. Klamut, B. Dabrowski, R. Dybziński, Z. Bukowski, A. Shengelaya, R. Khasanov, S. Döttinger, and H. Keller
J. Appl. Phys. **87**, 5558-5560 (2000)
- Anisotropy of the magnetization discontinuity at the vortex-lattice melting in untwinned $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$
A. Schilling, M. Willemin, C. Rossel, H. Keller, R. A. Fisher, N. E. Phillips, U. Welp, W. K. Kwok, R. J. Olsson, and G. W. Crabtree,
Phys. Rev. B **61**, 3592-3603 (2000)
- Oxygen isotope effects in the manganates and cuprates studied by electron paramagnetic resonance
A. Shengelaya, Guo-meng Zhao, H. Keller, K.A. Müller, and K. Conder
in: *New Developments in High Temperature Superconductivity*, ed. J. Klamut *et al.*, Lecture notes in physics (Springer-Verlag, 2000) (pp. 91-99)
- Strong oxygen-isotope effect on the intrinsic resistivity in the ferromagnetic state of manganites
G.M. Zhao, D.J. Kang, W. Prellier, M. Rajeswari, H. Keller, T. Venkatesan, and R.L. Greene
Phys. Rev. B (Rapid Communications) **63**, R60402-60405 (2001)
- Unusual electrical transport mechanism in the ferromagnetic state of the magnetoresistive manganites
G.M. Zhao, H. Keller, and W. Prellier
J. Phys.: Condens. Matter **12**, L361-366 (2000)
- Double-exchange and the cause of the ferromagnetism in doped manganites
G.M. Zhao
Phys. Rev. B **62**, 11 639-11 643 (2000)
- Large oxygen-isotope effect in $\text{Sr}_{0.4}\text{K}_{0.6}\text{BiO}_3$: evidence for phonon-mediated superconductivity
G.M. Zhao, K. Conder, M. Angst, S.M. Kazakov, J. Karpinski, M. Maciejewski, C. Bougerol, J.S. Pshirkov, and E.V. Antipov
Phys. Rev. B (Rapid Communications) **62**, R11 977-11 980 (2000)

- Evidence for the immobile bipolaron formation in the paramagnetic state of the magnetoresistive manganites
G.M. Zhao, Y.S. Wang, D.J. Kang, W. Prellier, M. Rajeswari, H. Keller, T. Venkatesan, C.W. Chu, and R.L. Greene
Phys. Rev. B (Rapid Communications) **62**, R11 949-11 952 (2000)
- Electrical transport in the ferromagnetic state of manganites: Small polaron metallic conduction at low temperatures
G.M. Zhao, V. Smolyaninova, W. Prellier, and H. Keller
Phys. Rev. Lett. **84**, 6086-6089 (2000)
- Argon annealing of the oxygen-isotope exchanged manganite $\text{La}_{0.8}\text{Ca}_{0.2}\text{MnO}_{3+y}$
G.M. Zhao, K. Conder, H. Keller, and K.A. Müller
Phys. Rev. B **62**, 5334-5334 (2000)

Articles in press

- Vortex-lattice melting in $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ for $H//ab$
A. Schilling, U. Welp, W.K. Kwok, and G.W. Crabtree
Phys. Rev. B
- Tilting mode relaxation in the electron paramagnetic resonance of isotope substituted $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$: Mn^{2+}
A. Shengelaya, H. Keller, K.A. Müller, B.I. Kochelaev, and K. Conder
Phys. Rev. B
- Bulk experimental evidence of half-metallic ferromagnetism in doped manganites
G.M. Zhao, H. Keller, W. Prellier, and D.J. Kang
Phys. Rev. B

Diploma and PhD theses

- Studies of Intrinsic Magnetic Properties of High Temperature Superconductors by Means of Torque Magnetometry
Jürg Hofer
Dissertation, Physik-Institut, Universität Zürich, 2000
- Bestimmung der Sensitivitäten von Empfangsspulen in der Magnetresonanz-Bildgebung
Philipp Roggwiller
Diplomarbeit, Institut für Biomedizinische Technik der UNI und ETH Zürich, 2000

Conference reports

- Low-energy charge fluctuations in the presence of the pseudo spin gap in $\text{YBa}_2\text{Cu}_4\text{O}_8$
A. Suter, M. Mali, J. Roos, and D. Brinkmann
Physica C **341-348**, 2167-2168 (2000)
- Chain charge fluctuations in $\text{YBa}_2\text{Cu}_4\text{O}_8$ detected via apex oxygen nuclear quadrupolar relaxation
M. Mali, A. Suter, J. Roos, D. Brinkmann, H. Keller, and J. Karpinski
Physica C **341-348**, 2169-2170 (2000)
- EPR of $\text{YBa}_2\text{Cu}_3\text{O}_{6+y}$: models of paramagnetic centers with $g \approx 4.2$
R. Eremina, M. Eremin, M. Gafurov, V. Ivanshin, I. Kurkin, S. Kurzin, H. Keller, and M. Gutmann
Physica B **284-288**, 917-918 (2000)

- Charge fluctuations in the high- T_c superconductor $\text{YBa}_2\text{Cu}_4\text{O}_8$ observed by ^{17}O NMR
J. Roos, M. Mali, A. Suter, D. Brinkmann, and H. Keller
30th Congress AMPERE on Magnetic Resonance and Related Phenomena, Lisbon, Portugal, 23-28 July, 2000
- Anisotropy of the magnetization discontinuity at the vortex-lattice melting in untwinned $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$
A. Schilling
Gordon Research Conference on Superconductivity, Ventura, CA (USA), 13 February, 2000

Invited Lectures

- H. Keller
Probing high-temperature superconductivity with muons
Conference on *Major Trends in Superconductivity in the New Millennium*
Klosters, Switzerland, 31 March-6 April, 2000
- T. Schneider
Universal properties at the quantum superconductor-to-insulator transition of cuprates
Conference on *Major Trends in Superconductivity in the New Millennium*
Klosters, Switzerland, 31 March-6 April, 2000
- J. Hofer
Oxygen-isotope effect on the magnetic penetration depth in underdoped $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$
Symposium on *Itinerant and Localized States in HTSC*
Klosters, Switzerland, 6-10 April, 2000
- Guo-meng Zhao
Experimental constraints on the physics of cuprates and manganites
Symposium on *Itinerant and Localized States in HTSC*
Klosters, Switzerland, 6-10 April, 2000
- A. Shengelaya
Tilting mode relaxation and oxygen isotope effect in $\text{La}_{2-x}\text{Sr}_x\text{CuO}_4$ studied by electron paramagnetic resonance
Symposium on *Itinerant and Localized States in HTSC*
Klosters, Switzerland, 6-10 April, 2000
- Guo-meng Zhao
Unconventional isotope effects in manganites and cuprates
Department of Physics, Montana State University, USA, 17 April, 2000
- A. Schilling
Superconducting ceramics: materials of atoms, matter of vortices
Universität Karlsruhe, Germany, 18 May, 2000
- Guo-meng Zhao
Experimental constraints on the physics of cuprates and manganites
Department of Physics, University of Geneva, Switzerland, 23 May, 2000
- H. Keller
Vortexmaterie und Myonen in Hochtemperatur-Supraleitern
Universität Augsburg, Germany, 19 June, 2000

- H. Keller
Probing high-temperature superconductivity with muons
Trends in Condensed Matter Physics
Monte Verità, Ascona, Switzerland, 3-8 September, 2000
- A. Schilling
Phase transitions and thermodynamic data of vortex matter in $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$
Trends in Condensed Matter Physics
Monte Verità, Ascona, Switzerland, 3-8 September, 2000
- J. Roos
High-pressure solid state NMR/NQR investigations.
AMPERE Summer School: *Applications of Magnetic Resonance in Novel Materials*,
Nafplion, Greece, 3-9 September, 2000
- Guo-meng Zhao
Experimental constraints on the physics of cuprates and manganites
Second International Summer School on Strongly Correlated Systems, Debrecen, Hungary, 4-9 September, 2000
- A. Schilling
Phase transitions in vortex matter
Physikalisch-Chemisches Institut der Universität Zürich, 11 January, 2001
- Guo-meng Zhao
Experimental constraints on the physics of cuprates
Texas Center for Superconductivity at the University of Houston, USA, 23 January, 2001
- Guo-meng Zhao
Unconventional isotope effects in the high-temperature cuprate superconductors and colossal magnetoresistive manganites
University of South Carolina, Columbia, USA, 25 January, 2001
- H. Keller
Oxygen-isotope effect on the magnetic penetration depth in cuprate superconductors
Workshop on the Phase Diagram of High-Temperature Superconducting Copper Oxides
Max-Planck Institut Stuttgart, Germany, 5-7 March, 2001
- M. Mali
Oxygen isotope effect of the spin pseudogap in $\text{YBa}_2\text{Cu}_4\text{O}_8$ as determined by NMR
Workshop on the Phase Diagram of High-Temperature Superconducting Copper Oxides
Max-Planck Institut Stuttgart, Germany, 5-7 March, 2001

16.5 Research group of Prof. P. F. Meier

Articles

- Cluster Calculations of the Hyperfine Interactions in Superconducting Copper Compounds
P. F. Meier, T. A. Claxton, P. Hüsser, S. Pliberšek, and E. P. Stoll
Z. Naturf., **55 a**, 247-255 (2000)
- First-principles Calculations of Hyperfine Interactions in La_2CuO_4
P. Hüsser, H. U. Suter, E. P. Stoll, and P.F. Meier
Phys. Rev. B **61**, 1567-1579 (2000)

- Electronic Structure of Barium Hexaboride
S. Massidda, R. Monnier, and E. Stoll
Eur. Phys. J. B **17**, 645-649 (2000)
- First Principles Investigation of Local Distortions in Doped La_2CuO_4
S. Pliberšek, E. P. Stoll, and P. F. Meier
J. Supercond. Inc. Nov. Magn. **13**, 921-923 (2000)
- Influence of Spin-Orbit Couplings to Nuclear Spin-Lattice Relaxation Rates in Sr-doped La_2CuO_4
E. P. Stoll, S. Pliberšek, S. Renold, T. A. Claxton, and P. F. Meier
J. Supercond. Inc. Nov. Magn. **13**, 971-975 (2000)
- Interpretation of Nuclear Quadrupole Resonance Spectra in doped La_2CuO_4
S. Pliberšek and P. F. Meier
Europhys. Lett. **50**, 789-795 (2000)
- Quasiparticle Diffusion in Tantalum using Superconducting Tunnel Junctions
T. Nussbaumer, P. Lerch, E. Kirk, A. Zehnder, R. Füchslin, P. F. Meier, and H. R. Ott
Phys. Rev. B **61**, 9719-9728 (2000)
- Local Estimates for Entropy Densities in Coupled Map Lattices
E. Olbrich, R. Hegger, and H. Kantz
Phys. Rev. Lett. **84**, 2132-2135 (2000)
- Coarse Grained Dynamical Entropies – Investigation of High-entropic Dynamical Systems
H. Kantz and E. Olbrich
Physica A **280**, 34-48 (2000)
- Chaos or Noise: Difficulties of a Distinction
M. Cencini, M. Falcioni, H. Kantz, E. Olbrich, and A. Vulpiani
Phys. Rev. E **62**, 427-437 (2000)
- Record Breaking Optimization Results – Using the Ruin & Recreate Principle
G. Schrimpf, J. Schneider, H. Stamm-Wilbrandt, and G. Dueck
J. Comp. Phys. **159**, 139-171 (2000)
- The Influence of Trucks on Traffic Flow – An Investigation on the Nagel-Schreckenberg-model
A. Ebersbach, J. Schneider, I. Morgenstern, and R. Hammwöhner
Int. J. Mod. Phys. C **11**, 837-842 (2000)
- Optimization of Production Planning Problems – A Case Study for Assembly Lines
J. Schneider, J. Britze, A. Ebersbach, I. Morgenstern, and M. Puchta
Int. J. Mod. Phys. C **11**, 949-972 (2000)

Articles in press

- Reconstruction of the Parameter Spaces of Dynamical Systems
S. Güttler, H. Kantz, and E. Olbrich
Phys. Rev. E
- Optimization of the Time-dependent Traveling Salesman Problem with Monte Carlo Methods
J. Bentner, G. Bauer, G. M. Obermair, I. Morgenstern, and J. Schneider
Phys. Rev. E

Invited Lectures

- H. R. Moser
"Electroencephalograms in Epilepsy: Complexity Analysis and Seizure Prediction within the Framework of Lyapunov Theory"
Invited talk, The Physics of Low Dimensions, Oaxaca (Mexico), 17.1.2000
- S. Pliberšek
"Changes in the Electronic Structure of La_2CuO_4 induced by Strontium"
APS March Meeting 2000, Minneapolis, 22. 3. 2000
- E. Olbrich
"Characterizing extensive chaos by means of local observations"
Seminarvortrag, Max-Planck-Institut für Mathematik der Naturwissenschaften, Leipzig, 10.5.2000
- J. Schneider
"Modern Optimization Techniques for Spin Glasses"
Seminar talk dedicated to the 100th anniversary of Ernst Ising's birthday, Univ. of Cologne, 15.6.2000
- E. P. Stoll
"Virtual Endoscopy: a new method for the early detection of colon cancer and for defining the size and shape of aortic stents based on a collaboration between medicine, computer science and physics"
Invited talk, IBM Forschungslabor Rüschlikon, 30.8.2000
- J. Schneider
"Methoden der statistischen Physik zur Optimierung von Produktionslinien"
Vorlesung mit Übungen, WE-Heräus-Ferienkurs für Physik, Univ. of Chemnitz (Germany), 2.10.2000
- E. Olbrich
"Das Konzept der dimensionalen Komplexität zur Charakterisierung von EEG's"
Seminarvortrag, Klinik für Epileptologie, Univ. of Bonn, 30.10.2000
- E. Olbrich
"What can be learned from EEG by nonlinear time series analysis?"
Seminarvortrag, Max-Planck-Institut für Physik komplexer Systeme, Dresden, 5.12.2000
- P. F. Meier
"Ab initio Calculations of Hyperfine Properties in Superconductors" Arizona State Univ., Tempe, Arizona, 6. 11. 2000
- P. F. Meier
"New Interpretation of NMR Data on Cuprates"
Third Internat. Conf. on New Theories, Discoveries and Applications of Superconductors, Honolulu, 18. 1. 2001
- P. F. Meier
"New Interpretation of NMR Data on Cuprates"
Workshop on the Phase Diagram of Cuprates, MPI Stuttgart, 5. 1. 2001

16.6 Research group of Prof. J. Osterwalder

Articles

- Electronic structure of K doped C_{60} monolayers on Ag(001)
C. Cepek, M. Sancrotti, T. Greber, J. Osterwalder
Surf. Sci. 454-456 (2000) 467-471
- Angle-resolved photoemission study of clean and hydrogen saturated Mo(110)
J. Kröger, T. Greber, J. Osterwalder
Phys. Rev. B 61 (2000) 14146-14156
- Full hemispherical photoelectron diffraction and Fermi surface mapping
J. Osterwalder, T. Greber, E. Wetli, J. Wider, H.-J. Neff
Prog. Surf. Sci. 64 (2000) 65-87
- Fermi surface contours of p(2x2) O/Mo(110): an angle-resolved photoelectron spectroscopy study
J. Kröger, T. Greber, J. Osterwalder
Surf. Sci. 459 (2000) 173-182
- Step-induced one-dimensional surface state on Cu(332)
F. Baumberger, T. Greber, J. Osterwalder
Phys. Rev. B 62 (2000) 15431-15434
- Doping-dependent electronic structure of cuprates studied using angle-resolved photoemission
P. Schwaller, T. Greber, P. Aebi, J. M. Singer, H. Berger, L. Forro, J. Osterwalder
Europhys. J. B 18 (2000) 215-225
- The photoemission Fermi edge as a sample thermometer
J. Kröger, T. Greber, T. J. Kreutz, J. Osterwalder
J. Electron Spectrosc. Relat. Phenom. 113 (2001) 241-251
- Determining adsorbate structures from substrate emission x-ray photoelectron diffraction
M. Muntwiler, W. Auwärter, F. Baumberger, M. Hoesch, T. Greber, J. Osterwalder
Surf. Sci. 472 (2001) 125-132
- Atomically resolved images from near-node photoelectron holography experiments on Al(111)
J. Wider, F. Baumberger, M. Sambì, R. Gotter, A. Verdini, F. Bruno, D. Cvetko, A. Morgante, T. Greber, J. Osterwalder
Phys. Rev. Lett. 86 (2001) 2337-2340

Articles in press

- Surface states on clean and adsorbate-covered metal surfaces
J. Osterwalder, T. Greber, J. Kröger, J. Wider, H.-J. Neff, F. Baumberger
M. Hoesch, W. Auwärter, R. Fasel, P. Aebi
Proceedings of the *Workshop on Physics in Low Dimensions*, Oaxaca, Mexico, (Plenum Press, 2001)
- Influence of an atomic grating on a magnetic Fermi surface
T. Greber, W. Auwärter, J. Osterwalder
Proceedings of the *Workshop on Physics in Low Dimensions*, Oaxaca, Mexico, (Plenum Press, 2001)

- Electronic and atomic structure of the Cu/Si(111) ‘quasi-5x5’ overlayer
M. De Santis, M. Muntwiler, J. Osterwalder, G. Rossi, F. Sirotti, A. Stuck,
L. Schlapbach
Surf. Sci. (2001)
- Coexisting inequivalent orientations of C₆₀ on Ag(001)
C. Cepek, R. Fasel, M. Sancrotti, T. Greber, J. Osterwalder
Phys. Rev. B (2001)
- Correlation effects and magnetism in 3d transition metals
J. Osterwalder
J. Electron Spectrosc. Relat. Phenom. (2001)
- Temperature-dependent Fermi gap opening in the c(6x2)-C₆₀/Ag(001) two-dimensional superstructure
C. Cepek, I. Vobornik, A. Goldoni, E. Magnano, G. Selvaggi, J. Kröger, G. Panaccione,
G. Rossi, M. Sancrotti
Phys. Rev. Lett. (2001)
- Probing the electronic states of band ferromagnets with photoemission
T. Greber
Invited chapter, Heraeus Workshop on ‘Ground-State and Finite-Temperature Band Ferromagnetism’, Berlin Wandlitz, Springer Verlag (2001)

Diploma and PhD Theses

- C₆₀ interaction with metals and semiconductors
Cinzia Cepek
Ph. D. Thesis, Physik-Institut, Universität Zürich, 2000
- Bau einer Elektronenkanone für zeitaufgelöste Beugung mit langsamen Elektronen
Reto Karrer
Diploma Thesis, Physik-Institut, Universität Zürich, 2000

Conference reports

- Near node photoelectron holography: first proof-of-principle experiments
J. Wider
European Physical Society - Condensed Matter Division Meeting (EPS-CMD-18), Montreux, 13.3.00
- Influence of a single layer insulator on a ferromagnetic substrate: h-BN on Ni(111)
T. Greber
European Physical Society - Condensed Matter Division Meeting (EPS-CMD-18), Montreux, 16.3.00
- Co clusters on h-BN/Ni(111): interface atomic structure analysis with XPD and STM
M. Muntwiler, W. Auwärter, T. Greber, J. Osterwalder (Poster)
European Physical Society - Condensed Matter Division Meeting (EPS-CMD-18), Montreux, 16.3.00
- One-dimensional Shockley surface state resonances on Cu(332)
F. Baumberger, T. Greber, J. Osterwalder (Poster)
European Physical Society - Condensed Matter Division Meeting (EPS-CMD-18), Montreux, 16.3.00

- One- and two-dimensional surface states on vicinal Cu(111)
F. Baumberger
12th Symposium on Surface Science, Kananaskis Village, Canada, 18.3.00
- Fermi-surface contours of H/Mo(110)
J. Kröger
March Meeting of the American Physical Society, Minneapolis, USA, 23.3.00
- Fermi-Flächen von Oberflächenzuständen auf H/Mo(110)
J. Kröger
Frühjahrstagung der Deutschen Physikalischen Gesellschaft, Regensburg, 29.3.00
- One- and two-dimensional surface states on vicinal Cu(111)
F. Baumberger
19th European Conference on Surface Science, Madrid, Spain, 8.9.00
- Co on h-BN/Ni(111): a sharp metal-insulator-metal junction?
W. Auwärter, M. Muntwiler, T. Greber, J. Osterwalder (Poster)
19th European Conference on Surface Science, Madrid, Spain, 8.9.00
- The electronic structure of itinerant ferromagnets: correlation effects and future experiments
J. Osterwalder
Japanese-Swiss Seminar on ‘Spectroscopy of Novel Materials with Highly Brilliant Synchrotron Radiation’, Nikko, Japan, 2.10.00
- A nanometer-sized magnetic tunneling junction: Co/h-BN/Ni(111)
M. Muntwiler (Poster) 4th Hasliberg Workshop on Nanoscience, Hasliberg, 19.10.00
- Status of COPHEE, the COmplete PHotoEmission Experiment
M. Hoesch (Poster) 3rd SLS Workshop on Synchrotron Radiation, Les Diablerets, 19.10.00
- Quantized electrons in ultrathin Ag films on Si(001) surfaces
I. Matsuda (Poster) 3rd SLS Workshop on Synchrotron Radiation, Les Diablerets, 19.10.00
- Photoemission from Bi(111): comparison of synchrotron and home lab studies
M. Hengsberger (Poster, short talk (Poster Prize))
3rd SLS Workshop on Synchrotron Radiation, Les Diablerets, 19.10.00
- Imaging atom sites with near node photoelectron holography
T. Greber (Poster)
3rd SLS Workshop on Synchrotron Radiation, Les Diablerets, 19.10.00
- Partial densities of states measured with polarized x-rays
F. Baumberger (Poster)
3rd SLS Workshop on Synchrotron Radiation, Les Diablerets, 19.10.00

Invited Lectures

- F. Baumberger
One-dimensional Shockley surface state resonances on stepped Cu(111) as measured by photoelectron spectroscopy
Condensed Matter Physics Seminar, Kansas State University, Manhattan, Kansas, USA, 13.3.00

- T. Greber
Exploiting the orientation of the light polarization in x-ray photoelectron spectroscopy (XPS) and diffraction (XPD): From symmetry breaking, s partial densities of states to near node photoelectron holography
Workshop on the 'ALOISA' beamline, Istituto Nazionale della Fisica della Materia, Genova, Italy, 17.4.00
- J. Osterwalder
Electronic states near the Fermi energy in 3d ferromagnets and interfaces
Seminar, Department of Physics, University of Modena, Italy, 25.5.00
- T. Greber
Strukturbestimmung mit winkelgerasterter Photoelektronenbeugung: von der Projektion eines Kristalls bis zur Holographie mit atomarer Auflösung
Festkörperseminar der ETHZ, 25.5.00
- T. Greber
Exploring surface states and magnetic tunneling junctions with photoemission
Seminar de la Matiere Condensee, EPFL, 16.6.00
- J. Osterwalder
High-resolution photoemission study of the discommensurate (5.55x5.55)-Cu:Si(111) surface layer
International Workshop on Electron Spectroscopies and Strongly Correlated Electron Systems, Avila, Spain, 10.7.00
- J. Osterwalder
Surface structure from photoelectron diffraction: fingerprinting, holography and structural refinement
26th IUVESTA Workshop on Surface Holography and Other Direct Methods, Hong Kong, 15.8.00
- M. Hoesch
COPHEE, the COmplete PHotoEmission Experiment
National Synchrotron Light Source Lunchtime Seminar, Brookhaven National Laboratory, Upton, NY, USA, 25.8.00
- M. Hoesch
Photoemission from oriented orbitals
Seminar, Environmental Molecular Sciences Laboratory, Pacific Northwest National Laboratory, Richland, WA, USA, 8.9.00
- J. Osterwalder
Photoelectron diffraction and band structure mapping
Low-Energy Electron Microscopy (LEEM-2) Workshop, Paris, 27.9.00
- J. Osterwalder
The electronic structure of itinerant ferromagnets: correlation effects and future experiments
Seminar, Nara Institute of Science and Technology, Nara, Japan, 5.10.00
- T. Greber
Photoemission around the Fermi level of band ferromagnets
Heraeus Workshop on 'Ground-State and Finite-Temperature Band Ferromagnetism', Berlin Wandlitz, 5.10.00

- T. Greber
Hexagonal boron nitride on nickel (111): a spin-selective tunneling junction?
Lunch Seminar, Technische Chemie, Technische Universität Wien, 9.10.00
- T. Greber
Experiments at ELETTRA: from near node photoelectron holography to Fermi surfaces
in three dimensions
3rd SLS Workshop on Synchrotron Radiation, Les Diablerets, 17.10.00
- T. Greber
Photoelektronenbeugung: Holographie mit atomarer Auflösung
Physik-Kolloquium, Universität Marburg, 3.11.00
- T. Greber
Untersuchung der Grenzfläche zwischen einem Bandferromagneten und einem Isolator
Physik-Kolloquium, Universität Düsseldorf, 9.11.00
- J. Osterwalder
Valence band photoemission and Fermi surface mapping
6 hours of Lecture, School on Synchrotron Radiation, ICTP Trieste, Italy,
29.11.00 - 4.12.00
- T. Greber
Untersuchung von Oberflächenzuständen und einer magnetischen Tunnelbarriere mit
winkelaufgelöster Photoemission
Physik-Seminar, Technische Universität München, 26.1.01

16.7 Research group of Prof. U. Straumann (for H1 publications see group of Prof. P. Truöl, Sec. 16.8)

Articles

- Measurement of CP-Violating Asymmetries in B0 Decays to CP Eigenstates
B. Aubert et al. (BABAR Collaboration) , Phys. Rev. Lett. 86 (2001), 2515
- Hoffnung für die Gravitationskonstante
St. Schramminger
Physikalische Blätter **56** (2000) Nr. 9 pp. 15-16 .

LHCb notes

- A triple GEM detector with two-dimensional readout
M. Ziegler, P. Sievers and U. Straumann
hep-ex/0007007 and LHCb internal note LHCb-2000-056, July 2000
- LHCb Calorimeter, technical design report
The LHCb Collaboration
CERN/LHCC/2000-036, Sep. 6, 2000
- LHCb RICH, technical design report
The LHCb Collaboration
CERN/LHCC/2000-037, Sep. 7, 2000
- A Possible Layout of an Inner Tracker Silicon Detector
O. Steinkamp
LHCb-2000-109, November 2000

- Space Requirements and z Positions for Tracking Stations
O. Steinkamp
LHCb-2000-108, November 2000

Conference reports

- R. Bernet, B. Aubert *et al.*
14 contributed papers to the BABAR conference, July 2000.
SLAC-PUB-8526...SLAC-PUB-8540 (BABAR-CONF-00-01...BABAR-CONF-00-16)
- A triple GEM detector with two-dimensional readout
M. Ziegler, P. Sievers and U. Straumann
Proceedings of the International Conference on Imaging Techniques in the borderlands of High Energy Physics, Astrophysics, Nuclear Physics, Medicine and Biology (Imaging 2000), 28 June - 1 July 2000, Stockholm, submitted to Nucl. Instr. and Meth.
- First Level Trigger for H1, using the latest FPGA generation
M. Urban, J. Becker, A. Rausch and U. Straumann
Proceedings of the 6th Workshop on Electronics for LHC Experiments 11-15 September 2000, Cracow, Poland.
- Determination of the Gravitational Constant Using a Beam Balance
St. Schlamminger, E. Holzschuh, W. Kündig
Conference Digest, Conference on Precision Electromagnetic Measurements 2000, Sydney, May 14 - 19, 2000, pp. 693-694 .
- Determination of the Gravitational Constant Using a Beam Balance
St. Schlamminger, E. Holzschuh, W. Kündig
to be published in the Conference Proceedings of the 9th Marcel Grossmann Meeting, Rome, July 3 - 7 2000.

Invited Lectures

- Inner Tracking of LHCb
U. Straumann, Seminarvortrag, DESY, 15. März 2000
- LHCb tracking system
O. Steinkamp,
International symposium "LHC physics and detectors"
JINR, Dubna, Russian Federation, June 28-30, 2000
- Determination of the Gravitational Constant Using a Beam Balance
St. Schlamminger, E. Holzschuh, W. Kündig
Seminar, Physik Institut, Universität Konstanz, June 16th 2000.
- Neuere Bestimmungen der Gravitationskonstanten
St. Schlamminger
Physikalisches Kolloquium, Fachbereich Physik, Universität Kaiserslautern, January 29th 2001.

Diploma and PhD Theses

- Entwurf und Bau einer Frontend-Steuerung für das CIP-Upgrade Projekt für H1 bei HERA
Achim Vollhardt
Diplomarbeit, Heidelberg und Zürich, Januar 2001

- The Data Acquisition and Control System for a Fast Trigger at H1
Jan Becker
Diplomarbeit, Heidelberg und Zürich, November 2000
- Ein schneller Trigger für H1 bei HERA
Max Urban
Diplomarbeit, Heidelberg und Zürich, Mai 2000.

16.8 Research group of Prof. P. Truöl (incl. H1 publications of group Prof. U. Straumann)

Articles

- Di-jet Event Rates in Deep-Inelastic Scattering at HERA
H1-Collaboration**, C. Adloff *et al.*
DESY 98 – 076
The European Physical Journal **C13** (2000), 415 - 426
- Measurement of Dijet Cross Sections in Low Q^2 and the Extraction of an Effective Parton Density for the Virtual Photon
H1-Collaboration**, C. Adloff *et al.*
DESY 98 – 205
The European Physical Journal **C13** (2000), 397 -414
- $K^+ \rightarrow \pi^+ \mu^- \mu^+$ in E865 at BNL
E865 Collaboration†, Julia A. Thompson *et al.*
hep-ex 9904026
Proc. 17th Int. Workshop on Weak Interactions and Neutrinos (WIN 99), Cape Town, South Africa (January 1999), eds. A. Dominguez, R.D. Viollier (World Scientific, Singapore 2000), p. 540 - 544.
- Elastic Electroproduction of ρ Mesons at HERA
H1-Collaboration**, C. Adloff *et al.*
DESY 99 – 10
The European Physical Journal **C13** (2000), 371 - 396
- Measurement of Neutral and Charged Current Cross Sections in Positron-Proton Collisions at Large Momentum Transfer
H1-Collaboration**, C. Adloff *et al.*
DESY 99 – 107, hep-ex 9908059
The European Physical Journal **C13** (2000), 609 - 639
- A New Measurement of the Rare Decay $K^+ \rightarrow \pi^+ \mu^+ \mu^-$
E865-Collaboration†, H. Ma *et al.*
hep-ex 9910047
Physical Review Letters **84** (2000), 2580 - 2583
- Investigation of Power Corrections Event Shape Variables Measured in Deep-Inelastic Scattering
H1-Collaboration**, C. Adloff *et al.*
DESY 99 – 193, hep-ex 9912052
The European Physical Journal **C14** (2000), 255 - 269; addendum ibidem **C18** (2000), 417 - 419.

- The H1 Silicon Vertex Detector
D. Pitzl, O. Behnke, M. Biddulph, K. Bösiger, R. Eichler, W. Erdmann, K. Gabathuler, J. Gassner, W.J. Haynes, R. Horisberger, M. Kausch, M. Lindström, H. Niggli, G. Noyes, P. Pollet, S. Steiner, S. Streuli, K. Szeker, and P. Truöl
hep-ex 0002044
Nuclear Instruments and Methods in Physics Research **A454** (2000), 334 - 349.
- Search for Compositeness, Leptoquarks and Large Extra Dimensions in eq Contact Interactions at HERA
H1-Collaboration**, C. Adloff *et al.*
DESY 00 – 027, hep-ex 0003002
Physics Letters **B479** (2000), 358 - 370
- Measurement of Di-jet Cross Sections in Photoproduction and Photon Structure
H1-Collaboration**, C. Adloff *et al.*
DESY 00 – 035, hep-ex 0003011
Physics Letters **B483** (2000), 36 - 48
- Elastic Photoproduction of J/Ψ - and Y -Mesons at HERA
H1-Collaboration**, C. Adloff *et al.*
DESY 00 – 037, hep-ex 0003020
Physics Letters **B483** (2000), 23 - 35
- Elastic Φ -Meson Production at HERA
H1-Collaboration**, C. Adloff *et al.*
DESY 00 – 070, hep-ex 0005010
Physics Letters **B483** (2000), 360 - 372
- An Improved Limit on the Rate of the Decay $K^+ \rightarrow \pi^+ \mu^+ e^-$
E865-Collaboration[†], R. Appel *et al.*
hep-ex 0005016
Physical Review Letters **85** (2000), 2450 - 2453
- Search for Lepton Flavor Violation in K^+ Decays into a Charged Pion and Two Leptons
E865-Collaboration[†], R. Appel *et al.*
hep-ex 0006003
Physical Review Letters **85** (2000), 2877 - 2880.
- Inclusive Photoproduction of Neutral Pions in the Photon Hemisphere at HERA
H1-Collaboration**, C. Adloff *et al.*
DESY 00 – 085, hep-ex 0006017
The European Physical Journal **C18** (2000), 293 - 302.
- A Search for Excited Fermions at HERA
H1-Collaboration**, C. Adloff *et al.*
DESY 00 – 102, hep-ex 0007035
The European Physical Journal **C17** (2000), 567 - 581

Articles in Print

- Di-jet Production in Charged and Neutral Current ep Interactions at High Q^2
H1-Collaboration**, C. Adloff *et al.*
DESY 00 – 143, hep-ex 0010016
The European Physical Journal **C** (2001), in print.

- Measurement and QCD Analysis of Jet Cross Sections in Deep-Inelastic Positron-Proton Collisions at \sqrt{s} of 300 GeV
H1-Collaboration**, C. Adloff *et al.*
DESY 00 – 145, hep-ex 0010054
The European Physical Journal **C** (2001), in print.
- Diffractive Jet-Production in Deep-Inelastic e^+p Collisions at HERA
H1-Collaboration**, C. Adloff *et al.*
DESY 00 – 174, hep-ex 0012051
The European Physical Journal **C** (2001), in print.
- Deep-Inelastic Inclusive ep Scattering at Low x and a Measurement of α_s
H1-Collaboration**, C. Adloff *et al.*
DESY 00 – 181, hep-ex 0012053
submitted to The European Physical Journal **C**
- Measurements of Neutral and Charged Current Cross Sections in Electron-proton Collisions at High Q^2 at HERA
H1-Collaboration**, C. Adloff *et al.*
DESY 00 – 187, hep-ex 0012052
The European Physical Journal **C** (2001), in print.
- A Large Acceptance, High Resolution Detector for Rare K^+ -decay Experiments
E865-Collaboration[†], R. Appel *et al.*
Nuclear Instruments and Methods in Physics Research (2001), in print.
- Searches at HERA for Squarks in R-Parity Violating Supersymmetry
H1-Collaboration**, C. Adloff *et al.*
DESY 01 – 021, hep-ex 0102050
submitted to The European Physical Journal **C** (2001)
- Open Charm and Beauty Production at HERA
F. Sefkow
Proc. 30th International Conference on High Energy Physics (ICHEP 2000), Osaka, Japan, July 2000
hep-ex 0011034
- New Results on Rare and Forbidden Semileptonic K^+ Decays
P. Truöl
HQ2K, 5th International Workshop on Heavy Quarks at Fixed Target, Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro, Brazil, October 2000
hep-ex 0012012
Proc. ed. A. Reis, Frascati Physics Series (2001)

Conference reports

- Test der Quantenchromodynamik in inklusiver ep -Streuung mit dem H1 Detektor
R. Wallny
DPG Frühjahrstagung 2000 - Teilchenphysik, Dresden, Germany, March 21 - 24, 2000
- Messung von Beauty-Produktion bei HERA mit dem H1-Vertexdetektor
J. Kroseberg
DPG Frühjahrstagung 2000 - Teilchenphysik, Dresden, Germany, March 21 - 24, 2000
- Messung von Beauty-Produktion bei HERA
J. Kroseberg
DPG Frühjahrstagung 2001 - Teilchenphysik, Bonn, 26. - 29. März 2001

Invited Lectures

- Open Charm and Beauty Production at HERA
F. Sefkow
30th International Conference on High Energy Physics (ICHEP 2000), Osaka, Japan, July 2000
- New Results on Rare and Forbidden Semileptonic K^+ Decays
P. Truöl
HQ2K, 5th International Workshop on Heavy Quarks at Fixed Target, Centro Brasileiro de Pesquisas Fisicas, Rio de Janeiro, Brazil, October 2000

Diploma and PhD Theses

- A Measurement of Diffractive Charm Production at HERA
Stefan Hengstmann
Dissertation, Physik-Institut, Universität Zürich, December 2000
- Contributions to the Development of Microstrip Gas Chambers (MSGC) for the HERA-*B* Experiment
Thomas Walter
Dissertation, Physik-Institut, Universität Zürich, February 2001

† E865-collaboration:

R. Appel^{8,6}, G.S. Atayan^{2,8}, B. Bassaleck⁵, D.N. Brown⁶, D.R. Bergman⁸, N. Cheung⁶, S. Dhawan⁸, H. Do⁸, J. Egger³, S. Eilerts⁵, C. Felder^{1,6}, H. Fischer⁵, M. Gach⁶, W.D. Herold³, V.V. Isakov^{2,8}, H. Kaspar³, D. Kraus⁶, D. Lazarus¹, L. Leipuner¹, J. Lowe⁵, J. Lozano⁸, H. Ma¹, W. Majid⁸, W. Menzel⁴, S. Pislak^{7,8}, A.A. Poblaguev^{2,8}, A.L. Proskurjakow², P. Rehak¹, P. Robmann⁷, A. Sher⁷, A. Sher⁶, R. Stotzer⁵, J.A. Thompson⁶, P. Truöl^{7,8}, H. Weyer^{4,3}, M.E. Zeller⁸

³ Paul Scherrer Institut, Villigen

⁷ Physik-Institut der Universität Zürich, Zürich

** H1-collaboration (status of February 2001, the actual author list may differ from paper to paper somewhat):

C. Adloff³³, V. Andreev²⁴, B. Andrieu²⁷, T. Anthonis⁴, V. Arkadov³⁵, A. Astvatsatourov³⁵, A. Babaev²³, J. Bähr³⁵, P. Baranov²⁴, E. Barrelet²⁸, W. Bartel¹⁰, P. Bate²¹, A. Beglarian³⁴, O. Behnke¹³, C. Beier¹⁴, A. Belousov²⁴, T. Benisch¹⁰, Ch. Berger¹, T. Berndt¹⁴, J.C. Bizot²⁶, V. Boudry²⁷, W. Braunschweig¹, V. Brisson²⁶, H.-B. Bröker², D.P. Brown¹¹, W. Brückner¹², D. Bruncko¹⁶, J. Bürger¹⁰, F.W. Büsler¹¹, A. Bunyatyan^{12,34}, A. Burrage¹⁸, G. Buschhorn²⁵, A.J. Campbell¹⁰, J. Cao²⁶, T. Carli²⁵, S. Caron¹, D. Clarke⁵, B. Clerbaux⁴, C. Collard⁴, J.G. Contreras^{7,41}, Y.R. Coppens³, J.A. Coughlan⁵, M.-C. Cousinou²², B.E. Cox²¹, G. Cozzika⁹, J. Cvach²⁹, J.B. Dainton¹⁸, W.D. Dau¹⁵, K. Daum^{33,39}, M. Davidsson²⁰, B. Delcourt²⁶, N. Delerue²², R. Demirchyan³⁴, A. De Roeck^{10,43}, E.A. De Wolf⁴, C. Diaconu²², J. Dingfelder¹³, P. Dixon¹⁹, V. Dodonov¹², J.D. Dowell³, A. Drutskoi²³, A. Dubak²⁵, C. Duprel², G. Eckerlin¹⁰, D. Eckstein³⁵, V. Efremenko²³, S. Egli³², R. Eichler³⁶, F. Eisele¹³, E. Eisenhandler¹⁹, M. Ellerbrock¹³, E. Elsen¹⁰, M. Erdmann^{10,40,e}, W. Erdmann³⁶, P.J.W. Faulkner³, L. Favart⁴, A. Fedotov²³, R. Felst¹⁰, J. Ferencei¹⁰, S. Ferron²⁷, M. Fleischer¹⁰, Y.H. Fleming³, G. Flügge², A. Fomenko²⁴, I. Foresti³⁷, J. Formánek³⁰, J.M. Foster²¹, G. Franke¹⁰, E. Gabathuler¹⁸, K. Gabathuler³², J. Garvey³, J. Gassner³², J. Gayler¹⁰, R. Gerhards¹⁰, C. Gerlich¹³, S. Ghazaryan^{4,34}, L. Goerlich⁶, N. Gogitidze²⁴, M. Goldberg²⁸, C. Goodwin³, C. Grab³⁶, H. Grässler², T. Greenshaw¹⁸, G. Grindhammer²⁵, T. Hadig¹³, D. Haidt¹⁰, L. Hajduk⁶, W.J. Haynes⁵, B. Heinemann¹⁸, G. Heinzelmann¹¹, R.C.W. Henderson¹⁷, S. Hengstmann³⁷, H. Henschel³⁵, R. Heremans⁴, G. Herrera^{7,41}, I. Herynek²⁹, M. Hildebrandt³⁷, M. Hilgers³⁶, K.H. Hiller³⁵, J. Hladký²⁹, P. Höting², D. Hoffmann²², R. Horisberger³², S. Hurling¹⁰,

M. Ibbotson²¹, Ç. İşsever⁷, M. Jacquet²⁶, M. Jaffre²⁶, L. Janauschek²⁵, D.M. Jansen¹², X. Janssen⁴, V. Jemanov¹¹, L. Jönsson²⁰, D.P. Johnson⁴, M.A.S. Jones¹⁸, H. Jung^{20,10}, H.K. Kästli³⁶, D. Kant¹⁹, M. Kapichine⁸, M. Karlsson²⁰, O. Karschnick¹¹, F. Keil¹⁴, N. Keller³⁷, J. Kennedy¹⁸, I.R. Kenyon³, S. Kermiche²², C. Kiesling²⁵, P. Kjellberg²⁰, M. Klein³⁵, C. Kleinwort¹⁰, T. Kluge¹, G. Knies¹⁰, B. Koblitz²⁵, S.D. Kolya²¹, V. Korbel¹⁰, P. Kostka³⁵, S.K. Kotelnikov²⁴, R. Koutouev¹², A. Koutov⁸, H. Krehbiel¹⁰, J. Kroseberg³⁷, K. Krüger¹⁰, A. Küpper³³, T. Kuhr¹¹, T. Kurča^{25,16}, R. Lahmann¹⁰, D. Lamb³, M.P.J. Landon¹⁹, W. Lange³⁵, T. Laštovička³⁵, P. Laycock¹⁸, E. Lebailly²⁶, A. Lebedev²⁴, B. Leißner¹, R. Lemrani¹⁰, V. Lendermann⁷, S. Levonian¹⁰, M. Lindstroem²⁰, B. List³⁶, E. Lobodzinska^{10,6}, B. Lobodzinski^{6,10}, A. Loginov²³, N. Loktionova²⁴, V. Lubimov²³, S. Lüders³⁶, D. Lüke^{7,10}, L. Lytkin¹², N. Magnussen³³, H. Mahlke-Krüger¹⁰, N. Malden²¹, E. Malinovski²⁴, I. Malinovski²⁴, R. Maraček²⁵, P. Marage⁴, J. Marks¹³, R. Marshall²¹, H.-U. Martyn¹, J. Martyniak⁶, S.J. Maxfield¹⁸, D. Meer³⁶, A. Mehta¹⁸, K. Meier¹⁴, P. Merkel¹⁰, A.B. Meyer¹¹, H. Meyer³³, J. Meyer¹⁰, P.-O. Meyer², S. Mikocki⁶, D. Milstead¹⁸, T. Mkrtchyan³⁴, R. Mohr²⁵, S. Mohr dieck¹¹, M.N. Mondragon⁷, F. Moreau²⁷, A. Morozov⁸, J.V. Morris⁵, K. Müller³⁷, P. Murin^{16,42}, V. Nagovizin²³, B. Naroska¹¹, J. Naumann⁷, Th. Naumann³⁵, G. Nellen²⁵, P.R. Newman³, T.C. Nicholls⁵, F. Niebergall¹¹, C. Niebuhr¹⁰, O. Nix¹⁴, G. Nowak⁶, J.E. Olsson¹⁰, D. Ozerov²³, V. Panassik⁸, C. Pascaud²⁶, G.D. Patel¹⁸, M. Peez²², E. Perez⁹, J.P. Phillips¹⁸, D. Pitzl¹⁰, R. Pöschl²⁶, I. Potachnikova¹², B. Povh¹², K. Rabbertz¹, G. Rädcl²⁷, J. Rauschenberger¹¹, P. Reimer²⁹, B. Reisert²⁵, D. Reyna¹⁰, S. Riess¹¹, C. Risler²⁵, E. Rizvi³, P. Robmann³⁷, R. Roosen⁴, A. Rostovtsev²³, C. Royon⁹, S. Rusakov²⁴, K. Rybicki⁶, D.P.C. Sankey⁵, J. Scheins¹, F.-P. Schilling¹³, P. Schleper¹⁰, D. Schmidt³³, D. Schmidt¹⁰, S. Schmitt¹⁰, M. Schneider²², L. Schoeffel⁹, A. Schöning³⁶, T. Schörner²⁵, V. Schröder¹⁰, H.-C. Schultz-Coulon⁷, C. Schwanenberger¹⁰, K. Sedlák²⁹, F. Sefkow³⁷, V. Shekelyan²⁵, I. Sheviakov²⁴, L.N. Shtarkov²⁴, Y. Sirois²⁷, T. Sloan¹⁷, P. Smirnov²⁴, V. Solochenko^{23,†}, Y. Soloviev²⁴, D. South²¹, V. Spaskov⁸, A. Specka²⁷, H. Spitzer¹¹, R. Stamen⁷, B. Stella³¹, J. Stiewe¹⁴, U. Straumann³⁷, M. Swart¹⁴, M. Taševský²⁹, V. Tchernyshov²³, S. Tchetchelnitski²³, G. Thompson¹⁹, P.D. Thompson³, N. Tobien¹⁰, D. Traynor¹⁹, P. Trüöl³⁷, G. Tsipolitis^{10,38}, I. Tsurin³⁵, J. Turnau⁶, J.E. Turney¹⁹, E. Tzamariudaki²⁵, S. Udluft²⁵, A. Usik²⁴, S. Valkár³⁰, A. Valkárová³⁰, C. Vallée²², P. Van Mechelen⁴, S. Vassiliev⁸, Y. Vazdik²⁴, A. Vichnevski⁸, K. Wacker⁷, R. Wallny³⁷, B. Waugh²¹, G. Weber¹¹, M. Weber¹⁴, D. Wegener⁷, M. Werner¹³, N. Werner³⁷, G. White¹⁷, S. Wiesand³³, T. Wilksen¹⁰, M. Winde³⁵, G.-G. Winter¹⁰, Ch. Wissing⁷, M. Wobisch², H. Wollatz¹⁰, E. Wünsch¹⁰, A.C. Wyatt²¹, J. Žáček³⁰, J. Zálešák³⁰, Z. Zhang²⁶, A. Zhokin²³, F. Zomer²⁶, J. Zsembery⁹, and M. zur Nedden¹⁰

³² Paul Scherrer Institut, Villigen

³⁶ Institut für Teilchenphysik, ETH, Zürich

³⁷ Physik-Institut der Universität Zürich, Zürich