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Appointments

2019 – Present	**Chair,** Department of Physics, Yale University http://physics.yale.edu
2013 – Present	**Director**, Wright Laboratory, Yale University http://wlab.yale.edu
2013 – Present	**Professor of Physics,** Yale University http://heegerlab.yale.edu
2012 – 2013	**Professor of Physics**, University of Wisconsin, Madison
2009 – 2012	**Associate Professor of Physics** (with tenure) University of Wisconsin, Madison
2006 – 2009	**Assistant Professor of Physics** University of Wisconsin, Madison
2002 – 2006	**Chamberlain Fellow, Physicist Scientist** Lawrence Berkeley National Laboratory, Physics Division
1996 – 2002	**Research Assistant** University of Washington, Seattle Center for Experimental Nuclear Physics and Astrophysics

Affiliations

Since 2016	**Associate Member**, TD Lee Institute (TDLI), Shanghai
Since 2008	**Senior Scientist**, Institute for Physics and Mathematics of the Universe (IPMU), Tokyo, Japan
Since 2006	**Guest Scientist,** Lawrence Berkeley National Laboratory (LBNL), Nuclear Science Division, Berkeley, CA, USA

Professional Development

2010	**Masters Certificate in Project Management (MCPM)** University of Wisconsin, School of Business

Education & Degrees

2002	**Ph.D. in Physics** *"Model-Independent Measurement of the Neutral Current Interaction Rate of Solar ^{8}B Neutrinos with Deuterium in the Sudbury Neutrino Observatory"* University of Washington, Seattle, Washington, USA Thesis Advisor: Prof. R.G.H. Robertson
1999	**Master of Arts (M.A.)** Oxford University, Oxford, England

1996 **Master of Science (M.Sc.) in Physics**
University of Washington, Seattle, Washington, USA

1995 **Bachelor of Arts (B.A. Hons.) in Physics**
Oxford University, England

Research Projects & Scientific Leadership

Since 2017 **CUPID** (CUORE Upgrade with Particle Identification)
https://cupid.lngs.infn.it/
- International Co-spokesperson of a collaboration of about 200 scientists (2021-Present)
- Steering Committee and Executive Board, Member (2017-Present)

Since 2011 **PROSPECT** (A Precision Oscillation and Spectrum Experiment),
http://prospect.yale.edu

- PI and Co-spokesperson of PROSPECT
- Leading collaboration of ~ 70 people for a search for short-baseline sterile neutrino oscillations and a high-precision measurement of the reactor antineutrino spectrum at the High Flux Isotope Reactor (HFIR) at Oak Ridge National Laboratory (ORNL)
- Coordinated the R&D and technical development of the project as well as the assembly at the Yale Wright Laboratory and installation at ORNL
- Overseeing the scientific program of the collaboration including publication plan, analysis strategy, and operations planning

2004-2021 **Daya Bay** (θ_{13} Reactor Antineutrino Experiment)
http://dayabay.ihep.ac.cn

- Elected Executive Board Member (2007-2017)
- US Antineutrino Detector Manager (2006-2017)
- Institutional Representative (2006-Present)
- Reactor flux working group co-convener (2011-2015)
- Nominated as Daya Bay Co-Spokesperson (Dec 2010)
- Internal reviewer for first Daya Bay physics publications (2011-2012)
- Led and supervised group of up to 22 technical and scientific staff at the University of Wisconsin and Physical Sciences Laboratory for the construction of the Daya Bay experiment
- Responsible for the overall design, assembly, and commissioning of the US contribution to the Daya Bay Antineutrino Detectors ($11.5M)
- Responsible for the design and fabrication of the detectors' target vessels and a system for measuring the detectors' target mass
- Coordinates and manages the largest US university contribution to the Daya Bay reactor neutrino experiment

Since 2005 **CUORE** (Cryogenic Underground Observatory for Rare Events)
http://cuore.yale.edu

- Executive Board, Member (2014-Present)
- Collaboration Council, Chair (2012-2014)
- Collaboration Council, Member (2009-Present)
- Technical Coordinator Board, Member (2009-Present)
- Data Vetting Committee, Chair (2009-2012)
- Scientific lead for the Detector Calibration Subsystem (2006-2019)

- Responsible for the design, development and construction of a low-temperature and low-background, energy calibration system for the CUORE bolometric double beta decay experiment

Since 2015 **Project 8**
http://www.project8.org

- Institutional representative and Project 8 Science Board Member
- Scientific lead of Yale group, coordinated Yale activities on
  - Design and construction of cryogenic hardware for Phase III
  - Developing simulation framework for cyclotron radiation electron spectroscopy (CRES)
  - Machine learning for event reconstruction in Project 8
  - Analysis of Phase II data

Completed Scientific Projects

2010-2015 **DM-Ice** (Dark Matter Search in Ice at the South Pole**)**
http://dm-ice.yale.edu/

- Collaborator on the DM-Ice project
- Development of ultralow-background NaI crystals for DM-Ice
- Commissioned two NaI(Tl) detectors at the South Pole (Jan-Feb 2011)
- Helped develop and build two prototype NaI dark matter detectors for deployment 2.5km deep inside the Antarctic Ice at the South Pole (May-Dec 2010).

2002–2010 **KamLAND** (Kamioka Liquid Scintillator Antineutrino Detector)
http://kamland.lbl.gov/research-projects/kamland

- Scientific lead and system manager for the KamLAND full-volume (4π) calibration system.
- Responsible for the design, construction, and operation of this calibration system which led to an improvement in KamLAND's fiducial volume uncertainty from 4.7% to 1.8% with a comparable improvement in the uncertainty of the neutrino mass splitting Δm_{12}
- Participated in the analysis of first KamLAND data for the discovery of reactor antineutrino disappearance

1996–2004 **SNO** (Sudbury Neutrino Observatory)
https://falcon.phy.queensu.ca/SNO/

- SNO Analysis Coordination Committee Member (2001-2003)
- Performed a model-independent analysis of the neutral-current interaction rate with Ph.D. thesis advisor R.G.H. Robertson
- SNO won the Nobel Prize in 2015 for the discovery of neutrino flavor transformation

University Leadership & Special Projects

Since 2019 **Physical Sciences and Engineering Building (PSEB**)

- Lead and chair committee to develop plans and programming for PSEB
- Lead and co-chair task force to develop the vision and program for an Advanced Instrumentation Development Center (AIDC)

2020-2022 **Science and Engineering Chairs Council (SECC)**

- Chair of the SECC
- Co-led initiative for a prize postdoctoral fellowship program to increase diversity in the sciences

Since 2018 **Frontiers of Instrumentation at Yale**

- Organized the instrumentation community at Yale https://instrumentation.yale.edu
- Led the organization of the first and second Yale Day of Instrumentation https://instrumentation.yale.edu/yale-day-instrumentation-2020
- Advanced an initiative for instrumentation development at Yale as part of the University Science Strategy Committee https://research.yale.edu/ussc-report

2013-2017 **Yale Wright Laboratory**

- Led the transformation of the Wright Nuclear Structure Laboratory (WNSL) into the new Yale Wright Laboratory with a broad program in experimental nuclear, particle, and astrophysics. http://wlab.yale.edu
- Developed the scientific and programmatic vision for the new Yale Wright Laboratory, produced a strategic plan, and oversaw its realization
- Produced videos and visual media on the transformation of the Yale Wright Laboratory and the student experiences at Wright Laboratory https://wlab.yale.edu/videos
- Developed the identity, branding, and communication materials for Wright Lab including brochures, websites, and handouts
- Coordinated tours, outreach, events for the public and the Yale community

2013-2015 **Wright Nuclear Structure Laboratory Accelerator (WNSL) Decommissioning**

- Led the decommissioning of the nuclear tandem accelerator in the Wright Nuclear Structure Laboratory.
- Coordinated between the Department of Energy, Office of Science, Nuclear Physics and Yale University the decommissioning of the accelerator systems, the disposition of equipment, and the remediation of the facility

Awards, Honors, and Fellowships

2016 **Breakthrough Prize in Fundamental Physics**
Co-recipient of prize to 3 collaborations: SNO, KamLAND, and Daya Bay
https://breakthroughprize.org/Laureates/1
"For the fundamental discovery and exploration of neutrino oscillations, revealing a new frontier beyond, and possibly far beyond, the standard model of particle physics"

2013 **APS Fellowship**
American Physical Society, nominated by DNP
"For his contributions to the highest impact experiments in neutrino physics, especially for the major roles he played in the Daya Bay and KamLAND experiments"

2012 **Kavli Fellow,** National Academy of Sciences,
24th Annual Kavli Frontiers of Science Symposium

2011–2012 **H.I. Romnes Faculty Fellowship**, University of Wisconsin
http://www.grad.wisc.edu/research/researchfunding/nkr/warfnamed.html

2009–2011	**Alfred P. Sloan Research Fellow,** http://www.sloan.org/fellowships/page/19
2008	**Outstanding Junior Investigator Award**, DOE Office of High Energy Physics, *"Precision Studies of the Reactor Antineutrino Spectrum and the Search for θ_{13} at Daya Bay"* http://www.er.doe.gov/hep/files/pdfs/OJI_ALL_Awards.pdf
2008	**Outstanding Junior Investigator Award**, DOE Office of Nuclear Physics, *"Investigation of Neutrino Properties with Bolometric Detectors"* http://www.sc.doe.gov/np/program/oji.html Department of Energy (DOE) Outstanding Junior Investigator Awards in both High Energy and Nuclear Physics.
2004	**Michelson Postdoctoral Prize Lectureship** Case Western Reserve University http://www.phys.cwru.edu/events/mppl-prior.php
2003	**APS Dissertation Award in Nuclear Physics** American Physical Society, Division of Nuclear Physics http://www.aps.org/praw/dissnucl/03winner.html *"For his role in generating and analysis of the data from the Sudbury Neutrino Observatory, and the resulting resolution of the solar neutrino problem."*
2002-2005	**Chamberlain Fellowship** Lawrence Berkeley National Laboratory, Physics Division, USA
2001	**Member of the Institute of Physics (MInstP)** Institute of Physics (IOP), London, UK
2000	**Mellam Fellowship** University of Washington, Seattle, Washington, USA http://www.mellam.org *"…selected for this fellowship because of outstanding contributions to research."*
2000	**Dahlstrom Prize** University of Washington, Seattle, Washington, USA *"Prize to an outstanding graduate student in experimental physics who has passed the General Exam."*
1996	**Sebastian Karrer Memorial Scholarship** University of Washington, Seattle, Washington, USA *"The Karrer Memorial Scholarship … is given to an outstanding student in the first year of graduate study."*
1994 – 1995	**Academic Scholarship** Oxford University, College St. Edmund Hall, England
1993	**Academic Exhibition and Bursary** Oxford University, College St. Edmund Hall, England
1992 – 1997	**Stipendiat der Studienstiftung des Deutschen Volkes** **(German National Academic Foundation)** http://www.studienstiftung.de/

1992	**Lions Club Scholarship** for cultural exchange and travel in South Africa

Professional and Synergistic Activities

2022	Reviewer for DOE Nuclear Physics (NP) and DOE High-Energy Physics (HEP)
2021	Reviewer for German Research Foundation (DFG), National Science Foundation (NSF), DOE High-Energy Physics (HEP)
2020 – 2022	Coordinating Panel for Advanced Detectors (CPAD), *Co-Chair*
2019 – 2020	BESAC neutron subcommittee, *Member* Co-author of "The Scientific Justification for a U.S. Domestic High-Performance Reactor-Based Research Facility"
2019	DOE Nuclear Physics, Committee of Visitors, *Member*
2018	Academic Review of Institute for Basic Science (IBS), Center for Underground Physics, Korea, *Member*
2018	Visiting Committee, Caltech PMA Division, *Member*
2018	Academic Review Committee, Columbia University, Nevis Laboratory, *Member*
2018	Natural Sciences and Engineering Research Council of Canada (NSERC), T2K Expert review committee, *Chair*
2018	Initiative for excellence of the German Research Foundation (DFG), *Member*
2017 – 2018	National Science Foundation, *Reviewer and Panel Reviewer*
2017 – 2018	APS DPF Mentoring Award Committee, *Vice-Chair*
2017	US Atlas Director's Review Committee, *Member*
2016 – 2017	Advanced Scientific Computing Advisory Committee (ASCAC), Subcommittee on Independent review of Laboratory Directed Research and Development (LDRD) work of the DOE Laboratories (Labs), *Member*
2016 – 2017	Natural Sciences and Engineering Research Council (NSERC), *Chair*
2015 – 2018	Natural Sciences and Engineering Research Council (NSERC), *Member*
2015 – 2016	APS DPF, Instrumentation Award Committee, *Member*
2015 – 2017	APS Division of Particles and Fields (DPF) Executive Committee, *Member*
2014 – 2017	Nuclear Science Advisory Committee (NSAC), *Member*
2014 – 2017	High Energy Physics Advisory Panel (HEPAP), *Member*
2014 – 2015	APS Division of Nuclear Physics (DNP) Nominating Committee, *Member*
2014 – 2015	APS Division of Nuclear Physics (DNP) Long Range Planning Group, *Member*
2014 – Present	US Atlas Project Advisory Group, *Member*
2014 – Present	Journal of Physics G, *Associate Editor*
2013	DOE Office of Science, High Energy Physics, FNAL S&T Review Committee
2013 – Present	Physics Letters B (PLB), *Referee*

2012 – 2013	APS DPF, Community Summer Study 2013, http://www.snowmass2013.org Neutrino Oscillations in the 3-Neutrino Framework, *Convener* Non-Accelerator Underground Facilities, *Convener*
2012	APS DPF, Community Planning Meeting 2012, http://www.snowmass2013.org Local Organizing Committee, *Member*
2012 – 2013	APS Division of Particles and Fields, Nominating Committee, *Member*
2012 – 2019	European Physics Journal C, *Associate Editor*
2012 – Present	Defense Threat Reduction Agency (DTRA), *Reviewer*
2012 – Present	French Research Agency (ANR), *Reviewer*
2011 – Present	GACR Czech Science Foundation, *Reviewer*
2010 – Present	DOE Office of Science, High Energy Physics, *Reviewer*
2010 – Present	DOE Office of Science, Nuclear Physics, *Reviewer*
2010 – Present	Natural Sciences and Engineering Research Council (NSERC), *Reviewer*
2009 – 2013	APS Committee on International Scientific Affairs (CISA) - Chair of APS CISA (2011-2012) - http://www.aps.org/about/governance/committees/cisa/ - Initiated and organized trial of digital access to APS Meetings (2011) http://www.aps.org/publications/apsnews/201104/indico.cfm.html http://www.aps.org/publications/apsnews/201110/meetingslides.cfm.html http://www.aps.org/units/fip/newsletters/201109/heeger.cfm.html http://agenda.hep.wisc.edu/conferenceDisplay.py?confId=483 - Leading development of the APS US-China program (2010-Present) - Chaired subcommittee on future international activities of APS
2009 – Present	Physical Review C, *Referee*
2007 – Present	Journal of Applied Physics, *Referee*
2007 – Present	National Science Foundation, *Reviewer and Panel Reviewer*
2007 – 2010	National Nuclear Physics Summer School Steering Committee, *Member*
2007	APS Division of Nuclear Physics Long Range Plan, *Working Group Member*
2005	APS California Section Executive Committee, *Member-at-Large*
2004 – 2005	Civilian Research & Development Foundation (CRDF), *Review Panel Member*
2003 – 2004	APS Neutrino Study, *Working Group Member*
2004	APS Forum on Graduate Student Affairs (FGSA), *Past-Chair*
2004	APS Committee on Membership, *Member*
2003	APS Forum on Graduate Student Affairs (FGSA*), Chair*
2003	APS CAM2003, *Conference Organizing Committee, Co-Chair*
2002 – 2003	Lawrence Berkeley National Laboratory, *Neutrino Planning Group, Member*
2002	APS Forum on Graduate Student Affairs (FGSA), *Chair-Elect, Program Chair*
2002 – Present	Nuclear Instrumentation and Methods, *Referee*
2002	Lobbying Congress with the APS Office of Public Affairs

1996 – Present	Member of the	American Physical Society (APS) European Physical Society (EPS) German Physical Society (DPG) Institute of Physics (IOP)

University Service

2021-2022 Yale University
- Physical Sciences and Engineering Building (PSEB) working group, *Chair*
- Physical Sciences and Engineering Building (PSEB) Instrumentation Task Force, *Co-Chair*

Yale University, Physics Department
- Chair

Yale University, Wright Laboratory
- Director

2020-2021 Yale University
- Physical Sciences and Engineering Building (PSEB) working group, *Chair*
- Physical Sciences and Engineering Building (PSEB) Instrumentation Task Force, *Co-Chair*
- FAS Advisory Group on Collaborative Tools, *Member*
- EHS RSO Search Committee, *Member*
- Machine shop advisory committee, *Member*

Yale University, Physics Department
- Chair

Yale University, Wright Laboratory
- Director

2019-2020 Yale University
- Physical Sciences and Engineering Building (PSEB) working group, *Chair*
- Physical Sciences and Engineering Building (PSEB) Instrumentation Task Force, *Co-Chair*
- Physical Science and Engineering Building (PSEB) Exploratory Planning Committee, *Member*
- Instrumentation Development Committee, *Co-Chair*
- FAS Advisory Group on Collaborative Tools, *Member*
- Machine shop advisory committee, *Member*

Yale University, Physics Department
- Chair

Yale University, Wright Laboratory
- Director

2018-2019 Yale University
- Physical Sciences Area Committee and Tenure Appointments Committee (PSETAC)
- Lead organizer for the inaugural Yale Day of Instrumentation, November 16, 2018
- Machine shop advisory committee, *Member*
- Center for Research Computing (YCRC), Focus Group on “Grant Opportunities”,
- Task force on BNL-Yale relation, *Member*
- Lead the development of a 5-year Wright Lab Strategic Plan

Yale University, Physics Department
- Appointment Committee for Alison Sweeney, *Chair*
- Space Committee, *Member*

- Special Opportunities Committee*, Member*

2017-2018 Yale University
- Physical Sciences Area Committee and Tenure Appointments Committee (PSETAC)
- University Science Strategy, Subcommittee on "Instrumentation & Measurement Institute"
- Machine shop advisory committee, *Member*

Yale University, Physics Department
- Special Opportunity Committee

2016-2017 Yale University
- Machine shop advisory committee, *Member*

Yale University, Physics Department
- Target of opportunity committee, *chair*
- Space committee

2015-2016 Yale University
- Machine shop advisory committee, *Member*

Yale University, Physics Department
- Faculty search committee in nuclear, particle, and astrophysics
- Target of opportunity committee
- Space committee*, co-chair*
- Safety committee
- Physics colloquium committee

2014-2015 Yale University
- Machine shop advisory committee, *Member*

Yale University, Physics Department
- Space committee*, co-chair*
- Strategic planning committee
- Target of opportunity committee
- Graduate admissions committee
- Safety Committee

2013-2014 Yale University
- Keasbey Scholarship Committee

Yale University, Physics Department
- Graduate Admissions Committee
- Safety Committee
- Promotions Committee

2012-2013 University of Wisconsin, Physics Department
- Computing & IT Committee
- Scientist Committee

2011-2012 University of Wisconsin, Physics Department
- Department Board of Visitor Committee
- Faculty&Staff Recognition Committee
- Amenities Committee
- UW campus China Initiative

2010-2011 University of Wisconsin, Physics Department
- Faculty Search Committee in Experimental Neutrino Physics (chair)

- Strategic Planning Committee
- New Staff Committee
- Graduate Program Committee
- Graduate Student Admissions & Fellowships Committee
- Colloquium Committee

2009-2010 University of Wisconsin, Physics Department
- Strategic Planning Committee
- New Staff Committee
- Web Committee
- Computing & IT Committee
- Colloquium Committee

2008-2009 University of Wisconsin, Physics Department
- Graduate Program Committee
- Graduate Student Admissions & Fellowships Committee
- Colloquium Committee
- Computing & IT Committee

2007-2008 University of Wisconsin, Physics Department
- Graduate Student Admissions & Fellowships Committee
- Colloquium Committee
- Committee on Introductory Courses, Labs, and Lecture Room
- Physics Library Committee

Conference Organization

2022 *2022 CPAD Instrumentation Frontier Workshop*
Co-Organizer
Stony Brook, Nov 4-7, 2022
https://www.stonybrook.edu/cfns/cpad2022/committees.html

2021 *2021 CPAD Instrumentation Frontier Workshop*
Co-Organizer
Stony Brook, March 18-22, 2021
https://indico.fnal.gov/event/46746/overview

2019 *2019 International Workshop on Baryon and Lepton Number Violation (BLV2019)*
Organizing Committee, Member
Institute for Theoretical Physics (IFT) Madrid, Spain, October 21-24 2019
https://workshops.ift.uam-csic.es/BLV2019

2019 2019 International Conference on Applications of Nuclear Techniques
Organizing Committee, Member
Crete, Greece, June 9-15, 2019
https://www.creteconf.org

2018 *National Nuclear Physics Summer School (NNPSS)*
Organizing Committee, Member
Yale Wright Laboratory, June 17-30, 2018
https://wlab.yale.edu/nnpss2018

2015 *Workshop on the Intermediate Neutrino Program*
Scientific Advisory Committee, Member
Reactor Working Group, Co-convener
BNL, February 4-6, 2014
http://www.bnl.gov/winp/

2013 *IceCube Particle Astrophysics Symposium (IPA2013)*
Organizing Committee Member,
Madison, WI, USA, May 13-15, 2013
http://wipac.wisc.edu/meetings/home/ipa2013

2013 *Snowmass Intensity Frontier Neutrino Workshop*
Working group convener,
SLAC, CA, USA, March 6-7, 2013
https://indico.fnal.gov/conferenceDisplay.py?confId=6122

2012 *Community Planning Meeting (CMP2012)*
Local Organizing Committee Member,
Fermilab, Batavia, Il, USA. October 11-13, 2012
http://www.snowmass2013.org/

2012 *NNN12 – 12th International Workshop on Next Generation Nucleon Decay and Neutrino Detectors,*
Co-Chair of the Organizing Committee
Fermilab, Batavia, Il, USA. October 4-7, 2012
http://conferences.fnal.gov/nnn12/

2012 *First Joint Scientific Session of the Chinese Physical Society (CPS) and the American Physical Society (APS)* at CPS Annual Meeting,
Chair of the Organizing Committee
Guangzhou, China, September 22, 2012
http://www.aps.org/programs/international/conferences/cps2012.cfm

2012 *Neutrinos and Dark Matter – US-China School for Young Physicists*
Co-Chair of the Organizing Committee
Shanghai, China, September 16-20, 2012
http://www.physics.sjtu.edu.cn/spcs/

2010 *The Future of Neutrino Mass Measurements: Terrestrial and Astrophysical Measurements in the Next Decade,*
Lead Workshop Organizer
Institute for Nuclear Theory, University of Washington, Seattle, WA, USA,
February 8-11, 2010
http://www.int.washington.edu/PROGRAMS/10-44w.html

2009 *Neutrinos and Dark Matter (NDM09),*
Co-Chair of the Organizing Committee
Madison, WI, USA, August 31-September 5, 2009
http://www.physics.wisc.edu/ndm09/

2009 *CIPANP09: Intersection of Particle and Nuclear Physics,*
Convener for session on "Nuclear and Particle Astrophysics"
San Diego, CA, USA, May 26-31, 2009

http://groups.physics.umn.edu/cipanp2009

2005 *Neutrino Physics Planning Meeting at PANIC05,*
Member of the Organizing Committee
Santa Fe, NM, USA, October 28-30, 2005
http://panic05.lanl.gov/index.php?link=satellite

2005 *APS California Section Meeting,*
Member of the Program Committee
Sacramento, CA, USA, October 21-22, 2005
http://aps-ca.lbl.gov/

2003 *Neutrinos: Ghostlike Particles in the Universe,*
APS-AAPT Workshop for Teachers and Students, Co-Organizer
Berkeley, CA, USA, November 14, 2003
http://pdg.lbl.gov/aapt-aps/workshop.html

2003 *The Future of Physics Education and the Fate of the Universe,*
AAPT California-Nevada and APS California Section Meeting,
Member of the Organizing Committee
Berkeley, CA, USA, November 14-15, 2003
http://pdg.lbl.gov/aapt-aps/

2003 *CAM2003 – Canadian, American, Mexican Graduate Student Conference*
Student Visions for Physics in the 21st Century,
Co-Chair of the US Advisory Committee for CAM2003
Merida, Mexico, October 24-27, 2003
http://www.mda.cinvestav.mx/cam2003

1999 *8th US Symposium of the German National Academic Foundation*
Member of the Local Organizing Committee
Seattle, Washington, USA, 1999

Teaching

2022 Spring **Responsible Conduct in Research for Physical Scientists - Physics 590**
graduate level course
Yale University, Instructor: Heeger

2021 Fall **Special Investigations in Research - Physics 990**

2021 Spring **Responsible Conduct in Research for Physical Scientists - Physics 590**
graduate level course
Yale University, Instructor: Heeger

2020 Fall **Responsible Conduct in Research for Physical Scientists - Physics 590**
graduate level course
Yale University, Instructor: Heeger and Ramos

2020 Spring **Special Investigations in Research - Physics 990**

2019 Fall **Special Investigations in Research - Physics 990**

2019 Spring	**Modern Physical Measurements – Physics 205/206** *undergraduate level course* Yale University, Lead Instructor: Heeger
2018 Fall	**Experimental Methods in Nuclear, Particle, and Astrophysics: Fundamentals and Detection of Weakly Interacting Particles - Physics 524** *graduate level course* Yale University, Instructor: Heeger and Fleming
2018 Spring	**Modern Physical Measurements – Physics 205/206** *undergraduate level course* Yale University, Lead Instructor: Heeger
2017 Fall	*Triannual Leave of Absence – no teaching*
2017 Spring	**Responsible Conduct in Research – Physics 590** *graduate level course, lecturer*
2017 Spring	**Modern Physical Measurements – Physics 205/206** *undergraduate level course* Yale University, Lead Instructor: Heeger
2016 Fall	**Modern Physical Measurements – Physics 205/206** *undergraduate level course* Yale University, Lead Instructor: Heeger
2016 Spring	**Responsible Conduct in Research – Physics 590** *graduate level course, lecturer*
2016 Spring	**Modern Physical Measurements – Physics 205/206** *undergraduate level course* Yale University, Lead Instructor: Heeger
2015 Fall	**Modern Physical Measurements – Physics 205/206** *undergraduate level course* Yale University, Lead Instructor: Heeger
2015 Spring	**Modern Physical Measurements – Physics 205/206** *undergraduate level course* Yale University, Lead Instructor: Heeger
2014 Fall	**Introduction to Nuclear Physics – Physics 524** *graduate level course* Yale University, Instructor: Heeger
2014 Spring	*research leave – no teaching*
2013 Fall	*research leave – no teaching*
2013 Spring	**Experimental Methods in Nuclear, Particle, and Astrophysics – Physics 736** *graduate level course* University of Wisconsin, Instructor: Heeger
2012 Fall	*research semester*

2012 Spring — **Experimental Methods in Nuclear, Particle, and Astrophysics – Physics 736**
graduate level course
University of Wisconsin, Instructor: Heeger

2011 Fall — *research semester*

2011 Spring — **Experimental Methods in Nuclear, Particle, and Astrophysics – Physics 736**
graduate level course
University of Wisconsin, Instructor: Heeger

2010 Fall — *research semester*

2010 Spring — **Experimental Methods in Nuclear, Particle, and Astrophysics – Physics 736**
graduate level course
University of Wisconsin, Instructor: Heeger

2009 Fall — **Physics in the Arts – Physics 109**
University of Wisconsin, Instructors: Heeger, Gilbert

2009 Spring — *research semester*

2008 Fall — **Experimental Nuclear Physics – Physics 741**
graduate level course
University of Wisconsin, Instructor: Heeger

2008 Spring — **Physics in the Arts – Physics 109**
undergraduate course
University of Wisconsin, Instructors: Heeger, Balantekin

2007 Fall — **Physics in the Arts – Physics 109**
undergraduate course
University of Wisconsin, Instructor: Heeger, Halzen

2007 Spring — **Physics in the Arts – Physics 109**
undergraduate course
University of Wisconsin, Instructors: Heeger, Balantekin

2006 Spring — *research semester*

Curriculum Development

2020 Fall — **Responsible Conduct in Research for Physical Scientists - Physics 590**
graduate level course
Yale University
Updated course to include topics of bias, diversity and inclusion as well as case studies.

2018 Fall — **Fundamentals and Detection of Weakly Interacting Particles – Phys 524**
graduate level course
Yale University
Developed new graduate level course on neutrinos and weakly interacting particles in preparation for a book on this topic.

2018 Summer — **Modern Physical Measurements – Physics 205/206**
undergraduate level course
Yale University
Developed and updated the 206 laboratory sequence and developed methods for the unbiased evaluation of student performance

2010 Spring — **Experimental Methods in Nuclear, Particle, and Astrophysics – Physics 736**
graduate level course
Developed graduate level course on experimental methods for a broad group of experimental and theoretical students
http://neutrino.physics.wisc.edu/teaching/PHYS736/
University of Wisconsin, Instructor: Heeger

Schools & Lectures

2022 — **IX. International Pontecorvo Neutrino Physics School,**
Lecturer,
Bratislava, Slovakia, August 1-12, 2021

2015 — **2015 SLAC Summer Institute "The Universe of Neutrinos"**
Lecturer,
Stanford, Paolo Alto, CA, USA, August 10-21, 2015
http://www-conf.slac.stanford.edu/ssi/

2012 — **V. International Pontecorvo Neutrino Physics School,**
Lecturer,
Alushta, Crimea, Ukraine, September 6-16, 2012
http://pontecorvosch.jinr.ru/General.html

2012 — **4th International Summer School on Neutrino Physics (INSS) 2012**
Lecturer,
Virginia Polytechnic Institute and State University, VA, USA, July 10-21, 2012
http://cnp.phys.vt.edu/inss2012.html

2012 — **EDIT2012 – Excellence in Detectors and Instrumentation Technologies**
Lecturer,
Fermilab, Batavia, Il, USA, February 13-24, 2012
http://detectors.fnal.gov/EDIT2012/

2010 — **IV. International Pontecorvo Neutrino Physics School,**
Lecturer,
Alushta, Crimea, Ukraine, September 26 – October 6, 2010
http://pontecorvosch.jinr.ru/

2009 — **2009 International Neutrino Summer School**
Lecturer,
Fermilab, Batavia, Il, USA, July 6-17, 2009
http://projects.fnal.gov/nuss/

2007 — **III. International Pontecorvo Neutrino Physics School,**
Lecturer,
Alushta, Crimea, Ukraine, September 16-26, 2007

http://wwwinfo.jinr.ru/pontecorvo07/

2004 **Michelson Postdoctoral Prize Lectureship,**
Case Western Reserve University, April 26-30, 2004
http://www.phys.cwru.edu/events/mppl-prior.php

2003 **AAPT-APS Neutrino Workshop**
Lecturer and Organizer, *"Neutrinos: Ghostlike Particles in the Universe",*
Berkeley Lab, November 14, 2003

2002 Fall **Graduate Course Lectures in Neutrino Physics**
Guest Lecturer, UC Berkeley and LBNL
Instructor: Y. Kolomensky

1998 Fall **Nuclear Astrophysics – Physics 554**
Graduate Course Teaching Assistant, University of Washington
Instructor: W. Haxton

1995 Fall **General Physics, Laboratory Instruction and Tutorials**
Undergraduate Course Teaching Assistant, University of Washington
Instructor: Physics Education Group

Teaching Training

Fall 2009 **DELTA Roundtables** – Integrating Research, Teaching, and Learning,
University of Wisconsin
http://www.delta.wisc.edu/

June 2007 **STEMES 2007 Workshop – 11th Annual Science, Technology, Engineering, and Mathematics Education Scholars Program**
June 12-16, 2007, Howard University, DC, USA
http://cirtl.wceruw.org/STEMES/index.html

Outreach Programs

2018 Spring **Pathways to Science** – *Discovering the Invisible Universe*
Organized and supervised lab activities for middle and high school students
Spring and summer 2018
https://wlab.yale.edu/news/yale-pathways-science-students-discover-invisible-universe-wright-lab

2009 Summer **QuarkNet Summer Program, University of Wisconsin**
Supervised summer workshop with teachers from Madison West High School, July 2009

2008 Summer **QuarkNet Summer Program, University of Wisconsin**
Supervised summer research project with teachers from Madison West High School, *"Quantitative Studies of Acrylic Transmittance under UV Exposure", August-September 2008*

2003 Summer **QuarkNet Summer Program, LBNL**
Lecturer, **"***The World of Neutrinos – Recent Results in Neutrino Astrophysics"*

Berkeley Lab, July 25, 2003

Advising and Mentoring

Currently advising, mentoring, and supervising 5 graduate students, 1 postdoc, and 3 research scientists. Graduated 10 PhD students and 1 M.Sc. student.

Research Scientists

Dr. James Nikkel	Research Scientist, Feb 2016 – Present Projects: PROSPECT, Project 8, CUORE
Dr. Penny Slocum	Associate Research Scientist, Feb 2014 – Present Projects: Project 8, CUORE
Dr. Thomas Langford	Associate Research Scientist, Oct 2013 – Present Projects: PROSPECT, CUORE, DUNE

Postdoctoral Fellows

Dr. Pranava Surukuchi	Jan 2019 – Present Projects: Project 8, CUORE

Graduate Students

Iris Ponce	August 2020 - Present *Current research on CUORE/CUPID*
Talia Weiss	August 2020 - Present *Current research on Project 8*
Samantha Pagan	June 2019 - Present Thesis: *Towards a High-Sensitive Search for $0\nu\beta\beta$ with CUORE and CUPID*
Arina B. Telles	June 2019 - Present Thesis: *Towards a Direct Measurement of the Neutrino Mass with Phase III of Project 8*
Ben Foust	Sep 2016 – Present Thesis: *A Precise Measurement of the ^{235}U Antineutrino Spectrum with PROSPECT and STEREO*

Former Group Members

Scientist / Researcher

Thomas Wise	Oct 2006 – May 2018 Prizes: 2008 Chancellor's Award for Excellence in Research, University of Wisconsin, Madison, WI Current position: Research Scientist, retired
Dr. Henry Band	Oct 2007 – Mar 2020

Current position: Senior Research Scientist, retired

Postdoctoral Fellows

Dr. Danielle Speller	Sep 2017 – May 2020	Faculty, John Hopkins University
Dr. Kyungeun Lim	Mar 2013 – 2017	Senior Lead Data Scientist, NBC Universal Media
Dr. Walter Pettus	Aug 2015 – May 2016	Faculty, Indiana University
Dr. Ke Han	Oct 2014 – Feb 2016	Faculty, SJTU, China
Dr. David Webber	Jun 2010 – Sep 2013	Data scientist, Scanalytics
Dr. Daniel Lenz	Apr 2010 – Dec 2011	Development engineer, Zeiss Optics
Dr. Wei Wang	Jul 2007 – Jul 2011	Faculty, Sun Yat-Sen University, China
Dr. S. Sangiorgio	Oct 2007 – Mar 2010	Scientist, LLNL, USA

Graduate Students

Jeremy Gaison — Aug 2015 – September 2021
Thesis: *Search for eV-scale sterile neutrinos with PROSPECT and Daya Bay*
Prize: 2017 NSF Graduate Fellowship
Current Position: Pauling Fellow at PNNL

Luis Saldana — Sep 2015 – August 2021
Thesis: *Event Classification and Tritium Endpoint Measurement with Project 8 Phase II Data*
Current Position: Postdoc at Yale University

Danielle Norcini — Sep 2014 – December 2019
PhD Thesis: *Search for eV-scale sterile neutrinos with PROSPECT and Measurement of the Reactor Antineutrino Spectrum from ^{235}U with PROSPECT*
Prizes: 2015 APS PDF travel award for student presentation
Current Position: Prize postdoctoral fellow, Kavli Institute, Chicago

Jeremy Cushman — Sep 2013 – December 2017
PhD Thesis: *Search for neutrinoless double beta decay with CUORE*
Current Position: Development engineer

Walter Pettus — May 2010 – June 2015
PhD Thesis: *"Cosmogenic Activation in NaI Detectors for Dark Matter Searches"*
Prizes: 2011 DOE NNSA Stewardship Science Graduate Fellowship, invitation to 2012 Lindau Nobel Laureate Meeting
Current Position: Faculty, Indiana University

Adam Dally — May 2010 – Jan 2015
PhD Thesis*: "Towards a precise energy calibration of the CUORE double beta decay experiment"*
Current Position: Research Scientist in industry

Christine Lewis — May 2008 – February 2014
PhD Thesis: *"Precision Measurement of the Reactor Antineutrino Spectrum at Daya Bay and Search for Non-Standard Interactions"*

Current Position: Research staff at Institute for Defense Analysis (IDA)

Michael McFarlane — Jan 2007 – May 2014
PhD Thesis: "*Measurement of θ_{13} Oscillations at Daya Bay: Evidence of Spectral Distortion"*
Current Position: Product engineer in industry

Larissa Ejzak — Jan 2007 – May 2013
PhD Thesis: *"Calibrating the CUORE Bolometer Array: In Search of Neutrinoless Double Beta Decay"*
Prize: honorable mention in the 2007 NSF Graduate Fellowship Competition
Current Position: Scientific editor

Bryce Littlejohn — Jan 2007 – May 2012
PhD Thesis: "*Observation of Electron Antineutrino Disappearance at Daya Bay"*
Prize: won 2008 NSF East Asia and Pacific Summer Institute Fellowship
Current Position: Associate Professor at IIT

Daniel Passmore — Jan 2007 – Jun 2007
M.Sc.Thesis: *"Precision Measurement of the Target Mass in the Daya Bay Antineutrino Detectors"*
Current Position: Application scientist in industry

Postgraduates

Arina Bykadorova — Sep 2016– Aug 2017
Projects: PROSPECT, Project 8
Current Position: PhD student, Yale University

External PhD Exams

Lee Hagaman — Yale University, USA,
Core thesis committee
Advisor: Prof. Bonnie Fleming

Ridge Liu — Yale University, USA,
Core thesis committee
Advisor: Prof. Reina Maruyama

Shilo Xia — Yale University, USA, *March 2020*
Member of the PhD committee, Advisor: Prof. David Moore

James Mulligan — Yale University, USA, *October 9, 2018*
Member of the PhD committee, Advisor: Prof. John Harris

Paul Andrei Puiu — University of Milan, Italy, *April 11, 2017*
External examiner to the PhD committee, Advisor: Dr. Angelo Nucciotti

Stefano Pozzi — University of Milan, Italy, *April 11, 2017*
External examiner to the PhD committee, Advisor: Dr. Maura Pavan

Corey Adams	Yale University, USA, *September 27, 2016* *Member of the PhD committee,* Advisor: Prof. Bonnie Fleming
Matteo Biassoni	University of Milan, Italy, February 11, 2013 *External examiner to the PhD committee,* Advisor: Prof. Oliviero Cremonesi
Carl Pfender	University of Wisconsin, USA, February 13, 2012 *Member of the PhD committee,* Advisor: Prof. Stefan Westerhoff
Gwynne Crowder	University of Wisconsin, USA, January 17, 2012 *Member of the PhD committee,* Advisor: Prof. Dan McCammon
Mike Baker	University of Wisconsin, USA, November 10, 2011 *Member of the PhD committee,* Advisor: Prof. Teresa Montaruli
Kai Wang	University of Wisconsin, USA, May 7, 2008 *Member of the PhD committee,* Advisor: Prof. Tao Han
Jessica Hodges	University of Wisconsin, USA, May 11, 2007 *Member of the PhD committee,* Advisor: Prof. Albrecht Karle
Samuele Sangiorgio	Universita dell 'Insubria, Como, Italy, February 23, 2007 *External examiner to the PhD committee,* Advisor: Prof. Andrea Giuliani

Undergraduate Research Projects

Trent Ray	University of Connecticut & Yale University, Sep 2020 – Present Project: PROSPECT
Sergio Nunez Silva	Yale University, Jan – April 2020 Project: PROSPECT Yale Research Experience for Peruvian Undergraduates (REPU)
India Bhalla-Ladd	Yale University, Jan 2019 – May 2019 Project: PROSPECT
Lukas Baker	Yale University, 2018 Project: PROSPECT
Joshua Swerdlow	Yale University, 2018 Project: Project 8
Arina Telles	Yale University, 2018 Project: PROSPECT
Jack Roth	Yale University, 2017-2018 Project: PROSPECT
Victor Valera Baca	Yale University, Jan -April 2017 Project: PROSPECT Yale Research Experience for Peruvian Undergraduates (REPU)

Nate Stemen	Yale University, Summer 2014 & 2015 Project: PROSPECT Prize: 2015 Conference Experience for Undergraduates (CEU), APS Division of Nuclear Physics Meeting, Santa Fe, NM
Benjamin Weiner	Yale University, Jan 2015 – May 2015 Project: PROSPECT
Karl Medina	Yale University, Jan 2015 – May 2014 Current position: UIUC graduate school
Basi Smitham	Yale University, Feb – Sep 2014 Project: CUORE
Pingchuan Zhao	Univ. of Wisconsin, Sep 2012 – Sep 2013
Jess Clark	Univ. of Wisconsin, Jan 2012 – Nov 2012 Last position: high school science teacher, Madison, WI
Jesse Nims	Univ. of Wisconsin, May 2011 – 2012
Benjamin Broerman	Univ. of Wisconsin, June 2010 – May 2012 Prizes: 2011-2012 Wisconsin Hilldale Undergraduate/Faculty Research Fellowship, poster at 2011 APS Division of Nuclear Physics Meeting, Conference Experience for Undergraduates (CEU),East Lansing, MI; 2010 DOE/INFN summer research fellowship Current Position: graduate student at Queen's University, ON, Canada
Ian Guinn	Univ. of Wisconsin, Sep 2009 – May 2012 Prize: poster at 2010 APS Division of Nuclear Physics Meeting, Conference Experience for Undergraduates (CEU), Santa Fe, NM
Alex Green	Univ. of Wisconsin, Sep 2009 – Jun 2011 Prize: poster at 2010 APS Division of Nuclear Physics Meeting, Conference Experience for Undergraduates (CEU), Santa Fe, NM
Jacob Swan	Univ. of Wisconsin, Sep 2009 – Feb 2010
Jacqueline Houston	Univ. of Wisconsin, Aug 2008 – Aug 2009
Patrick Mende	Univ. of Wisconsin, Sep 2007 – Aug 2009 Prizes: 2007-08 Liebenberg Family Undergraduate Research Scholarship, University of Wisconsin; poster at 2008 Conference Experience for Undergraduates (CEU), APS Division of Nuclear Physics Meeting, Oakland, CA; 2008 Undergraduate Research Symposium, University of Wisconsin Current position: data scientist in industry
Ho Ling Li	Univ. of Wisconsin, Sep 2006 – Aug 2008

	Prize: presentation at 2008 Undergraduate Research Symposium, University of Wisconsin, poster at 2007 APS Division of Nuclear Physics Meeting, Conference Experience for Undergraduates (CEU), Newport News, VA Current position: University of Nottingham, England
Dan Zou	Univ. of Wisconsin, Sep 2006 – Aug 2008 Prizes: 2007 Hilldale Undergraduate Research Fellowship, University of Wisconsin; 2008 Undergraduate Research Symposium, University of Wisconsin Last position: graduate student at University of Chicago
Jason Ma	Cal Poly & Lawrence Berkeley National Lab, Summer 2004 Project: *Baseline Optimization for a New Reactor Neutrino Experiment to Measure*
Brian Perry	Cal Poly & Lawrence Berkeley National Lab, Summer 2003 Project: *Development of a New Calibration System for KamLAND*
Steven Furlanetto	Carleton College, REU student at University of Washington, Summer 1999 Project: *Sensitivity of SNO to Neutrino Oscillation Using Charged-Current Spectrum Data* Current Position: Associate Professor, UCLA
Toshiko Asai	University of Washington, Summer 1998 Project: *Determination of the Photodisintegration Background from ^{238}U and ^{232}Th in SNO*
Lincoln Webbeking	University of Washington, Summer 1997 Project: *Microdischarge Studies of Neutral Current Detector Components"*

Supervision of Technical Staff

PROSPECT: Jeff Cherwinka (senior engineer), Kevin Koehler (engineer), Jordon Bricco (CAD designer), Jeff Ashenfelter (logistics), Frank Lopez (research technician), Tom Barker (electrical engineer), Tom Hurteau (research technical), James Wilhelmi (engineer)

Daya Bay: Jeff Cherwinka (senior engineer), Lee Greenler (senior engineer), Dan Wenman (senior engineer), Qiang Xiang (senior engineer), Dan Wahl (electrical engineer), Harold Mattison (electrical engineer), Darrel Hamilton (technician), Andrew Arbuckle (technician), Amy Pagac (designer), Jonathan Heise (project support specialist)

CUORE: Ken Kriesel (senior engineer), Glen Gregerson (designer)

DM-Ice: Jeff Cherwinka (senior engineer), Glen Gregerson (designer), Darrel Hamilton (technician)

Management Experience and International Projects

- Directed the Yale Wright Laboratory with over 150 scientific personnel, faculty, postdocs and students. Led the transformation of the Wright Nuclear Structure Laboratory into the Yale Wright Laboratory.

- Chaired the Yale Physics Department with 36 faculty, 135 graduate students, about 40 postdocs, as well as administrative and technical staff.

- Managed and supervised up to 22 technical and scientific staff during the construction of the Daya Bay experiment in China. Coordinated the activities of about 50 people in the US, China, and Taiwan as US manager for the Daya Bay antineutrino detectors, and level-2 manager of the Daya Bay project.

- Conducted research and managed scientific projects in Antarctica, China, Italy, Japan, Canada, and the USA.

- Traveled in Antarctica, New Zealand, Iceland, Egypt, Ukraine, Japan, China, Hong Kong, Vietnam, South Africa, Mexico, Polynesia, Canada, USA, and many countries in Europe.

Languages

German (native)
English (fluent)
French (comprehension)

Other Interests

Enjoys playing the violin, climbing, and skiing.

Citation Summary

h-index: 73, **total number of citations**: 37,354 **citations in 2021** 2592

Journal Articles and Preprints Submitted for Publication

For a complete list of SPIRES HEP listing see:
https://inspirehep.net/literature?sort=mostrecent&size=25&page=1&q=find%20author%20heeger%2C%20k

149. Optimization of the first CUPID detector module
A. Armatol et al. (CUPID Collaboration)
e-Print: 2202.0679

148. *Viterbi Decoding of CRES Signals in Project 8* A.
Ashtari Esfahani et al. (Project 8 collaboration)
arXiv: 2112.05265

147. *Low exposure long-baseline neutrino oscillation sensitivity of the DUNE experiment*
A. Abed Abud et al. (DUNE Collaboration)
e-Print: 2109.01304

146. *CUORE opens the door to tonne-scale cryogenics experiments*
D.Q. Adams et al. (CUORE Collaboration)
Prog.Part.Nucl.Phys. 122 (2022)

145. *Design, construction and operation of the ProtoDUNE-SP Liquid Argon TPC*
A. Abed Abud et al. (DUNE Collaboration)
Published in: JINST 17 (2022) 01, P01005

144. *Searching for solar KDAR with DUNE*
A. Abed Abud (DUNE Collaboration)
JCAP 10 (2021) 065

143. *PROSPECT-II Physics Opportunities*
M. Andriamirado, et al. (PROSPECT collaboration)
e-Print: 2107.03934

142. *Joint Measurement of the ^{235}U Antineutrino Spectrum by Prospect and Stereo*
Prospect and Stereo
Phys.Rev.Lett. 128 (2022) 8, 081802

141. *Joint Determination of Reactor Antineutrino Spectra from* ^{235}U and ^{239}Pu Fission by Daya Bay and PROSPECT
Prospect and Daya Bay Collaborations
Phys.Rev.Lett. 128 (2022) 8, 081801

140. *Limits on sub-GeV dark matter from the PROSPECT reactor antineutrino experiment*
M. Andriamirado et al. (PROSPECT Collaboration)
Phys.Rev.D 104 (2021) 1, 012009

139. *High sensitivity neutrinoless double-beta decay search with one tonne-year of CUORE data*
D.Q. Adams et al. (CUORE Collaboration)
e-Print: 2104.06906, accepted in Nature

138*. Experiment Simulation Configurations Approximating DUNE TDR*
B. Abi et al. (DUNE Collaboration)
e-Print: 2103.04797

138. *Antineutrino energy spectrum unfolding based on the Daya Bay measurement and its applications*
F.P. An et al. (Daya Bay Collaboration)
Chin.Phys.C 45 (2021) 7, 073001

137. *Bayesian analysis of a future β decay experiment's sensitivity to neutrino mass scale and ordering*
A. Ashtari Esfahani (Project 8 Collaboration)
Phys.Rev.C 103 (2021) 6, 065501

136. *Status and results from the CUORE experiment*
A. Campani et al. (CUORE Collaboration)
Int.J.Mod.Phys.A 35 (2020) 36, 2044016

135. *Measurement of the 2νββ 2νββ Decay Half-Life of 130Te with CUORE*
D.Q. Adams et al. (CUORE Collaboration)
Phys.Rev.Lett. 126 (2021) 17, 171801

134. *Characterization of cubic Li2100 MoO4 crystals for the CUPID experiment*
A. Armatol et al (CUPID Collaboration)
Eur.Phys.J.C 81 (2021) 2, 104

133*. A CUPID Li2100MoO4 scintillating bolometer tested in the CROSS underground facility*
CUPID and CROSS Collaborations
JINST 16 (2021) 02, P02037

132. *Novel technique for the study of pileup events in cryogenic bolometers*
A. Armatol et al. (CUPID Collaboration)
Phys.Rev.C 104 (2021) 1, 015501

131*. Prospects for beyond the Standard Model physics searches at the Deep Underground Neutrino Experiment*
B. Abi et al. (DUNE Collaboration)
Eur.Phys.J.C 81 (2021) 4, 322

130. *Supernova neutrino burst detection with the Deep Underground Neutrino Experiment*
DUNE Collaboration
B. Abi et al. (DUNE Collaboration)
Eur.Phys.J.C 81 (2021) 5, 423

129. *First results on ProtoDUNE-SP liquid argon time projection chamber performance from a beam test at the CERN Neutrino Platform*
B. Abi et al. (DUNE Collaboration)
JINST 15 (2020) 12, P12004

128*. Search for electron-antineutrinos associated with gravitational-wave events GW150914, GW151012, GW151226, GW170104, GW170608, GW170814, and GW170817 at Daya Bay*
F.P. An et al. (Daya Bay Collaboration)
Chin.Phys.C 45 (2021) 5, 055001

127. *Optimization of the JUNO liquid scintillator composition using a Daya Bay antineutrino detector*
JUNO and Daya Bay Collaborations
Nucl.Instrum.Meth.A 988 (2021)

126. *Neutrino interaction classification with a convolutional neural network in the DUNE far detector*
B. Abi et al. (DUNE Collaboration)
Phys.Rev.D 102 (2020) 9, 092003

125. *Long-baseline neutrino oscillation physics potential of the DUNE experiment*
B. Abi et al. (DUNE Collaboration)
Eur.Phys.J.C 80 (2020) 10, 978

124. *Note on arXiv:2005.05301, 'Preparation of the Neutrino-4 experiment on search for sterile neutrino and the obtained results of measurements'*
M. Andriamirado et al. (PROSPECT and STEREO Collaborations)
e-Print: 2006.13147 [hep-ex]

123. Improved Short-Baseline Neutrino Oscillation Search and Energy Spectrum Measurement with the PROSPECT Experiment at HFIR
M. Andriamirado et al. (PROSPECT Collaboration)
e-Print: 2006.11210 [hep-ex], submitted to PRD

122. *Nonfuel antineutrino contributions in the ORNL High Flux Isotope Reactor (HFIR)*
A.B. Balantekin et al. (PROSPECT Collaboration)
Phys.Rev.C 101 (2020) 5, 054605

121. *Improved Limit on Neutrinoless Double-Beta Decay in ^{130}Te with CUORE*
D.Q. Adams et al. (CUORE Collaboration)
Phys.Rev.Lett. 124 (2020) 12, 122501

120. *Cyclotron Radiation Emission Spectroscopy Signal Classification with Machine Learning in Project 8*
A. Ashtari Esfahani et al. (Project 8 Collaboration)
New J.Phys. 22 (2020) 3, 033004

119. *Locust: C++ software for simulation of RF detection*
A. Ashtari Esfahani et al. (Project 8 Collaboration)
New J.Phys. 21 (2019) 113051

118. *CUORE: The first bolometric experiment at the ton scale for rare decay searches*
D.Q. Adams et al. (CUORE Collaboration)
Nucl.Instrum.Meth. A936 (2019) 158-161

117. *The Radioactive Source Calibration System of the PROSPECT Reactor Antineutrino Detector*
J. Ashenfelter et al. (PROSPECT Collaboration)
Nucl.Instrum.Meth. A944 2019

116. *Response to Comment on Daya Bay's definition and use of Delta(m^2_ee)*
D. Adey et al. (Daya Bay Collaboration)
e-Print: arXiv:1905.03840

115. *Extraction of the ^{235}U and ^{239}Pu Antineutrino Spectra at Daya Bay*
D. Adey et al. (Daya Bay Collaboration)
Phys.Rev.Lett. 123 (2019) no.11, 111801

114. *A high precision calibration of the nonlinear energy response at Daya Bay*

D. Adey et al. (Daya Bay Collaboration)
Nucl.Instrum.Meth. A940 (2019) 230-242

113. *A Low Mass Optical Grid for the PROSPECT Reactor Antineutrino Detector*
J. Ashenfelter et al. (PROSPECT Collaboration)
Published in JINST 14 (2019)
e-Print: arXiv:1902.06430

112. *Lithium-loaded Liquid Scintillator Production for the PROSPECT experiment*
H.R. Band et al. (PROSPECT Collaboration)
JINST 14 (2019) no.03, P03026
111. *Electron Radiated Power in Cyclotron Radiation Emission Spectroscopy Experiments*
A. Ashtari Esfahani et al. (Project 8 Collaboration)
Phys.Rev. C99 (2019) no.5, 055501

110. *Measurement of the Antineutrino Spectrum from ^{235}U Fission at HFIR with PROSPECT*
J. Ashenfelter et al. (PROSPECT Collaboration)
Phys.Rev.Lett. 122 (2019) no.25, 251801

109. *Double-beta decay of ^{130}Te to the first 0+ excited state of ^{130}*Xe with CUORE-0
C. Alduino et al. (CUORE Collaboration)
Eur.Phys.J. C79 (2019) no.9, 795

108. *Neutrino-based tools for nuclear verification and diplomacy in North Korea*
Rachel Carr et al.
Science & Global Security, 27:1, 15-28 (2019)

107. *Search for a time-varying electron antineutrino signal at Daya Bay*
D. Adey et al. (Daya Bay Collaboration)
Phys.Rev. D98 (2018) no.9, 092013

106. *Measurement of electron antineutrino oscillation with 1958 days of operation at Daya Bay*
D. Adey et al. (Daya Bay Collaboration)
Phys.Rev.Lett. 121 (2018) no.24, 241805

105. *Improved Measurement of the Reactor Antineutrino Flux at Daya Bay*
D. Adey et al. (Daya Bay Collaboration)
Phys.Rev. D100 (2019) no.5, 052004

104. *The PROSPECT Reactor Antineutrino Experiment*
J. Ashenfelter et al. (PROSPECT Collaboration)
Nucl.Instrum.Meth. A922 (2019) 287-309

103. *First search for short-baseline neutrino oscillations at HFIR with PROSPECT*
J. Ashenfelter et al. (PROSPECT Collaboration)
Phys.Rev.Lett. 121 (2018) no.25, 251802

102. *Performance of a segmented 6Li-loaded liquid scintillator detector for the PROSPECT experiment*
J. Ashenfelter et al. (PROSPECT Collaboration
JINST 13 (2018) no.06, P06023

101. *Study of Rare Nuclear Processes with CUORE*
C. Alduino et al. (CUORE Collaboration)
Int.J.Mod.Phys. A33 (2018) no.09, 1843002

100. *Cosmogenic neutron production at Daya Bay*

F.P. An *et al.* (Daya Bay Collaboration)
Phys.Rev. D97 (2018) no.5, 052009

99. *First Results from CUORE: A Search for Lepton Number Violation via 0νββ Decay of ^{130}Te*
C. Alduino et al. (CUORE Collaboration)
Phys.Rev.Lett. 120 (2018) no.13, 132501

98. *Search for Neutrinoless β+EC Decay of ^{120}Te with CUORE-0*
C. Alduino et al. (CUORE Collaboration)
Phys.Rev. C97 (2018) no.5, 055502

97. *Low Energy Analysis Techniques for CUORE*
C. Alduino et al. (CUORE Collaboration)
Eur.Phys.J. C77 (2017) no.12, 857

96. *Seasonal Variation of the Underground Cosmic Muon Flux Observed at Daya Bay*
F.P. An *et al.*,(Daya Bay Collaboration)
JCAP 1801 (2018) no.01, 001

95. *CUORE sensitivity to 0νββ decay*
C. Alduino et al. (CUORE Collaboration) Eur.Phys.J. C77 (2017) no.8, 532

94. *The projected background for the CUORE experiment*
C. Alduino et al. (CUORE Collaboration)
Eur.Phys.J. C77 (2017) no.8, 543

93. *Evolution of the Reactor Antineutrino Flux and Spectrum at Daya Bay*
F.P. An *et al.* (Daya Bay Collaboration)
Phys.Rev.Lett. 118 (2017) no.25, 251801

92. *Determining the neutrino mass with cyclotron radiation emission spectroscopy—Project 8*
A.A. Esfahani et al. (Project 8 Collaboration)
J.Phys. G44 (2017) no.5, 054004

91. *The CUORE cryostat and its bolometric detector*
C. Alduino et al. (CUORE Collaboration)
JINST 12 (2017) no.02, C02055

90. *Measurement of electron antineutrino oscillation based on 1230 days of operation of the Daya Bay experiment*
F.P. An *et al.* (Daya Bay Collaboration)
Phys. Rev. D **95**, 072006 (2017)

89. *Measurement of the two-neutrino double-beta decay half-life of ^{130}Te with the CUORE-0 experiment*
C. Alduino et al. (CUORE Collaboration)
Eur.Phys.J. C77 (2017) no.1, 13

87. *The detector calibration system for the CUORE cryogenic bolometer array*
J.S. Cushman *et al.*
Nucl.Instrum.Meth. A844 (2017) 32-44

87. *Study of the wave packet treatment of neutrino oscillation at Daya Bay*
F.P. An *et al.* (Daya Bay Collaboration)
arXiv:1608.01661

86. Improved Measurement of the Reactor Antineutrino Flux and Spectrum at Daya Bay

F.P. An *et al.* (Daya Bay Collaboration)
Chin.Phys. C2017 41

85. *Limits on Active to Sterile Neutrino Oscillations from Disappearance Searches in the MINOS, Daya Bay, and Bugey-3 Experiments*
P. Adamson et al (Daya Bay and MINOS Collaborations)
Phys.Rev.Lett. 117 (2016) no.15, 151801

84. *Improved Search for a Light Sterile Neutrino with the Full Configuration of the Daya Bay Experiment*
F.P. An *et al.* (Daya Bay Collaboration)
Phys.Rev.Lett. 117 (2016) no.15, 151802

83. *CUORE-0 detector: design, construction and operation*
C. Alduino et al. (CUORE Collaboration)
arXiv: 1604.05465, JINST 11 (2016) no.07, P07009

82. *New measurement of θ_{13} via neutron capture on hydrogen at Daya Bay*
F.P. An et al. (Daya Bay Collaboration)
Phys.Rev. D93 (2016) no.7, 072011

81. *First Search for a Dark Matter Annual Modulation Signal with NaI(Tl) in the Southern Hemisphere by DM-Ice17*
E. Barbosa de Souza et al (DM-Ice Collaboration)
Phys. Rev. D 95, 032006 (2017)

80. *Analysis Techniques for the Evaluation of the Neutrinoless Double-Beta Decay Lifetime in ^{130}Te with CUORE-0*
C. Alduino et al. (CUORE Collaboration)
Phys.Rev. C93 (2016) no.4, 045503

79. *The PROSPECT Physics Program*
J. Ashenfelter et al. (PROSPECT Collaboration)
J.Phys. G43 (2016) no.11, 113001

78. *Measurement of Muon Annual Modulation and Muon-Induced Phosphorescence in NaI(Tl) Crystals with DM-Ice17*
J. Cherwinka et al. (DM-Ice Collaboration)
Phys.Rev. D93 (2016) 4, 042001

77. *Light Collection and Pulse-Shape Discrimination in Elongated Scintillator Cells for the PROSPECT Reactor Antineutrino Experiment*
J. Ashenfelter et al. (PROSPECT Collaboration)
JINST 10 (2015) 11, P11004

76. *Measurement of the Reactor Antineutrino Flux and Spectrum at Daya Bay*
F.P. An et al (Daya Bay Collaboration)
Phys.Rev.Lett. 116 (2016) 6, 061801

75. *The Detector System of The Daya Bay Reactor Antineutrino Experiment*
F.P. An et al. (Daya Bay Collaboration)
Nucl.Instrum.Meth. A811 (2016) 133-161

74. *Background Radiation Measurements at High Power Research Reactors*
J. Ashenfelter et al. (PROSPECT Collaboration)
Nucl.Instrum.Meth. A806 (2016) 401-419

73. *New Measurement of Antineutrino Oscillation with the Full Detector Configuration at Daya Bay*
F.P. An et al. (Daya Bay Collaboration)
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79. *Engaging the International Physics Community: Neutrino Physics in China*
APS FIP, April Meeting 2021
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78. *Project 8*
CERN Neutrino Platform Week “Hot Topics in Neutrino Physics”
CERN October 7-11, 2019

77. *Short Baseline Neutrino Oscillations*
International Nuclear Physics Conference (INPC) 2019
Glasgow, UK, 29 July-2 August, 2019

76. *Precision Neutrino Studies with PROSPECT and Daya Bay*
PINS 2019
SLAC, Menlo Park, CA, July 14-17, 2019

75. *Future of Neutrino Physics*
WE-Heraeus Seminar on "Massive Neutrinos"
Bad Honnef, Germany, 8-11 July, 2019

74. *Precision Neutrino Studies with PROSPECT and Daya Bay*
Elba 2019 – Lepton Interactions with Nucleons and Nuclei
Marciana Marina, Isola d’Elba, 23-28 June 2019

73. *PROSPECT – Precision Reactor Oscillation and Spectrum Experiment*
IAEA Technical Meeting on Nuclear Data for Antineutrino Spectra and their Applications
Vienna, Austria, 23-26 April 2019

72. *Latest Results from PROSPECT*
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71. *Search for New Physics with Reactor Neutrinos*
NuTheories: Beyond the 3x3 Paradigm at Current and Near-Future Facilities
University of Pittsburgh Particle Astrophysics Cosmology Center (PITT PACC), November 7, 2018

70. *PROSPECTS in Neutrino Physics*
PACIFIC 2018.9
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69. *Recent Results from PROSPECT*
6th Symposium on Neutrinos and Dark Matter
IBS HQ, Daejeon, Korea, June 29-July 4, 2018

68. *Reactor Neutrinos – Recent Results and Future Prospects*
IPA 2017
Madison, WI, USA, May 9, 2017

67. *Exploring the (Invisible) Universe at the new Yale Wright Laboratory*
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66. *Recent Results from Daya Bay*
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65. *PROSPECT – Precision Oscillation and Spectrum Experiment*
Lake Louise Winter Institute 2017
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64. *Reactor Neutrinos: Recent Results and Future Prospects*
Inauguration of TD Lee Library and Institute
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63. *Neutrino Oscillation with Reactors and Radioactive Sources*
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62. *Status of the Reactor Neutrino Anomaly*
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61. *Short-baseline Reactor Experiments*
Frontiers of Liquid Scintillator Technology (FROST)
FNAL, Il, USA, March 18-20, 2016

60. *Reactor Neutrino Experiments*
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59. *Investigation of Double Beta Decay with Bolometers*
Neutrino Mass: From the Terrestrial Laboratory to the Cosmos
University of Massachusetts, Amherst Center for Fundamental Interactions
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58. *PROSPECT – A Precision Oscillation and Spectrum Experiment*
Workshop on Applied Antineutrino Physics 2015
Arlington, VA, December 7, 2015

57. *Search for Neutrinoless Double Beta Decay: Recent Results and Future Prospects*
CIPANP 2015
Vail, CO, USA, May 19-24, 2015

56. *Reactor Neutrinos: Recent Results and Future Prospects*
IPA 2015, IceCube Particle Astrophysics Symposium
Madison, WI, USA, May 4-6, 2015

55. *Reactor Neutrinos: Status and Outlook*
KITP Workshop: Neutrinos: Recent Developments and Future Challenges
KITP, Santa Barbara, CA, USA, November 4, 2014

54. *What Coordination is Necessary for Planning the Short-Baseline Neutrino Program?*
ICFA Neutrino Panel Mini Workshop, roundtable discussion
FNAL, Il, USA, January 30, 2014

53. *Probing Neutrino Oscillations at Very Short Baselines with Reactors and Radioactive Sources*
NNN13: International Workshop on Next-generation Nuclear Decay and Neutrino Detectors
Kavli IPMU, Tokyo, Japan, November 11-13, 2013

52. *Prospects for Measuring the Reactor Neutrino Flux and Spectrum*
Institute for Nuclear Theory,
Seattle, WA, USA, November 8, 2013

51. *Experiments with Reactor Antineutrinos – The decade after the Solar Neutrino Problem*
Perspectives on Fundamental Symmetries and Neutrinos,
Seattle, WA, USA, September 6, 2013

50. *A Discovery Program of Neutrino Experiments,*
Snowmass on the Mississippi - Community Summer Study 2013
Minneapolis, MN, July 30, 2013

49. *Precision Studies at the Neutrino Frontier*
APS April Meeting 2013
Denver, CO, USA, April 13, 2013

48. *Reactor and Solar Neutrino Experiments – Recent Highlights and Future Opportunities*
Deutsche Physikalische Gesellschaft (plenary talk)
Dresden, Germany, March 4, 2013

47. *Experiments with Reactor Neutrinos – Recent Discoveries and Future Prospects*
Lake Luise Winter Institute (plenary lecture)
Lake Louise, Alberta, Canada, February 20, 2013

46. *Probing Neutrino Oscillations at Very Short Baselines*
Aspen Winter Workshop – New Directions in Neutrino Physics
Aspen, Co, USA, February 8, 2013

45. *Observation of Electron Antineutrino Disappearance at Daya Bay*
24th Kavli Frontiers of Science Symposium
National Academies of Sciences, Irvine, CA, USA, November 2-4, 2012

44. *Opportunities in Nuclear, Particle, and Astrophysics*
First CPS-APS Joint Session, CPS Annual Fall Meeting
Guangzhou, China, September 22, 2012

43. *Neutrino Experiments*
Nuclear Science Advisory Subcommittee
Washington, DC, USA, September 7, 2012

42. *Neutrino Oscillations and Interactions*
DNP Town Meeting on Fundamental Symmetries and Neutrinos
Chicago, Il, USA, August 10-11, 2012

41. *Recent Progress in Neutrino Physics*
Latino-American Workshop on High Energy Physics: Particles and Strings
Havana, Cuba, 15-21 July 2012 *(declined)*

40. *Neutrino Oscillation Studies with Reactor Neutrinos: Recent Results and Future Prospects*

NDM12–International Symposium on Neutrinos and Dark Matter in Nuclear Physics,
Nara, Japan, June 11-15, 2012

39. *Future Reactor Experiments*
Neutrino 2012–XXV International Conference on Neutrino Physics and Astrophysics,
Kyoto, Japan, June 3-9, 2012

38. *CUORE: Bolometric Search for Neutrinoless Double Beta Decay*
SNOLAB Opening Workshop,
SNOLAB, Sudbury, ON, Canada, May 16, 2012

37. *Observation of Electron Antineutrino Disappearance at Daya Bay and the Future of θ_{13}*
European Strategy for Neutrino Oscillation Physics – A Town Meeting
CERN, Geneva, Switzerland, May 14, 2012

36. *Precision Reactor Neutrino Physics with the Daya Bay Experiment*
Symposium on Electroweak Nuclear Physics,
Duke University, NC, USA, March 8-9, 2012

35*. Oscillation Measurements with Reactor Neutrinos: Recent Discoveries and Future Prospects*
13th Conference on Astroparticle, Particle, Space Physics, and Detectors for Physics Applications (ICATPP11)
Villa Olmo, Como, Italy, October 3-7, 2011

34. *Antineutrino Detectors for a High-Precision Measurement of θ_{13} at Daya Bay*
Technology and Instrumentation in Particle Physics 2011 (TIPP2011)
Chicago, Il, USA, June 9-14, 2011

33. *Reactor Neutrino Oscillation Experiments: Status and Prospects*
Short Baseline Neutrino Workshop (SBNW11)
Fermilab, Batavia, Ill, USA, May 12-14, 2011

32. *Systematics in Reactor Neutrino Oscillation Experiments*
12th International Workshop on Neutrino Factories, Superbeams and Beta Beams
Mumbai, India, October 20-25, 2010

31. *Status and Prospects of Neutrino Oscillation Experiments*
International Conference of Nuclear Physics, INPC2010,
Vancouver, BC, Canada, July 4-9, 2010

30. *Reactor Neutrino Experiments*
Workshop on "Low Energy" Neutrino Physics and Astrophysics with IceCube's DeepCore Sub-Array"
State College, PA, USA, July 1-2, 2010

29. *Probing Neutrino Mixing with Non-Accelerator Experiments*
APS April/AAPT Meeting 2010
Washington, DC, USA, February 13-17, 2010

28*. Reactor Neutrino Experiments: Recent Results and Future Prospects*
CTP International Conference on Neutrino Physics in the LHC Era,
Luxor, Egypt, November 15-19, 2009

27. *Understanding Neutrino Mass and Mixing with Low-Energy Experiments*

Inaugural Fall Meeting of the APS Prairie Section
Iowa City, Iowa, November 12-14, 2009

26. *A High-Precision Measurement of θ_{13} with the Daya Bay Reactor Neutrino Experiment*
TAUP 2009, International Conference on Topics in Astroparticle and Underground Physics
Laboratori, Nazionali del Gran Sasso, Italy, July 1-5, 2009

25. *Understanding Neutrino Mass and Mixing with Low-Energy Experiments*
4th International Symposium on Symmetries in Subatomic Physics
Taipei, Taiwan, June 2-5, 2009

24. *Antineutrino Detectors for a High-Precision Measurement of the Neutrino Mixing Angle θ_{13} at Daya Bay*
TIPP09, Technology and Instrumentation in Particle Physics
Tsukuba, Japan, March 12-17, 2009

23*. Precision Measurements of Neutrino Oscillation Parameters with Reactor Neutrinos*
Les Recontres de Physique de la Valee d'Aoste
La Thuile, Aosta Valley, Italy, March 1-7, 2009

22. *Reactor Neutrino Experiments: Recent Results and Future Prospects*
TAUP 2007, International Conference on Topics in Astroparticle and Underground Physics
Sendai, Japan, September 11-15, 2007

21. *Search for the Neutrino Mixing Angle θ_{13}*
APS April Meeting
Jacksonville, Fl, USA, April 14-17, 2007

20. *Future Reactor Neutrino Experiments to Measure $\sin^2 2\theta_{13}$*
Workshop on Next Generation Nucleon Decay and Neutrino Detectors 2006
Seattle, WA, USA, September 21-23, 2006

19. *Evidence of New Physics in Reactor and Solar Neutrino Experiments*
VietNam 2006 6th Rencontres du Vietnam
Hanoi, Vietnam, August 6 - 12, 2006

18. *Future θ_{13} Reactor Experiments*
Neutrino 2006
Santa Fe, NM, USA, June 13-19, 2006

17. *Measuring $\sin^2 2\theta_{13}$ with Reactor Antineutrinos*
US-Japan Seminar on "Double Beta Decay and Neutrino Mass",
2nd Joint Meeting of the Nuclear Physics Divisions of the APS and The Physical Society of Japan
Maui, HI, USA, September 17-20, 2005

16. *Measuring $\sin^2 2\theta_{13}$ with Reactor Antineutrinos at Daya Bay* – An Underground Laboratory for a Multidetector Experiment
Workshop on Exploring the Physics Frontier at the Deep Underground Laboratories,
Seattle, WA, USA, June 23-24, 2005

15. *Experimental Evidence for Neutrino Mass*
SeeSaw25, International Conference on Seesaw Mechanism
Paris, France, June 10-11, 2004

14. *Recent Discoveries in Neutrino Oscillation Physics & Prospects for the Future*
Opening Talk at the German Physical Society Meeting
Mainz, Germany, March 29 - April 1, 2004

13. *The Case for a Reactor Neutrino Disappearance Experiment to Measure θ_{13}*
Workshop on Future Low-Energy Neutrino Experiments
Niigata, Japan, March 20, 2004

12. *Results from KamLAND and Future Reactor Neutrino Experiments*
Les Recontres de Physique de la Vallee d'Aosta,
La Thuile, France, February 29- March 6, 2004

11. *Towards a Precision Measurement of θ_{13} with Reactor Neutrinos in the US*
NOON2004, Workshop on Neutrino Oscillation and their Origin
Tokyo, Japan, February 11-15, 2004

10. *A Reactor Neutrino Experiment at Diablo Canyon*
Workshop on Future Low-Energy Neutrino Experiments
Munich, Germany, October 9-11, 2003

9. *Reactor Neutrino Experiments: KamLAND and Diablo Canyon*
Institute for Nuclear Particle Astrophysics and Cosmology (INPAC Meeting)
San Diego, October 3-5, 2003

8. *The Future of Reactor Neutrino Oscillation Experiments*
Yamada Symposium on Neutrinos and Dark Matter in Nuclear Physics (NDM03)
Nara, Japan, June 9-14, 2003

7. *Reactor Neutrino Measurement of θ_{13}*
Conference on the Intersections of Particle and Nuclear Physics
New York, NY, USA, May 19-24, 2003

6. *APS DNP Dissertation Award in Nuclear Physics Prize Talk:*
Evidence for Neutrino Oscillations from SNO and KamLAND
APS April Meeting
Philadelphia, USA, April 5-8, 2003

5. *The Resolution to the Solar Neutrino Problem: Model-Independent Evidence for Neutrino Flavor Change at SNO*
XXXVIIIth Rencontres de Moriond: Electroweak Interactions and Unified Theories
Les Arcs, France, March 15-22, 2003

4. *Evidence for Neutrino Oscillations from SNO and KamLAND*
KITP Conference on “Neutrinos: Data, Cosmos, and Planck Scale”
Santa Barbara, USA, March 3-7, 2003

3. *Oscillation Measurements in the Solar Δm^2 Region Including KamLAND*
International Workshop on Neutrinos and Subterranean Science,
Washington, DC, USA, September 18-21, 2002

2. *Solar Neutrino Detection in KamLAND*
International Workshop on Neutrinos and Subterranean Science,

Washington, DC, USA, September 18-21, 2002

1. *First Results from the Sudbury Neutrino Observatory (SNO),*
Euroconference on Neutrino Masses and Mixing
Les Houches, France, June 17-21, 2001

Contributed Conference Presentations

32. *Towards a Precise Measurement of the ^{235}U Antineutrino Spectrum with PROSPECT*
Fifth Joint Meeting of Nuclear Physics Divisions of DNP and JPS
Hawaii, HI, USA, October 23-27, 2018

31. *Towards a Precise Measurement of the ^{235}U Antineutrino Spectrum with PROSPECT*
Neutrino 2018
XXVIII International Conference on Neutrino Physics and Astrophysics
Heidelberg, June 4-9, 2018

30. *PROSPECT: A Precision Reactor Oscillation and Spectrum Experiment*
14th International Conference on Topics in Astroparticle and Underground Physics (TAUP15)
Torino, Italy, September 7-11, 2015

29. *Measurement of the Reactor Antineutrino Flux and Spectrum at Daya Bay*
Joint Meeting of Nuclear Physics Divisions of DNP and JPS
Hawaii, HI, USA, October 10, 2014

28. *First Data with the Daya Bay Antineutrino Detectors,*
12th International Conference on Topics in Astroparticle and Underground Physics (TAUP11)
Munich, Germany, September 5-9, 2011

27. *Search for Neutrinoless Double Beta Decay with CUORE,*
XXIV International Conference on Neutrino Physics and Astrophysics,
Athens, Greece, June 14-19, 2010

26. *Antineutrino Detectors for a High-Precision Measurement of the Neutrino Mixing Angle θ_{13} at Daya Bay,*
XXIV International Conference on Neutrino Physics and Astrophysics,
Athens, Greece, June 14-19, 2010

25. *Status and Sensitivity of the Daya Bay Reactor θ_{13} Experiment*
Third Joint Meeting of the Nuclear Physics Divisions of the American Physical Society and The Physical Society of Japan
Hawaii, HI, USA, October 13-17, 2009

24. *Energy Calibration of the CUORE Bolometric Double Beta Decay Experiment*
Japan-US seminar on Double Beta Decay and Neutrinos,
Hawaii, HI, USA, October 11-13, 2009

23. *Design, Simulation, and Performance of the Daya Bay Antineutrino Detectors*
APS April Meeting,
Denver, CO, USA, May 2-5, 2009

22. *A Low-Temperature Calibration System for the CUORE Bolometric Double Beta-Decay Experiment*
APS Meeting of the Division of Nuclear Physics (2008)

Oakland, CA, October 26, 2008

21. *A High-Precision Measurement of $\sin^2 2\theta_{13}$ with the Daya Bay Reactor Neutrino Experiment*
Division of Nuclear Physics Town Meeting for the NSAC Long Range Plan
Chicago, Il, January 20, 2007

20. *Measuring $\sin^2 2\theta_{13}$ with Reactor Antineutrinos at Daya Bay*
APS Meeting of the Division of Nuclear Physics (2006)
Nashville, TN, October 23, 2006

19. *Measuring $\sin^2 2\theta_{13}$ with Reactor Antineutrinos at Daya Bay*
Joint APS/JPS Meeting of the Division of Nuclear Physics (2005)
Maui, HI, September 25-28, 2005

18. *Full-Volume Calibration of KamLAND and Precision Measurement of Oscillation Parameters*
Joint APS/JPS Meeting of the Division of Nuclear Physics (2005)
Maui, HI, September 17-22, 2005

17. *Full-Volume Calibration in KamLAND*
APS Division of Nuclear Physics, Bulletin of the American Physical Society vol. 49, No.6 (2004)
Chicago, Il, October 27-30, 2004

16. *Measuring θ_{13} in a Reactor Neutrino Oscillation Experiment*
APS April Meeting, Bulletin of the American Physical Society vol. 49, No.2 (2004)
Denver, CO, USA, May 1, 2004

15. *Measuring θ_{13} with Reactors*
APS Division of Nuclear Physics, Bulletin of the American Physical Society vol. 48, No.8 (2003)
Tucson, AZ, USA, October 31, 2003

14. *Reactor Neutrino Measurement of θ_{13}*
TAUP 2003 - Topics in Astroparticle and Underground Physics
Seattle, WA, USA, September 5-8, 2003

13. *Reactor Neutrino Measurement of θ_{13}*
Lepton Photon Conference (poster)
Fermilab, Il, USA, August 11-8, 2003

12*. Measuring the Neutrino Interaction Rates in SNO for Variable Fiducial Volumes*
APS April Meeting, Bulletin of the American Physical Society vol. 48, No.2 (2003)
Albuquerque, NM, USA, April 20-23, 2002

11. *Determination of the Charged-Current Rate and Energy Scale in SNO by Means of a Calibration Source-Independent Analysis of the Energy Spectrum*
APS Division of Nuclear Physics, Bulletin of the American Physical Society vol. 46, no.7 (2001)
Maui, Hawaii, USA, October 17-20, 2001

10. *Neutral-Current Detection in the Sudbury Neutrino Observatory Using Ultra-Low-Background ^{3}He Proportional Counters,*
EuroConference on Neutrinos in the Universe: Frontiers in Astroparticle Physics and Cosmolgy
Lenggries, Germany, September 30, 2001

9. *Background Studies for the Neutral Current Detector Array in SNO,*

APS Division of Nuclear Physics, Bulletin of the American Physical Society vol. 45, No.5 (2000)
Williamsburg, VA, USA, October 4-7, 2000

8. *High-Voltage Microdischarge in Ultra-Low-Background ^{3}He Proportional Counters,*
IEEE Nuclear Science Symposium
Seattle, Washington, USA, October 24-30, 1999

7. *Background Studies for the Neutral Current Detector Array in SNO,*
TAUP99 - Topics in Astroparticle and Underground Physics
Paris, France, September 5-10, 1999

6. *Neutral Current Detection in the Sudbury Neutrino Observatory,*
National Nuclear Physics Summer School, UCSD
San Diego, California, USA, June 28-July 9, 1999

5. *Model-Independent Constraints on Neutrino Mixing from Solar Neutrinos,*
APS Centennial Meeting, Bulletin of the American Physical Society 44, 1307 (1999)
Atlanta, Georgia, USA, March 20-26, 1999

4. *In Situ Determination of Backgrounds from Neutral Current Detectors in the Sudbury Neutrino* Observatory,
APS Division of Nuclear Physics, Bulletin of the American Physical Society 43, 1549 (1999)
Santa Fe, New Mexico, USA, October 28-31, 1998

3. *A Model Independent Analysis of the Solar Neutrino Anomaly,*
International School of Nuclear Physics, 19th Course
Erice, Sicily, 16-24 September, 1997

2. *Model-Independent Analysis of the Solar Neutrino Anomaly,*
APS Division of Nuclear Physics, Bulletin of the American Physical Society 42, 1679 (1997)
Whistler, BC, Canada, October 5-8, 1997

1. *The Energy Spectrum of ^{8}B Neutrinos and the Solar Neutrino Problem,*
APS Division of Nuclear Physics, Bulletin of the American Physical Society 42, 1639 (1997)
Whistler, BC, Canada, October 5-8, 1997

Public Science, Outreach, and Arts

9. *Exploring the Invisible Universe*
Worthington Hooker School
New Haven, CT, USA, February 26, 2019

8. *Neutrinos and the Invisible Universe*
CT Stargazing Party
September 8, 2018

7. Pathways to Science: "*Exploring the Invisible Universe"*
https://wlab.yale.edu/gallery/yale-pathways-science-discover-invisible-universe-wright-lab-may-5-2018
Wright Laboratory, Yale University, May and July 2018

6. Nominated as a speaker for *Inspiring Yale 2016*
http://www.inspiringyale.com/gsas-sciences

5. *Neutrinos – Chasing The Ghost Particles in our Universe*
Tilde Science Café, http://www.tildecafe.org
Branford, CT, USA, December 5, 2015

5*. Art at the Yale Wright Laboratory*
Various art projects carried out jointly with Yale art students, inspired by the decommissioned accelerator of the Wright Nuclear Structure Laboratory, 2015
http://wlab.yale.edu/arts

4. *Neutrinos - Ghost Particles in our Universe,*
Science Saturdays – fun science lectures for kids, Yale University
New Haven, CT, USA, October 19, 2013

3. *Neutrinos and Dark Matter – The Next Frontier at the Wright Lab,*
Open House of the Yale Wright Laboratory, Yale University
New Haven, CT, USA, October 12, 2013

2. *Hunting Invisible Ghosts in the Universe*
Madison Science Pub, Wisconsin Citizens for Science, http://madsciencepub.org/
Madison, WI, USA, October 31, 2010

1. *From the Cultural Revolution to Nuclear Power: The Rise of Science and Technology in China*
Rotary Club Madison West
Madison, WI, USA, June 10, 2010

Colloquia and Seminars

91. Stony Brook University, March 11, 2019 (seminar)

90. Brookhaven National Laboratory, January 11, 2018 (seminar)

89. University of Illinois at Urbana-Champaign, November 29, 2017 (colloquium)

88. Oak Ridge National Laboratory, September 6, 2017 (seminar)

87. University of Toronto, April 24, 2017 (seminar)

86. Fermi National Laboratory, September 15, 2016 (seminar)

85. University of Washington, CENPA, March 1, 2015 (seminar)

84. Yale University, CT, USA, October 19, 2015 (colloquium)

83. Brandeis University, MA, USA, October 13, 2015 (colloquium)

82. Yale University, CT, USA, March 27, 2015 (colloquium)

81. Muenster University, Muenster, Germany, April 10, 2014 (colloquium)

80. Penn State University, State College, PA, December 12, 2013 (colloquium)

79. Yale University, New Haven, CT, September 30, 2013 (seminar)

78. University of Massachusetts, Amherst, MA, September 13, 2013 (seminar)

77. Brookhaven National Laboratory, Upton, NY, USA, March 28, 2013 (seminar)

76. Argonne National Laboratory, Physics Division, Il, USA, March 18, 2013 (seminar)

76. National Institute of Standards and Technology (NIST), MD, USA, March 15, 2013 (seminar)

75. University of Wisconsin, Madison, WI, USA, February 25, 2013 (undergraduate colloquium)

75. Technical University Dresden, Germany, November 27, 2012 (colloquium)
74. Ohio State University, Columbus, OH, November 21, 2012 (colloquium)
73. Ohio State University, CCAPP, Columbus, OH, November 20, 2012 (seminar)
72. Simon Fraser University, Burnaby, BC, Canada, November 9, 2012 (colloquium)
71. University of British Columbia, Vancouver, BC, Canada, November 8, 2012 (colloquium)
70. University of Victoria, Victoria, BC, Canada, November 7, 2012 (colloquium)
69. University of Alberta, Edmonton, Alberta, Canada, October 19, 2012 (colloquium)
68. University of North Carolina, Chapel Hill, NC, USA, August 27, 2012 (colloquium)
67. NSAC Fundamental Symmetries Town Meeting, Chicago, Il, USA, August 10-11, 2012 (invited talk)
66. Oak Ridge National Laboratory, Oak Ridge, TN, USA, July 5, 2012 (seminar)
65. Lawrence Livermore National Laboratory, CA, USA, May 23, 2012 (seminar)
64. University of Rome, Italy, May 4, 2012 (seminar)
63. Stony Brook University, NY, USA, May 1, 2012 (seminar)
62. University of Maryland, MD, USA, April 18, 2012 (seminar)
61. Fermi National Accelerator Laboratory, Il, USA, March 23, 2012 (seminar)
61. University of Wisconsin, WI, USA March 13, 2012 (seminar)
60. Yale University, CT, USA, February 11, 2012 (colloquium)
59. National Institute of Standards and Technology (NIST), MD, USA, October 2011 (seminar)
58. University of Washington, CENPA, WA, USA, July 2011 (seminar)
57. Shanghai Jiao Tong University, China, May 20, 2011 (seminar)
56. Shanghai Jiao Tong University, China, May 18, 2011 (colloquium)
55. UC Irvine, Orange, CA, USA, April 21, 2011 (seminar)
54. University of Wisconsin, Madison, WI, USA, February 8, 2011 (undergraduate colloquium)
53. SLAC National Accelerator Laboratory, May 11, 2010 (seminar)
52. University of Illinois at Urbana-Champaign, Il, USA, April 23, 2010 (seminar)
51. Yale University, New Haven, CT, USA, March 1, 2010 (colloquium)
50. University of Wisconsin, Madison, WI, USA, January 26, 2010 (undergraduate colloquium)
49. Indiana University Cyclotron Facility (IUCF), Bloomington, IN, USA, December 11, 2009 (seminar)
48. Forschungszentrum Karlsruhe, Karlsruhe, Germany, November 20, 2009 (seminar)
47. University of Wisconsin, Madison, WI, USA, March 31, 2009 (undergraduate colloquium)
46. Columbia University, New York, NY, USA, February 16, 2009 (colloquium)
45. Technical University Munich (TUM), Munich, Germany, February 2, 2009 (colloquium)
44. Illinois Institute of Technology, Chicago, IL, USA, December 4, 2008 (colloquium)
43. Argonne National Laboratory, Physics Division, Chicago, IL, USA, May 23, 2008 (colloquium)
42. California Institute of Technology, Pasadena, CA, USA, February 7, 2008 (colloquium)
41. University of Wisconsin, Madison, WI, USA, February 5, 2008 (undergraduate colloquium)

40. University of Chicago, Enrico Fermi Institute, Il, USA, June 4, 2007 (seminar)
39. University of Wisconsin, Madison, WI, USA, April 24, 2007 (undergraduate colloquium)
38. Illinois Institute of Technology, Chicago, Il, USA, April 19, 2007 (colloquium)
37. Argonne National Laboratory, Physics Division, Chicago, IL, USA, December 11, 2006 (seminar)
36. University of Illinois Urbana-Champaign, Urbana, IL, USA, September 13, 2006 (seminar)
35. Harvard University, Cambridge, MA, March 14, 2006 (colloquium)
34. Lawrence Berkeley National Laboratory, Berkeley, CA, USA, February 23, 2006 (colloquium)
33. University of Washington, Seattle, WA, USA, February 2, 2006 (colloquium)
32. University of Wisconsin-Madison, Madison, WI, January 23, 2006 (seminar)
31. UC Berkeley, CA, USA, November 30, 2005 (seminar)
30. German National Academic Foundation, Berlin, Germany, September 2, 2005 (seminar)
29. SLAC, Menlo Park, CA, USA, July 7, 2005 (seminar)
28. University of Maryland, College Park, MD, USA, March 7, 2005 (seminar)
27. University of North Carolina at Chapel Hill, NC, USA, February 28, 2005 (colloquium)
26. Massachusetts Institute of Technology, Boston, MA, USA, February 11, 2005 (colloquium)
25. California Institute of Technology, Pasadena, CA, USA, January 18, 2005 (seminar)
24. University of Washington, Seattle, WA, USA, January 10, 2005 (colloquium)
23. Lawrence Berkeley National Laboratory, Nuclear Physics Forum, USA, December 16, 2004 (seminar)
22. Max-Planck Institute for Nuclear Physics, Heidelberg, Germany, November 25, 2004 (colloquium)
21. CENPA, University of Washington, Seattle, WA, USA, May 18, 2004 (seminar)
20. Case Western Reserve University, Cleveland, OH, USA, April 28, 2004 (colloquium)
19. Los Alamos National Laboratory, T-Division, Los Alamos, NM, USA, April 6, 2004 (seminar)
18. California Institute of Technology, Pasadena, CA, USA, December 5, 2003 (seminar)
17. Kansas State University, Manhattan, KS, USA, October 22, 2003 (colloquium)
16. San Luis Obispo Polytechnic State University, CA, USA, July 18, 2003, (seminar)
15. Harvard University, Cambridge, MA, USA, April 2, 2003 (colloquium)
14. John Hopkins University, Baltimore, MD, USA, Feburary 28, 2003 (colloquium)
13. Laboratoire d'Annecy-le-Vieux de Physique des Particules (LAPP), Annecy, France
Feburary 7, 2003 (colloquium)
12. Institute de Sciences Nucleaire (ISN), Grenoble, France, February 6, 2003 (colloquium)
11. Los Alamos National Laboratory, P-25, Los Alamos, NM, USA, January 6, 2003 (seminar)
10. University of Mainz, Mainz, Germany, June 5, 2002 (colloquium)
9. University of Wuppertal, Wuppertal, Germany, June 4, 2002 (colloquium)
8. University of Washington, Seattle, WA, USA, April 25, 2002 (colloquium)
7. University of Oregon, Eugene, OR, USA, January 14, 2002 (seminar)
6. University of Heidelberg, Particle Physics Seminar, December 4, 2001 (seminar)

5. University of Heidelberg, Philosophisches Kolloquium, November 30, 2001 (colloquium)

4. Forschungszentrum Karlsruhe, November 29, 2001 (seminar)

3. University of Illinois at Urbana-Champaign, Il, USA, November 14, 2001 (seminar)

2. Los Alamos National Laboratory, P-23, Los Alamos, NM, USA, November 6, 2001 (seminar)

1. Laboratoire d'Annecy-le-Vieux de Physique des Particules (LAPP), Annecy, France

June 22, 2001 (colloquium)

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References

References are available upon request.