Elizabeth Worcester

Physicist
Department of Physics, Brookhaven National Laboratory
Adjunct Professor
Department of Physics and Astronomy, Stony Brook University

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etw@bnl.gov
office: 631-344-5325
cell: 773-220-6862

Education

- **University of Chicago** Chicago, IL
  Ph.D. Physics *2007*
  - Advisor: Edward Blucher
  - Dissertation: Measurements of Direct CP Violation, CPT Symmetry, and Other Parameters in the Neutral Kaon System
- **University of California at Los Angeles** Los Angeles, CA
  M.S. Physics *1998*
- **Georgia Institute of Technology** Atlanta, GA
  B.S. Physics *1997*
  - *With Highest Honor*
  - Certificate in American Literature

Research

- **DUNE/LBNE** Brookhaven National Lab, Stony Brook University
  Neutrino Oscillation Sensitivity at Long Baselines *2011-present*

  Studying the sensitivity of neutrino oscillation measurements, with a focus on the long-baseline muon neutrino disappearance and electron neutrino appearance measurements of mass hierarchy, CP violation, and the octant of θ_{23}, in the Deep Underground Neutrino Experiment (DUNE).

  - Deputy Physics Coordinator, 2016-present
  - PI US/Japan: "Development of a Novel 3D-projection Scintillator Tracker Technology for Near Detectors in Neutrino Experiments," 2018-present
  - DUNE Authorship and Publication Board, 2017-present
  - DUNE Web Committee, 2017-present
  - DUNE Newsletter Editorial Board, 2017-present
  - protoDUNE Cold Electronics QC Coordinator, 2017-2018
  - Co-convener of DUNE Long-Baseline Physics Working Group, 2015-2016
  - Co-convener of DUNE CD-1 Interim Systematics Task Force, 2015
  - Co-editor of DUNE Letter of Intent, 2014-2015
  - Co-convener of LBNE Long-Baseline Physics Working Group, 2014-2015
  - Chapter Editor of LBNE Science Book, 2013-2014

- **Short-Baseline Neutrino Program** Brookhaven National Lab
  SBND & ICARUS *2015-present*
  - SBND PI for BNL
  - SBND Deputy-L2 Project Manager for Cold Electronics, focusing on quality assurance, installation, and integration.

- **NA62** Brookhaven National Lab
  Investigation of Potential Involvement *2014-2015*

  Participated in the 2014 and 2015 runs of NA62, an experiment at CERN to measure the branching ratio of $K^+ \to \pi^+ \nu\bar{\nu}$ decay. Lead investigation of possible expanded US involvement in NA62.

- **Water-based Liquid Scintillator R&D** Brookhaven National Lab
  Beam Tests and Experiment Design *2012-present*

  Studying properties of WbLS in beam tests at BNL's NASA Space Radiation Laboratory. Contributing to experiment design, implementation of trigger and readout electronics, and data-taking. Studying performance of conceptual large WbLS detector for neutrino oscillation measurements.

- **Daya Bay Reactor Neutrino Experiment** Brookhaven National Lab
  Neutrino Oscillation Parameters in Reactor Antineutrino Disappearance *2011-present*

  Studying reactor electron-antineutrino disappearance at the Daya Bay experiment in Guongdong, China

  - Studied possible reduction in systematic uncertainties in the absolute antineutrino detection efficiency from combined analysis of neutron capture on hydrogen and gadolinium.
  - Studied Monte Carlo simulation of scintillation to improve understanding of energy linearity in Daya Bay detector.
  - Analyzed special calibration data to improve understanding of energy reconstruction.
  - Developed database tables containing PMT high voltage values and cable mappings for use in determining data quality.
  - Contributing to the day-to-day operation of the Daya Bay reactor neutrino experiment by monitoring data quality and taking data quality and DAQ shifts.

- **ORKA** Brookhaven National Lab
  R&D and Experiment Design *2011-2014*

  Member of collaboration proposing ORKA, an experiment to precisely measure the branching ratio of $K^+ \to \pi^+ \nu\bar{\nu}$ decay using the Main Injector at FNAL.

- **KTeV Analysis** University of Chicago
  Dalitz Decay Measurements *2010-2011*

  Facilitated study of Dalitz decays of neutral pions in data taken by the KTeV experiment at FNAL by performing preliminary investigation of a new analysis searching for dark photons in KTeV data and working with KTeV collaborators and computing experts at FNAL to preserve access to KTeV data.

- **KTeV Analysis** University of Chicago
  CP Violation and CPT Symmetry in the Neutral Kaon System *1999 - 2010*

  Made precise measurements of the direct CP violation parameter $Re(\epsilon'/\epsilon)$ and the kaon parameters Δm, τ_S, ϕ_ϵ, and $\Delta\phi$ using data from the KTeV experiment. Important aspects of the analysis include precise calibration of particle detectors, measurement of detector acceptance using a detailed Monte Carlo simulation, and careful evaluation of systematic uncertainties:

  - Responsible for calibration of the regenerator, the photon veto detectors, and the CsI calorimeter.
  - Responsible for development of improved simulation and reconstruction techniques for electromagnetic showers in the CsI calorimeter.
  - Responsible for software development, data analysis, and evaluation of systematic uncertainties for the half of the analysis studying kaon decays to neutral pions and worked closely with collaborators on the full analysis combining decays to neutral and charged pions.

- **KTeV 1999 Run** UCLA
  Detector Maintenance and Data Acquisition *1998 - 2000*
  - Responsible for re-commissioning and maintenance of the regenerator and photon veto detectors.
  - Responsible for data-taking and monitoring of the KTeV experiment during frequent shifts in the experiment control room.

- **MACHO/GMAN** University of Notre Dame
  Microlensing Observations *1997 - 1998*
  - Telescope operator for follow-up observation of microlensing events for the MACHO/GMAN collaboration using the 74-inch telescope at Mt. Stromlo Observatory in Canberra, Australia.
  - Contributed to development of analysis software used to study microlensing events.

- **CTIO REU Program** Cerro Tololo Inter-American Observatory
  Supernova Studies *1996*
  - Responsible for analysis of infrared photometry follow-up observations of supernova 1987a.
  - Participated in High-z Supernova Search to identify Type 1a supernovae at the CTIO 4-m telescope.

Presentations

- *Long-Baseline Neutrino Oscillation (DUNE/LBNF/LBNE)*
  - **Neutrino 2018** Heidelberg, Germany
    DUNE: Status and Science *June 2018*
  - **Johns Hopkins University/University of Maryland Seminar** Baltimore, MD
    The Science and Detectors of DUNE *March 2018*
  - **HEX Seminar, Rutgers University** New Brunswick, NJ
    The Science and Detectors of DUNE *March 2018*

- **Physics Colloquium, Colorado State University** — Fort Collins, CO
  The Science and Detectors of DUNE — *February 2018*
- **Stan/Physics Workshop** — Cambridge, MA
  Intro to Long-Baseline Physics and DUNE — *September 2017*
- **APS April Meeting 2017** — Washington, DC
  Long-Baseline Physics in DUNE — *January 2017*
- **Particle Physics Seminar, Stony Brook University** — Stony Brook, NY
  Preparing for Physics at DUNE — *November 2016*
- **ICHEP 2016** — Chicago, IL
  DUNE Physics Program — *August 2016*
- **Neutrino Day Public Lecture** — Lead, SD
  Catching Neutrinos at SURF — *July 2016*
- **Neutrino - Latin America Workshop, FNAL** — Batavia, IL
  Long-baseline Oscillation Physics in DUNE — *April 2016*
- **SLAC Experimental Seminar** — Menlo Park, CA
  The Path to CP Violation Discovery at DUNE — *March 2016*
- **NuInt15, Osaka University** — Osaka, Japan
  DUNE Strategy for Controlling Systematic Uncertainties — *November 2015*
- **NNN 2015, Stony Brook University** — Stony Brook, NY
  DUNE Strategy for Controlling Systematic Uncertainties — *October 2015*
- **Workshop for Large Neutrino Infrastructures, FNAL** — Batavia, IL
  Impact of Systematics on Future Long-Baseline Experiments — *April 2015*
- **WINP 2015, BNL** — Upton, NY
  What is Needed for Precision Measurements at LBNF? — *February 2015*
- **HEP Seminar, University of Pennsylvania** — Philadelphia, PA
  Towards Precision Measurements at LBNF — *January 2015*
- **NOW 2014** — Conca Specchiulla, Italy
  LBNE to LBNF — *September 2014*
- **Neutrino 2014** — Boston, MA
  Poster: LBNE Systematic Uncertainty — *June 2014*
- **EPS-HEP 2013** — Stockholm, Sweden
  LBNE — *July 2013*
- **Particle Physics Seminar, BNL** — Upton, NY
  LBNE in the Precision Era of Neutrino Oscillation — *February 2013*

- *Neutrinos: General*

  - **Pheno 2018, Univerisity of Pittsburgh** — Pittburgh, PA
    Neutrino Experiments: Present and Future — *May 2018*
  - **TRISEP Summer School on Elementary Particles, SNOLAB** — Sudbury, ON
    Long-baseline Neutrino Oscillation — *July 2017*
  - **Neutrino University Summer Lectures, FNAL** — Batavia, IL
    Current and Future Oscillation Experiments — *August 2016*

- *Observation of Electron Antineutrino Disappearance at Daya Bay*

  - **Symposium on Symmetries in Subatomic Physics** — Victoria, BC
    Recent Results from Daya Bay — *June 2015*
  - **Division of Particles and Fields** — Santa Cruz, CA
    August 2013

- **HEP Seminar, University of Pennsylvania** — Philadelphia, PA, *April 2012*

- *ORKA: The Golden Kaon Experiment*
  - **HEP Seminar, University of Virginia** — Charlottesville, VA, *September 2013*
  - **Snowmass Community Summer Study** — Minneapolis, MN, *July 2013*
    Probing New Physics with ORKA
  - **Brookhaven Forum** — Upton, NY, *May 2013*
  - **Kaon 2013** — Ann Arbor, MI, *May 2013*
  - **BEACH 2012** — Wichita, KS, *July 2012*
  - **Users' Meeting, FNAL** — Batavia, IL, *June 2012*
  - **Project X Physics Study, FNAL** — Batavia, IL, *June 2012*
    Physics Breadth

- *KTeV Measurement of $Re(\epsilon'/\epsilon)$ and Other Kaon Parameters*
  - **Project X Physics Study, FNAL** — Batavia, IL, *June 2012*
    The KTeV CsI Calorimeter
  - **Particle Physics Seminar, BNL** — Upton, NY, *August 2011*
  - **Division of Particles and Fields** — Detroit, MI, *July 2009*
  - **Heavy Quarks and Leptons** — Melbourne, Australia, *June 2008*
  - **HEP Seminar, University of Chicago** — Chicago, IL, *April 2008*
  - **Wine and Cheese Seminar, FNAL** — Batavia, IL, *February 2008*
  - **Rencontres de Blois** — Blois, France, *June 2002*

- *Other Topics*
  - **FroST 2016, FNAL** — Batavia, IL, *March 2016*
    WCD-Like Detectors and DUNE Long-Baseline Physics
  - **Dark Interactions, BNL** — Upton, NY, *June 2014*
    Dark Photon Searches in Meson-Decay Experiments
  - **Water-Based Liquid Scintillator Workshop** — Berkeley, CA, *May 2014*
    Long-baseline physics with WbLS
  - **American Astronomical Society** — Toronto, Canada, *January 1997*
    Poster: Infrared Photometry of SN1987a

Selected Publications

- T.Alion *et al.*, *Experiment Simulation Configurations Used in DUNE CDR*, 2016, arXiv:1606.09550.
- R.Acciarri *et al.*, *Long-Baseline Neutrino Facility (LBNF) and Deep Underground Neutrino Experiment (DUNE) Conceptual Design Report Volume 2: The Physics Program for DUNE at LBNF*, 2015, arXiv:1512.06148.
- D. Cherdack and E. Worcester, *Summary of Long-Baseline Systematics Session at CETUP*14*, 2015, arXiv:1501.05054.
- J.R. Alonso *et al.*, *Advanced Scintillator Detector Concept (ASDC): A Concept Paper on the Physics Potential of Water-Based Liquid Scintillator*, 2014, arXiv:1409.5864.
- M. Bass *et al.*, *Baseline optimization for the measurement of CP violation and mass hierarchy in a long-baseline neutrino oscillation experiment*, Phys.Rev.Lett. 91, 2015, arXiv:1311.0212.
- F.P. An *et al.*, *Spectral measurement of electron antineutrino oscillation amplitude and frequency at Daya Bay*, Phys.Rev.Lett. 112, 2014, arXiv:1310:6732.
- LBNE Collaboration, *The Long-Baseline Neutrino Experiment: Exploring Fundamental Symmetries of the Universe*, 2013, arXiv:1307.7335.
- M. Bishai *et al.*, *Precision Neutrino Oscillation Measurements Using Simultaneous, High-Power, Low-Energy Project-X Beams*, 2013, arXiv:1307.0807.
- E.T. Worcester for the ORKA Collaboration, *ORKA, The Golden Kaon Experiment: Precision measurement of* $K^+ \to \pi^+ \nu\bar{\nu}$ *and other rare processes*, PoS(KAON13)035, 2013, arXiv:1305.7245.
- E. Abouzaid *et al.*, *Precise Measurements of Direct CP Violation, CPT Symmetry, and Other Parameters in the Neutral Kaon System*, Phys. Rev. D 83, 2011, arXiv:1011.0127v2 [hep-ex].
- A. Alavi-Harati *et al.*, *Measurements of Direct CP Violation, CPT Symmetry, and Other Parameters in the Neutral Kaon System*, Phys. Rev. D 67, 2003, arXiv:hep-ex/0208007v1.
- D.P. Bennett *et al.*, *Gravitational microlensing evidence for a planet orbiting a binary star system*, Nature, Volume 402, Issue 6757, pp 57-59, 1999.
- P. Garnavich *et al.*, 1996 International Astronomical Union Circular 6358.

Awards & Honors

- **Fundamental Physics Prize (Daya Bay Collaboration)** Breakthrough Prize *2016*
- **Real.Strong.Women. of Distinction Award** Alpha Chi Omega *2015*
- **Young Scientist Award** Heavy Quarks and Leptons, Melbourne *2008*
- **Graduate Opportunity Fellowship** UCLA *1997*

Service

- **Executive Committee Member at Large** DPF *2018-2019*
- **Neutrino Oscillation Workshop Session Convener** Ostuni,Italy *2018*
- **BWIS Goldhaber Prize Selection Committee** Brookhaven National Lab *2018*
- **Intensity Frontier Comparative Review Committee** DOE *2017*
- **Stan/Physics Workshop Organzier** BNL/MIT *2017*
- **Leona Woods Selection Committee** Brookhaven National Lab *2017-present*
- **Brookhaven Forum Organizing Committee** Brookhaven National Lab *2017*
- **Physics and Astronomy Seminar Co-Organizer** Stony Brook University *2017*
- **Cold Electronics Mini Summer School Organizer** Brookhaven National Lab *2016*
- **Neutrino Physics Center Advisory Board** Fermilab *2016-present*
- **PhyStat-ν Scientific Organizing Committee** Fermilab, Batavia, IL *2016*
- **PhyStat-ν Scientific Organizing Committee** IPMU, Kashiwa, Japan *2015-2016*
- **Particle Physics Seminar Committee** Brookhaven National Lab *2013-2015*
- **Brookhaven Forum Organizing Committee** Brookhaven National Lab *2015*
- **Co-editor of Proceedings** CETUP*14, Deadwood, SD *2014-2015*
- **Co-convener for Long-baseline Systematics** CETUP*14, Deadwood, SD *2014*
- **Co-convener for Quark and Lepton Flavor Physics** DPF, Santa Cruz, CA *2013*

Teaching

- **Professor**
  - **Graduate Seminar (Phy 599)** — Stony Brook University, *Fall 2018*
- **Teaching Assistant**
  - **Elementary Particle Physics** — UCLA, *Winter 1998*
  - **Introduction to Electromagnetism** — UCLA, *Fall 1997*
  - **Calculus of Multivariable Integration** — Georgia Tech, *Fall 1996*

Mentoring

- Postdoctoral Researchers: Matthew Bass (Goldhaber Fellow, BNL), Michael Mooney (Colorado State University), Arbin Timilsina (BNL)
- Graduate Students: Kuan Qi (Stony Brook University)
- Undergraduate Students: Amanda Depoain, August Gula, Jacob Larkin

Appointment History

- **Physicist** — Brookhaven National Lab, *2017-present*
- **Adjunct Professor** — Stony Brook University, *2016-present*
- **Associate Physicist** — Brookhaven National Lab, *2015-2017*
- **Assistant Physicist** — Brookhaven National Lab, *2013-2015*
- **Postdoctoral Research Associate** — Brookhaven National Lab, *2011-2013*
- **Part-time Research Consultant** — University of Chicago, *2010-2011*
- **Stay-at-home mother** — No employer, *2007-2010*
- **Graduate Research Assistant** — University of Chicago, *2002-2007*

- **Graduate Research/Teaching Assistant** UCLA
  1997-2002
- **Telescope Operator/Research Assistant** University of Notre Dame
  1997

Personal Information

Full Name: Elizabeth Turner Worcester
Former Name: Shirley Elizabeth Turner (before August 24, 2002)
Date of Birth: September 23, 1975
Place of Birth: Berlin, Vermont
Home address: 351 Pipe Stave Hollow Road, Miller Place, NY 11764

Full Publication List

1. B. Abi *et al.*, *The DUNE Far Detector Interim Design Report Volume 3: Dual-Phase Module*, 2018, arXiv:1807.10340.
2. B. Abi *et al.*, *The DUNE Far Detector Interim Design Report Volume 2: Single-Phase Module*, 2018, arXiv:1807.10327.
3. B. Abi *et al.*, *The DUNE Far Detector Interim Design Report Volume 1: Physics, Technology and Strategies*, 2018, arXiv:1807.10334.
4. *D.L Adams *et al.*, *Photon detector system timing performance in the DUNE 35-ton prototype liquid argon time projection chamber*, JINST13, P06022, 2018, arXiv:1803.06379.
5. S. Gao *et al.*, *The Development of Front-End Readout Electronics for ProtoDUNE-SP LAr TPC*, PoS TWEPP-17, 2017.
6. *F.P. An *et al.*, *Cosmogenic neutron production at Daya Bay*, Phys.Rev.D97, 052009, 2017, arXiv:1711.00588.
7. *F.P. An *et al.*, *Seasonal Variation of the Underground Cosmic Muon Flux Observed at Daya Bay*, JCAP 1801, 001, 2018, arXiv:1708.01265.
8. B. Abi *et al.*, *The Single-Phase ProtoDUNE Technical Design Report*, FERMILAB-DESIGN-2017-02, 2017, arXiv:1706.07081.
9. *F.P. An *et al.*, *Evolution of the Reactor Antineutrino Flux and Spectrum at Daya Bay*, Phys.Rev.Lett. 118 (2017), arXiv:1704.01082.
10. E. Worcester for the DUNE collaboration, *DUNE Strategy for Controlling Systematic Uncertainties*, JPS Conf. Proc. 12, 010012, 2016.
11. *F.P. An *et al.*, *Measurement of electron antineutrino oscillation based on 1230 days of operation of the Daya Bay experiment*, Phys.Rev.D95, 072006, 2017, arXiv:1610.04802.
12. *F.P. An *et al.*, *Study of the wave packet treatment of neutrino oscillation at Daya Bay*, Eur.Phys.J. C77, 606, 2017, arXiv:1608.01661.
13. *F.P. An *et al.*, *Improved Measurement of the Reactor Antineutrino Flux and Spectrum at Daya Bay*, Chin.Phys. C41, 013002, 2017, arXiv:1607.05378.
14. *P. Adamson *et al.*, *Limits on Active to Sterile Neutrino Oscillations from Disappearance Searches in the MINOS, Daya Bay, and Bugey-3 Experiments*, Phys.Rev.Lett. 117, 2016, arXiv:1607.01177.

15. *F.P. An *et al.*, *Improved Search for a Light Sterile Neutrino with the Full Configuration of the Daya Bay Experiment*, Phys.Rev.Lett. 117, 2016, arXiv:1607.01174.

16. T.Alion *et al.*, *Experiment Simulation Configurations Used in DUNE CDR*, 2016, arXiv:1606.09550.

17. R.Acciarri *et al.*, *Long-Baseline Neutrino Facility (LBNF) and Deep Underground Neutrino Experiment (DUNE) Conceptual Design Report Volume 2: The Physics Program for DUNE at LBNF*, 2015, arXiv:1512.06148.

18. E. Worcester for the LBNE collaboration, *Precision Measurements of Long-Baseline Neutrino Oscillation at LBNF*, Nucl.Part.Phys.Proc. 265-266, 2015.

19. *L. Bignell *et al.*, *Characterization and Modeling of a Water-based Liquid Scintillator*, JINST 10 (2015) P12009, arXiv:1508.07029.

20. *L. Bignell *et al.*, *Measurement of Radiation Damage of Water-based Liquid Scintillator and Liquid Scintillator*, JINST 10 (2015) P10027, arXiv:1508.07023.

21. *F.P. An *et al.*, *Measurement of the Reactor Antineutrino Flux and Spectrum at Daya Bay*, Phys.Rev.Lett. 116, 2016, arXiv:1508.04233.

22. *F.P. An *et al.*, *The Detector System of the Daya Bay Reactor Antineutrino Experiment*, Nucl.Instrum.Meth. A811, 2016, arXiv:1508.03943.

23. *F.P. An *et al.*, *A new measurement of antineutrino oscillation with the full detector configuration at Daya Bay*, Phys.Rev.Lett. 115, 2015, arXiv:1505.03456.

24. C. Adams *et al.*, *The Intermediate Neutrino Program*, 2015, arXiv:1503.06637.

25. D. Cherdack and E. Worcester, *Summary of Long-Baseline Systematics Session at CETUP*14*, 2015, arXiv:1501.05054.

26. J.R. Alonso *et al.*, *Advanced Scintillator Detector Concept (ASDC): A Concept Paper on the Physics Potential of Water-Based Liquid Scintillator*, 2014, arXiv:1409.5864.

27. *F.P. An *et al.*, *Search for a Light Sterile Neutrino at Daya Bay*, Phys.Rev.Lett. 113, 2014, arXiv:1407.7259.

28. *F.P. An *et al.*, *The Muon System of the Daya Bay Reactor Antineutrino Experiment*, Nucl.Instr.Meth. A773, 2014, arXiv:1407.0275.

29. *F.P. An *et al.*, *Independent Measurement of Theta13 via Neutron Capture on Hydrogen at Daya Bay*, Phys.Rev.D 90, 2014, arXiv:1406.6468.

30. E. Worcester for the LBNE Collaboration, *LBNE In the Precision Era of Neutrino Oscillation*, PoS EPS-HEP2013, 2014.

31. *F.P. An *et al.*, *Spectral measurement of electron antineutrino oscillation amplitude and frequency at Daya Bay*, Phys.Rev.Lett. 112, 2014, arXiv:1310:6732.

32. J.N. Butler (Convener) *et al.*, *Report of the Quark Flavor Physics Working Group*, 2013, arXiv:1311.1076.

33. *M. Bass *et al.*, *Baseline optimization for the measurement of CP violation and mass hierarchy in a long-baseline neutrino oscillation experiment*, Phys.Rev.Lett. 91, 2015, arXiv:1311.0212.

34. A. de Gouvea *et al.*, *Neutrinos*, 2013, arXiv:1310.4340.

35. E. Worcester for the Daya Bay Collaboration, *Observation of electron antineutrino disappearance by the Daya Bay Reactor Neutrino Experiment*, DPF Proceedings, 2013, arXiv:1309.7991.

36. R. Lipton *et al.*, *Compendium of Instrumentation Whitepapers on Frontier Physics Needs for Snowmass 2013*, 2013.

37. J. Anderson *et al.*, *Snowmass 2013 Young Physicists Science and Career Survey Report*, 2013, arXiv:1307.8080.

38. X. Qian *et al.*, *A Second Detector Focusing on the Second Oscillation Maximum at an Off-axis Location to Enhance the Mass Hierarchy Discovery Potential in LBNE10*, 2013, arXiv:1307.7406.

39. LBNE Collaboration, *The Long-Baseline Neutrino Experiment: Exploring Fundamental Symmetries of the Universe*, 2013, arXiV:1307.7335.

40. M. Bishai *et al.*, *Precision Neutrino Oscillation Measurements Using Simultaneous, High-Power, Low-Energy Project-X Beams*, 2013, arXiv:1307.0807.

41. A.S. Kronfeld, R.S. Tschirhart, *et al.*, *Project X: Physics Opportunities*, 2013, arXiv:1306.5009.

42. E.T. Worcester for the ORKA Collaboration, *ORKA, The Golden Kaon Experiment: Precision measurement of $K^+ \to \pi^+ \nu\bar{\nu}$ and other rare processes*, PoS(KAON13)035 (2013), arXiv:1305.7245.

43. *H. Huang *et al.*, *Manual Calibration System for Daya Bay Reactor Neutrino Experiment*, JINST 8 P09013, 2013, arXiv:1305.2343.

44. *F.P. An *et al.*, *Improved Measurement of Electron Antineutrino Disappearance at Daya Bay*, Chinese Physics C37, 011001, 2013, arXiv:1210.6327.

45. *E.T. Worcester for the ORKA Collaboration, *ORKA: The Golden Kaon Experiment*, Nuclear Physics B (Proceedings Supplements) (2012), pp. 285-290, arXiv:1211.4883.

46. F. DeJongh *et al.*, *Electromagnetic Calorimetry in Project X Experiments*, `http://www.snowmass2013.org/tiki-download_file.php?fileId=155`, 2012.

47. J. Appel *et al.*, *Physics Working Group Report to the LBNE Reconfiguration Steering Committee*, `www.fnal.gov/directorate/lbne_reconfiguration`, 2012.

48. J Goon *et al.*, *Conceptual Design Report developed for the Water Cherenkov Detector (WCD) option for the far detector of the Long Baseline Neutrino Experiment*, 2012, arXiv1204.2295.

49. J.L. Hewett *et al.*, *Fundamental Physics at the Intensity Frontier*, 2012, arXiv:1205.2671.

50. M. Bishai *et al.*, *Neutrino Oscillations in the Precision Era*, 2012, arXiv1203.4090.

51. *F.P. An *et al.*, *Observation of electron-antineutrino disappearance at Daya Bay*, Phys.Rev.Lett. 108, 2012.

52. J. Comfort *et al.*, *Measurement of the $K^+ \to \pi^+ \nu\bar{\nu}$ decay at Fermilab*, FERMILAB-PROPOSAL-1021, 2011.

53. *E. Abouzaid *et al.*, *Search for the rare decays $K_L \to \pi^0\pi^0\mu^+\mu^-$ and $K_L \to \pi^0\pi^0 X^0 \to \pi^0\pi^0\mu^+\mu^-$*, Phys.Rev.Lett. 107, 2011.

54. *E. Abouzaid *et al.*, *Precise Measurements of Direct CP Violation, CPT Symmetry, and Other Parameters in the Neutral Kaon System*, Phys.Rev.D 83, 2011.

55. *E. Abouzaid *et al.*, V. Bernard, M. Oertel, E. Passemar, J. Stern, *Dispersive analysis of K_{L mu3} and K_{L e3} scalar and vector form factors using KTeV data*, Phys.Rev.D 81, 2010.

56. E.T. Worcester, *The Final Measurement of Epsilon'/Epsilon from KTeV*, Proceedings of DPF-2009, Detroit, MI, 2009.

57. E.T. Worcester, *The Final Measurement of Epsilon'/Epsilon from KTeV*, Proceedings of Heavy Quarks and Leptons, Melbourne, 2008.

58. *E. Abouzaid *et al.*, *Detailed Study of the KL → 3pi0 Dalitz Plot*, Phys.Rev.D 78:032009, 2008.
59. *E. Abouzaid *et al.*, *Final Results from the KTeV Experiment on the Decay K(L) → pi0 gamma gamma*, Phys.Rev.D 77:112004, 2008.
60. *E. Abouzaid *et al.*, *Determination of the Parity of the Neutral Pion via the Four-Electron Decay*, Phys.Rev.Lett. 100:182001, 2008.
61. *E. Abouzaid *et al.*, *Search for lepton flavor violating decays of the neutral kaon*, Phys.Rev.Lett. 100:131803, 2008.
62. *E. Abouzaid *et al.*, *Search for the Rare Decay K(L) → pi0 pi0 gamma*, Phys.Rev.D 78:032014, 2008.
63. E.T. Worcester, *Measurements of Direct CP Violation, CPT Symmetry, and Other Parameters in the Neutral Kaon System*, Ph.D. thesis, The University of Chicago, December 2007.
64. *E. Abouzaid *et al.*, *Measurement of the Decay K(L) → pi0 e+ e- gamma*, Phys.Rev.D 76:052001, 2007.
65. *E. Abouzaid *et al.*, *First observation of K(L) → pi+- e-+ nu e+ e-*, Phys.Rev.Lett. 99:081803, 2007.
66. *E. Abouzaid *et al.*, *Measurements of the Decay K(L) → e+ e- gamma*, Phys.Rev.Lett. 99:051804, 2007.
67. *E. Abouzaid *et al.*, *Measurement of the rare decay pi0 → e+ e-*, Phys.Rev.D 75:012004, 2007.
68. *E. Abouzaid *et al.*, *Xi0 and anti-Xi0 Polarization Measurements at 800-GeV/c*, Phys.Rev.D 75:012005, 2007.
69. *E. Abouzaid *et al.*, *Improved K(L) → pi+- e-+ nu form factor and phase space integral with reduced model uncertainty*, Phys.Rev.D 74:097101, 2006.
70. *E. Abouzaid *et al.*, *Measurement of direct photon emission in the K(L) → pi+ pi- gamma decay mode*, Phys.Rev.D 74:032004, 2006.
71. *E. Abouzaid *et al.*, *A Measurement of the K0 Charge Radius and a CP Violating Asymmetry Together with a Search for CP Violating E1 Direct Photon Emission in the Rare Decay KL → pi+pi-e+e-*, Phys.Rev.Lett. 96:101801, 2006.
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