

Roger R. McNeil

EDUCATION:

B.A. University of California, San Diego, 1980, Physics
M.A. University of California, Davis, 1982, Physics
Ph.D. University of California, Davis, 1986, Physics

PROFESSIONAL EXPERIENCE:

Positions at California State University, Stanislaus:

2007-present Founding Dean, College of Natural Sciences

Positions at Louisiana State University, Department of Physics and Astronomy:

1986-1988 Postdoctoral Researcher
1988-1993 Assistant Professor
1993-1999 Associate Professor
1999-2007 Professor
2003-2007 Department Chair
2007-present Professor Emeritus

TEACHING EXPERIENCE:

21 years of experience teaching Physics at Louisiana State University and California State University Stanislaus. Courses taught include:

General Physics of Physics Majors (PHYS 1201/02)
General Physics Laboratory for Physics Majors (PHYS 1208/09)
General Physics (PHYS 2001/02)
Introductory Physics for Technical Students (PHYS 2101/02)
Introductory Modern Physics (PHYS 2203)
Introductory Modern Physics Laboratory (PHYS 2207)
Science Teaching in Secondary School I (BIOL/CHEM/PHYS 3001)
Special Problems in Physics (PHYS 4991)

Advanced Modern Physics Laboratory (PHYS 4198)
Laboratory Methods for Teachers (PHYS 6198)
Graduate Laboratory (PHYS 7398)
Energy and Matter (PHYS 1500)
Heat, Light and Sound (PHYS 3200)

AWARDS (LSU):

Three times recognized by the Dean of College for excellence in teaching.
Received award for “Coolest Professor Around” from Undergraduate Physics Majors (1998).
Alpha Lambda Delta Freshman Honor Society Distinction for Teaching, Fall 1998 and Fall 2000.
Tiger Athletic Foundation Undergraduate Teaching Award, University College, 2000.
College of Basic Sciences Undergraduate Teaching Award, 2001.
Alumni Association Faculty Excellence Award, 2003.

UNIVERSITY SERVICE (last 5 years at LSU and 2 years at CSU Stanislaus):

2005-2006	Co-Principle Investigator on grant to enhance Introductory Physics Teaching Laboratories at LSU
1998-2001	Co-PI on PLATO project for K-12 Science Teacher Workshops
1997-2003	Chairman, Department Undergraduate Recruiting Committee
1999-2003	Department Undergraduate Physics Major Advisor
1997-2000	University Faculty Senate
2000-2003	LSU General Education Committee, (Chair 2001-2002)
2000-2003	LSU Long-range Planning Committee
2000-2007	Advisory Committee for LSU Center for Math and Science Literacy
2000-2001	PK-16+ Science Consortium, Part of a State of Louisiana Commission on Science Education
2001-2003	LSU Undergraduate Council
2001-2003	LSU Secondary Education Redesign Committee
2002-2007	LSU Teacher Education Council
2002-2003	Search Committee for the Director of the CAIN Communications Center
2003-2004	Search Committee for the Dean of the College of Arts and Sciences
2004-2007	SACS <i>Quality Enhancement Plan</i> Task Force
2007-Present	San Joaquin Valley Clean Energy Organization (part of California Partnership)
2007-Present	Assessment Leadership Team Member
2007-Present	Academic Affairs Council
2007-Present	Deans' Council
2007-Present	President's Executive Cabinet

PROFESSIONAL AFFILIATIONS:

American Physical Society – Southeastern Section, Division of Particles and Fields; Topical Group on Energy Research and Applications
American Association of Physics Teachers – Louisiana Chapter; California Chapter

Summary of Administrative Experience

Two years as Founding Dean of the College of Natural Sciences, California State University Stanislaus

- First permanent Dean to a new College formed of 5 departments, 12 degree programs, and nearly 900 undergraduate and graduate majors.
- Oversaw the move of three of the departments and College office into a new 110,000sqft science building.
- Member of Dean's Council, Academic Affairs Council, President's Executive Cabinet, and the University's Assessment Leadership Team.

Personnel and Budgetary Management

- Overall supervision of 55 full-time instructional faculty, 10 FTEF of part-time instructional faculty, and 14 technical and administrative support staff. I am also administrative head of approximately 15 research staff in our Endangered Species Recovery Program.
- Overall responsibility for State funded budget of \$5.3M of the College as well as responsibility for externally funded budgets exceeding \$10M. Two years of fiscal year budgets that ended in balance or with a surplus.
- Responsibility for negotiating new faculty and staff hires for the College as well as for the Dean's level review of faculty promotions and tenure.
- Developed in consultation with department chairs, faculty and staff a plan for reducing the budget of the college by 10% in 2008/9 while maintaining student credit hours and the quality of major programs.

Program Development and Excellence

- Provided vision and leadership to grow all of the college's academic programs despite budgetary reductions. Over the last two years student credit hours have increased by 6% and number of majors has increased by 12%.
- Launched a new Professional Science Master's program in Genetic Counseling as a self-support program. This program is one of only three such programs in the State of California and involves a partnership of three Universities and Kaiser Permanente, with CSU Stanislaus as the lead institution. First cohort of students began fall 2008 and second cohort to begin this fall.
- Coordinated development of an interdisciplinary Master's program in Green Technologies with participation of three colleges. Program still under development to launch as early as fall 2010.
- Supported the development of assessment programs for each of the academic programs.
- Supported the expansion of our single subject preparation program for Math and Science Teachers. This included helping to organize a first Dinner with a Math and Science Teacher Event. College faculty were awarded a NSF Robert Noyce Scholarship grant for nearly \$900K in 2009 to fund scholarships for math and science teacher candidates.
- Organized and established the college's first faculty retreat to commence the strategic planning process. In collaboration with college faculty, developed a revised college mission that emphasizes quality instruction, research opportunities and community engagement.

Faculty Research, Scholarship and Grant Funding Development

- Provided vision and leadership to expand the research and scholarship activities of the college's faculty and students.
- Under my leadership, the college's grant proposal submissions have increased by 20% and the success rate has increased. Over the year, the total dollar amount of new external funding awards for the College has more than doubled to nearly \$2.7M
- Developed a Faculty Research Enhancement program to support faculty research, faculty travel, and the preparation of proposal for external grant funding. The program was funded from a private gift to name the new Science Building and form an endowment to support faculty research.
- College Faculty have increase the rate of submission of journal articles to peer reviewed journals. Since 2007, 3 articles co-authored by science faculty have appeared in the *Journal Science*.

Four years as Chair of the Department of Physics and Astronomy, Louisiana State University – Baton Rouge

Academic Program Planning and Policy Development

- Developed, with the faculty, a strategic plan for the department consistent with the university's *Flagship Agenda*. One of the key objectives was to increase the number and quality of our graduate students. Through enhanced stipends and aggressive recruiting, we have increased the number of graduate students from 56 to 83, while improving both the undergraduate GPA and GRE test scores of our entering class.
- Provided vision and leadership to move our professional medical physics program forward by recruiting a national leader to direct the program and partner with a local cancer therapy center and achieve National Accreditation of the program in LSU program in radiation therapy.

Curriculum and Programmatic Excellence

- Under my leadership the department successfully underwent a full external program review in 2004.
- Served as Chair of the University's General Education Committee, and have served on the University Courses and Curriculum Committee. I am well acquainted with the university's academic standards and general education requirements and policies.
- Served on the University's Teacher Education Council and the Secondary Education Redesign Committee.
- Developed two concentrations for our undergraduate physics degree program: the Concentration in Medical Physics and the Concentration in Secondary Education.

Students

- Served for 6 years as undergraduate physics majors advisor
- Involved undergraduates in student research projects.
- Improved space and support the Physics and Astronomy Tutoring Center.

Enrollment Management

- Expanded recruiting activities of the department for both graduate and undergraduate students. Funded department open houses for graduate and undergraduate recruiting.
- Expanded, improved and supported for the Physics and Astronomy Tutoring Center.
- Encouraged and financially supported our Society of Physics Students.
- Set enrollment caps in courses and managed teaching assignments to meet demand for courses. In my second year as department chair, I created an Associate Department Chair position to better manage the academic programs of the department.
- Under my leadership we have increased the number and quality of both undergraduate physics majors and graduate students.

Budget

- Overall responsibility for internally and externally-funded budgets for the department.
- We have 3 years of balanced budgets for the department.
- Overseen the growth of a discretionary fund based on return of indirect costs from grants.
- Managed a \$900,000 state fund for the furnishings associated with the construction and renovation of Nicholson Hall which houses the Department of Physics and Astronomy.

Advancement and Fundraising

- Increased fundraising activities for the department. I have worked to produce a department newsletter that has brought in checks from department alumni.
- Participated in finding a donor for a \$1M endowed chair in Medical Physics.
- Prepared a *Case Statement* for the Department.

Personnel

- Made recommendations to the Dean regarding appointments, promotions, tenure, and compensation issues for faculty and staff of our department.
- Negotiated with new faculty and staff hires for the department. Negotiated with 13 candidates resulting in 9 faculty hires. Two faculty hires went to highly qualified women and went to highly quality minority candidates. We hired 2 tenured senior faculty, 4 untenured assistant professors, and 3 full-time instructors in the last three years.
- Initiated a new policy for the mentoring of junior faculty members in the department. Established mentoring committees for all untenured professors.
- Performed evaluations of department faculty and staff according to university and college policies
- Made committee assignments and academic advising functions for department faculty.
- Supported faculty development activities

RESEARCH EXPERIENCE:

25 years of research experience in Experimental High Energy Particle Physics at accelerator centers around the world. I have over 260 publications in refereed journals and 22 invited talks given at international conferences. My research program has been funded by Department of Energy grants since 1989. I have been major advisor for Ph.D. Students: J.N. Lim (1990), A. Stone Jr. (1999), S. Saremi (2001)

My current projects include:

- The L3 Experiment at the LEP collider, the European Center for Nuclear and Particle Physics (CERN) in Geneva, Switzerland. I led the LSU group on L3 which consisted of one faculty member, one post-doctoral researcher, two graduate students and one undergraduate student. The entire L3 collaboration consists of 400 scientists from 50 institutions from 10 countries on 4 continents. Our group focused its research efforts in: $\gamma\gamma$ interactions at very high energy including the production of heavy flavors; and the search for heavy stable charged pair production in e^+e^- interactions. We have increased the world's supply of charm events produced in $\gamma\gamma$ interactions by an order of magnitude. We have demonstrated the need for the gluon content of the photon. We have made the first ever measurement of the production of beauty quarks in $\gamma\gamma$ collisions. We have made a search for heavy stable leptons with the resulting limit listed in the current Particle Data Group (PDG) values. The experiment completed data taking in 2000, but the collaboration is still analyzing data and writing more papers.
- The Auger Observatory. The Auger project seeks to make a measurement of the highest energy cosmic ray particles by recording the particles from the extensive air showers. Two detector arrays will be constructed, one in Argentina and one in the US (Colorado). The Argentina array of detectors is built. The size of the detector is comparable to the size of the State of Delaware. Data has been recorded since 2002 with first results appearing in the 2005 summer conferences. I am part of the LSU group on AUGER which consists of two faculty members, two post-doctoral researchers, one graduate student, and one undergraduate student. The entire Auger collaboration consists of over 300 scientists from 17 countries. Plans are made for a Northern Auger Observatory to be located in Southeastern Colorado.

Previous projects include: The TPC/Two-Gamma Experiment at the PEP e^+e^- collider at the Stanford Linear Accelerator Center (SLAC); The AMY Experiment at TRISTAN e^+e^- collider located in Japan; The ZEUS experiment at HERA ep collider at the German National Laboratory (DESY) in Hamburg, Germany; The GEM experiment at the SSC (Texas); the development of simulation codes used to evaluate the design and performance of particle detectors; The RD5 Experiment at the European Center for Nuclear and Particle Physics (CERN) in Geneva Switzerland, to study muon backgrounds to particle experiments; The AMS experiment to search for anti-matter in space on the Shuttle and the International Space Station.

PUBLICATIONS:

1. Leptonic Structure Functions of the Photon, M.P. Cain et al., (PEP-9 Collab.), Phys. Lett. **B147**, 232 (1984).
2. Measurement of the Total Hadronic Cross Section in Virtual Photon-Photon Interactions, D. Bintinger et al. (PEP-9 Collab.) Phys. Rev. Lett. **54**, 763 (1985).
3. Exclusive Production of $K^+K^-\pi^+\pi^-$ in Photon-Photon Collisions at PEP, H. Aihara et al. (TPC/Two Gamma Collab.), Phys. Rev. Lett. **54**, 2564 (1985).
4. Study of η Formation in Photon-Photon Collisions, H. Aihara et al. (TPC/Two-Gamma Collab.), Phys. Rev. **D33**, 844 (1986).
5. Experimental Limit on $\iota \rightarrow \gamma\gamma$ and the Interpretation of the iota as a Glueball, H. Aihara et al. (TPC/Two-Gamma Collab.), Phys. Rev. Lett. **57**, 51 (1986).
6. Pion and Kaon Pair Production in Photon-Photon Collisions, H. Aihara et al. (TPC/Two-Gamma Collab.), Phys. Rev. Lett. **57**, 404 (1986).
7. Comparison of Particle Flow in $q\bar{q}g$ and $q\bar{q}\gamma$ Events in e^+e^- Annihilation, H. Aihara et al. (TPC/Two-Gamma Collab.), Phys. Rev. Lett. **57**, 945 (1986).
8. Charged D^* Meson Production in e^+e^- Annihilation at $\sqrt{s} = 29$ GeV, H. Aihara et al., (TPC/Two-Gamma Collab.), Phys. Rev. **D34**, 1945 (1986).
9. Measurement of the Inclusive Branching Fractions $\tau \rightarrow \nu_\tau \pi^+ \pi^0 + \text{Neutral Meson(s)}$, H. Aihara et al., Phys. Rev. Lett. **57**, 1836 (1986).
10. Evidence for a Spin-1 Particle Produced by Two Photons, H. Aihara et al. (TPC/Two-Gamma Collab.), Phys. Rev. Lett. **57**, 2500 (1986).
11. Study of Baryon Correlations in e^+e^- Annihilations at 29 GeV, H. Aihara et al. (TPC/Two-Gamma Collab.), Phys. Rev. Lett. **57**, 3140 (1986).
12. Search for High-Mass Narrow Resonances in Virtual Photon-Photon Interactions, H. Aihara et al. (TPC/Two-Gamma Collab.), Phys. Rev. Lett. **57**, 3245 (1986).
13. Observation of Scaling in Photon Structure Function $F_2^\gamma(x, Q^2)$ at Low Q^2 , H. Aihara et al. (TPC/Two-Gamma Collab.), Phys. Rev. Lett. **58**, 97 (1987).

14. Comparison of π^+ , K^+ , and p, \bar{p} Production in the Central Rapidity Region in Hadron-Hadrons and in e^+e^- Annihilation, H. Aihara et al. (TPC/Two-Gamma Collab.), Phys. Lett. **134B**, 114 (1987).
15. Pion and Kaon Multiplicities in Heavy Quark Jets in e^+e^- Annihilation at 29 GeV, H. Aihara et al. (TPC/Two-Gamma Collab.), Phys. Lett. **134B**, 299 (1987).
16. Measurement of τ Branching Ratios, H. Aihara et al. (TPC/Two-Gamma Collab.), Phys. Rev. **D35**, 1553 (1987).
17. Experimental Limit on the Decay $\tau \rightarrow \nu_\tau K^- K^0$, H. Aihara (TPC/Two-Gamma Collab.), Phys. Rev. Lett. **59**, 751 (1987).
18. Measurement the Photon Structure Function $F_2^\gamma(x, Q^2)$ in the Region $0.2 \text{ GeV}^2 < Q^2 < 7 \text{ GeV}^2$, H. Aihara et al. (TPC/Two-Gamma Collab.), Z.f. Physik **C34**, 1 (1987).
19. Study of η' Formation in Photon-Photon Collisions, H. Airhara et al. (TPC/Two-Gamma Collab.), Phys. Rev. **D35**, 2650 (1987).
20. Exclusive Production of Proton-Antiproton Pairs in Two Photon Collisions, H. Aihara et al. (TPC/Two-Gamma Collab.) Phys. Rev. **D36**, 3506 (1987).
21. Measurement of R and a Search for Heavy-Quark Production in e^+e^- Annihilation Events at $\sqrt{s} = 50$ and 52 GeV, H. Sagawa et al. (AMY Collab.), Phys. Rev. Lett. **60**, 93 (1988).
22. Search for Isolated Leptons in Low-Thrust e^+e^- Annihilations at $\sqrt{s} = 50$ and 52 GeV, I. Igarashi et al. (AMY Collab.), Phys. Rev. Lett. **60**, 2359 (1988).
23. Experimental Mass Limit on a Fourth-Generation Sequential Lepton for e^+e^- Annihilations at $\sqrt{s} = 56$ GeV, G. N. Kim et al. (AMY Collab.) Phys. Rev. Lett. **61**, 911 (1988).
24. Production of Four-Prong Final States in Photon-Photon Collisions, H. Aihara et al. (TPC/Two-Gamma Collab.) Phys. Rev. **D37**, 28 (1988).
25. Measurement of Cross Sections and Asymmetries for $e^+e^- \rightarrow \tau^+\tau^-$ and $e^+e^- \rightarrow \mu^+\mu^-$ for \sqrt{s} from 52 to 57 GeV, A. Bacala et al. (AMY Collab.), Phys. Lett. **B218**, 112 (1989).
26. Measurement of the e^+e^- Total Hadronic Cross Section and a Determination of M_Z and $\Lambda_{\overline{\text{MS}}}$, T. Mori et al. (AMY Collab.), Phys. Lett. **B218**, 499 (1989).
27. Experimental Evidence for the non-Abelian Nature of QCD from a Study of Multijet Events Produce in e^+e^- Annihilations, I. H. Part et al. (AMY Collab.), Phys. Rev. Lett. **62**, 1713 (1989).

28. Search for the Substructure of Leptons in High Energy QED Processes at TRISTAN, S. K. Kim et al. (AMY Collab.) Phys. Lett. **B223**, 476 (1989).
29. Search for Unstable Heavy Neutral Leptons in e^+e^- Annihilations at \sqrt{s} from 50 to 60.8 GeV, N. M. Shaw et al. (AMY Collab.), Phys. Rev. Lett. **63**, 1342 (1989).
30. Search for non-minimal Higgs Production in e^+e^- Annihilations at $\sqrt{s} = 56$ GeV, E. H. Low et al. (AMY Collab.), Phys. Lett. **B228**, 548 (1989).
31. Comparison of Quark and Gluon Jets Produced in High Energy Annihilation, Y. K. Kim et al. (AMY Collab.), Phys. Rev. Lett. **63**, 17872 (1989).
32. Search for a Fourth-Generation Charge-1/3 Quark, S. Eno et al. (AMY Collab.), Phys. Rev. Lett. **63**, 1910 (1989).
33. Measurement of $e^+e^- \rightarrow b\bar{b}$ forward-backward charge asymmetry between $\sqrt{s} = 52$ and 57 GeV, H. Sagawa et al. (AMY Collab.), Phys. Rev. Lett. **63**, 2341 (1989).
34. A Search for Susy Particles in e^+e^- Annihilations at $\sqrt{s} = 50$ -60.8 GeV, Y. Sakai et al. (AMY Collab.), Phys. Lett. **B234**, 534 (1990).
35. Forward-Backward Charge Asymmetry in $e^+e^- \rightarrow$ Hadron Jets, D. Stuart et al. (AMY Collab.), Phys. Rev. Lett. **64**, 983 (1990).
36. A Search for Leptoquark and Colored Lepton Pair Production in e^+e^- Annihilations at Tristan, G. N. Kim et al. (AMY Collab.), Phys. Lett. **B240**, 243 (1990).
37. Measurement of the Total Hadronic Cross section in Tagged $\gamma\gamma$ Reactions, H. Aihara et al., Phys. Rev. **D41**, 2667 (1990).
38. Multihadron-event Properties in e^+e^- Annihilation at $\sqrt{s} = 52$ -57 GeV, Y. K. Li et al. (AMY Collab.), Phys. Rev. **D41**, 2675 (1990).
39. Observation of Anomalous Production of Muon Pairs in e^+e^- Annihilation in Four-Lepton Final States, Y. H. Ho et al. (AMY Collab.), Phys. Lett. **B244**, 573 (1990).
40. Charged Hadron Multiplicities in e^+e^- Annihilations at $\sqrt{s} = 50$ to 61.4 GeV, H. W. Zheng et al. (AMY Collab.), Phys. Rev. **D42**, 737 (1990).
41. Mass Limits on Charged Higgs at Large $\tan(\beta)$ from e^+e^- Annihilations at $\sqrt{s} = 50$ -60.8 GeV, J.R. Smith et al. (AMY Collab.), Phys. Rev. **D42**, 1339 (1990).

42. Measurements of R for e^+e^- Annihilation at the KEK Collider at TRISTAN, T. Kumita et al. (AMY Collab.), Phys. Rev. **D42**, 1339 (1990).
43. Measurement of the Photon Structure Function F_2 , T. Sasaki et al. (AMY Collab.), Phys. Lett. **B252**, 491 (1990).
44. Search for Charged Heavy Leptons with Arbitrary Neutrino Masses in e^+e^- Annihilations at $\sqrt{s} = 60.8$ GeV, G. N. Kim et al. (AMY Collab.), Int. Journ. Mod. Phys. **A6**, 2583 (1991).
45. Evidence for Hard Scattering of Hadronic Constituents of Photons in Photon-Photon Collisions at TRISTAN, R. Tanaka et al. (AMY Collab.), Phys. Lett. **B277**, 215 (1992).
46. A Measurement of $\sigma_T(\gamma p)$ at $\sqrt{s} = 210$ GeV, M. Derrick et al. (ZEUS Collab.), Phys. Lett. **B293**, 465 (1992).
47. Observation of Hard Scattering in Photoproduction at HERA, M. Derrick et al. (ZEUS Collab.), Phys. Lett. **B297**, 404 (1992).
48. Initial Study of Deep Inelastic Scattering with ZEUS at HERA, M. Derrick et al. (ZEUS Collab.), Phys. Lett. **B303**, 183 (1993).
49. Observation of Two-Jet Production in Deep Inelastic Scattering at HERA, M. Derrick et al. (ZEUS Collab.), Phys. Lett. **B306**, 158 (1993).
50. Search for Leptoquarks with the ZEUS Detector, M. Derrick et al. (ZEUS Collab.), Phys. Lett. **B306**, 173 (1993).
51. Search for Excited Electrons Using the ZEUS Detector, M. Derrick et al. (ZEUS Collab.), Phys. Lett. **B316**, 207 (1993).
52. Hadronic Energy Distributions in Deep Inelastic Electron-Proton Scattering, M. Derrick et al. (ZEUS Collab.), Z.f. Physik. **C59**, 231 (1993).
53. Observation of Events with a Large Rapidity Gap in Deep Inelastic Scattering at HERA, M. Derrick et al. (ZEUS Collab.), Phys. Lett. **B315**, 481 (1993).
54. Beam Tests of the ZEUS Barrel Calorimeter, A. Bernstein et al., Nucl. Instr. Meth. **A336**, 23 (1993).
55. Measurement of the Proton Structure Function F_2 in ep Scattering at HERA, M. Derrick et al. (ZEUS Collab.), Phys. Lett. **B316**, 412 (1993).
56. Observation of Direct Processes in Photoproduction at HERA, M. Derrick et al. (ZEUS Collab.), Phys. Lett. **B322**, 287 (1994).

57. Measurement of the Total and Partial Photon-Proton Cross Sections at 180 GeV Center of Mass Energy, M. Derrick et al. (ZEUS Collab.), *Z.f. Physik* **C63**, 391 (1994).
58. Observation of Jet Production in Deep Inelastic Scattering with a Large Rapidity Gap at HERA, M. Derrick et al. (ZEUS Collab.), *Phys. Lett.* **B332**, 228 (1994).
59. Studies of Electromagnetic Debris Associated with a High Energy Muon Passing Through Matter, R.R. McNeil, A. Korytov, and L.S. Osborn, *Nucl. Instr. Meth.* **A348**, 148 (1994).
60. Comparison of Energy Flows in Deep Inelastic Scattering with a Large Rapidity Gap at HERA, M. Derrick et al. (ZEUS Collab.), *Phys. Lett.* **B338**, 483 (1994).
61. An Antimatter Spectrometer in Space, S. Ahlen et al., *Nucl. Inst. Meth.* **A350**, 351 (1994).
62. Measurement of the Proton Structure Function F_2 from the 1993 HERA Data, M. Derrick et al. (ZEUS Collab.), *Z.f. Physik* **C65**, 379 (1995).
63. A Search for Excited Fermions in Electron-proton Collisions at HERA, M. Derrick et al. (ZEUS Collab.), *Z.f. Physik* **C65**, 627 (1995).
64. Inclusive Jet Differential Cross Sections in Photoproduction at HERA, M. Derrick et al. (ZEUS Collab.), *Phys. Lett.* **B342**, 417 (1995).
65. Extraction of the Gluon Density of the Proton at low- x , M. Derrick et al. (ZEUS Collab.), *Phys. Lett.* **B345**, 576 (1995).
66. Observation of Hard Scattering in Photoproduction Events with a Large Rapidity gap at HERA, M. Derrick et al. (ZEUS Collab.), *Phys. Lett.* **B346**, 399 (1995).
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69. Jet Production in High Q^2 Deep-inelastic ep Scattering at HERA, M. Derrick et al. (ZEUS Collab.), *Z.f. Physik* **C67**, 81 (1995).
70. Study of D^* (2010) plus/minus Production in ep Collisions at HERA, M. Derrick et al. (ZEUS Collab.), *Phys. Lett.* **B349**, 225 (1995).
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73. Measurement of the Charged and Neutral Current e-p Deep Inelastic Scattering Cross Sections at high Q^2 , M. Derrick et al. (ZEUS Collab.), Phys. Rev. Lett. **75**, 1006 (1995).
74. Study of the Photon Remnant in Resolved Photoproduction at HERA, M. Derrick et al. (ZEUS Collab.), Phys. Lett. **B354**, 163 (1995).
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78. Electromagnetic Secondaries in the Detection of High Energy Muons, C. Albajar et al. (RD5 Collab.), Nucl. Instr. Meth. **A364**, 473 (1995).
79. Exclusive ρ^0 Production in Deep Inelastic Electron-Proton Scattering at HERA, M. Derrick et al. (ZEUS Collab.), Phys. Lett. **B356**, 601 (1995).
80. Measurement of Elastic ρ^0 Photoproduction at HERA, M. Derrick et al. (ZEUS Collab.), Z.f. Physik **C69**, 39 (1995).
81. Measurement of α_s from Jet Rates in Deep Inelastic Scattering, M. Derrick et al. (ZEUS Collab.), Phys. Lett. **B363**, 201 (1995).
82. Measurement of Hadronic Shower Punchthrough in a Magnetic Field, C. Albajar et al. (RD5 Collab.), Z.f. Physik **C69**, 415 (1996).
83. Measurement of the Proton Structure Function F_2 at low x and low Q at HERA, M. Derrick et al. (ZEUS Collab.), Z.f. Physik **C69**, 607 (1995).
84. Rapidity Gaps between Jets in Photoproduction at HERA, M. Derrick et al. (ZEUS Collab.), Phys. Lett. **B369**, 55 (1996).
85. Inclusive Charged Particle Distributions in Deep Inelastic Scattering Events at HERA, M. Derrick et al. (ZEUS Collab.), Z.f. Physik **C70**, 1 (1996).
86. Measurement of Hadron and Lepton-Pair Production at $130 < \sqrt{s} < 140$ GeV at LEP, M. Acciarri et al. (L3 Collab.) Phys. Lett. **B370**, 195 (1996).

87. Search for Excited Leptons in e^+e^- Annihilation at $\sqrt{s} = 130-140$ GeV at LEP, M. Acciarri et al. (L3 Collab.) Phys. Lett. **B370**, 211 (1996).
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89. Measurement of Elastic Φ Photoproduction at HERA, M. Derrick et al. (ZEUS Collab.), Phys. Lett. **B377**, 259 (1996).
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93. Observation of Multiple Hard Photon Final States at $\sqrt{s} = 130-140$ GeV at LEP, M. Acciarri et al. (L3 Collab.) Phys. Lett. **B384**, 323 (1996).
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TALKS GIVEN AT NATIONAL/INTERNATIONAL MEETINGS:

1. Study of Proton-Antiproton Production in Photon-Photon Collisions at PEP, presented at the APS Sprint Meeting, Washington DC, April 1984.
2. Measurement of the Proton-Antiproton Production in Photon-Photon Collisions, presented at the 1984 International Conference on Photon-Photon Interactions, Lake Tahoe, California, 1984.
3. Measurement of the Photon Structure Function in Photon-Photon Collisions in the range $0.2 < Q^2 < 7 \text{ GeV}^2$, presented at the APS Spring Meeting, Washington DC, April 1985.
4. Measurement of the Photon Structure Function $F_2^\gamma(x, Q^2)$ in Photon-Photon Collisions in the range $0.2 < Q^2 < 7 \text{ GeV}^2$, presented at the 1986 International Conference on Photon-Photon Interactions, Paris, April 1986.
5. Recent Results from AMY at TRISTAN, presented at the XV SLAC Summer Institute on Particle Physics, Stanford California, August 1987; proceedings published in SLAC Report No. 328, p. 521
6. Search for new Quarks in e^+e^- Interactions at $\sqrt{s} = 52$ and 55 GeV , APS Spring Meeting, Baltimore, MD, April 1988.
7. Physics from TRISTAN, Presented at the Conference on "Beyond the Standard Model", Iowa State University, Ames Iowa, November 1988, Proceedings published by World Scientific.
8. Study of Hadron Punchthrough using GEANT, EFACT Workshop, SSC Laboratory, Dallas, TX, December 1989.

9. GEANT Simulation of Punchthrough, Workshop on Physics and Simulation for SSC Experiments, SSC Laboratory, Dallas TX, January 1990.
10. Muon Detection at the SSC, Workshop on Diamond Based Detector for SSC Experiments, Rutgers University, New Jersey, May 1990.
11. Scintillating Plate Calorimeter Optical Design, Symposium on Detector Research and Development of the SSC, Fort Worth, TX, October 1990.
12. The EMPACT/TEXAS Experiment, Atlanta Conference on the Superconducting Super Collider, Decatur, Georgia, November 1990.
13. PCHTR – A fast Simulation for Hadron Punchthrough, Rocky Mountain Consortium workshop on Muon Tracking and Triggering for the SSC, Boulder, CO, July 1992.
14. Depth of Calorimetry for Punchthrough Suppression, 3rd International Conference on Calorimetry in High Energy Physics, Corpus Christi, TX, September, 1992.
15. Measurement of Elastic ρ and ϕ Production and Deep Inelastic ρ Production at HERA, DPF Meeting, Albuquerque, New Mexico, August, 1994.
16. Hadron Production in $\gamma\gamma$ collisions at $\sqrt{s} = 130 - 140$ GeV at LEP, DPF Meetings, Minneapolis, Minn. August 1996.
17. Lepton Pair Production in $\gamma\gamma$ collisions at LEP with the L3 Detector, DPF Meetings, Minneapolis, Minn. August 1996.
18. Recent Results from L3 at LEP2, SLAC Seminar, Stanford, CA, December, 1997.
19. Results from L3, Aspen Winter Conference, Aspen, CO, January, 1998.
20. The Q^2 Evolution of the Hadronic Photon Structure Function F_2^γ at LEP, APS Spring Meeting, Atlanta, Georgia, March 1999.
21. Open Charm and Beauty Production in Photon-Photon Collisions at L3, PHOTON99 Conference, Freiburg, Germany, May 1999; Nucl. Phys. B (proc. Suppl.) 82 (2000) 193-199.
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23. Open Charm and Beauty Production in $\gamma\gamma$ collisions at LEP, DPF Meeting, William and Mary College, May 2002.

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PLATO – Physics Learning and Astronomy Training Outreach, with T.G. Guzik, Louisiana Board of Regents (Louisiana Systemic Initiatives Program), 4/1/00 – 5/31/01, \$147,300.

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