

KRISHNA SUBRAMANIAN KUMAR

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RESEARCH INTERESTS: *Experimental Nuclear and Particle Physics*
Tests of Fundamental Symmetries, Weak Neutral Current Interactions,
Precision Probes of Electroweak Interactions with Leptons,
Neutrinoless Double-Beta Decay, Parity-Violating Electron Scattering,
QCD structure of the nucleon and other tests of low energy QCD.

WORK EXPERIENCE:

Jan. '19 -	University of Massachusetts , Amherst, MA. <i>Gluckstern Professor of Physics.</i>
Sep. '14 - Jan. '19	Stony Brook University, SUNY , Stony Brook, NY. <i>Professor of Physics and Astronomy.</i>
Sep. '04 - Aug. '14	University of Massachusetts , Amherst, MA. <i>Professor of Physics.</i>
Sep. '99 - Aug. '04	University of Massachusetts , Amherst, MA. <i>Associate Professor of Physics.</i>
Sep. '93 - Aug. '99	Princeton University , Princeton, NJ. <i>Assistant Professor of Physics.</i>
Feb. '90 - Aug. '93	Harvard University , Cambridge, MA. <i>Research Associate at the L3 experiment at CERN.</i>
Jan. '85 - Jan. '90	Syracuse University , Syracuse, NY. <i>Graduate Research Assistant at the MIT-Bates Linac.</i>

EDUCATION:

Sep. '84 - Jan. '90	Syracuse University , Syracuse, NY. <i>Ph. D. Physics</i> , Thesis Advisor: Paul Souder Thesis Title: <i>Parity Violation in Elastic $\vec{e}-^{12}\text{C}$ Scattering</i>
Sep. '79 - Aug. '84	Indian Institute of Technology , Bombay, INDIA. <i>M. Sc. Physics</i>

AWARDS:

- **2005 Fellow, American Physical Society**, *For his leadership in parity-violating electron scattering experiments, especially those focused on low energy searches for physics beyond the standard model.*
- **1995 Outstanding Junior Investigator Award**, *Precision Electroweak Tests with Polarized Electrons*, awarded by the US Department of Energy, Division of High Energy Physics.
- **1990 Peter T. Demos Award**, Achievement in Graduate Student Research, awarded by the MIT-Bates Linear Accelerator Center Users Group.
- **1990 Doctoral Prize**, awarded by the Graduate School at Syracuse University.

PROFESSIONAL SERVICE

- Co-convenor, session on *Fixed Target Physics* at the International Conference on the Future of Particle Physics, Snowmass, 2001
- Elected member of SLUO (the Users Organization of SLAC) from 2001-2004
- Co-organizer, session on *Light Quarks and Leptons*, at the 8th International Conference on the Intersections between Nuclear and Particle Physics (CIPANP2003), NY City, May 2003
- Member, Nuclear Science Advisory Committee (NSAC) from 2001 to 2003. NSAC members are appointed by the Secretary of Energy for three year terms.
- Lecturer, Hampton University Graduate Summer School in Nuclear Physics, 2005
- Co-convenor, *Spin Physics* session at DIS2005, XIII International Workshop on Deep Inelastic Scattering
- Chair, National Nuclear Physics Summer School Committee, 2006
- Co-convenor, session on *Electroweak Physics and Physics Beyond the Standard Model* at CIPANP 2006: Ninth Conference on the Intersections of Particle and Nuclear Physics, San Juan, Puerto Rico
- Member, Program Committee of the Division of Nuclear Physics, American Physical Society, 2006-7
- Member, Executive Committee of the Division of Nuclear Physics, American Physical Society, 2007-8
- Co-Organizer, 10 week program on *Low Energy Precision Tests of the Standard Model in the LHC Era* at the Institute for Nuclear Theory, Seattle, USA, 2008
- Member, International Scientific Advisory Committee of the *10th Conference on the Intersections of Particle and Nuclear Physics*, San Diego, CA, May 2009
- Member, APS-DNP Fellowship Committee, 2010-11
- Lecturer, Joint US-Canadian Nuclear Physics Summer School, Vancouver, Canada, 2010
- Lecturer, Joliot-Curie French Nuclear Physics Summer School, Lacanau, France, 2010
- Co-Organizer, International Workshop on *Precision Tests of the Standard Model: From Atomic Parity Violation to Parity Violating Electron Scattering* at ECT*, Trento, Italy, 2010
- Member, Organizing Committee of PAVI11, 5th International Workshop on *Parity Violation, Hadron Structure and More....*, Rome, Italy, 2011
- Co-Convener, session on *Symmetries and Conservation Laws* at PANIC11: 2011 Particle and Nuclear Conference, Boston, USA, 2011
- Chair, NSAC Subcommittee on Fundamental Nuclear Physics with Neutrons, 2011
- Member, International Scientific Advisory Committee of the *11th Conference on the Intersections of Particle and Nuclear Physics*, St. Petersburg, FL, May 2012

- Member, NSAC Subcommittee on the Implementation of the 2007 Long Range Plan for Nuclear Science, 2012
- Member, APS-DNP Nominating Committee, 2012-13
- Member, Electron Ion Collider Advisory Committee, 2014
- Member, International Scientific Advisory Committee of the *12th Conference on the Intersections of Particle and Nuclear Physics*, Vail, CO, May 2015
- Member, NSAC Long Range Plan Writing Group, 2015
- Member, Editorial Board, Physical Review C, 2016-18
- Chair, Jefferson Laboratory User Group Board of Directors, 2017-18
- Member, Organizing Committee of the *13th Conference on the Intersections of Particle and Nuclear Physics*, Palm Springs, FL, May 2018
- Vice-Chair, Division of Nuclear Physics, American Physical Society, 2018-19
- Chair-Elect, Division of Nuclear Physics, American Physical Society, 2019-20
- Member, International Advisory Committee of the *5th International Workshop on Nuclear Structure at Large Bjorken-x*, Kolymbari, Crete, August 2019.
- Member, Program Advisory Committee, Center for Frontiers of Nuclear Science, Stony Brook University, 2020-
- Chair, Division of Nuclear Physics, American Physical Society, 2020-21
- Past-Chair, Division of Nuclear Physics, American Physical Society, 2021-22
- Member, Jefferson Science Associates Science and Technology Mission Committee, 2022-

PROFESSIONAL COLLABORATION LEADERSHIP

- Principal Spokesperson: Stanford Linear Accelerator Center E158 Experiment: 1997-2005
- Co-Spokesperson: Jefferson Laboratory HAPPEXII Experiment, 1999-2007
- Co-Spokesperson: Jefferson Laboratory PREX Experiment, 2007-
- Principal Spokesperson: Jefferson Laboratory MOLLER Experiment, 2009-
- Executive Board Member: nEXO Collaboration, 2014-

OTHER PROFESSIONAL COLLABORATION MEMBERSHIP

- Fermilab Mu2e Collaboration, 2006-2014
- EXO-200 Collaboration, 2007-

Ph.D. THESES SUPERVISION

- G. Wilson Miller, *Parity Violation in Elastic Electron Proton Scattering*, Princeton University, 2001.
- D. Relyea, *Parity Violation in Møller Scattering*, Princeton University, 2003.
- L. Kaufman, *Parity Violation in Elastic Electron Proton Scattering at low Q^2* , University of Massachusetts, 2006.
- L. Mercado, *Parity Violation in Elastic Electron Proton Scattering at high Q^2* , University of Massachusetts, December 2011
- J. Wexler, *A Measurement of the Neutron Skin of ^{208}Pb using Parity Violating Electron Scattering*, University of Massachusetts, 2014
- O. Njaya, *Search for Neutrinoless Double-Beta Decay in ^{134}Xe with EXO-200 and Development of Laser-Driven In-Situ Electron Lifetime Monitoring for nEXO*, August 2018
- T. Kutz, *Probing F_2^n/F_2^p , d/u and the EMC Effect with Deep Inelastic Scattering in $A = 3$ Nuclei*, Stony Brook University, November 2019
- R. Richards, *Measurements of the Vector Analyzing Powers in Elastic Scattering off ^{208}Pb and ^{48}Ca* , Stony Brook University, July 2021
- T. Ye, *Precision Measurement of the Neutral Weak Form Factor of ^{208}Pb Using Parity-Violating Elastic Electron Scattering*, Stony Brook University, August 2021
- C. Clarke, *Precision Measurement of the Neutral Weak Form Factor of ^{208}Ca Using Parity-Violating Elastic Electron Scattering*, Stony Brook University, December 2021

DEPARTMENTAL & UNIVERSITY SERVICE

at the University of Massachusetts, Amherst

- Advisor, Society for Physics Students, 2001-2
- Member, Personnel Committee 2000-
- Member, Executive Search Committee, 2004
- Member, Chairman's Advisory Committee, 2002-6, 2008-
- Member, Personnel Subcommittee, 2003-2005
- Member, Graduate Admissions Committee, 2000
- Member, Comprehensive Exam Committee, Spring 2000
- Chair, Experimental Nuclear Faculty Search Committee, 2004
- Chair, Graduate Admissions Committee, 2001, 2003-05
- Chair, Physics Department Personnel Committee, 2006-7
- Member, Experimental Particle Search Committee, 2008
- Director, Physics Graduate Program, 2007-2012
- Member, NSM College Personnel Committee, 2007-9
- Member, Graduate Admissions Committee, 2020-2023
- Member, Personnel Committee, 2021-2023
- Member, Shop Committee, 2020-
- Chair, Departmental Awards Committee, 2020-

DEPARTMENTAL & UNIVERSITY SERVICE

at Stony Brook University

- Member, Departmental Colloquium Committee, 2017-18
- Member, Departmental Strategic Planning Committee, 2015-18
- Member, Chair Search Committee, 2017
- Member, Research Facilities/Safety Committee, 2015-18
- Chair, Experimental Condensed Matter Physics Search Committee, 2016

CONFERENCE AND WORKSHOPS ORGANIZATION

1. "Fixed Target Physics", co-organizers P. Reimer, R. Ray and M. Strovink, parallel session at the *APS/DPF/DPB Summer Study on the Future of Particle Physics*, June 2001.
2. "Light Quarks and Leptons" co-organizer A. Czarnecki, parallel session at the *VIII International Conference on the Intersections between Nuclear and Particle Physics* (CIPANP2003), New York City, May 2003.
3. "Spin Physics" co-organizers P. di Nezza and M. Stratmann, parallel session at the XIII International Conference on Deep Inelastic Scattering (DIS2005), Madison, WI, May 2005
4. "EW and BSM Physics" co-conveners C. Kolda and B. Heineman, parallel session at the *Conference on the Intersections of Nuclear and Particle Physics* (CIPANP2006), San Juan, Puerto Rico, May 2006
5. "Low Energy Precision Electroweak Physics in the LHC Era", Institute of Nuclear Theory Program, co-organizers V. Cirigliano, J. Erler, M.J. Ramsey-Musolf, Seattle, WA, September-December 2008,
6. Member, International Scientific Advisory Committee of the *10th Conference on the Intersections of Particle and Nuclear Physics*, San Diego, CA, May 2009
7. Co-convenor, Electroweak Physics, INT Program on "Gluons and the Quark Sea at High Energies: Distributions, Polarizations, Tomography", Seattle, October 2010
8. Co-organizer, Workshop on "Precision Test of the Standard Model", ECT*, Trento, Italy, November 2010
9. "Tests of Symmetries and Conservation Laws", Co-convenor D. Bryman, *Particles and Nuclei* (PANIC11), Cambridge, MA, June 2011
10. Member, Organizing Committee of the *Workshop on Parity Violation* (PAVI11), Rome, Italy, September 2011
11. Member, International Scientific Advisory Committee of the *11th Conference on the Intersections of Particle and Nuclear Physics*, St. Petersburg, FL, May 2012
12. External Organizer, Workshop on "Low Energy Precision Physics", Mainz Institute for Theoretical Physics, Mainz, Germany, September 2013
13. Member, Organizing Committee of the *Workshop on Parity Violation* (PAVI14), Syracuse, NY, July 2014
14. Member, International Scientific Advisory Committee of the *12th Conference on the Intersections of Particle and Nuclear Physics*, Vail, CO, May 2015
15. Co-organizer, Workshop on "Physics Beyond the Standard Model and Precision Nucleon Structure Measurements", ECT*, Trento, Italy, August 2016
16. Member, Organizing Committee of the *13th Conference on the Intersections of Particle and Nuclear Physics*, Palm Springs, FL, May 2018
17. Member, International Advisory Committee of the *5th International Workshop on Nuclear Structure at Large Bjorken-x*, Kolymbari, Crete, August 2019

INVITED CONFERENCE AND WORKSHOP TALKS

1. “Recent τ Results from the L3 Detector at LEP.”
The Vancouver DPF Meeting, Vancouver, Canada, 1991.
2. “Electroweak Tests with the τ Lepton at LEP”
X DAE Symposium on High Energy Physics, Bombay, India, December 1992.
3. “Measurement of τ Polarization in Z^0 Decays”
ICHEP 92, Dallas, TX, August 1992.
4. “Precision Low Q^2 Weak Neutral Current Experiments”
1995 Aspen Winter Conference of Particle Physics, Aspen, CO, January 1995.
5. “Parity Nonconservation in Møller Scattering”
Physics Beyond the Standard Model at Low and Intermediate Energies, Seattle, WA, June 1995.
6. “An Experiment to Measure Parity Nonconservation in Møller Scattering”
SLAC in the Year 2000 and Beyond, SLAC, CA, March 1996.
7. “Fixed Target Møller Scattering at the NLC”
Workshop on Future Directions in High Energy Physics, Snowmass, CO, June 1996.
8. “Parity Violation Experiments at TJNAF”
DAFCE96, Workshop on Hadron Dynamics with the new DAFNE and CEBAF facilities, Frascati, Italy, November 1996.
9. “Testing the Standard Model with ee and ep Scattering”
Future Directions in Parity Violation, Workshop at the Institute for Nuclear Theory, Seattle, WA, June 1997.
10. “Status of the HAPPEX Experiment at TJNAF”
Workshop of Parity Violation in Electron-Hadron Electroweak Interactions, Paris, France, October 1997.
11. “Parity Violation and Fundamental Electroweak Physics”, Invited talk the the APS New England Section Fall Meeting, October 1998.
12. “Probing Nucleon Structure with Parity Violating Electron Scattering”
Juelich Workshop on Hadron Structure, June 1999.
13. “Recent Progress in Parity Violating Electron Scattering at Jefferson Laboratory”, invited talk at the Gordon Research Conference on Nuclear Physics, Newport, RI, July 1999.
14. “Experiment Overview”, Plenary talk at the joint Jefferson Lab-University of Connecticut workshop on *Low Energy Electroweak Sea Quark Structure of the Nucleon*, November 1999.
15. “Experiment Summary”, Plenary Talk at the joint Jefferson Lab-Temple University workshop on *Nucleon Structure in the High- x Region*, April 2000.
16. “New Results from HAPPEX and Future Plans at Jefferson Lab and SLAC”, invited talk at the joint DNP/DPF APS meeting, Long Beach, CA, April 2000.
17. “Status of SLAC E158: Parity Violation in Møller Scattering”, ECT* Workshop on *Parity Violation in Atomic, Nuclear and Hadronic Systems*, Trento, Italy, June 2000.

18. "Overview of Parameters and Experiments", Opening Talk at the Jefferson Laboratory Parity Workshop, October 2001.
19. "Experimental Review", Plenary Talk at *From Parity Violation to Hadronic Structure and more...*, University of Mainz, Germany, June 2002.
20. "Status of Neutral Weak Form Factor Measurements", Plenary talk at QNP2002, *International Conference on Quark Nuclear Physics*, Juelich, Germany, June 2002.
21. "Spin Dependant Asymmetries at low Q^2 and high W ", invited talk at the BNL-RIKEN Workshop on Current and Future Directions, Brookhaven, August 2002.
22. "Parity Violating Electron Scattering", Plenary talk at SPIN2002, *15th International Spin Physics Symposium*, Upton, NY, September 2002.
23. "SLAC E158: Recent Progress and First Results", Presentation at the DoE HEP Institutional Review of the Stanford Linear Accelerator Center, April 2003.
24. "Parity Violation Experiments", Plenary talk at *Celebration of the First Seven Years*, Jefferson Lab Annual Users Meeting, June 2003.
25. "The SLAC E158 Experiment", Invited talk at the *2003 Gordon Research Conference on Nuclear Physics*, Colby College, ME, July 2003.
26. "Electroweak Tests at Low Q^2 ", Invited Talk at the *Workshop on Nucleon Form Factors and Parity Violation*, Athens, Greece, October 2003
27. "Frontiers of Parity-Violating Electron Scattering Experiments", Invited talk at the *Workshop on Parity Violating Electron Scattering* (PAVI04), Grenoble, France, June 2004.
28. "Proving Subatomic Matter with Polarized Electrons: MeV to TeV Physics", Plenary Talk at the APS April Meeting, Tampa, FL, April 2005.
29. "Parity Violation in Møller Scattering", invited talk at the *XIII International Workshop on Deep Inelastic Scattering* (DIS2005), Madison, WI, April 2005.
30. "Parity-Violating Deep Inelastic Scattering", Invited talk at the *Workshop on Parton Distributions in the 21st Century*, Seattle, WA, November 2004.
31. "Symmetries in Nuclear Physics", Invited talk at the *Jefferson Laboratory 12 GeV Science Review*, Newport News, VA, April 2005
32. "Tests of the Standard Model below the Z Pole", Invited Talk at the *Jefferson Laboratory Hall C Summer Workshop*, Newport News, VA, August 2005.
33. "Parity-Violating Deep Inelastic Scattering: A New Probe of Charge Symmetry Breaking", invited talk at the *ECT* International Workshop on Charge Symmetry Breaking and Other Isospin Violations*, Trento, Italy, June 2005.
34. "Parity-Violating Electron Scattering: New Results and Future Prospects", Invited plenary talk at the *Conference on the Intersections of Nuclear and Particle Physics* (CIPANP2006), San Juan, Puerto Rico, May 2006

35. "Conclusions and Perspectives", Summary Talk at the *Workshop on Parity Violation* (PAVI06), Milos, Greece, May 2006
36. "Parity-Violating Electron Scattering: New Results and Future Prospects", Invited talk at the *Jefferson Laboratory Annual Users Meeting*, Newport News, VA, June 2006
37. "MeV to TeV Physics with Parity-Violating Electron Scattering", Invited talk at the *Gordon Research Conference on Nuclear Physics*, Newport, RI, May 2007.
38. "Long Range Plan: Fundamental Symmetries and Neutrinos", Plenary talk at the Jefferson Laboratory Users Meeting, Newport News, VA, June 2007.
39. "Parity-Violating Deep Inelastic Scattering with the 12 GeV Upgrade", Invited talk at the *XV International Workshop on Deep Inelastic Scattering* (DIS2007), Munich, Germany, April 2007.
40. "Probing the TeV Scale: New Opportunities with the Jefferson Laboratory 12 GeV Upgrade", Invited talk at the *Workshop on Electroweak and Precision Physics*, APS Division of Nuclear Physics Fall Meeting, Newport News, VA, October 2007.
41. "Deep Inelastic Scattering and Electroweak Physics", Invited talk at the *Workshop on the Structure of Hadrons and Nuclei at an Electron-Ion Collider*, ECT* Trento, Italy, June 2008
42. "Introduction to Parity Violation", Opening Talk at the *PREX Workshop at Jefferson Laboratory*, Newport News, VA, August 2008.
43. "Beyond the Standard Model: Future Prospects with Parity-Violating Electron Scattering", Plenary Talk at the *18th International Spin Physics Symposium* (SPIN 2009), Charlottesville, VA, October 2008.
44. "Parity-Violating Møller Scattering", Invited talk at the *Workshop on Parity-Violating Electron Scattering* at the Institute for Nuclear Theory, Seattle, WA, November 2008.
45. "Electroweak and Precision QCD Tests: Experimental Opportunities at a Polarized Electron-Ion Collider", Invited Talk at the *Electron Ion Collider International Advisory Committee Meeting*, Washington D.C., February 2009.
46. "Parity-Violating Møller Scattering: Past Results and Future Prospects", Invited talk at the *10th Conference on the Intersections of Particle and Nuclear Physics*, San Diego, CA, May 2009.
47. "Møller Scattering at 11 GeV at Jefferson Laboratory", Invited talk at *4th International Workshop on Parity Violation and Hadron Structure*, Bar Harbor, ME, June 2009.
48. "Overview of Parity-Violating Electron Scattering", Opening talk at the workshop on *The Lead Radius Experiment and Neutron Rich Matter in Astrophysics and the Laboratory*, Trento, Italy, August 2009.
49. "Parity Violation and Beyond the Standard Model Aspects", Invited talk at the *8th European Research Conference on Electromagnetic Interactions with Nucleons and Nuclei* (EINN09), Milos, Greece, September 2009.
50. "Low Energy Tests of the Standard Model: The 12 GeV Parity-Violation Program at Jefferson Laboratory", Plenary talk at the *International Conference on Nuclear Reactions on Nucleons and Nuclei*, Messina, Italy, October 2009

51. "Electroweak Physics with the EIC: Experimental Prospects", invited talk at the *INT Workshop on the Physics of Lepton-Ion Colliders*, Seattle, WA, October 2009
52. "Electroweak Physics at a Future Electron-Ion Collider", invited talk at *XVIII International Conference on Deep Inelastic Scattering and Related Subjects*, Florence, Italy, April 2010.
53. "Overview of Electroweak Physics Measurements at the EIC", invited talk at the *EIC EW JLab User Workshop*, Williamsburg, VA, May 2010.
54. "Beyond the Standard Model with Electron and Muon Beams", plenary talk at *International Nuclear Physics Conference (INPC2010)*, Vancouver, Canada, July 2010.
55. "The Møller Project at Jefferson Laboratory", invited talk at the *Second Workshop on Hadron Physics in China and Opportunities with 12 GeV JLab (WHAT2010)*, Beijing, China, July 2010.
56. "Parity Violation and Standard Model Tests", invited plenary talk at *19th International Spin Physics Symposium (SPIN2010)*, Juelich, Germany, September 2010.
57. "Electroweak Structure Functions: Measurement Aspects", invited talk at the INT Program on *Gluons and the Quark Sea at High Energies: Distributions, Polarizations, Tomography*, Seattle, Washington, October 2010
58. "Beyond the Standard Model at Low Energy: Experimental Overview", invited talk at the workshop on *Precision Tests of the Standard Model*, ECT*, Trento, November 2010
59. "Parity-Violating Electron Scattering: Introduction and Overview of the World Experimental Program", at *Many-Body Structure of Strongly Interacting Systems*, Conclusive Symposium at Johannes Gutenberg University, Mainz, Germany, February 2010
60. "Introduction to Parity Violating Electron Scattering", opening talk at the *Minisymposium on Parity Violation*, APS April Meeting, Anaheim, CA, April 2011
61. "Measurements of the Weak Mixing Angle: An Experimental Overview", invited talk at the *Workshop on Machine Aspects and Physics of the MESA Accelerator*, Mainz, Germany, May 2011
62. "What is the Proton Made of?", Invited pedagogical lecture at the *19th Particles and Nuclei International Conference (PANIC11)*, MIT, Cambridge, MA, July 2011
63. "Searches for BSM Physics at Low Energy", plenary talk at *Fall Meeting of the Division of the Particles and Fields (DPF2011)*, Brown University, Providence, RI, August 2011
64. "High Precision Electroweak Measurements of Electrons and Muons", invited talk at the *Tenth ICFA Seminar on Future Perspectives in High Energy Physics*, CERN, Geneva, Switzerland, October 2011
65. "Parity-Violating Electron Scattering: MeV to TeV Physics", Invited talk at the *50th International Meeting on Nuclear Physics*, Bormio, Italy, January 2012
66. "The PREX Experiment at Jefferson Laboratory", invited talk at the workshop on *The Nucleon Dipole Polarizability and its Impact on Nuclear Structure and Astrophysics*, ECT*, Trento, Italy, June 2012
67. "Low Energy Standard Model Tests with Parity-Violating Electron Scattering", invited talk at *Electron-Nucleus XII*, Elba, Italy, June 2012.

68. “The PREX and CREX Experiments”, invited talk at *III International Symposium on the Nuclear Symmetry Energy*, NSCL/FRIB, E. Lansing, MI, July 2013
69. “EXO-200 and nEXO, Recent Results and Future Prospects”, invited talk at the *INT Workshop on Nuclei and Fundamental Symmetries*, Seattle, WA, August 2013.
70. “Parity Violating Electron Scattering”, invited talk at *EINN 2013*, 10th European Research Conference on Electromagnetic Interactions with Nucleons and Nuclei, Paphos, Cyprus, October 2013
71. “The E158 and MOLLER Experiments”, invited talk at *Gamma-Z Workshop*, at JLab, Newport News, VA, December 2013
72. “Parity Violation and Fundamental Symmetries: Connections to an EIC”, invited talk at *EIC Users Meeting*, Stony Brook, NY, June 2014
73. “Parity Violating Electron Scattering”, invited talk at *PANIC 2014*, Particles and Nuclei International Conference, Hamburg, Germany, August 2014
74. “Parity Violation and Hadron Structure”, invited talk at *Long Range Plan Joint QCD Town Meeting*, Philadelphia, PA, September 2014
75. “Parity Violating Electron Scattering”, invited talk at *Fundamental Symmetries, Neutrinos, Neutrons and related Nuclear Astrophysics*, Long Range Plan Town Meeting, Chicago, IL, September 2014
76. “The MOLLER Experiment”, invited talk at *Minisymposium on Fundamental Symmetries*, Division of Nuclear Physics Meeting, Hawaii, October 2014
77. “The PREX and CREX Experiments at JLab”, invited talk at *Neutron Skins From Laboratory to Stars: Introductory Workshop*, at the Mainz Institute of Theoretical Physics, Mainz, Germany, May 2015
78. “Parity-Violating Electron Scattering: Physics Reach and Review of Experiments”, invited talk at *Intense Electron Beams Workshop*, Ithaca, NY, June 2015
79. “The PREX and CREX Experiments at JLab”, invited talk at *Neutron Stars and All That Jazz*, Montreal, Canada, June 2015
80. “Electroweak and Beyond the Standard Model Physics at an EIC”, invited talk at *POETIC VI*, Palaiseau, France, September 2015
81. “Overview of Experiments to Search for Neutrinoless Double-Beta Decay”, invited talk at *WHEPP XIV*, IIT Kanpur, India, December 2015
82. “Parity Violating Electron Scattering”, invited talk at *WHEPP XIV*, IIT Kanpur, India, December 2015
83. “Introduction to Parity-Violating Electron Scattering: The PREX-I Result”, invited talk at *Neutron Skins of Nuclei*, workshop at the Mainz Institute of Theoretical Physics, Mainz, Germany, May 2016
84. “Beyond the Standard Model with Electron Scattering”, invited talk at *Photonuclear Reactions*, Gordon Research Conference, Holderness, NH, August 2016
85. “ A_n Experiments”, invited talk at the *The Electroweak Box: Workshop at the Amherst Center for Fundamental Interactions*, Amherst, MA, September 2017

86. “The PREX, CREX and MOLLER Experiments at JLab”, invited talk at the *Bridging the Standard Model to New Physics*, Workshop at MITP, Mainz, April 2018
87. “Low Energy Measurements of the Weak Mixing Angle”, invited talk at the *Beyond the Standard Model with Charged Leptons*, COFI Workshop in San Juan, Puerto Rico, May 2018
88. “Neutron Skins of Nuclei”, invited talk at *Nuclear Astrophysics in the New Era of Multi-Messenger Astronomy*, Annals of Physics Workshop at Columbia University, May 2018
89. “Low Energy Probes of the Standard Model”, invited lecture at *The Standard Model at 50: Successes and Challenges*, SLAC Summer Institute, August 2018
90. “Searching for Tau Lepton Appearance at the EIC”, invited talk at *EICUG Annual Meeting*, Paris, France, July 2019
91. “Physics with Parity-Violating Electron Scattering”, invited talk at *8th International Conference in on New Frontiers in Physics (ICNFP2019)*, Colympari, Crete, August 2019
92. “The Parity Violation Program at Jefferson Lab”, invited talk at *EINN2019*, Paphos, Cyprus, November 2019
93. “Parity-Violating Electron Scattering”, invited talk at *The Third Nuclear and Particle Theory Meeting*, Washington University, St. Louis, May 2021
94. “Parity-Violating Electron Scattering off Nuclei”, invited talk at *Precision Tests of Coherent Neutral Current Reactions with Nuclei*, MITPTopical Workshop, Mainz, Germany, May 2022

SEMINARS AND COLLOQUIA

1. “ τ Polarization with the L3 detector”
High Energy Physics Seminar at Princeton University, April 1992.
2. “ τ Polarization with the L3 detector”
High Energy Physics Seminar at Syracuse University, March 1992.
3. “ τ Polarization with the L3 detector”
Weekly Seminar at the MIT-Bates Linac, March 1992.
4. “ τ Polarization with the L3 detector”
High Energy Physics seminar at Harvard University, March 1992.
5. “Precision Parity-Violating Neutral Current Experiments”
Physics Department Colloquium at Harvard University, April 1993.
6. “Precision Parity-Violating Neutral Current Experiments”
Physics Department Colloquium at Johns Hopkins University, March 1993.
7. “Parity Nonconservation in Møller Scattering”
High Energy Physics Seminar at Columbia University, March 1995.
8. “Parity Nonconservation in Møller Scattering”
Orange Room Seminar at SLAC, April 1995.
9. “Strange and New Physics with Virtual Zs”
LNS Colloquium at MIT, May 1995.
10. “Physics Potential of Weak Neutral Current Experiments at CEBAF”
Invited Talk at the Hall A Collaboration Meeting, CEBAF, VA, February, 1996.
11. “Strange and New Physics with Virtual Zs”
Nuclear Physics Seminar at University of Illinois, Champagne, Il, March 1996.
12. “Precision Weak Neutral Current Experiments at Low Q^2 ”
High Energy Physics Seminar at University of California, San Diego, CA, May 1996.
13. “Precision Measurement of the Spin Structure Function of the Neutron g_1 : First Results from E-154”
Orange Room Seminar at SLAC, Stanford, CA, July 1996.
14. “Future Prospects of Weak Neutral Current Experiments at CEBAF”
Experimental Seminar at TJNAF, Newport News, VA, July 1996.
15. “An Experiment to Measure Parity Nonconservation in Møller Scattering”
Nuclear Physics Seminar at CEN, Saclay, France, October 1996.
16. “Parity Violation: Probing the Nucleon and Beyond”
LNS Colloquium at MIT, February 1997.
17. “A Precision Measurement of the Electroweak Mixing Angle in Møller Scattering: A SLAC Proposal”
High Energy Physics Seminar at the University of Chicago, April 1997.
18. “Probing Subatomic Matter with Polarized Electrons: MeV to TeV Physics”
Particles and Fields Seminar at Boston University, April 1998.

19. "SLAC E158: A Precision Measurement of the Weak Mixing Angle in Møller Scattering"
Physics Division Seminar at Jefferson Laboratory, March 1998.
20. "Probing Subatomic Matter with Polarized Electrons: MeV to TeV Physics"
Physics Department Colloquium at University of Connecticut, February 1998.
21. "Probing Subatomic Matter with Polarized Electrons: MeV to TeV Physics"
Physics Department Colloquium at University of Massachusetts, Amherst, February 1998.
22. "Probing Subatomic Matter with Polarized Electrons", Physics Department Colloquium at Princeton University, April 1999.
23. "Probing Subatomic Matter with Polarized Electrons", Physics Department Colloquium at Amherst College, February 2000.
24. "Strange, New Physics with parity Violating Electron Scattering", Physics Colloquium at the Argonne National Laboratory, April 2002.
25. "Strange, New Physics with Parity Violating Electron Scattering", High Energy Physics Seminar at the Tata Institute of Fundamental Research, Mumbai, India, December 2002.
26. "First Result from the SLAC E158 Experiment", Seminar at the Stanford Linear Accelerator Center, Stanford, CA, April 2003
27. "Electrons and Mirror Symmetry", Physics Department Colloquium at University of Massachusetts, Amherst, April 2003.
28. "Electrons and Mirror Symmetry", Physics Department Colloquium at University of Connecticut, February 2004.
29. "Electrons and Mirror Symmetry", Physics Department Colloquium at University of Kentucky, April 2004.
30. "Electrons and Mirror Symmetry", Physics Department Colloquium at Brown University, November 2004.
31. "Parity Violating Møller Scattering", PPE Seminar at CERN, Geneva, Switzerland, March 2005.
32. "Parity Violating Electron Scattering: Past, Present and Future", High Energy Physics Seminar at CalTech, May 2005.
33. "Parity Violating Electron Scattering: Past, Present and Future", High Energy Physics Seminar at UC San Diego, May 2005.
34. "Parity Violating Electrong Scattering: Past, Present and Future", Nuclear Physics seminar at INFN, Frascati, Italy, June 2005
35. "Probing Subatomic Matter with Polarized Electrons", HENP Seminar at UMass, Amherst, April 2005.
36. "Low Energy Electroweak Physics", Invited talk at the New England Particle Physics Retreat, Cape Cod, MA, August 2006
37. "Electrons and Mirror Symmetry", Physics Department Colloquium at Brookhaven National Laboratory, Upton, NY January 2006.

38. "Electrons and Mirror Symmetry", Physics Department Colloquium at the University of South Carolina, March 2006
39. "Electrons and Mirror Symmetry", Physics Department Colloquium at Indiana University, April 2006
40. "Electrons and Mirror Symmetry", Physics Department Colloquium at Amherst College, April 2006
41. "Parity-Violating Electron Scattering: New Results and Future Prospects", Nuclear Physics Seminar at Oakridge National Research Laboratory, Oakridge, TN, August 2006
42. "Electrons and Mirror Symmetry", Colloquium at Fermi National Accelerator Laboratory, April 2007.
43. "Electrons and Mirror Symmetry", Colloquium at Argonne National Laboratory, April 2007.
44. "Electrons and Mirror Symmetry", Physics Department Colloquium at UNAM, Mexico City, Mexico, March 2007.
45. "Probing the TeV Scale with Parity-Violating Electron Scattering", Seminar at the Indiana University Cyclotron Facility, Bloomington, IN, October 2007
46. "Probing the TeV Scale with Parity-Violating Electron Scattering", Seminar at the Department of Physics NPAC Forum, University of Wisconsin, Madison, WI, May 2008.
47. "The Physics of Electron-Electron Scattering", Seminar at Jefferson Laboratory, Newport News, VA, January 2009.
48. "Electrons and Mirror Symmetry", Colloquium at Jefferson Laboratory, Newport News, VA, July 2009.
49. "The 12 GeV Parity-Violation Program at Jefferson Laboratory", seminar at the Instituto Superiore di Sanita', Rome, Italy, October 2009
50. "The Physics of Electron-Electron Scattering", Institute Colloquium at Johannes Gutenberg University, Mainz, Germany, December 2009
51. "The Physics of Electron-Electron Scattering", Physics Department Colloquium at Duke University, October 2011
52. "MeV to TeV Physics with Parity-Violating Electron Scattering", Nuclear Science Division Colloquium at Lawrence Berkeley National Laboratory, November 2011
53. "Electrons are not Ambidextrous: New Insights from a Subatomic Matter of Fact", Physics Department Colloquium at the University of New Hampshire, November 2012
54. "Electrons are not Ambidextrous: New Insights from a Subatomic Matter of Fact", Physics Department Colloquium at SUNY Stony Brook, November 2012
55. "Electrons are not Ambidextrous: New Insights from a Subatomic Matter of Fact", Physics Department Colloquium at Rensselaer Polytechnic Institute, February 2013
56. "Electrons are not Ambidextrous: New Insights from a Subatomic Matter of Fact", Physics Colloquium at SLAC National Accelerator Laboratory, May 2013
57. "Electrons are not Ambidextrous: New Insights from a Subatomic Matter of Fact", Physics Colloquium at Brookhaven National Laboratory, Upton, NY, November 2014

58. "Electrons are not Ambidextrous: New Insights from a Subatomic Matter of Fact", NPA Seminar at the Physics Department, Yale University, March 2015
59. "The Physics of Electron Electron Scattering", colloquium at TRIUMF, Vancouver, Canada, November 2015
60. "From Old to New Physics with Electron-Electron Scattering", Physics Department Colloquium at the University of Washington, January 2016
61. "Search for Lepton Number Violation with EXO-200 and nEXO", High Energy Physics Seminar at Department of Physics and Astronomy, Stony Brook University, November 2016
62. "From Old to New Physics with Electron-Electron Scattering", Physics Department Colloquium at UC San Diego, November 2016
63. "Search for Lepton Number Violation with EXO-200 and nEXO", Particle Physics Seminar at Department of Physics, UC San Diego, November 2016
64. "Electrons are not Ambidextrous", Physics Department Colloquium, UMass, Amherst, March 2018
65. "Electrons are not Ambidextrous", Physics and Astronomy Colloquium, Ohio University, Athens, OH, March 2019
66. "Electrons are not Ambidextrous", Physics and Astronomy Colloquium, University of Rochester, NY, March 2019
67. "Electrons are not Ambidextrous", Physics and Astronomy Colloquium, University of Nebraska, Lincoln, NE, December 2020
68. "How Thick is the Neutron Skin of a Heavy Nucleus?", Physics and Astronomy Colloquium, Michigan State University, E. Lansing, MI, March 2022

PUBLICATIONS

1. “First Observation of the Negative Muonium Ion produced by Electron Capture in a Beam Foil Experiment”,
Y. Kuang *et al.*, *Physical Review* **A36**, RC, 3172, (1987).
2. “Formation of Negative Muonium Ion and Charge Processes for Positive Muons passing through Thin Metal Foils.”,
Y. Kuang *et al.*, *Physical Review* **A39**, No. 12, 6109, (1989).
3. “The Bates Polarized Electron Source.”,
G.D. Cates *et al.*, *Nuclear Instruments and Methods in Physics Research* **A278** No. 2, 293, (1989).
4. * “Measurement of Parity Violation in the Elastic Scattering of Polarized Electrons from ^{12}C ”,
P.A. Souder *et al.*, *Physical Review Letters* **65**, No. 6, 694, (1990).
5. “Operation of the LAMPF Stopped Muon Channel for Small Gas Targets.”,
R. Holmes *et al.*, *Nuclear Instruments and Methods in Physics Research* **A303**, 226, (1991).
6. “Mass Limits for Excited Electrons and Muons from Z^0 Decay.”,
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **247B** (1990) 177.
7. “A Determination of Electroweak Parameters from $Z^0 \rightarrow \mu^+ \mu^- (\gamma)$.”,
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **247B** (1990) 473.
8. “A Precision Measurement of the Number of Neutrino Species”,
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **249B** (1990) 341.
9. “Search for Neutral Higgs Boson in Z^0 Decay.”,
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **248B** (1990) 203.
10. “Determination of α_s from Jet Multiplicities Measured on the Z^0 Resonance.”,
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **248B** (1990) 462.
11. “A Test of QCD based on 4-Jet Events from Z^0 Decays.”,
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **248B** (1990) 227.
12. “Test of QED in $e^+e^- \rightarrow \gamma\gamma$ at LEP.”,
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **250B** (1990) 199.
13. * “Search for Excited Taos from Z^0 Decays.”,
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **250B** (1990) 205.
14. “Search for the Neutral Higgs Bosons of the Minimal Supersymmetric Standard Model from Z^0 Decays.”,
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **251B** (1990) 311.
15. * “A Search for Heavy Charged and Neutral Leptons from Z^0 Decays”,
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **251B** (1990) 321.
16. * “A Determination of Electroweak Parameters from Z^0 Decays into Charged Leptons.”,
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **250B** (1990) 183.

17. "Search for the Charged Higgs Boson in Z^0 Decays.",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **252B** (1990) 511.
18. "Search for a Low Mass Neutral Higgs Boson in Z^0 Decays.",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **252B** (1990) 518.
19. "A Measurement of B^0 - \bar{B}^0 Mixing in Z^0 Decays.",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **252B** (1990) 703.
20. "Search for Excited Neutrinos from Z^0 Decays.",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **252B** (1990) 525.
21. "A Measurement of the $Z^0 \rightarrow b\bar{b}$ Forward-Backward Asymmetry.",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **252B** (1990) 713.
22. "Determination of α_s from Energy-Energy Correlations Measured on the Z^0 Resonance.",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **257B** (1991) 469.
23. "Search for the Neutral Higgs Boson.", The L3 Collaboration, B. Adeva *et al.*,
Physics Letters **257B** (1991) 450.
24. "Measurement of the Inclusive Production of Neutral Pions and Charged Particles on the Z^0 Resonance.",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **259B** (1991) 199.
25. "Search for Leptoquarks in Z^0 Decays.",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **261B** (1991) 169.
26. "Measurements of $Z^0 \rightarrow b\bar{b}$ Decays and the Semileptonic Branching Ratio $\text{Br}(b \rightarrow \ell + X)$.",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **261B** (1991) 177.
27. "Measurement of Electroweak Parameters from Hadronic and Leptonic Decays of the Z^0 .",
The L3 Collab., B. Adeva *et al.*, *Z. Phys.* **C51C** (1991) 179.
28. "Search for Narrow High-Mass Resonances in Radiative Decays of the Z^0 .",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **262B** (1991) 155.
29. "A Test of QCD based on 3-Jet events from Z^0 Decays.",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **263B** (1991) 551.
30. * "Decay Properties of Tau Leptons Measured at the Z^0 Resonance",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **265B** (1991) 451.
31. "Measurement of the Lifetime of B-Hadrons and a determination of $|V_{cb}|$ ",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **270B** (1991) 111.
32. "Measurement of the Strong Coupling Constant α_s for Bottom Quarks at the Z^0 Resonance",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **271B** (1991) 461.
33. * "Search for Lepton Flavour Violation in Z^0 Decays",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **271B** (1991) 453.
34. "A Direct Determination of the Number of Light Neutrino Families from $e^+e^- \rightarrow \nu\bar{\nu}\gamma$ at LEP",
The L3 Collaboration, B. Adeva *et al.*, *Physics Letters* **275B** (1992) 209.

35. "Search for the Neutral Higgs Boson at LEP ",
The L3 Collaboration, O. Adriani *et al*, *Physics Letters* **283B** (1992) 454.
36. "Studies of Hadronic Event Structure and Comparisons with QCD Models at the Z^0 Resonance",
The L3 Collab., O. Adriani *et al*, *Z. Phys.* **C55C** (1992) 39.
37. "Determination of α_s from Hadronic Event Shapes on the Z^0 Resonance ",
The L3 Collaboration, O. Adriani *et al*, *Physics Letters* **284B** (1992) 471.
38. "Measurement of Inclusive η Production in Hadronic Decays of the Z^0 ",
The L3 Collaboration, O. Adriani *et al*, *Physics Letters* **286B** (1992) 403.
39. "An Improved Measurement of $B^0 - \bar{B}^0$ Mixing in Z^0 Decays",
The L3 Collaboration, O. Adriani *et al*, *Physics Letters* **288B** (1992) 395.
40. "A Test of Quantum Electrodynamics in the Reaction $e^+e^- \rightarrow \gamma\gamma(\gamma)$ ",
The L3 Collaboration, O. Adriani *et al*, *Physics Letters* **288B** (1992) 404.
41. "Inclusive J/ψ production in Z^0 Decays",
The L3 Collaboration, O. Adriani *et al*, *Physics Letters* **288B** (1992) 412.
42. "Measurement of the $e^+e^- \rightarrow b\bar{b}$ and $e^+e^- \rightarrow c\bar{c}$ Forward-Backward Asymmetries at the Z^0 Resonance",
The L3 Collaboration, O. Adriani *et al*, *Physics Letters* **292B** (1992) 454.
43. "Determination of the number of light neutrino species",
The L3 Collaboration, O. Adriani *et al*, *Physics Letters* **292B** (1992) 463.
44. "Isolated Hard Photon Emission in Hadronic Z^0 Decays",
The L3 Collaboration, O. Adriani *et al*, *Physics Letters* **292B** (1992) 472.
45. * "A Measurement of τ Polarization in Z^0 Decays ",
The L3 Collaboration, O. Adriani *et al*, *Physics Letters* **294B** (1992) 466.
46. "Searches for Non-Minimal Higgs Bosons in Z^0 Decays",
The L3 Collaboration, O. Adriani *et al*, *Physics Letters* **294B** (1992) 457.
47. "High Mass Photon Pairs in $\ell^+\ell^-\gamma\gamma$ events at LEP",
The L3 Collaboration, O. Adriani *et al*, *Physics Letters* **295B** (1992) 337.
48. "Isosinglet Neutral Heavy Leptons in Z^0 Decays",
The L3 Collaboration, O. Adriani *et al*, *Physics Letters* **295B** (1992) 371.
49. "Search for Anomalous Production of Single-Photon Events in e^+e^- -Annihilations at the Z Resonance",
The L3 Collaboration, O. Adriani *et al*, *Physics Letters* **297B** (1992) 469.
50. "Determination of Quark Electroweak Couplings from Direct Photon Production in Hadronic Z Decays",
The L3 Collaboration, O. Adriani *et al*, *Physics Letters* **301B** (1993) 136.
51. "Results from the L3 Experiment at LEP.",
The L3 Collaboration, O. Adriani, *et al*, *Physics Reports* **236** (1993) 1.
52. "Search for the Neutral Higgs Boson at LEP.",
The L3 Collaboration, O. Adriani, *et al*, *Physics Letters* **303B** (1993) 391.

53. "Search for Narrow Vector Resonances in the Z Mass Range.",
The L3 Collaboration, O. Adriani, *et al*, *Physics Letters* **313B** (1993) 326.
54. "Search for a Z' at the Z Resonance.",
The L3 Collaboration, O. Adriani, *et al*, *Physics Letters* **306B** (1993) 187.
55. "Measurement of $\Gamma_{b\bar{b}}/\Gamma_{\text{had}}$ From Hadronic Decays of the Z.",
The L3 Collaboration, O. Adriani, *et al*, *Physics Letters* **307B** (1993) 237.
56. * "Determination of the Effective Electroweak Mixing Angle from Z Decay",
The L3 Collaboration, O. Adriani, *et al*, *Physics Letters* **309B** (1993) 451.
57. "Inclusive Search for the Charmless Radiative Decay of the B Quark ($B \rightarrow s\gamma$)",
The L3 Collaboration, O. Adriani, *et al*, *Physics Letters* **317B** (1993) 637.
58. "An S Matrix Analysis of the Z Resonance",
The L3 Collaboration, O. Adriani, *et al*, *Physics Letters* **315B** (1993) 494.
59. * "Search for Lepton Flavor Violation in Z Decays",
The L3 Collaboration, O. Adriani, *et al*, *Physics Letters* **316B** (1993) 427.
60. "Measurement of the Average Lifetime of B Hadrons",
The L3 Collaboration, O. Adriani, *et al*, *Physics Letters* **317B** (1993) 474.
61. " χ_c Production in Hadronic Z Decays",
The L3 Collaboration, O. Adriani, *et al*, *Physics Letters* **317B** (1993) 467.
62. "Measurement of η_c Production in Untagged Two Photon Collisions at LEP.",
The L3 Collaboration, O. Adriani, *et al*, *Physics Letters* **318B** (1993) 575.
63. "A Study of Four Fermion Processes at LEP.",
The L3 Collaboration, A. Adam, *et al*, *Physics Letters* **321B** (1994) 283.
64. "Measurement of the Cross-Sections and Leptonic Forward-Backward Asymmetries at the Z Pole and Determination of the Electroweak Parameters",
The L3 Collaboration, M. Acciarri *et al*, *Z. Phys.* **CC62** (1994) 551.
65. "Measurement of the Inclusive Production of Neutral Hadrons From Z Decays",
The L3 Collaboration, M. Acciarri, *et al*, *Physics Letters* **328B** (1994) 223.
66. "Measurement of the Inclusive $B \rightarrow \nu_\tau X$ Branching Ratio.",
The L3 Collaboration, M. Acciarri *et al*, *Physics Letters* **332B** (1994) 201.
67. "Measurement of $B^0 - \bar{B}^0$ Mixing Parameter and the $Z \rightarrow B^0 - \bar{B}^0$ Forward-Backward Asymmetry",
The L3 Collaboration, M. Acciarri, *et al*, *Physics Letters* **335B** (1994) 542.
68. * "A Measurement of τ Polarization at LEP",
The L3 Collaboration, M. Acciarri, *et al*, *Physics Letters* **341B** (1994) 245.
69. * "Electroweak Tests with τ Leptons at LEP.",
K.S. Kumar, *Pramana J. Phys.* **41** (1994) Suppl. 45.

70. * "Precision Low Energy Weak Neutral Current Experiments",
K.S. Kumar *et al.*, *Modern Physics Letters* **A10** (1995) 2979.
71. "A Combined Polarized Target/Ionization Chamber for Measuring the Spin Dependence of Nuclear Muon Capture in Laser Polarized Muonic ^3He ",
P. Bogorad *et al.*, *Nuclear Instruments and Methods in Physics Research* **398A** (1997) 211.
72. "Precision Determination of the Neutron Spin Structure Function g_1^n "
The E154 Collaboration, K. Abe *et al.*, *Physical Review Letters* **79**, 26, (1997).
73. "Next-to-Leading Order Analysis of Polarized Deep Inelastic Scattering Data"
The E154 Collaboration, K. Abe *et al.*, *Physics Letters* **405B** (1997) 180.
74. "Measurement of the Neutron Spin Structure Function g_2^n and Asymmetry A_2^n ",
The E154 Collaboration, K. Abe *et al.*, *Physics Letters* **404B** (1997) 377.
75. * "Parity Violation Experiments at TJNAF",
K.S. Kumar, *Nucl. Phys.* **A623** (1997) 258c-267c.
76. * "Measurement of the Neutral Weak Form Factors of the Proton"
The HAPPEX Collaboration, K.A. Aniol *et al.*, *Physical Review Letters* **82**, 1096, (1999)
77. "Large Momentum Transfer Measurements of the Deuteron Elastic Structure Function $A(Q^2)$ at Jefferson Laboratory"
The Jefferson Lab Hall A Collaboration, L.C. Alexa *et al.*, *Physical Review Letters* **82**, 1374, (1999)
78. "Dynamical Relativistic Effects in Quasielastic $1p$ -Shell Proton Knockout from ^{16}O "
The Jefferson Lab Hall A Collaboration, J. Gao *et al.*, *Physical Review Letters* **84**, 3265 (2000)
79. "Polarization Transfer in the $^{16}\text{O}(\vec{e}, e'\vec{p})^{15}\text{N}$ Reaction"
The Jefferson Lab Hall A Collaboration, S. Malov *et al.*, *Physical Review* **C62** (2000) 057302.
80. * "Strange Quarks and Parity Violation"
K.S. Kumar and P.A. Souder, *Prog. Nucl. Part. Phys.* **45** (2000) S333-S395.
81. The Reaction Dynamics of the $^{16}\text{O}(e, e'p)^{15}\text{N}$ Cross-Section at High Missing Energies",
The Jefferson Lab Hall A Collaboration, N. Liyanage *et al.*, *Physical Review Letters* **86** (2001) 5670.
82. * "New Measurement of Parity Violation in Elastic Electron-Proton Scattering and Implications for Strange Form-Factors"
The HAPPEX Collaboration, K.A. Aniol *et al.*, *Physics Letters* **B509** (2001) 211.
83. * "The Future of Fixed Target Physics: Snowmass E5 Working Group Summary"
K.S. Kumar, R. Ray, P.E. Reimer and M. Strovink, Prepared for the APS/DPF/DPB Summer Study on the Future of Particle Physics, *eConf* **C010630** (2001) E5001.
84. * "Helicity Correlated Systematics for SLAC Experiment E158"
P.A. Mastromarino *et al.*, *IEEE Trans. Nucl. Sci.* **49** (2002) 1097-1105.
85. * "SLAC's Polarized Electron Source Laser System for the E-158 Parity Violation Experiment"
A. Brachmann *et al.*, *Proc. SPIE Int. Soc. Opt. Eng.* **4632** (2002) 211-222.

86. "The Q^2 Evolution of the Generalized Gerasimov-Drell-Hearn Integral for the Neutron using a ^3He Target"
M. Amarian *et al.*, *Physical Review Letters* **89** (2002) 242301.
87. * "SLAC's Polarized Electron Source Laser System and Minimization of Electron Beam Helicity Correlations for the E158 Parity Violation Experiment"
T.B. Humensky *et al.*, *Nuclear Instruments and Methods in Physics Research* **A521** (2004) 261-298.
88. "Backward Electroproduction of π^0 Mesons on Protons in the Region of Nucleon Resonances at $Q^2 = 1.0$ GeV^2 "
G. Laveissiere *et al.*, *Physical Review* **C69** (2004) 045203.
89. " Q^2 Evolution of the Neutron Spin Structure Moments using a ^3He Target"
M. Amarian *et al.*, *Physical Review Letters* **92** (2004) 022301.
90. * "Observation of Parity Nonconservation in Møller Scattering"
The E158 Collaboration, P.L. Anthony *et al.*, *Physical Review Letters* **92** (2004) 181602.
91. * "Parity-Violating Electron Scattering"
K.S. Kumar, prepared for the 15th International Spin Physics Symposium (SPIN2002), published in *AIP Conf.Proc.***675** (2003) 142.
92. * "Status and Plans for Neutral Weak Form Factor Measurements"
K.S. Kumar, prepared for the Conference on Quarks and Nuclear Physics (QNP2002), published in *Euro.Phys.J.***A18** (2003) 129.
93. "The Dynamics of the Quasielastic $^{16}\text{O}(\text{e},\text{e}'\text{p})$ reaction at $Q^2 = 0.8$ GeV^2 "
K.G. Fissum *et al.*, *Physical Review* **C70** (2004) 034606.
94. * "Parity-Violating Electroweak Asymmetry in Polarized e-p Scattering"
HAPPEX Collaboration, K.A. Aniol *et al.*, *Physical Review* **C69** (2004) 065501.
95. "Measurements of the Generalized Polarizabilities of the Proton in Virtual Compton Scattering at $Q^2 = 0.92$ GeV^2 and 1.76 GeV^2 "
JLab Hall A collaboration, G. Laveissiere *et al.*, *Physical Review Letters* **93** (2004) 122001.
96. "Measurement of the Generalized Forward Spin Polarizabilities of the Neutron"
JLab Hall A collaboration, M. Amarian *et al.*, *Physical Review Letters* **93** (2004) 152301.
97. "Basic Instrumentation for Hall A at Jefferson Lab"
JLab Hall A collaboration, J. Alcorn *et al.*, *Nuclear Instruments and Methods in Physics Research* **bf A522** (2004) 294.
98. * "Frontiers of Polarized Electron Scattering Experiments"
K.S. Kumar, prepared for the International Workshop on Parity Violation and Hadronic Structure (PAVI04), published in *Eur.Phys.J.***A24S2** (2005) 191.
99. * "Precision Measurement of the Weak Mixing Angle in Møller Scattering"
The E158 Collaboration, P.L. Anthony *et al.*, *Physical Review Letters* **95** (2005) 081601.
100. * "Flux Profile Scanners for High Energy Electrons"
R.S. Hicks *et al.*, *Nuclear Instruments and Methods in Physics Research* **A553** (2005) 470.

101. * “Parity-Violating Electron Scattering from ^4He and the Strange Electric Form Factor of the Nucleon”
HAPPEX Collaboration, K.A. Aniol *et al.*, *Physical Review Letters* **96** (2006) 022003.
102. * “Constraints on the Nucleon Strange Form Factors at $Q^2 \sim 0.1 \text{ GeV}^2$ ”
HAPPEX Collaboration, K.A. Aniol *et al.*, *Physics Letters* **B635** (2006) 275.
103. * “Strange Events in the Proton”
K.S. Kumar, published in *Phys. World***18N9** (2005) 29.
104. * “Spin Physics Summary”
P. Di Nezza, K.S. Kumar, M. Stratmann, prepared for the 13th International Workshop on Deep Inelastic Scattering (DIS05), published in *AIP Conf. Proc.***792** (2005) 173.
105. * “Parity Violation in Møller Scattering”
K.S. Kumar, prepared for the 13th International Workshop on Deep Inelastic Scattering (DIS05), published in *AIP Conf. Proc.***792** (2005) 353.
106. * “Parity-Violating Electron Scattering: New Results and Future Prospects”
K.S. Kumar, prepared for CIPANP 2006: 9th Conference on the Intersections of Particle and Nuclear Physics, Puerto Rico, 2006, published in *AIP Conf. Proc.***870** (2006).
107. * “The E158 Experiment”
K.S. Kumar, prepared for PAVI06: 3rd International Workshop on *Parity Violation to Hadronic Structure and More*, Milos, Greece, published in *Eur.J.***A32** (2007) 531.
108. * “Conference Summary”
K.S. Kumar, prepared for PAVI06: 3rd International Workshop on *Parity Violation to Hadronic Structure and More*, Milos, Greece, published in *Eur.J.***A32** (2007) 531.
109. * “Precision Measurements of the Nucleon Strange Form Factors at $Q^2 \sim 0.1 \text{ GeV}^2$ ”
HAPPEX Collaboration, A. Acha *et al.*, *Physical Review Letters* **98** (2007) 032301.
110. * “Parity-Violating Deep Inelastic Scattering”
K.S. Kumar, prepared for the 15th International Workshop on Deep Inelastic Scattering and Related Subjects (DIS2007), published in *Munich 2007, Deep-Inelastic Scattering, vol 2* 1137-1140.
111. “Letter of Intent: A Muon to Electron Conversion Experiment at Fermilab”
Mu2e Collaboration, R.M. Carey *et al.*, FERMILAB-TM-2389-AD-E, (2007).
112. “ ^3He Spin-Dependent Cross-Sections and Sum Rules”
E94010 Collaboration, K. Slifer *et al.*, arXiv:0803.2267, *Physical Review Letters* **101**:022303 (2008).
113. “Characterization of Large Area APDs for the EXO-200 Detector”
EXO-200 Collaboration, R. Nielson *et al.*, arXiv:0806.2499, *Nuclear Instruments and Methods in Physics Research* **A608** (2009) 68-75.
114. “A Proposal to Search for $\mu^- + N \rightarrow e^- + X$ with Single Event Sensitivity Below 10^{-16} ”
Mu2e Collaboration, R.M. Carey *et al.*, FERMILAB-PROPOSAL-0973 (2008).
115. * “Beyond the Standard Model: Future Prospects in Parity-Violating Electron Scattering”
K.S. Kumar, prepared for SPIN2008: 18th International Spin Physics Symposium, published in *AIP Conf. Proc.***1149** 69-73 (2009).

116. * “Parity-Violating Møller Scattering”
K.S. Kumar, prepared for CIPANP2009, 10th Conference on the Intersections of Particle and Nuclear Physics, *AIP Conf.Proc.* **1182**: 660-664, 2009
117. * “Low Energy Tests of the Standard Model: The 12 GeV Parity-Violation Program at Jefferson Laboratory”
K.S. Kumar, prepared for the International Conference on Nuclear Reactions with Nucleons and Nuclei, *Int.J.Mod.Phys.* **E19**:927-937, 2010.
118. “A Simple Radionuclide-driven Single-ion Source”
EXO-200 Collaboration, M. Montero-Diaz *et al.*, arXiv:1008.3422, *Rev.Sci.Instrum.* **81**:113301, 2010
119. “Transverse Spin Structure of the Nucleon through Target Spin Asymmetry in Semi-Inclusive Deep-Inelastic ($e, e'\pi^\pm$) Reaction at Jefferson Lab
H. Gao *et al.*, *Eur.Phys.J.Plus* **126**:1-16, 2011.
120. * “Electroweak Physics at a Future Electron-Ion Collider”
K.S. Kumar, prepared for 18th International Workshop on Deep Inelastic Scattering and Related Subjects (DIS2010), *PoS DIS2010*:**269**, 2010.
121. “A Magnetically-Driven Piston Pump for Ultra-Clean Applications”
EXO-200 Collaboration, F. LePort *et al.*, arXiv:1104.5041v1 [physics.ins-det], *Rev.Sci.Instrum.* **82**:105114, 2011
122. “A Xenon Gas Purity Monitor for EXO”
EXO-200 Collaboration, A. Dobi *et al.*, arXiv:1106.1812v1 [physics.ins-det], *Nuclear Instruments and Methods in Physics Research* **A659**:215-228, 2011
123. * “Parity Violating and Standard Model Tests”
K.S. Kumar, prepared for the 19th International Spin Physics Symposium (SPIN2010), *J.Phys.Conf.Ser.* **295**:12007, 2011.
124. * “New Precision Limit on the Strange Form Factors of the Proton”
HAPPEX Collaboration, Z. Ahmed *et al.*, arXiv:1107.0913v1 [nucl-ex], *Physical Review Letters* **108**:102001, 2012.
125. “Gluons and the Quark Sea at High Energies: Distributions, Polarizations, Tomography”, Proceedings of the INT Program, D. Boer *et al.*, arXiv:1108.1713 [nucl-th]
126. “Observation of Two-Neutrino Double-Beta Decay in ^{136}Xe with EXO-200”
EXO-200 Collaboration, N. Ackerman *et al.*, arXiv:1108.4193v1 [nucl-ex], *Physical Review Letters* **107**:212501, 2011.
127. “Xenon Purity Analysis for EXO-200 via Mass Spectrometry”
EXO-200 Collaboration, A. Dobi *et al.*, arXiv:1109.1046 [physics.ins-det], *Nuclear Instruments and Methods in Physics Research* **A675**:40-46, 2012.
128. * “Parity-Violating Electron Scattering: An Experimental Overview”
K.S. Kumar, prepared for the Symposium on Many-Body Structure of Strongly Interacting Systems, *Eur.Phys.J.ST* **198**:329-341, 2011

129. * “Beyond the Standard Model with Electron and Muon Beams”
K.S. Kumar, prepared for the 24th International Nuclear Physics Conference (INPC2010), *J.Phys.Conf.Ser.* **312**:102001, 2011
130. * “Measurement of the Neutron Radius of ²⁰⁸Pb Through Parity-Violation in Electron Scattering”
PREX Collaboration, S. Abrahamyan *et al.*, arXiv:1201.2568 [nucl-ex], *Physical Review Letters* **108**:112502, 2012.
131. * “Weak Charge Form Factor and Radius of ²⁰⁸Pb Through Parity Violation in Electron Scattering”
C.J. Horowitz *et al.*, arXiv:1202.1468 [nucl-ex], *Physical Review* **C85**:032501, 2012.
132. “The EXO-200 Detector, Part I: Detector Design and Construction”
EXO-200 Collaboration, M. Auger *et al.*, arXiv:1202.2192 [physics.ins-det], *JINST* **7**:P05010, 2012.
133. “Fundamental Physics at the Intensity Frontier”
J.L. Hewett *et al.*, arXiv:1205.2671 [hep-ex], 2012.
134. “Virtual Compton Scattering and the Generalized Polarizabilities of the Proton at $Q^2 = 0.92$ and 1.76 GeV²”
Jefferson Lab Hall A Collaboration, H. Fonvielle *et al.*, *Physical Review* **C86**:015210, 2012.
135. “Search for Neutrinoless Double-Beta Decay in ¹³⁶Xe with EXO-200”
EXO-200 Collaboration, M. Auger *et al.*, arXiv:1205.5608 [hep-ex], *Physical Review Letters* **109**:032505, 2012.
136. “Physics Opportunities with the 12 GeV Upgrade at Jefferson Laboratory”
J. Dudek *et al.*, arXiv:1208.1244 [hep-ex], *Eur.Phys.J* **A48**:187, 2012.
137. * “New Measurements of the Transverse Beam Asymmetry in Elastic Electron Scattering from Selected Nuclei”
HAPPEX and PREX Collaborations, S. Abrahamyan *et al.*, arXiv:1208.6164 [nucl-ex], *Physical Review Letters* **109**:192501, 2012.
138. “Mu2e Conceptual Design Report”
Mu2e Collaboration, R.J. Abrams *et al.*, arXiv:1211.7019 [phys.ins-det], 2012.
139. “P2 - The Weak Charge of the Proton”
D. Becker *et al.*, *AIP Conf.Proc.* **1563**:78-81, 2013.
140. “Measurement of the Weak Charge of the ¹²C nucleus within the P2 Experiment in Mainz”
K. Gerz *et al.*, *AIP Conf.Proc.* **1563**:86-89, 2013.
141. * “MeV to TeV Physics with Parity-Violating Electron Scattering”
K.S. Kumar, prepared for the 50th International Winter Meeting on Nuclear Physics, Bormio, Italy, *PoS BORMIO2012* **042**, 2012.
142. “Electron Ion Collider: The Next QCD Frontier - Understanding the glue that binds us all”
A. Accardi *et al.*, arXiv:1212.1701 [nucl-ex], *Eur.Phys.J* **A52**:268, 2016.
143. “Discovering the New Standard Model: Fundamental Symmetries and Neutrinos”
V. Cianciolo *et al.*, arXiv:1212.5190 [nucl-ex], 2012.

144. *"Low Energy Measurements of the Weak Mixing Angle",
K.S. Kumar *et al.*, arXiv:1302.6263, *Ann.Rev.Nucl.Part.Sci.* **63**:237, 2013.
145. "Measurement of the Parity-Violating Electron-Deuteron Scattering in the Nucleon Resonance Region"
Jefferson Lab Hall A Collaboration, D. Wang *et al.*, *Physical Review Letters* **111**:082501, 2013.
146. "An Improved Measurement of the $2\nu\beta\beta$ Half-Life of ^{136}Xe with EXO-200"
EXO-200 Collaboration, J.B. Albert *et al.*, arXiv:1306.6106 [nucl-ex], *Physical Review* **C89**:015502, 2014.
147. "Electroweak Measurements of Neutron Densities by in CREX and PREX at JLab, USA"
C.J. Horowitz, K.S. Kumar and R. Michaels, arXiv:1307.3572, *Eur.Phys.J.* **A50**:48, 2014
148. "Measurement of Parity Violation in Electron-Quark Scattering"
PVDIS Collaboration, D. Wang *et al.*, *Nature* **506**:67-70, 2014.
149. "Search for Majorana Neutrinos with the first two years of EXO-200 data"
EXO-200 Collaboration, J.B. Albert *et al.*, *Nature* **510**:229-234, 2014
150. "An Apparatus to Manipulate and Identify Individual Ba Ions from Bulk Liquid Xenon"
T. Twelker *et al.*, arXiv:1407.0618, *Rev.Sci.Instrum.* **85**:095114, 2014
151. *"Parity-Violating Electron Scattering"
K.S. Kumar, prepared form the 20th International Conference on Particles and Nuclei (PANIC 14), *C14-08-24*, 433-438, 2014
152. "Search for Majoron-emitting Modes of Double-Beta Decay of ^{136}Xe with EXO-200"
EXO-200 Collaboration, J.B. Albert *et al.*, arXiv:1409.6829 [hep-ex], *Physical Review* **D90**:092004, 2014
153. "Spectroscopy of Ba and Ba^+ Deposits in Solid Xenon for Barium Tagging in nEXO"
B. Mong *et al.*, *Physical Review* **A90**:22505, 2015
154. "Measurement of Parity-Violating Asymmetry in Electron Deuteron Inelastic Scattering"
D. Wang *et al.*, arXiv:1411.3200 [nucl-ex], *Physical Review* **C91**:045506, 2015.
155. *"The MOLLER Experiment: A Ultra Precise Measurement of the Weak Mixing Angle in Møller Scattering"
MOLLER collaboration, J. Benesch *et al.*, arXiv:1411.4088 [nucl-ex], 2014
156. "An RF-only Ion-Funnel for Extraction from High Pressure Gases"
T. Brunner *et al.*, *Int.J.Mass Spectrometry* **379**:110, 2015
157. "Investigation of Radioactivity-Induced Backgrounds in EXO-200"
J.B. Albert *et al.*, arXiv:1503.06241 [physics.ins-det], *Physical Review* **C92**:015503, 2015
158. "Measurement of Ion Fraction and Mobility of α - and β -decay products in liquid xenon using the EXO-200 detector"
EXO-200 Collaboration, J.B. Albert *et al.*, arXiv:1506.00317 [nucl-ex], *Physical Review* **C92**:045504, 2015
159. "Search for $2\nu\beta\beta$ decay of ^{136}Xe to the 0_1^+ excited state of ^{136}Ba with EXO-200"
EXO-200 Collaboration, J.B. Albert *et al.*, arXiv:1511.04770 [nucl-ex], *Physical Review* **C93**:035501, 2016
160. "Cosmogenic Backgrounds to $0\nu\beta\beta$ in EXO-200"
EXO-200 Collaboration, J.B. Albert *et al.*, arXiv:1512.06835 [nucl-ex], *JCAP* **1604**:029, 2016

161. "First Search for Lorentz and CPT Violation in Double Beta Decay with EXO-200"
EXO-200 Collaboration, J.B. Albert *et al.*, arXiv:1601.07266 [nucl-ex], *Physical Review* **D93**:072001, 2016
162. *"Electroweak and BSM Physics at an EIC"
K.S. Kumar, prepared for the 6th International Conference on the Physics Opportunities of an Electron Ion Collider, Palaiseau, France, *EPJ Web Conf* **112**:03004, 2016
163. "An Optimal Energy Estimator to Reduce Correlated Noise in the EXO-200 Readout"
EXO-200 Collaboration, C.G. Davis *et al.*, arXiv:1605.06552 [physics.ins-det], *JINST* **11**:P07015, 2016
164. "Measurement of the Drift Velocity and Transverse Diffusion of Electrons in Liquid Xenon with the EXO-200 Detector"
EXO-200 Collaboration, J.B. Albert *et al.*, arXiv:1609.04467 [physics.ins-det], *Physical Review* **C95**:025502, 2016
165. *"Neutral Current Weak Interactions at an EIC"
Y.X. Zhao, A. Deshpande, J. Huang, K.S. Kumar and S. Riordan, arXiv:1612.06927 [nucl-ex], *Eur.Phys.J.* **A53**:55, 2017
166. "Trace Impurities in the Final Construction Materials of EXO-200"
D.S. Leonard *et al.*, arXiv:1703.10799 [physics.ins-det], *Nuclear Instruments and Methods in Physics Research* **A871**:169, 2017
167. *"Searches for Double-Beta Decay of ^{134}Xe with EXO-200"
EXO-200 Collaboration, J.B. Albert *et al.*, arXiv:1704.05042, *Physical Review* **D96**:092001, 2017
168. "Search for Double-Beta Decay with the Upgraded EXO-200 Detector"
EXO-200 Collaboration, J.B. Albert *et al.*, arXiv:1707.08707, *Physical Review Letters* **120**:072701, 2018.
169. *"Sensitivity and Discovery Potential of the nEXO Detector to Neutrinoless Double-Beta Decay"
nEXO Collaboration, J.B. Albert *et al.*, arXiv:1710.05075 [nucl-ex], *Physical Review* **C97**:065503, 2018
170. "Characterization of an Ionization Readout Tile for nEXO"
nEXO Collaboration, M. Jewell *et al.*, arXiv:1710.05109 [physics.ins-det], *JINST* **13**:P01006, 2018.
171. *"Study of Light Backgrounds from Relativistic Electrons in Air Lightguides"
S. Riordan *et al.*, arXiv:1710:07100 [physics.ins-det], *Nuclear Instruments and Methods in Physics Research* **A896**:96-102, 2018.
172. "Study of Nucleon Decays in EXO-200"
EXO-200 Collaboration, J.B. Albert *et al.*, arXiv:1710.07670, *Physical Review* **D97**:072007, 2018
173. "The P2 Experiment"
D. Becker *et al.*, *Eur.Phys.J* **A54**:208, 2018.
174. "Deep Neural Networks for Energy and Position Reconstruction in EXO-200"
EXO-200 Collaboration, S. Delaquis *et al.*, arXiv:1804.09641 [physics.ins-det], *JINST* **13**:P08023, 2018
175. *"nEXO Pre-Conceptual Design Report"
nEXO Collaboration, S. Al Kharusi *et al.*, arXiv:1805.11142 [physics.ins-det]

176. “VUV-Sensitive Silicon Photomultipliers for Xenon Scintillation Light Detectors in nEXO”
nEXO Collaboration, A. Jamil *et al.*, arXiv:1806.02220 [physics.ins-det], *IEEE Trans.Nucl.Sci.* **65**:2823-2833, 2018
177. “Imaging Single Barium Atoms in Solid Xenon for Barium Tagging in nEXO”
nEXO Collaboration, C. Chambers *et al.*, arXiv:1806.10964 [physics.ins-det], *Nature* **569**:7755, 203-207, 2019
178. “Study of Silicon Photomultiplier Performance in External Electric Fields”
nEXO Collaboration, X.L. Sun *et al.*, arXiv:1807.03007 [physics.ins-det], *JINST* **13**:T09006, 2018.
179. “Characterization of the Hamamatsu VUV4 MPPCs for nEXO”
nEXO Collaboration, G. Gallina *et al.*, arXiv:1903.03663 [astro-ph.IM], *Nuclear Instruments and Methods in Physics Research* **A940**:371-379, 2019.
180. * “Search for Neutrinoless Double-Beta Decay with Complete EXO-200 Dataset”
EXO-200 Collaboration, G. Anton *et al.*, arXiv:1906.02723 [hep-ex], *Physical Review Letters* **123**:161802, 2019
181. “Simulation of Charge Readout with Segmented Tiles in nEXO”
nEXO Collaboration, Z. Li *et al.*, arXiv:1907.07512 [physics.ins-det], *JINST* **14**:P09020, 2019.
182. “Measurement of the scintillation and ionization response of liquid xenon at MeV energies in the EXO-200 experiment”
EXO-200 Collaboration, G. Anton *et al.*, arXiv:1908.04128 [physics.ins-det], *Physical Review* **C101**:065501, 2020
183. “Reflectivity and PDE of VUV4 Hamamatsu SiPMs in Liquid Xenon”
nEXO Collaboration, P. Nakami *et al.*, arXiv:1910.06438 [physics.ins-det], *JINST* **15**:P01019, 2020
184. * “Measurements of electron transport in liquid and gas Xenon using a laser-driven photocathode”
nEXO Collaboration, O. Njaya *et al.*, arXiv:1911.11580 [physics.ins-det], *Nuclear Instruments and Methods in Physics Research* **A972**:163965, 2020
185. “Reflectance of Silicon Photomultipliers at Vacuum Ultraviolet Wavelengths”
nEXO Collaboration, P. Lv *et al.*, arXiv:1912.01841 [physics.ins-det], *IEEE Trans.Nucl.Sci.* **67**:2501-2510, 2020
186. * “Electroweak Probes of Neutron Skins in Nuclei”
K.S. Kumar, prepared for the Workshop on Nuclear Astrophysics in the New Era of Multi-Messenger Astronomy, Columbia University, NY, *Annals of Physics* **412**:168012, 2020
187. “Measurement of the Spectral Shape of the β -Decay of ^{137}Xe to the Ground State of ^{137}Cs in EXO-200 and Comparison with Theory”
EXO-200 Collaboration, S. Al Kharusi *et al.*, arXiv:2002.00108 [nucl-ex], *Physical Review Letters* **124**:232502, 2020
188. “Event reconstruction in a liquid xenon Time Projection Chamber with an optically-open field cage”
nEXO Collaboration, T. Stiegler *et al.*, arXiv:2009.10231 [physics.ins-det], *Nuclear Instruments and Methods in Physics Research* **A1000**:165239, 2020

189. *"Accurate Determination of the Neutron Skin Thickness of ^{208}Pb through Parity-Violation in Electron Scattering"
PREX Collaboration, D. Adhikari *et al.*, arXiv:2102.10767 [nucl-ex], *Physical Review Letters* **126**:172502, 2021
190. *"Science Requirements and Detector Concepts for the Electron-Ion Collider: EIC Yellow Report"
R. Abdul Khalek *et al.*, arXiv:2103.05419 [physics.ins-det]
191. "Measurement of the Nucleon F_2^n/F_2^p Structure Function Ratio by the Jefferson Lab MARATHON Tritium/Helium-3 Deep Inelastic Scattering Experiment"
Jefferson Lab Hall A Tritium Collaboration, D. Abrams *et al.*, arXiv:2104.05850 [nucl-ex], *Physical Review Letters* **128**:132003, 2022
192. "Reflectivity of VUV-sensitive silicon photomultipliers in liquid Xenon"
nEXO Collaboration, M. Wagenpfeil *et al.*, arXiv:2104.07997 [physics.ins-det], *JINST* **16**:P08002, 2021
193. "nEXO: neutrinoless double beta decay search beyond 10^{28} year half-life sensitivity"
nEXO Collaboration, G. Adhikari *et al.*, arXiv:2106.16243 [physics.ins-det], *J.Phys.* **G49**:015104, 2022
194. "The EXO-200 detector, part II: auxiliary systems"
EXO-200 Collaboration, S. Delaquis *et al.*, arXiv:2107.06007 [physics.ins-det], *JINST* **17**:P02015, 2022
195. "Search for Majoron-emitting modes of Xe136 double beta decay with the complete EXO-200 dataset"
EXO-200 Collaboration, S. Al Kharusi *et al.*, arXiv:2109.01327 [physics.ins-det], *Physical Review* **D104**:112002, 2021
196. *"New Measurements of the Beam-Normal Single Spin Asymmetry in Elastic Electron Scattering over a Range of Spin-0 Nuclei"
PREX and CREX Collaboration, D. Adhikari *et al.*, arXiv:2111.04250 [nucl-ex], *Physical Review Letters* **128**:142501, 2022