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Current Research:

My research interests focus on neutrino astronomy with the 1 km^3 IceCube detector now being constructed at the South Pole. Our group is searching for high-energy extra-terrestrial neutrinos. My emphasis is on developing new algorithms to select and reconstruct candidate electron-neutrino events in IceCube, and on electromagnetic phenomena present in high energy electron neutrino interactions. I am also interested in high p_T particle (specifically muons) production in cosmic-ray air showers.

I also study ultra-peripheral collisions (UPCs) of relativistic nuclei, such as two-photon and photonuclear interactions. UPCs probe a wide range of physics topics, from strong field electrodynamics to meson spectroscopy to entangled quantum states.

Experience:

Senior Scientist, 2008-present, and **Staff Physicist**, 1994-2008, Lawrence Berkeley Laboratory.

Lead LBNL physics analysis effort on the IceCube 1 km^3 neutrino observatory, 2004-present. Lead "Cascades" Detector Channel Working Group and co-lead Diffuse Neutrino Physics Working Group. Developed simulation code for IceCube electronics. Developing new analysis algorithms to reconstruct electron neutrinos and to study high p_T muons in cosmic-ray air showers. Performed detailed studies of electromagnetic interactions. Chair, IceCube Publications committee, 2007-present.

Co-convenor, STAR ultra-peripheral collisions (UPCs) working group, 1997-2000 & 2002-2007. Led 5 institution, trinational group studying coherent nuclear interactions at RHIC. Perform theoretical and experimental studies of coherent vector meson production, interferometry, and e^+e^- production.

Lead Physicist for STAR (Solenoidal Tracker at RHIC) TPC electronics, 1994-2000. Oversaw development, production, installation and commissioning of $4 million, 138,000 channel, low noise preamplifier/shaper and waveform digitizer (switched capacitor array/ADC) system. Applied design to STAR forward TPCs.

Research Physicist, University of California, Berkeley, August, 2006-present. Principal Investigator for National Science Foundation grant for IceCube analysis.

Lecturer, University of California, Berkeley, January 1996 to June, 1996. Taught Physics 24 (freshman seminar), on "Nuclear Physics: Science and Applications."

Postgraduate Researcher, University of California, Santa Cruz, October, 1991 to June, 1994.

Spokesperson for SLAC-E146, an 11 member UCSC-SLAC-Livermore-American Univ. collaboration which performed a fixed target experiment to study interference between multiple scattering and bremsstrahlung (the LPM effect). Led collaboration from conception and proposal development through design and construction, data taking and analysis. Developed a novel 'parasitic' beam allowing experiments to avoid the costs of dedicated accelerator running.

Designed electronics for MILAGRO air shower detector. Developed a method to make air shower detectors sensitive to gamma ray burst photons with $\sim$ 10 GeV by counting single particle hits.

Research Assistant Professor and **Research Associate**, Boston University, November, 1988 to September, 1991.

Searched for magnetic monopoles and other new particles and studied astrophysical phenomena in MACRO experiment. Designed, built, and characterized a 200 MHz waveform digitizer with 'on the fly' zero suppression. Oversaw characterization of 900 8" photomultiplier tubes by undergraduate technicians. Created data acquisition and trigger scheme for the TEXAS SSC detector proposal.

Visiting Researcher, Programa de Anthropologia para el Ecuador, Salango, Ecuador, September to November, 1988.

Studied pre-Colombian architecture using archaeological remains. Excavated at Rio Chico and Salango, and worked on an archaeological survey of the surrounding area.

Research Assistant, Stanford Linear Accelerator Center. April, 1982 to September, 1988 and June to September, 1980.

Studied baryon production in 29 GeV e^+e^- collisions. Programming and maintenance of Mark II secondary trigger logic. Developed ultra-low noise LN_2 cooled preamplifier and computer data acquisition system for a fractional charge search.

Senior Teaching Assistant and **Teaching Assistant**, Stanford University, September, 1983 to June, 1984 and April to June, 1985.

Designed and Taught “Modern Physics through Science Fiction” (Physics 13). Head Teaching Assistant for Modern Physics for Engineers. Directed staff of 6 TA's. Teaching Assistant for introductory physics for biologists.

Education:

PhD in Physics, Stanford University, 9/82-6/88. Specialization: Experimental particle physics. Thesis: Baryon production in e^+e^- Annihilation at an E_{cm} of 29 GeV. Advisor: Professor Tom Himel. Graduate minor in anthropology, concentrating in archaeology.

BA in Physics, University of California, San Diego, 9/79 - 6/81. Minor in history.

Professional Activities:

Service to the Physics Community

Organizing Committee, Workshop on "Photoproduction at Collider Energies: from RHIC and HERA to the LHC," Jan. 2007, European Center for Nuclear Physics, Trento, Italy.

Organizer for 2007 Town Meeting on "Neutrinos, Neutrons and Fundamental Symmetries." Organized parallel session on "Dark Matter in Nuclear Physics, and led writing of white paper on that topic.

Nominating Committee, American Physical Society Topical Group on Hadron Physics, for 2006 election.

International Organizing Committee, "From Colliders to Cosmic Rays," Prague, Czech Republic, Sept., 2005.

Local Organizing Committee, Quark Matter 2004.

U.S. Civilian Research And Development Foundation physics review panel, 2004. Evaluated grant proposals from the former Soviet Union countries.

Organizing Committee, workshop on "Diffraction and Glueball Searches at RHIC," March, 2002, Brookhaven National Laboratory.

Consultant to Particle Data Group on bremsstrahlung and pair creation, 2000-present.

Referee for Physical Review, Physics Reports, Physics Letters, Nuclear Instruments & Methods, Journal of Physics G and IEEE Transaction on Nuclear Science.

Reviewer for DOE SBIR proposals, Canadian National Science and Engineering Council proposals and International Science and Technology Center (Russia) proposals, and National Science Foundation grants and MRI proposals.

Local Organizing Committee, Fall 1999 Meeting of the Division of Nuclear Physics, American Physical Society. Co-organizer of a 4 day conference with 750 participants. Co-organized a workshop on "Structure Functions of Heavy Nuclei at RHIC."

Program Committee, Division of Nuclear Physics, American Physical Society, 1997-1999.

Service to LBNL

LBNL Laboratory correspondent for the CERN Courier, 2006-present.

Principal Investigator, for funded IceCube ERCAP proposal/allocation from NERSC, 2004-present.

LBNL General Sciences Workplace Committee, 2003-2006. Developed 'Living List' for Nuclear Science Division, worked on workplace diversity and postdoc career planning.

Chair, DAQ hardware subcommittee, LBNL IceCube vetting review, Dec. 2003.

Chair, detector and electronics subcommittee, LBNL GRETINA vetting review, Nov. 2003.

Nuclear Science Division Equipment Committee, 1996-1998.

Lawrence Berkeley National Laboratory, Employee Outstanding Performance Award, 1995-6.

Other

Visits to Berkeley Public Elementary Schools to discuss phase changes, and science in Antarctica, under the auspices of LBNL CSEE, Community Resources for Science, and various personal contacts, 2006-present.

Biweekly columnist for the *Stanford Daily*, September, 1983 to January, 1984 and September, 1987 to January, 1988. General interest writing for various publications, including *Radio Electronics*, *Environmental Action*.

Member: American Physical Society

Refereed Publications

Primary Authorships

1. Astronomy and Astrophysics with Neutrinos. Francis Halzen and Spencer R. Klein, Physics Today, May 2008, pg. 29.
2. The Physics of UltraPeripheral Collisions at the LHC. K. Hencken *et al.*, Physics Reports **458**, 1 (2008).
3. ρ production in ultra-peripheral relativistic heavy ion collisions with STAR. B. I. Abelev *et al.*, Phys. Rev. **C77**, 034910 (2008).
4. First Year Performance of The IceCube Neutrino Telescope. A. Achterberg *et al.*, Astroparticle Physics **26**, 155 (2006).
5. A Cone-finding Algorithm for Heavy-ion Collisions at LHC energies, S.-L. Blyth *et al.*, J. Phys. **G34**, 271 (2007).
6. First Observations of Beam Losses due to Bound-Free Pair Production, R. Bruce, *et al.*, preprint arXiV:0706.2292, to appear in Phys. Rev. Lett.
7. e^+e^- Pair Production from 10 GeV to 10 ZeV, Spencer R. Klein, Radiation Physics and Chemistry **75**, 696 (2006).
8. Physics of Ultra-peripheral Nuclear Collisions, C. Bertulani, S. Klein and J. Nystrand, Annual Reviews of Nuclear and Particle Science, **55**, 271 (2005).
9. Cherenkov Radiation from e^+e^- pairs and its effect on ν_e Induced Showers, S.K. Mandal, S. R. Klein and J. David Jackson, Physical Review **D72**, 093003 (2005).
10. Photoproduction of Quarkonium in Proton Proton and Nucleus Nucleus Collisions, Spencer Klein and Joakim Nystrand, Physical Review Letters **92**, 142003 (2004).
11. Production of e^+e^- Pairs Accompanied by Nuclear Dissociation in Ultra-Peripheral Heavy Ion Collisions, J. Adams *et al.*, Phys. Rev. **C70**, 031902 (2004). *n.b.* This is work done by my student, Vladimir Morozov, for his dissertation.
12. Multi-photon Exchange Processes in Ultra-Peripheral Relativistic Heavy Ion Collisions, G. Baur *et al.*, Nucl. Phys. **A729**, 787 (2003).
13. Inhomogenous Shadowing Effects on J/ψ Production in dA Collisions, S. R. Klein and R. Vogt, Physical Review Letters **91**, 142301 (2003).

14. Deuteron Photodissociation in Ultra-peripheral Relativistic Heavy Ion-Deuteron Collisions, S. R. Klein and R. Vogt, Physical Review **C68**, 017902 (2003).

15. Nuclear Shadowing and High-p_T Hadron Spectra in Relativistic Heavy Ion Collisions, Phys. Rev. **C67**, 047901 (2003).

16. Does Particle Decay Cause Wave Function Collapse: an Experimental Test, S. R. Klein and J. Nystrand, Phys. Lett. **A308**, 323 (2003).

17. The High-Energy Gamma-Ray Fluence and Energy Spectrum of GRB970417A from Observations with Milagrito, R. Atkins *et al.*, Astrophysical Journal **583**, 824 (2003).

18. A Readout System for the STAR Time Projection Chamber, M. Anderson *et al.*, Nuclear Instruments and Methods **A499**, 679 (2003).

19. The STAR Time Projection Chamber: a Unique Tool for Studying High Multiplicity Events at RHIC, M. Anderson *et al.*, Nuclear Instruments and Methods **A499**, 659 (2003).

20. The STAR Detector Overview, K. H. Ackermann *et al.*, Nuclear Instruments and Methods **A499**, 624 (2003).

21. The Forward Time Projection Chamber in STAR, K. H. Ackerman *et al.*, Nuclear Instruments and Methods **A499**, 713 (2003).

22. Hardware Controls for the STAR Experiment at RHIC, D. Reichold *et al.*, Nuclear Instruments and Methods **A499**, 792 (2003).

23. The STAR Trigger, F. S. Bieser *et al.*, Nuclear Instruments and Methods **A499**, 766 (2003).

24. Coherent ρ^0 Production in Ultraperipheral Heavy Ion Collisions, C. Adler *et al.*, Physical Review Letters **89**, 272302 (2002).

25. Diffraction at RHIC, A. Bravar *et al.*, J. Phys. **G28**, 2885 (2002).

26. Heavy Quark Photoproduction in Ultra-peripheral Heavy Ion Collisions,, S. Klein, J. Nystrand and R. Vogt, Physical Review C **66**, 044906 (2002).

27. Coherent Vector-Meson Photoproduction with Nuclear Breakup in Relativistic Heavy-Ion Collisions, Anthony. J. Baltz, Spencer R. Klein and Joakim Nystrand, Physical Review Letters **89**, 012301 (2002).

28. A Full Acceptance Detector for the LHC (FELIX), A. Ageev *et al.*, J. Phys. G **28**, R117 (2002).

29. Photoproduction of Top in Peripheral Heavy Ion Collisions, Spencer R. Klein, Joakim Nystrand and Ramona Vogt, European Physics Journal **C21**, 563 (2001).

30. Localized Beampipe Heating due to e^+ Capture and Nuclear Excitation in Heavy Ion Colliders, Spencer R. Klein, Nuclear Instruments and Methods **A459**, 51 (2001).

31. MILAGRITO: a TeV air shower array, R. Atkins *et al.*, Nuclear Instruments and Methods **A449**, 478 (2000).

32. Interference in Exclusive Vector Meson Production in Heavy Ion Collisions, S. Klein and J. Nystrand, Physical Review Letters **84**, 2330 (2000).

33. The Effect of Shadowing on Initial Conditions, Transverse Energy and Hard Probes in Ultrarelativistic Heavy Ion Collisions, V. Emel'yanov *et al.*, Physical Review **C61**, 044904 (2000).

34. Exclusive Vector Meson Production in Relativistic Heavy Ion Collisions, Spencer Klein and Joakim Nystrand, Physical Review C **60**, 014903 (1999).

35. Impact Parameter Dependence of J/ψ and Drell-Yan Production in Heavy Ion Collisions at $\sqrt{s_{NN}} = 17.3A$GeV', V. Emel'yanov *et al.*, Physical Review **C59**, R1860 (1999).

36. Suppression of Bremsstrahlung and Pair Creation due to Environmental Factors, Spencer Klein, Reviews of Modern Physics **71**, 1501 (1999).

37. Spatial Variation of Nuclear Structure Functions and Heavy Quark Production, V. Emel'yanov *et al.*, Physical Review Letters **81**, 1801 (1998).

38. Charm Quark Production in Non-central Heavy Ion Collisions, V. Emel'yanov *et al.*, Physical Review **C56**, 2726 (1997).

39. Bremsstrahlung Suppression due to the LPM and Dielectric Effects in a Variety of Materials. P. Anthony *et al.*, Physical Review **D56**, 1373 (1997).

40. Results from the STAR TPC System Test, W. Betts *et al.*, IEEE Transactions on Nuclear Science. **44**, 592 (1997).

41. Measurement of Dielectric Suppression of Bremsstrahlung, P. Anthony *et al.*, Physical Review Letters **76**, 3550 (1996).

42. Front End Electronics for the STAR TPC, S.Klein *et al.*, IEEE Transactions on Nuclear Science **43**, 1768 (1996).

43. A Low Noise Amplifier-Shaper with Tail Correction for the STAR Detector, E. Beuville *et al.*, IEEE Transactions on Nuclear Science **43**, 1619 (1996).

44. An Accurate Measurement of the Landau-Pomeranchuk-Migdal Effect, P. Anthony *et al.*, Physical Review Letters **75**, 1949 (1995).

45. A Method of Obtaining Parasitic e^+ or e^- Beams During SLAC Linear Collider Operation. M. Cavalli-Sforza *et al.*, IEEE Transactions on Nuclear Science, **41**, 1364 (1994).

46. A Multiplexed 200 MSPS Waveform Digitizer with Zero Suppression for MACRO. S. Klein and E. Hazen. Nuclear Instruments and Methods **A309**, 536 (1991).

47. Charmed Baryons: A New Laboratory for Charm Studies. S. R. Klein, International Journal of Modern Physics A **5**, 1457 (1990).

48. Upper Limits on $D^\pm$ and $B^\pm$ decays to two leptons plus $\pi^\pm$ or $K^\pm$. A.J. Weir, S.R. Klein *et al.*, Physical Review **D41**, 1384 (1990).

49. Λ_c^+ Production and Semileptonic Decay in 29 GeV e^+e^- Annihilation. S.R. Klein, T. Himel *et al.*, Physical Review Letters **62**, 2444 (1989).

50. Charmed and Strange Baryon Production in 29-GeV Electron Positron Annihilation. S.R. Klein, SLAC-Report-330; PhD Dissertation, June, 1988.

51. Observation of Ω^- Production in e^+e^- Annihilation at 29 GeV. S.R. Klein, T. Himel *et al.*, Physical Review Letters **59**, 2412 (1987).

52. Observation of Ξ^- Production in e^+e^- Annihilation at 29 GeV. S.R. Klein, T. Himel *et al.*, Physical Review Letters **58**, 644 (1987).

53. The Rotor Electrometer: A New Instrument For Bulk Matter Quark Search Experiments. John C. Price, Walter R. Innes, Spencer Klein, Martin L. Perl, Review of Scientific Instruments **57**, 2691 (1986).

54. Audiofrequency Measurement of JFET Noise Vs. Temperature in a High Impedance Preamplifier. Spencer Klein, Walter R. Innes, John C. Price, Review of Scientific Instruments **56**, 1941 (1985).

55. The HEAO-A2 Soft X-Ray Survey of Dwarf Novae in Outburst. F.A. Cordova, J.J. Nugent, S.R. Klein, and G.P. Garmire. Monthly Notices of the Royal Astronomical Society **190**, 87 (1980).

Co-authorships

Coauthorship on the following papers, as part of the IceCube, STAR, Particle Data Group, CYGNUS, MILAGRO, MACRO, TEXAS, Mark II and/or Mark II upgrade collaborations:

56. Multiyear Search for a Diffuse Flux of Muon Neutrinos with AMANDA-II, A. Achterberg *et al.*, Physical Review **D76**, 042008 (2007).

57. Detection of Atmospheric Muon Neutrinos with the IceCube 9-string Detector, A. Achterberg *et al.*, Physical Review **D76**, 027101 (2007).

58. Limits on the Muon Flux from Neutralino Annihilations at the Center of the Earth with AMANDA, A. Achterberg *et al.*, Astroparticle Physics **26**, 129 (2006).

59. Five Years of Searches for Point Sources of Astrophysical Neutrinos with the AMANDA-II Neutrino Telescope, A. Achterberg *et al.*, Physical Review **D75**, 102001 (2007).

60. On the Selection of AGN Neutrino Source Candidates for a Source Stacking Analysis with Neutrino Telescopes, A. Achterberg *et al.*, Astroparticle Physics **26**, 282 (2006).

61. Forward Λ Production and Nuclear Stopping Power in d + Au Collisions at $\sqrt{s_{NN}} = 200$ GeV, B. Abelev *et al.*, preprint arXiv:0706.472; submitted to Phys. Rev. **C**.

62. Measurement of Transverse Single-Spin Asymmetries for Di-jet Production in Proton-Proton Collisions at $\sqrt{s_{NN}} = 200$ GeV, B. Abelev *et al.*, preprint arXiv:0705.4629; submitted to Phys. Rev. Lett.

63. Global Polarization Measurements in Au+Au collisions, B. Abelev *et al.*, Phys. Rev. **C76**, 024915 (2007).

64. Energy Dependence of π^+, p and anti-p Transverse Momentum Spectra for Au + Au Collisions at $\sqrt{s_{NN}} = 200$ GeV, B. Abelev *et al.*, preprint nucl-ex/0703040; submitted to Phys. Rev. **C**.

65. Partonic Flow and ϕ-Meson Production in Au + Au Collisions at $\sqrt{s_{NN}} = 200$ GeV, B. Abelev *et al.*, Physical Review Letters **99**, 112301 (2007).

66. Charged Particle Distributions and Nuclear Modification at High Rapidities in d + Au Collisions at $\sqrt{s_{NN}} = 200$ GeV, B. Abelev *et al.*, preprint nucl-ex/0703016; submitted to Phys. Lett.

67. Mass, quark-number, and $\sqrt{s_{NN}}$ dependence of the second and fourth flow harmonics in ultra-relativistic nucleus-nucleus collisions, B. Abelev *et al.*, Physical Review **C75**, 054906 (2007).

68. Rapidity and species dependence of particle production at large transverse momentum for d+Au collisions at $\sqrt{s_{NN}} = 200$ GeV, B. Abelev *et al.*, nucl-ex/0609021.

69. Longitudinal Double-spin Asymmetry and Cross Section for Inclusive Jet Production in Polarized Proton Collisions at $\sqrt{s_{NN}} = 200$ GeV, B. Abelev *et al.*, Physical Review Letters **97**, 252001 (2006).

70. Neutral Kaon Interferometry in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV, B. Abelev *et al.*, Physical Review **C74**, 054902 (2006).

71. Strange Particle Production in p+p Collisions at $\sqrt{s_{NN}} = 200$ GeV, B. Abelev *et al.*, Phys. Rev. **C75**, 064901 (2007).

72. Transverse Momentum and Centrality Dependence of high-p_T non-photonic electron suppression in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV, B. Abelev *et al.*, Phys. Rev. Lett. **98**, 192301 (2007).

73. Limits on the High-energy Gamma and Neutrino Fluxes from the SGR 1806-20 Giant Flare of December 27th, 2004 with the AMANDA-II detector, A. Achterberg *et al.*, Physical Review Letters **97**, 221101 (2006).

74. $\Delta\phi$ $\Delta\eta$ Correlations in Central Au+Au Collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Phys. Rev. **C75**, 034901 (2007).

75. The Multiplicity Dependence of Inclusive p_T spectra from p-p Collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Physical Review **D74**, 032006 (2006).

76. Scaling Properties of Hyperon Production in Au+Au Collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Phys. Rev. Lett. **98**, 062301 (2007).

77. Identified Baryon and Meson Distributions at Large Transverse Momenta from Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV, B. Abelev *et al.*, Physical Review Letters **97**, 152301 (2006).

78. Strange Baryon Resonance Production in $\sqrt{s_{NN}} = 200$ GeV p+p and Au+Au Collisions, J. Adams *et al.*, Physical Review Letters **97**, 132301 (2006).

79. Direct Observation of Dijets in Central Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Physical Review Letters **97**, 162301 (2006).

80. Forward Neutral Pion Production in p+p and d+Au Collisions at $\sqrt{s_{NN}} = 200$ GeV., J. Adams *et al.*, Physical Review Letters **97**, 1652302 (2006).

81. Measurements of Identified Particles at Intermediate Transverse Momentum in the STAR experiment from Au + Au collisions at $\sqrt{s_{NN}} = 200$ GeV J. Adams *et al.*, nucl-ex/0601042.

82. Identified Hadron Spectra at Large Transverse Momentum in p+p and d+Au Collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Phys. Lett. **B637**, 161 (2006).

83. Strangelet search at RHIC, J. Adams *et al.*, Physical Review **C76**, 011901 (2007).

84. Multiplicity and Pseudorapidity Distributions of Charged Particles and Photons at Forward Pseudorapidity in Au + Au collisions at $\sqrt{s_{NN}}$ = 62.4 GeV, J. Adams *et al.*, Phys. Rev. **C73**, 034906 (2006).

85. Proton-Lambda correlations in central Au + Au collisions at $\sqrt{s_{NN}}$ = 200 GeV, J. Adams *et al.*, Phys. Rev. **C74**, 064906 (2006).

86. Directed flow in Au + Au collisions at $\sqrt{s_{NN}}$ = 62.4 GeV, J. Adams *et al.*, Phys. Rev. **C73**, 034903 (2006).

87. Transverse-momentum p_T correlations on (η, ϕ) from mean p_T fluctuations in Au-Au Collisions at $\sqrt{s_{NN}}$ = 62.4 GeV, J. Adams *et al.*, J. Phys. **G32**, L37 (2006).

88. Incident energy dependence of p_T correlations at RHIC, J. Adams *et al.*, Phys. Rev. **C72**, 044902 (2005).

89. Multi-strange baryon elliptic flow in Au + Au collisions at $\sqrt{s_{NN}}$ = 200 GeV, J. Adams *et al.*, Phys. Rev. Lett. **95**, 122301 (2005).

90. Multiplicity and Pseudorapidity distributions of photons in Au + Au collisions at $\sqrt{s_{NN}}$ = 62.4 GeV, J. Adams *et al.*, Phys. Rev. Lett. **95**, 062301 (2005).

91. Pseudorapidity Asymmetry and Centrality Dependence of Charged Hadron Spectra in d + Au collisions at $\sqrt{s_{NN}}$ = 200 GeV, J. Adams *et al.*, Phys. Rev. **C70**, 064907 (2004).

92. Distribution of charged hadrons associated with high transverse momentum particles in pp and Au +Au collisions at $\sqrt{s_{NN}}$ = 200 GeV, J. Adams *et al.*, Phys. Rev. Lett. **95**, 152301 (2005).

93. Experimental and Theoretical Challenges in the Search for the Quark Gluon Plasma: the STAR Collaboration's Critical Assessment of the Evidence from RHIC collisions, J. Adams *et al.*, Nucl. Phys. **A757**, 102 (2005).

94. K*(892) resonance production in Au + Au and p + p collisions at $\sqrt{s_{NN}}$ = 200 GeV at STAR, J. Adams *et al.*, Physical Review **C71**, 064902 (2005).

95. Pion interferometry in Au + Au collisions at $\sqrt{s_{NN}}$ = 200 GeV, J. Adams *et al.*, Phys. Rev. **C71**, 064906 (2005).

96. Minijet Deformation and Charge-independent Two-particle Correlations on Momentum Subspace (η,ϕ) in Au - Au Collisions at $\sqrt{s_{NN}}$ = 130 GeV, J. Adams *et al.*, Physical Review **C73**, 064907 (2006).

97. Azimuthal Anisotropy in Au + Au collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Physical Review **C72**, 014904 (2005).

98. Transverse momentum correlations and minijet dissipation in Au Au collisions at $\sqrt{s_{NN}} = 130$ GeV, J. Adams *et al.*, nucl-ex/0408012.

99. Azimuthal anisotropy and correlations at large transverse momenta in p + p and Au + Au collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Physical Review Letters **93**, 252301 (2004).

100. Open charm yields in d + Au collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Physical Review Letters **94**, 062301 (2005).

101. Transverse-momentum dependent modification of dynamic texture in central Au + Au collisions at $\sqrt{s_{NN}} = 200$ GeV, J.Adams *et al.*, Physical Review **C71**, 031901 (2005).

102. Hadronization geometry and charge-dependent number autocorrelations on axial momentum space in Au Au collisions at $\sqrt{s_{NN}} = 130$ GeV, J. Adams *et al.*, Physics Letters **B634**, 347 (2006).

103. ϕ meson production in Au + Au and p + p collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Physics Letters **B612**, 181 (2005).

104. Centrality and pseudorapidity dependence of charged hadron production at intermediate p_T in Au + Au collisions at $\sqrt{s_{NN}} = 130$ GeV, J. Adams *et al.*, Physical Review **C70**, 044901 (2004).

105. Photon and neutral pion production in Au + Au collisions at $\sqrt{s_{NN}} = 130$ GeV, J. Adams *et al.*, Physical Review **C70**, 044902 (2004).

106. Azimuthally sensitive HBT in Au + Au collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Physical Review Letters **93**, 012301 (2004).

107. Production of charged pions and hadrons in Au + Au collisions at $\sqrt{s_{NN}} = 130$ GeV, J. Adams *et al.*, nucl-ex/0311017.

108. Cross sections and transverse single-spin asymmetries in forward π^0 production from proton collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Physical Review Letters **92**, 171801 (2004).

109. Azimuthal anisotropy at RHIC: The first and fourth harmonics, J. Adams *et al.*, Physical Review Letters **92**, 062301 (2004).

110. Identified particle distributions in p p and Au + Au collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Physical Review Letters **92**, 112301 (2004).

111. Pion, kaon, proton and anti-proton transverse momentum distributions from p + p and d + Au collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Physics Letters **B616**, 8 (2005).

112. Measurements of transverse energy distributions in Au+Au collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Physical Review **C70**, 054907 (2004).

113. Event-by-event $\langle p_T \rangle$ fluctuations in Au Au collisions at $\sqrt{s_{NN}} = 130$ GeV, J. Adams *et al.*, Physical Review **C71**, 064906 (2005).

114. Pion kaon correlations in Au + Au collisions at $\sqrt{s_{NN}} = 130$ GeV, J. Adams *et al.*, Physical Review Letters **91**, 262302 (2003).

115. Multi-strange baryon production in Au Au collisions at $\sqrt{s_{NN}} = 130$ GeV, J. Adams *et al.*, Physical Review Letters **92**, 182301 (2004).

116. ρ^0 production and possible modification in Au + Au and p + p collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Physical Review Letters **92**, 092301 (2004).

117. Multiplicity Fluctuations in Au + Au collisions at $\sqrt{s_{NN}} = 130$ GeV, J. Adams *et al.*, Physical Review **C68**, 044905 (2003).

118. Rapidity and Centrality Dependence of Proton and Anti-proton Production from Au + Au Collisions at $\sqrt{s_{NN}} = 130$ GeV, J. Adams *et al.*, Physical Review **C70**, 041901 (2004).

119. Three-Pion HBT Correlations in Relativistic Heavy Ion Collisiosn from the STAR Experiment, J. Adams *et al.*, Physical Review Letters **91**, 262301 (2003).

120. Evidence from d+Au Measurements for Final-State Suppression of High p_T Hadrons in Au + Au Collisions at RHIC, J. Adams *et al.*, Physical Review Letters **91**, 072304 (2003).

121. Particle Dependence of Azimuthal Anisotropy and Nuclear Modification of Particle Production at Moderate p_T in Au + Au Collisions at $\sqrt{s_{NN}} = 200$ GeV, J. Adams *et al.*, Physical Review Letters **92**, 052302 (2004).

122. Transverse Momentum and Collision Energy Dependence of High p_T Hadron Suppression in Au + Au Collisions at Ultrarelativistic Energies. J. Adams *et al.*, Physical Review Letters **91**, 172302 (2002).

123. Narrowing of the balance function with centrality in Au + Au collisions at $\sqrt{s_{NN}} = 130$ GeV, J. Adams *et al.*, Phys. Rev. Lett. **90**, 172301 (2003).

124. Disappearance of back-to-back high-p_T Hadron Correlations in Central Au+Au Collisions at $\sqrt{s_{NN}} = 200$ GeV, C. Adler *et al.*, Physical Review Letters **90**, 082302 (2003).

125. Strange particle to antiparticle ratios at mid-rapidity in Central Au+Au Collisions at $\sqrt{s_{NN}} = 200$ GeV", C. Adler *et al.*, Phys. Lett. **B567**, 167 (2003).

126. Centrality Dependence of High p_T Hadron Suppression in Au+Au Collisions at $\sqrt{s_{NN}} = 130$ GeV, C. Adler *et al.*, Physical Review Letters **89**, 202301 (2002).

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201. Upper Limit of B^0 $\overline{B^0}$ Mixing in e^+e^- Annihilation at 29 GeV. T. Schaad, M.E. Nelson *et al.*, Physics Letters **160B**, 188 (1985).

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Other Publications and Talks

Books, White Papers and Conference Summaries

1. The Physics of UltraPeripheral Collisions at the LHC, K. Hencken *et al.*, CERN Yellow Report and arXiv:0706.3356.

2. Nuclear Science and the New Standard Model: Fundamental Symmetries and Neutrinos in the Next Decade, M.J. Ramsey-Musolf *et al.*. White paper from the Nuclear Science Town Meeting on "Neutrinos, Neutrons and Fundamental Symmetries, held in Chicago on Jan. 17-19, 2007.

3. Dark Matter in Nuclear Physics, G. Fuller *et al.*, nucl-ex/0702031. White paper prepared for the for the Nuclear Science Town Meeting on "Neutrinos, Neutrons and Fundamental Symmetries, held in Chicago on Jan. 17-19, 2007.

4. Photoproduction at collider energies: from RHIC and HERA to the LHC, A. Baltz *et al.*, preprint hep-ph/0702212. Mini-proceedings of the eponymous workshop held at ECT, Trento, January, 2007.

5. Review of Particle Physics, W.-M. Yao *et al.*, J. Phys. **G33**, 1 (2006).

6. Heavy Quarkonium Physics, N. Brambilla *et al.*, CERN Yellow Report CERN-2005-005, June, 2005, and preprint hep-ph/0412158.

7. Review of Particle Properties, S. Eidelman *et al.*, Physics Letters **B592**, 1 (2004).

8. Review of Particle Properties, K. Hagiwara *et al.*, Phys. Rev. **D66**, 010001 (2002).

9. Hot Topics in Ultra-Peripheral Collisions, G. Baur *et al.*, preprint hep-ex/0201034, in Proc. of the Workshop on Electromagnetic Probes of Fundamental Physics, Erice, Italy, Oct. 16-21, 2001.

10. Review of Particle Properties, D. E. Groom *et al.*, European Physics Journal **15**, 1 (2000).

Selected Conference Presentations:

1. "Recent Results from RHIC & Some Lessons for Cosmic-ray Physicists," invited talk at the 14th Intl. Symp. on Very High Energy Cosmic Ray Interactions (ISVHECRI 2006), Weihai, China, Aug. 15-22, 2006. Preprint nucl-ex/0611040, to appear in the proceedings.

2. “Studying High p_T Muons in Cosmic-ray Air Showers,” presented at the 14th Intl. Symp. on Very High Energy Cosmic Ray Interactions (ISVHECRI 2006), Weihai, China, Aug. 15-22, 2006. Preprint astro-ph/0612051, to appear in the proceedings.

3. “First Results from IceCube,” invited talk presented at Particles and Nuclei in Collision (PANIC 05), Santa Fe, New Mexico, Oct. 24-28, 2005. Published in the proceedings, and as preprint astro-ph/0601269.

4. “Measuring Structure functions with UPCs at the LHC,” presented at the workshop on Heavy-Ion Physics at the LHC, Oct. 23, 2005, Santa Fe, New Mexcio.

5. “Photoproduction at Hadron Colliders,” invited talk presented at the 13th workshop on Deep Inelastic Scattering, Madison, Wisconsin, April 27-May 1, 2005. Published in the proceedings, and as nucl-ex/0506013.

6. “Cascades from ν_e above 10^{20} eV,” presented at “QCD at Cosmic Energies,” Erice, Sicily, Italy, Sept. 29 - Oct. 5, 2004. Published in the proceedings, and as astro-ph/0412158.

7. “Quantum Interferometry in ρ^0 Production in Ultra-Peripheral Heavy Ion Collisions,” poster presented at Quark Matter 2004. Published as nucl-ex/0402007.

8. “Ultra-Peripheral Collisions with STAR at RHIC,” invited talk presented at “Small-x and Diffraction 2003,” Sept. 17-20, 2003, Fermilab, IL Published in the (online) proceedings and as nucl-ex/0310020.

9. “Photoproduction of J/ψ and Υ in pp and $\overline{p}p$ collisions,” presented at Small-x and Diffraction, 2003, Sept. 17-20, 2003, Fermilab, Batavia, Illinois. Co-authored with Joakim Nystrand; published in the (online) proceedings and as hep-ph/0310223.

10. “Vector Meson Interferometry in STAR,” invited talk presented at the workshop on ultra-peripheral collisions, April 21-25, 2003, Inst. of Nuclear Theory, Seattle, Washington.

11. “Ultra-Peripheral Collisions in STAR: Current Results and Future Prospects,” invited talk presented at the Workshop on Coherent Effects at RHIC and LHC: Initial Conditions and Hard Probes, Oct. 14-25, 2002, ECT, Trento, Italy.

12. “Multiple UPCs in a single collision,” invited talk presented at the 2nd Workshop on Ultra-Peripheral Heavy Ion Collisions, Oct. 11-12, 2002, CERN.

13. “Heavy Nuclei, from RHIC to the Cosmos,” invited talk presented at the XIIth Intl. Symp. on Very High Energy Cosmic Ray Interactions, CERN, Geneva, Switzerland, Oct. 15-20, 2002. Published as astro-ph/0211018 and in the proceedings.

14. "Diffractive studies with pp at RHIC," presented at the Workshop on Diffraction and Glueball Searches at RHIC, May 17-18, 2002, Brookhaven National Lab, NY.

15. "Probing the Nucleus in Ultra-peripheral collisions," invited talk presented at the Workshop on "QCD in the RHIC era", April 8-12, 2002, Santa Barbara, CA.

16. "Electrodynamics at the highest energies,' invited talk presented at a workshop on Electromagnetic Probes of Fundamental Physics, Erice, Italy, Oct. 16-21, 2001. Published in the proceedings (also hep-ex/0112018).

17. "Ultra-peripheral collisions at RHIC," invited talk presented at the 2001 RHIC/AGS users meeting, Aug. 9-10, 2001,Brookhaven, NY.

18. "Ultra-peripheral collisions of relativistic heavy ions," presented at the Intl. Nucl. Phys. Conf, Jul. 30-Aug. 3, 2001. Published in the proceedings and as nucl-ex/0108018.

19. "A two-source interferometer for short-lived particles in relativistic heavy ion collisions," presented at the 7th Intl. Conf. on Squeezed States and Uncertainty Relations, June 4-8, 2001, Boston, MA.

20. "Observation of $Au + Au \rightarrow Au + Au + \rho^0$ and $Au + Au \rightarrow Au^* + Au^* + \rho^0$ with STAR", invited talk presented at the 17th Winter Workshop on Nuclear Dynamics, March 10-17, 2001, Park City, UT. Published in Heavy Ion Physics, **15**, 369 (2002).

21. "Nonlinear QED Effects in Heavy Ion Collisions," invited talk presented at the 18th Advanced ICFA Beam Dynamics Workshop on Quantum Aspects of Beam Physics, Capri, Italy, Oct. 15-20, 2000. Published in the proceedings (also as physics/0012021).

22. "RHIC and the Big Bang," talk presented at the Cosmic Genesis and Fundamental Physics Workshp, October 28-30, 1999, Sonoma State U, Rohnert Park, CA.

23. "Coherent Photonuclear Interactions at RHIC," invited talk at the RHIC Winter Workshop, Jan 7-9, 1999, Berkeley, CA.

24. "The LPM Effect: Comparing SLAC E-146 Data with Experiment," invited talk at the Fourth Workshop on Quantum Chromodynamics, June 1-6, 1998, Paris, France. Published in the proceedings (also as hep-ph/9808235).

25. “Bremsstrahlung & Pair Production Suppression and it's Effect on Air Showers,” invited talk at the Workshop on “Observing the Highest Energy Particles ($> 10^{20}$ eV) from Space”, Nov. 13-15, 1997, University of Maryland, MD. Published in the proceedings (also as astro-ph/9712198).

26. “The Spatial Dependence of Structure Functions in Heavy Nuclei,” presented at the 1997 American Physical Society Division of Nuclear Physics Meeting, October 5-8, 1997, Whistler, BC, Canada.

27. “Coherent Photons and Pomerons in Heavy Ion Collisions,” presented at the 6th Conf. on the Intersections of Particle and Nuclear Physics, May 27-June 2, 1997, Big Sky, Montana. The writeup, co-authored with Evan Scannapieco, is in the proceedings.

28. “The Gold Flashlight: Coherent Photons (and Pomerons) at RHIC,” presented at Photon '97, May 10-15, Egmond aan Zee, The Netherlands. The writeup, co-authored with Evan Scannapieco, is in the proceedings.

29. “Seeing Pomerons with STAR,” presented at the RHIC/INT Winter Workshop on Hadronic Probes of New Physics at RHIC, February 20-22, 1997, Berkeley, CA.

30. “Front End Electronics for the STAR TPC,” presented at the 1995 IEEE Nuclear Science Symposium, San Francisco, California, October 23-28, 1995. Published in the proceedings and in IEEE Transactions on Nuclear Science. (listed under publications)

31. “The STAR TPC Front End Electronics,” presented at the First Workshop for LHC Electronics”, Lisbon, Portugal, September 11-15, 1995. Published in the proceedings.

32. “Two Photon Physics at RHIC,” presented at Photon '95, Sheffield, England, April 8-13, 1995. Published in the Proceedings.

33. “A Method of Obtaining Parasitic e^+ or e^- Beams during SLAC Linear Collider Operation,” poster presented at the 1993 Nuclear Science Symposium, November, 1993. S. Klein, *et al.*. Published in the conference record and in IEEE Trans. Nucl. Science (listed under Publications).

34. “Measurement of the LPM Effect,” invited talk presented at the XVIth International Symposium on Lepton Photon Interactions, Cornell University, August 10th-15th, 1993. Published in the proceedings.

35. “An Experimental Test of the LPM Effect: Bremsstrahlung Suppression at High Energies,” presented at the 7th meeting of the Division of Particles and Fields of the APS, November 10-14, 1992, Batavia, IL. Published in the proceedings.

36. “MILAGRO: A Low Threshold Water Cherenkov Air Shower Array,” presented at the 7th meeting of the Division of Particles and Fields of the APS, November 10-14, 1992, Batavia, IL. Published in the proceedings.

37. “Competition between Multiple Scattering and Bremsstrahlung,” presented at the SLAC Workshop on High Energy Electroproduction and Spin Physics, February 5-8, 1992. Transparencies published in the proceedings, SLAC-Report 392, Feb. 1992.

38. “A Zero Suppressing 200 MSPS Waveform Digitizer for MACRO,” presented at the 1991 IEEE Nuclear Science Symposium, Santa Fe, NM, November 5-10, 1991. Published in the Conference Record.

39. “Charmed Baryons (at PEGASYS),” invited talk presented at the Workshop on Electronuclear Physics with the PEGASYS/Mark II Detector at PEP, Stanford, CA, January 9-12, 1991. Transparencies reproduced in the Proceedings.

40. “Recent Results from MACRO” and “Test Beam Requirements for TEXAS,” presented at the 1990 DPF Summer Study on Particle Physics, Snowmass, CO, June 25-July 13, 1990.

41. “Triggering and Data Acquisition with the TEXAS Detector,” presented at the Workshop on Major SSC Detectors, Tucson, AZ, February 19-23, 1990.

42. “First Results from MACRO,” invited talk presented at the 17th Annual SLAC Summer Institute in Particle Physics, July 10-21, 1989. Published in the Proceedings, SLAC-Report-361, January, 1990.

43. “Semileptonic Λ_c Decays with the Mark II at PEP,” presented at the XXIInd Rencontres de Moriond: Current Issues in Hadron Physics, Les Arcs, Savoie, France, March 13-19, 1988. Published in the proceedings.

44. “Detection and Identification of (Long Lived) Neutral Particles,” presented at the 3rd Mark II Workshop on Physics at the SLC, Pajaro Dunes, CA, Feb. 14-17, 1987. Published in the proceedings, SLAC-Report 315, July, 1987.

45. “Strange Baryon Production in e^+e^- Collisions at an E_{cm} of 29 GeV,” presented at the 1987 Annual Meeting of the Division of Particles and Fields of the APS, Salt Lake City, January 14-17, 1987.

46. “A Course on Modern Physics Through Science Fiction,” presented at the joint APS/AAPT Meeting, San Francisco, CA, Jan 27-31, 1987. Abstract published in the Bulletin of the APS **32**, 1402 (1987).

47. “Some Triggering considerations for the Mark II at SLC,” presented at the First Mark II Workshop on Physics at the SLC, Asilomar, CA, March 16-19, 1986.

Publications in Conference Proceedings:

I had a significant role in the following publications, but did mot give the associated talk:

48. The IceCube Collaboration: Contributions to the 29th International Cosmic Ray Conference (ICRC 2005), Pune, India, August, 2005. preprint astro-ph/0509330.

49. Measurement of Ion Beam Losses due to Bound-free Pair Production in RHIC, J. M. Jowett *et al.*, presented at the European Particle Accelerator Conference (EPAC06), Edinburgh, Scotland, June 26-30, 2006, and published in the proceedings.

50. Aspects of Coulomb Dissociation and Interference in Peripheral Nucleus-Nucleus Collisions, J. Nystrand, A. J. Baltz and S. R. Klein, preprint nucl-th/0203062, presented at the Workshop on Electromagnetic Probes of Fundamental Physics, Erice, Italy, Oct. 16-21, 2001, and in the proceedings.

51. The Transverse Energy Spectra at RHIC and Spatial Dependence of Nuclear Structure Functions, V. M. Emel'yanov *et al.*, Feb., 1999, in Yad. Fiz. **62**, 2259 (1999) [Physics of Atomic Nuclei **62**, 2081 (1999).].

52. Shadowing Effects on Particle and Transverse Energy Production V. Emel'yanov, A. Khodinov, S. R. Klein and R. Vogt, in Proc. Quark Matter '99, Nuclear Physics **A661**, 649c (1999).

53. Two-Photon Physics in Nucleus-Nucleus Collisions at RHIC, J. Nystrand and S. Klein, nucl-ex/9811007, November, 1998, in the Proc. Workshop on Photon Interactions and the Photon Structure, Lund, Sweden, Sept. 10-13, 1998.

54. Two-Photon Physics at RHIC: Separating Signals from Backgrounds, J. Nystrand and S. Klein, Nov. 1997, in the Proc. Hadron '97, August 25-30, 1997, Brookhaven, NY.

55. STAR Controls System, J. Meier *et al.*, in Proc. ICALEPCS. '95.

56. A Study of LPM Suppression of Bremsstrahlung, L. Kelley *et al.*, in the Proc. of the XXIVth Intl. Cosmic Ray Conf., Rome, Italy, July, 1995.

57. A Study of LPM Suppression at 25 GeV. R. Becker-Szendy *et al.*, in the Proc. of the XXIIIrd Intl. Cosmic Ray Conf., Calgary, Canada, July 19-30, 1993.

58. Quantum Mechanical Suppression of Bremsstrahlung, R. Becker-Szendy *et al.*, in the Proceedings of the 21st SLAC Summer Institute on Particle Physics, Palo Alto, CA, 1994.

59. Landau-Pomeranchuk-Migdal Effect and Suppression of Beamstrahlung and Bremsstrahlung in Linear Colliders. Pisin Chen and Spencer Klein, in the Proc. of the 3rd Intl. Workshop on Advanced Accelerator Concepts, June 1992, AIP Conf. Proc. **279**, 929 (1992).

60. Report of the Subgroup on the Top Quark. R. M. Barnett *et al.*, in the Proceedings of the 1990 Snowmass Workshop.

61. Λ_c^+ Tagging at a Tau-Charm Factory. Spencer Klein. Published in the Proceedings of the Tau-Charm Factory Workshop, SLAC-Report-343, June, 1989.

62. Data Filtering-Acquisition Group - Report of the Hardware Subgroup, P.S. Cooper, *et al.*, in the Proceedings of the Workshop on Triggering, Data Acquisition and Computing for High Energy/High Luminosity Hadron Colliders, Fermilab, November 11-14, 1985.

63. A Fractional Charge Search. W.R. Innes, S. Klein, Martin L. Perl, John C. Price. SLAC-PUB-2938, June 1982. Presented at the General Meeting of the American Physical Society, Wash. D.C., April 26-29, 1982.

I am a coauthor on the following contributions, as part of the STAR, MACRO, CYGNUS or MILAGRO collaborations:

64. Recent Developments on the Star Detector System at RHIC, H. Wieman *et al.*, the Proceedings of Quark Matter '97, Nucl. Phys. **A638**, 559c (1998).

65. Searching for Gamma-Ray Bursts with Water-Cherenkov-Detector Single-Particle Rates, G.E.Allen *et al.*, Search for Ultra-High Energy Radiation from Gamma-Ray Bursts, G.E.Allen *et al.*, Search for UHE Emission from Supernova Remnants, G. E. Allen *et al.*, A Study of Large Zenith angle Air Showers with the CYGNUS Experiment, G.E.Allen *et al.*, Solar Physics with the MILAGRO Telescope, G. Gisler *et al.*, Source Searches Using the CYGNUS Water Cherenkov Array, G.E.Allen *et al.*, The Milagro Detector, G.E.Allen *et al.*, The Milagro Data Acquisition System, G.E.Allen *et al.*, all in Proc. 1995 Intl. Cosmic Ray Conf., Rome, 1995.

66. Search for Strange Quark Matter using the MACRO Detector, S. Petrera *et al.*, in Proc. Intl. Workshop on Theoretical and Phenomenological Aspects of Underground Physics, Toledo, Spain, Sept. 9-13, 1991.

67. Multiple Muons and the Primary Cosmic Ray Composition Studied with MACRO, O. Palamara *et al.*, in Proc. Intl. Workshop on Theoretical and Phenomenological Aspects of Underground Physics, Toledo, Spain, Sept. 9-13, 1991.

68. Search for Stellar Collapse by MACRO; Characteristics and Results. R. Bellotti *et al.*, Nuclear Physics B (Proc. Suppl.) **28A**, 61 (1992).

69. Improvements in the CR-39 Polymer for the MACRO Experiment at the Gran Sasso Laboratory. S. Ahlen *et al.*, Nuclear Tracks and Radiation Measurements **19**, 641 (1991).

Other Publications

1. LBNL Turns 75, CERN Courier pictorial, October, 2006, pg. 31.

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