

**CHANG KEE JUNG, Ph. D.**

SUNY Distinguished Professor

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43 Erin Lane  
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**Education: Graduate**

Ph.D. in Physics, specializing in Experimental High Energy Physics  
Indiana University, Bloomington, Indiana, May 1986  
Thesis Title: *Measurement of The  $F^+$  Meson Lifetime*  
Thesis Advisor: Prof. Harold O. Ogren

**Undergraduate**

Bachelor of Science in Physics  
Seoul National University, Seoul, Korea, 1979

**Employment History:**

2021-present Chair, Dept. of Physics & Astronomy, Stony Brook U.  
2015-present SUNY Distinguished Professor, Dept. of Physics & Astronomy, Stony Brook U.  
2000-2015 Professor, Dept. of Physics & Astronomy, Stony Brook U.  
1996-2000 Assoc. Professor, Dept. of Physics & Astronomy, Stony Brook U.  
1990-1996 Assis. Professor, Dept. of Physics, Stony Brook U.  
1986-1990 Postdoctoral Research Physicist, SLAC, Stanford U.  
1982-1986 Graduate Research Assistant, Indiana U., Bloomington  
1980-1982 Graduate Teaching Assistant, Indiana University, Bloomington

**Major Long-Standing Professional Positions in Research:**

2021 Lead, SAND 3DST+TPC Group, DUNE Collaboration  
2018-2019 Elected Member, Spokesperson Advisory Committee, DUNE Collaboration  
2017-2021 PI, 3DST Group, DUNE Collaboration  
2017-2018 Elected Member, Executive Committee, DUNE Collaboration  
2015-2017 Advisory Member, Executive Committee, T2K Collaboration  
2015-2016 Resource Coordinator, DUNE Collaboration  
2015-2016 ex officio Member, Executive Committee, DUNE Collaboration  
2011-2015 International Co-Spokesperson, T2K Collaboration  
2014-2015 Member, Interim International Executive Board for U.S. Based Neutrino and Nucleon decay Experiment, "Experiment at Long Baseline Neutrino Facility"  
2004-present Spokesperson, T2K US Collaboration  
1999-present Founder and Chair of the Steering Committee, Next generation Nucleon decay and Neutrino detector (NNN) Workshop series  
2007-2011 Elected Member, Executive Committee, T2K Collaboration  
2000-2008 Spokesperson, Underground Nucleon decay/Neutrino Observatory (UNO) Collab.  
2004-2007 Spokesperson, Henderson Underground Science and Engineering Project (HUSEP)  
2002-2007 Chair, Interim/International Board of Representatives, T2K Collaboration  
1996-2007 Co-Spokesperson, KEK to Kamioka (K2K) US Collaboration  
1996-2007 Member, Executive Committee, KEK to Kamioka (K2K) Collaboration

### **Honors: Awards and Prizes**

2022 Julius Edgar Lilienfeld Prize, American Physical Society, 2021  
High Energy and Particle Physics Prize, European Physical Society, (shared, D0 Collab.), 2019  
Dean's Award for Excellence in Graduate Mentoring by a faculty member, Stony Brook U., 2018  
American Association for the Advancement of Science (AAAS) Fellow, 2017  
State University of New York (SUNY) Distinguished Professorship, 2015  
The Breakthrough Prize in Fundamental Physics 2016 (shared, Super-Kamiokande, K2K and T2K Collaborations), 2015  
Chancellor's Award for Excellence in Scholarship and Creative Activity, SUNY, 2014  
Suwa Prize (shared, J-PARC Neutrino Beam Group), 2013  
Le Prix La Recherche (shared, T2K Collaboration), 2012  
Outstanding Faculty (Teacher) Award, Dept. of Physics and Astronomy, Stony Brook U., 2010  
Academy of Teacher-Scholar Award, Stony Brook U., 2003  
American Physical Society (APS) Fellow, 2002  
Asahi Prize (shared, Super-Kamiokande Collaboration), 1998  
U.S. Dept. of Energy, Outstanding Junior Investigator Award, 1994  
Outstanding Research Assistant Award, Indiana U., 1986  
Outstanding Associate Instructor Award, Indiana U., 1983

### **Honors: Fellowships and Visiting Positions**

Scientific Associate, CERN (European Organization for Nuclear Research), 2019  
Affiliated Member, Kavli IPMU, U. of Tokyo, 2013-2018  
Project Professor, Kavli IPMU, U. of Tokyo, 2013  
Scientific Associate, Kavli IPMU, U. of Tokyo, 2012  
Spanish Ministry of Science and Education Visiting Professor Fellowship, Universitat Autònoma de Barcelona, Spain, 2005  
Visiting Professor, KEK, Japan, 1998  
Japan Society for Promotion of Science (JSPS) Fellow, 1998  
Center of Excellence (COE) Fellow, U. of Tokyo, 1997

### **Professional Affiliations and Societies:**

Fellow, American Physical Society (APS)  
Fellow, American Association for Advancement of Science (AAAS)  
Member, Association of Korean Physicists in America (AKPA)

### **Professional Services: National and International Committee**

*(This list excludes internal collaboration positions or services, and services on reviews of various proposals submitted to funding agencies and papers submitted to professional journals.)*

Member (2018-2021), Scientific Advisory Board of the US Neutrino Theory Network (NTN)  
Member (2017, 2018), APS - Division of Particles and Fields (DPF) Nominating Committee  
Chair (2017), Korean Institute for Basic Science (ibs) - Center for Underground Physics (CUP) Evaluation Panel  
Member (2015-2019), Commission on Underground Research Laboratory (URL) Networking, International Society for Rock Mechanics  
Member (2012), Large-Area Picosecond Photo-Detector (LAPPD) Program Review Panel  
Member (2012), Korean Institute for Basic Science (ibs) Review Panel  
Member (2009, 2010, 2012), Spanish Evaluation Panel for Particle Physics  
Member (2011), DOE Institutional Review of Fermilab

Member (2007-2010), Science Committee, Canfranc Underground Laboratory, Spain  
Member (2001, 2002), Committee for annual DOE program review of Fermilab  
Member (1998, 1999), DOE review panel (Lehman) of the NuMI/MINOS project

### **Professional Services: Conference Organization and Participation in National/International Working Groups**

*(This list excludes memberships on international advisory committees of various conferences and workshops.)*

Chair, Steering Committee, *NNN19 International Workshop on Next Generation Nucleon decay and Neutrino detectors, Medellin, Colombia; NNN18, Vancouver, Canada; NNN17, Warwick, U.K.; NNN16, Beijing, China; NNN15, Stony Brook, New York, U.S.A.; NNN14, Paris, France; NNN13, Kashiwa, Japan; NNN12, Batavia, Illinois, U.S.A.; NNN11, Zurich, Switzerland; NNN10, Toyama, Japan; NNN09, Estes Park, Colorado, U.S.A.; NNN08, Paris, France; NNN07, Hamamatsu, Japan; NNN06, Seattle, Washington, U.S.A.; NNN05, Aussois, France*

Co-Chair (2015), NNN15/Unification Day 2 (UD2) Workshop, Stony Brook, NY, U.S.A.

Co-Organizer (2002), NNN02-CERN Workshop, Geneva, Switzerland

Organizer (2000), NNN00-Fermilab Workshop, Batavia, Illinois, U.S.A.

Co-Organizer (2000), NNN00-UCI Workshop, Irvine, California, U.S.A.

Founder and Co-chair (1999), Organizing Committee, International Workshop on Next generation Nucleon decay and Neutrino detector (NNN99), Stony Brook, NY, U.S.A.

Co-convener (2011), Proton Decay Working Group, Fundamental Physics in Intensity Frontier, Rockville, Maryland, U.S.A.

Member (2006 - 2007), FNAL-BNL WG on very long baseline neutrino superbeam exp.

Organizer (2006), Science and Engineering at Henderson DUSEL Capstone Workshop, Stony Brook, New York

Member (2005 - 2006), European International Scoping Study (ISS) for future neutrino programs

Co-leader (2004 - 2006), Deep Underground Science and Engineering Lab (DUSEL) Proton decay working group

Organizer (2004), K2K Workshop, Stony Brook, New York, U.S.A.

Co-Organizer (2004), Unification Day Workshop, Keystone, Colorado, U.S.A.

Member (2003 - 2004), APS joint study on neutrino physics working groups

Member (1997), Local Organizing Committee, XIIth Hadrons in Collisions Symposium, Stony Brook, New York, U.S.A.

Member (1996), Parallel Session Organizing Committee, 1996 Annual American Physical Society Meeting, Indianapolis, Indiana, U.S.A.

Chair (1993), Local Organizing Committee, The DØ workshop, Stony Brook, New York, U.S.A.

**Postdoctoral Advisor:** J. Dorfan, SLAC (Professor Emeritus)

**Graudate Advisor:** H. O. Ogren, Indiana U., Bloomington (Professor Emeritus)

### **The total number of postdoctoral researchers, graduate students and undergraduate students advised (past and current):**

Postdoctoral Researchers: 13

Graduate Students (Ph.D.): 23

Graduate Students (M.S.): 5

Undergraduate Students (B.S.): 19

Undergraduate Students (Short Term): 17

(These list does not include students that spent very short term, one semester/summer or less.)

## Grauate and Postdoctoral Advisees:

### Past Postdoctoral Advisees:

**Dan Claes**, U. of Nebraska

**Clark McGrew**, Stony Brook U.

**Jim Hill**, California S. U., Dominguez Hills

**Kai Martens**, Kavli IPMU, U. of Tokyo, Japan

**Anthony Sarrat**, KEAS Group, France

**Kazuyoshi Kobayashi**, Institute for Cosmic Ray Research (ICRR), U. of Tokyo, Japan

**Ian Taylor**, British Government Defense/National Security, U.K.

**Jeanine Adam**, Parexa, a management consulting company, Zurich, Switzerland

**James Imber**, Deutsches Zentrum für Luftund Raumfahrt (German Aerospace Center)

**Jose Palomino**, Illinois Institute of Technology

**Neha Dokania**, U. of Cincinnati

### Current Postdoc Advisees:

**Guang Yang**, Stony Brook U.

**Ciro Riccio**, Stony Brook U.

### Past Graduate Advisees (Ph. D.'s):

**Marc Paterno**, Fermi National Accelerator Lab (FNAL)

**Hailin Li**, yHLsoft Inc., Naperville, IL

**Brett Viren**, Brookhaven National Lab (BNL)

**Christopher Mauger**, U. of Pennsylvania

**Eric Sharkey**, Netrics Computing Software Co.

**Matthew Malek**, U. of Sheffield, U.K.

**Tokufumi Kato**, Neuberger Berman, Manhattan, NY

**Lisa Whitehead**, University of Houston

**Ryan Terri**, The London Oratory School, London, U.K.

**Glenn Lopez**, OneWest Bank, Pasadena, CA

**Dmitriy Beznosko**, Harvard U., Boston, MA

**Joshua Hignight**, U. of Alberta, Canada

**Karin Gilje**, U. of Alberta, Canada

**Jay Hyun Jo**, Yale U.

**Xiaoyue Li**, TRIUMF, Vancouver, Canada

**Zoya Vallari**, California Institute of Technology

**Gabriel Santucci**, York U., Toronto, Canada

**Kevin Wood**, LBNL, Berkeley, CA

**Yue Wang**, TikTok, Mountain View, CA

### Current Graduate Advisees (Ph. D.'s):

**Shilin Liu**, Ph. D. (expected in May 2022)

**Abraham Teklu**, Ph. D. (expected in May 2024)

**Jacob Larkin**, Ph. D. (expected in May 2024)

**Julia Codere**, Ph. D. (expected in May 2027)

## SELECTED PUBLICATIONS

(Full publication list is provided separately.)

### **29. Constraint on the Matter-Antimatter Symmetry-Violating Phase in Neutrino Oscillations**

K. Abe *et al.* [T2K Collaboration] Nature **580**, no.7803, 339-344 (2020)

### **28. Observation of Electron Neutrino Appearance from a Muon neutrino Beam**

K. Abe *et al.* [T2K Collaboration] Phys. Rev. Lett. **112**, 061802 (2014)

### **27. Precise Measurement of the Neutrino Mixing Parameter $\theta_{23}$ from Muon Neutrino Disappearance in an Off-axis Beam**

K. Abe *et al.* [T2K Collaboration] Phys. Rev. Lett. **112**, 181801 (2014)

### **26. Measurement of Neutrino Oscillation Parameters from Muon Neutrino Disappearance with an Off-axis Beam**

K. Abe *et al.* [T2K Collaboration] Phys. Rev. Lett. **111**, 211803 (2013)

### **25. First Muon-Neutrino Disappearance Study with an Off-Axis Beam**

K. Abe *et al.* [T2K Collaboration] Phys. Rev. **D85**, 031103 (2012)

### **24. Indication of Electron Neutrino Appearance from an Accelerator-produced Off-axis Muon Neutrino Beam**

K. Abe *et al.* [T2K Collaboration] Phys. Rev. Lett. **107**, 041801 (2011)

### **23. The T2K Experiment**

K. Abe *et al.* [T2K Collaboration] Nucl. Instr. and Meth. **A 659**, 106 (2011)

### **22. Background Study on $\nu_e$ Appearance from a $\nu_\mu$ Beam Neutrino Oscillation Experiments with a Large Water Cherenkov Detector**

C. Yanagisawa, C. K. Jung, P. T. Le, B. Viren, Phys. Rev. **D83**, 072002 (2011)

### **21. Measurement of Single Charged Pion Production in the Charged-current Interactions of Neutrinos in a 1.3 GeV Wide Band Beam**

A. Rodriguez and L. Whitehead *et al.* [K2K Collaboration] Phys. Rev. **D78**, 032003 (2008)

### **20. Measurement of Neutrino Oscillation by the K2K experiment**

S.H. Ahn *et al.*[K2K Collaboration] Phys. Rev. **D74**, 072003 (2006)

### **19. A Measurement of Atmospheric Neutrino Flux Consistent with Tau Neutrino Appearance**

K. Abe *et al.* [Super-Kamiokande Collaboration] Phys. Rev. Lett. **97** 171801 (2006)

### **18. Evidence for Muon Neutrino Oscillation in an Accelerator-based Experiment.**

E. Aliu *et al.* [K2K Collaboration] Phys. Rev. Lett. **94**, 081802 (2005)

### **17. Measurement of Single pi0 Production in Neutral Current Neutrino Interactions with Water by a 1.3-GeV Wide Band Muon Neutrino Beam**

S. Nakayama *et al.*[K2K Collaboration] Phys. Lett. **B619**, 255 (2005)

### **16. Indications of Neutrino Oscillation in a 250 km Long Baseline Experiment**

S.H. Ahn *et al.*[K2K Collaboration] Phys. Rev. Lett. **90**, 041801 (2003)

### **15. The Super-Kamiokande Detector**

Y. Fukuda *et al.*[Super-Kamiokande Collaboration] Nucl. Inst. Meth. **A501** 418 (2003)

- 14. Search for Supernova Relic Neutrinos at Super-Kamiokande**  
M. Malek *et al.*[Super-Kamiokande Collaboration] Phys. Rev. Lett. **90**, 061101 (2003)
- 13. Detection of Accelerator Produced Neutrinos at a Distance of 250-km**  
S.H. Ahn *et al.*[K2K Collaboration] Phys. Lett. **B511**, 178 (2001)
- 12. Oscillations of Atmospheric Neutrinos**  
**C.K. Jung**, C. McGrew, T. Kajita, T. Mann, Ann. Rev. Nucl. Part. Sci. **51** 451 (2001)
- 11. Feasibility of a Next Generation Underground Water Cherenkov Detector: UNO**  
**Chang Kee Jung**, In \*Stony Brook 1999, Next generation nucleon decay and neutrino detector\* workshop proceedings. 29-34. [HEP-EX 0005046]
- 10. Evidence for Oscillation of Atmospheric Neutrinos**  
Y. Fukuda *et al.*[Super-Kamiokande Collaboration] Phys. Rev. Lett. **81**, 1562 (1998)
- 9. Search for Proton Decay via  $p \rightarrow e^+ \pi^0$  in a Large Water Cherenkov Detector**  
M. Shiozawa, B. Viren *et al.*[Super-Kamiokande Collaboration] Phys. Rev. Lett. **81**, 3319-3323, (1998)
- 8. Search for light top squarks in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV**  
S. Abachi *et al.*[DØ Collaboration] Phys. Rev. Lett. **76**, 2222 (1996).
- 7. Observation of the top quark**  
S. Abachi *et al.*[DØ Collaboration] Phys. Rev. Lett. **74**, 2632 (1995)
- 6. Search for squarks and gluinos in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV**  
S. Abachi *et al.*[DØ Collaboration] Phys. Rev. Lett. **75**, 618 (1995).
- 5. Experimental explanation of Tau lepton decay puzzle: discrepancy between the measured and the theoretical Tau lifetimes**  
**Chang Kee Jung**, Phys. Rev. **D47**, 3994 (1993)
- 4. Search for long-lived massive neutrinos in  $Z$  decays**  
**C. K. Jung**, R. Van Kooten *et al.*[MarkII Collaboration] Phys. Rev. Lett. **64**, 1091 (1990)
- 3. Measurements of  $Z$  boson resonance parameters in  $e^+e^-$  annihilation**  
G. S. Abrams *et al.*[MarkII Collaboration] Phys. Rev. Lett. **63**, 2173 (1989)
- 2. A drift chamber constructed of aluminized mylar tubes**  
P. Baringer, **C. Jung**, H. O. Ogren and D. R. Rust, Nucl. Instr. Meth. **A254**, 542 (1987)
- 1. Measurement of the  $F^+$  meson lifetime**  
**C. Jung (C.K. Jung in spires)** *et al.*[HRS Collaboration] Phys. Rev. Lett. **56**, 1775 (1986)

## PUBLICATIONS: Refereed Journal Articles

(The names appear on the papers as: Chang Kee Jung, C.K. Jung and C. Jung.)

**315. Search for neutrinos in coincidence with gravitational wave events from the LIGO-Virgo O3a Observing Run with the Super-Kamiokande detector**

K. Abe *et al.* [Super-Kamiokande].  
arXiv:2104.09196 [astro-ph.HE].

**314. First T2K measurement of transverse kinematic imbalance in the muon-neutrino charged-current single- $\pi^+$  production channel containing at least one proton**

K. Abe *et al.* [T2K].  
arXiv:2102.03346 [hep-ex].

**313. Improved constraints on neutrino mixing from the T2K experiment with  $3.13 \times 10^{21}$  protons on target**

K. Abe *et al.* [T2K].  
arXiv:2101.03779 [hep-ex].

**312. Search for Tens of MeV Neutrinos associated with Gamma-Ray Bursts in Super-Kamiokande**

A. Orii *et al.* [Super-Kamiokande].  
arXiv:2101.03480 [astro-ph.HE].

**311. Search for solar electron anti-neutrinos due to spin-flavor precession in the Sun with Super-Kamiokande-IV**

K. Abe *et al.* [Super-Kamiokande].  
arXiv:2012.03807 [hep-ex].

**310. Neutron-antineutron oscillation search using a 0.37 megaton-years exposure of Super-Kamiokande**

K. Abe *et al.* [Super-Kamiokande].  
Phys. Rev. D **103**, no.1, 012008 (2021)

**309. Search for proton decay via  $p \rightarrow e^+\pi^0$  and  $p \rightarrow \mu^+\pi^0$  with an enlarged fiducial volume in Super-Kamiokande I-IV**

A. Takenaka *et al.* [Super-Kamiokande].  
Phys. Rev. D **102**, no.11, 112011 (2020)

**308. Prospects for beyond the Standard Model physics searches at the Deep Underground Neutrino Experiment**

B. Abi *et al.* [DUNE].  
Eur. Phys. J. C **81**, no.4, 322 (2021)

**307. The SuperFGD Prototype Charged Particle Beam Tests**

A. Blondel, M. Bogomilov, S. Bordoni, F. Cadoux, D. Douqa, K. Dugas, T. Ekelof, Y. Favre, S. Fedotov and K. Fransson, *et al.*  
JINST **15**, no.12, P12003 (2020)

**306. First results on ProtoDUNE-SP liquid argon time projection chamber perfor-**

mance from a beam test at the CERN Neutrino Platform

B. Abi *et al.* [DUNE].

JINST **15**, no.12, P12004 (2020)

**305. Neutrino interaction classification with a convolutional neural network in the DUNE far detector**

B. Abi *et al.* [DUNE].

Phys. Rev. D **102**, no.9, 092003 (2020)

**304. Long-baseline neutrino oscillation physics potential of the DUNE experiment**

B. Abi *et al.* [DUNE].

Eur. Phys. J. C **80**, no.10, 978 (2020)

**303. Indirect search for dark matter from the Galactic Center and halo with the Super-Kamiokande detector**

K. Abe *et al.* [Super-Kamiokande].

Phys. Rev. D **102**, no.7, 072002 (2020)

**302. Measurements of  $\bar{\nu}_\mu$  and  $\bar{\nu}_\mu + \nu_\mu$  charged-current cross-sections without detected pions nor protons on water and hydrocarbon at mean antineutrino energy of 0.86 GeV**

K. Abe *et al.* [T2K].

PTEP **2021**, no.4, 043C01 (2021)

**301. Simultaneous measurement of the muon neutrino charged-current cross section on oxygen and carbon without pions in the final state at T2K**

K. Abe *et al.* [T2K].

Phys. Rev. D **101**, no.11, 112004 (2020)

**300. Measurement of the charged-current electron (anti-)neutrino inclusive cross-sections at the T2K off-axis near detector ND280**

K. Abe *et al.* [T2K].

JHEP **10**, 114 (2020)

**299. First combined measurement of the muon neutrino and antineutrino charged-current cross section without pions in the final state at T2K**

K. Abe *et al.* [T2K].

Phys. Rev. D **101**, no.11, 112001 (2020)

**298. Deep Underground Neutrino Experiment (DUNE), Far Detector Technical Design Report, Volume I Introduction to DUNE**

B. Abi *et al.* [DUNE].

JINST **15**, no.08, T08008 (2020)

**297. Deep Underground Neutrino Experiment (DUNE), Far Detector Technical Design Report, Volume III: DUNE Far Detector Technical Coordination**

B. Abi *et al.* [DUNE].

JINST **15**, no.08, T08009 (2020)

**296. Deep Underground Neutrino Experiment (DUNE), Far Detector Technical Design Report, Volume IV: Far Detector Single-phase Technology**

B. Abi *et al.* [DUNE].

JINST **15**, no.08, T08010 (2020)



- 295. Search for proton decay into three charged leptons in 0.37 megaton-years exposure of the Super-Kamiokande**  
M. Tanaka *et al.* [Super-Kamiokande].  
Phys. Rev. D **101**, no.5, 052011 (2020)
- 294. Search for Electron Antineutrino Appearance in a Long-baseline Muon Antineutrino Beam**  
K. Abe *et al.* [T2K].  
Phys. Rev. Lett. **124**, no.16, 161802 (2020)
- 293. Measurement of neutrino and antineutrino neutral-current quasielasticlike interactions on oxygen by detecting nuclear deexcitation  $\gamma$  rays**  
K. Abe *et al.* [T2K].  
Phys. Rev. D **100**, no.11, 112009 (2019)
- 292. Search for Astronomical Neutrinos from Blazar TXS 0506+056 in Super-Kamiokande**  
K. Hagiwara *et al.* [Super-Kamiokande].  
Astrophys. J. Lett. **887**, no.1, L6 (2019)
- 291. Constraint on the Matter-Antimatter Symmetry-Violating Phase in Neutrino Oscillations**  
K. Abe *et al.* [T2K Collaboration].  
Nature **580**, no.7803, 339-344 (2020)
- 290. Measurement of the muon neutrino charged-current single  $\pi^+$  production on hydrocarbon using the T2K off-axis near detector ND280**  
K. Abe *et al.* [T2K].  
Phys. Rev. D **101**, no.1, 012007 (2020)
- 289. First measurement of the charged current  $\bar{\nu}_\mu$  double differential cross section on a water target without pions in the final state**  
K. Abe *et al.* [T2K].  
Phys. Rev. D **102**, no.1, 012007 (2020)
- 288. Sensitivity of Super-Kamiokande with Gadolinium to Low Energy Anti-neutrinos from Pre-supernova Emission**  
C. Simpson *et al.* [Super-Kamiokande].  
Astrophys. J. **885**, 133 (2019)
- 287. Measurement of the  $\nu_\mu$  charged-current cross sections on water, hydrocarbon, iron, and their ratios with the T2K on-axis detectors**  
K. Abe *et al.* [T2K].  
PTEP **2019**, no.9, 093C02 (2019)
- 286. Search for heavy neutrinos with the T2K near detector ND280**  
K. Abe *et al.* [T2K].  
Phys. Rev. D **100**, no.5, 052006 (2019)
- 285. Search for light sterile neutrinos with the T2K far detector Super-Kamiokande at a baseline of 295 km**  
B. Abi *et al.* [DUNE].  
Phys. Rev. D **99**, no.7, 071103 (2019)

**284. Search for neutral-current induced single photon production at the ND280 near detector in T2K**

K. Abe *et al.* [T2K].

J. Phys. G **46**, no.8, 08LT01 (2019)

**283. Measurement of the neutrino-oxygen neutral-current quasielastic cross section using atmospheric neutrinos at Super-Kamiokande**

L. Wan *et al.* [Super-Kamiokande].

Phys. Rev. D **99**, no.3, 032005 (2019)

**282. Atmospheric Neutrino Oscillation Analysis with Improved Event Reconstruction in Super-Kamiokande IV**

M. Jiang *et al.* [Super-Kamiokande].

PTEP **2019**, no.5, 053F01 (2019)

**281. Dinucleon and Nucleon Decay to Two-Body Final States with no Hadrons in Super-Kamiokande**

S. Sussman *et al.* [Super-Kamiokande].

arXiv:1811.12430 [hep-ex].

**280. Search for CP violation in Neutrino and Antineutrino Oscillations by the T2K experiment with  $2.2 \times 10^{21}$  protons on target**

K. Abe *et al.* [T2K Collaboration].

Phys. Rev. Lett. **121**, no.17, 171802 (2018)

**279. Characterisation of nuclear effects in muon-neutrino scattering on hydrocarbon with a measurement of final-state kinematics and correlations in charged-current pionless interactions at T2K**

K. Abe *et al.* [T2K Collaboration].

Phys. Rev. D **98**, no. 3, 032003 (2018)

**278. Search for Neutrinos in Super-Kamiokande associated with the GW170817 neutron-star merger**

K. Abe *et al.* [Super-Kamiokande Collaboration].

Astrophys. J. **857**, no. 1, L4 (2018)

**277. Measurement of inclusive double-differential  $\nu_\mu$  charged-current cross section with improved acceptance in the T2K off-axis near detector**

K. Abe *et al.* [T2K Collaboration].

Phys. Rev. D **98**, 012004 (2018)

**276. A Measurement of the Tau Neutrino Cross Section in Atmospheric Neutrino Oscillations with Super-Kamiokande**

Z. Li *et al.* [Super-Kamiokande Collaboration].

Phys. Rev. D **98**, no. 5, 052006 (2018)

**275. Search for Boosted Dark Matter Interacting With Electrons in Super-Kamiokande**

C. Kachulis *et al.* [Super-Kamiokande Collaboration].

Phys. Rev. Lett. **120**, no. 22, 221301 (2018)

**274. Atmospheric neutrino oscillation analysis with external constraints in Super-Kamiokande I-IV**

K. Abe *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. D **97**, no. 7, 072001 (2018)

**273. First measurement of the  $\nu_\mu$  charged-current cross section on a water target without pions in the final state**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **97**, no. 1, 012001 (2018)

**272. Measurement of the single  $\pi^0$  production rate in neutral current neutrino interactions on water**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **97**, no. 3, 032002 (2018)

**271. Search for an excess of events in the Super-Kamiokande detector in the directions of the astrophysical neutrinos reported by the IceCube Collaboration**

K. Abe *et al.* [Super-Kamiokande Collaboration].  
Astrophys. J. **850**, no. 2, 166 (2017)

**270. Measurement of neutrino and antineutrino oscillations by the T2K experiment including a new additional sample of  $\nu_e$  interactions at the far detector**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **96**, no. 9, 092006 (2017)

**269. Measurement of  $\bar{\nu}_\mu$  and  $\nu_\mu$  charged current inclusive cross sections and their ratio with the T2K off-axis near detector**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **96**, no. 5, 052001 (2017)

**268. Search for nucleon decay into charged antilepton plus meson in 0.316 megaton-years exposure of the Super-Kamiokande water Cherenkov detector**

K. Abe *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. D **96**, no. 1, 012003 (2017)

**267. Updated T2K measurements of muon neutrino and antineutrino disappearance using  $1.5 \times 10^{21}$  protons on target**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **96**, no. 1, 011102 (2017)

**266. Search for Lorentz and CPT violation using sidereal time dependence of neutrino flavor transitions over a short baseline**

K. Abe *et al.*.  
Phys. Rev. D **95**, no. 11, 111101 (2017)

**265. Combined Analysis of Neutrino and Antineutrino Oscillations at T2K**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. Lett. **118**, no. 15, 151801 (2017)

**264. Search for proton decay via  $p \rightarrow e^+ \pi^0$  and  $p \rightarrow \mu^+ \pi^0$  in 0.31 megaton-years exposure of the Super-Kamiokande water Cherenkov detector**

K. Abe *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. D **95**, no. 1, 012004 (2017)

**263. Search for Neutrinos in Super-Kamiokande associated with Gravitational Wave**

**Events GW150914 and GW151226**

K. Abe *et al.* [Super-Kamiokande Collaboration].  
Astrophys. J. **830**, no. 1, L11 (2016)

**262. Solar Neutrino Measurements in Super-Kamiokande-IV**

K. Abe *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. D **94**, no. 5, 052010 (2016)

**261. First Measurement of the Muon Neutrino Charged Current Single Pion Production Cross Section on Water with the T2K Near Detector**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **95**, no. 1, 012010 (2017)

**260. Measurement of coherent  $\pi^+$  production in low energy neutrino-Carbon scattering**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. Lett. **117**, no. 19, 192501 (2016)

**259. Measurement of double-differential muon neutrino charged-current interactions on  $C_8H_8$  without pions in the final state using the T2K off-axis beam**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **93**, no. 11, 112012 (2016)

**258. Real-Time Supernova Neutrino Burst Monitor at Super-Kamiokande**

K. Abe *et al.* [Super-Kamiokande Collaboration].  
Astropart. Phys. **81**, 39 (2016)

**257. Measurement of Muon Antineutrino Oscillations with an Accelerator-Produced Off-Axis Beam**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. Lett. **116**, no. 18, 181801 (2016)

**256. Measurements of the atmospheric neutrino flux by Super-Kamiokande: energy spectra, geomagnetic effects, and solar modulation**

E. Richard *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. D **94**, no. 5, 052001 (2016)

**255. First measurement of radioactive isotope production through cosmic-ray muon spallation in Super-Kamiokande IV**

Y. Zhang *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. D **93**, no. 1, 012004 (2016)

**254. Measurement of the muon neutrino inclusive charged-current cross section in the energy range of 1 -- 3 GeV with the T2K INGRID detector**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **93**, no. 7, 072002 (2016)

**253. Search for Nucleon and Di-nucleon Decays with an Invisible Particle and a Charged Lepton in the Final State at the Super-Kamiokande Experiment**

V. Takhistov *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. Lett. **115**, no. 12, 121803 (2015)

**252. Search for dinucleon decay into pions at Super-Kamiokande**

J. Gustafson *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. D **91**, 072009 (2015)

**251. Measurement of the electron neutrino charged-current interaction rate on water with the T2K ND280  $\pi^0$  detector**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **91**, 112010 (2015)

**250. Measurement of the  $\nu_\mu$  charged current quasielastic cross section on carbon with the T2K on-axis neutrino beam**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **91**, 112002 (2015)

**249. Search for neutrinos from annihilation of captured low-mass dark matter particles in the Sun by Super-Kamiokande**

K. Choi *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. Lett. **114**, 141301 (2015)

**248. Upper bound on neutrino mass based on T2K neutrino timing measurements**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **93**, no. 1, 012006 (2016)

**247. Physics potential of a long-baseline neutrino oscillation experiment using a J-PARC neutrino beam and Hyper-Kamiokande**

K. Abe *et al.* [Hyper-Kamiokande Proto- Collaboration].  
PTEP **2015**, no. 5, 053C02 (2015)

**246. Measurements of neutrino oscillation in appearance and disappearance channels by the T2K experiment with  $6.6 \times 10^{20}$  protons on target**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **91**, no. 7, 072010 (2015)

**245. Measurement of the  $\nu_\mu$  charged-current quasielastic cross section on carbon with the ND280 detector at T2K**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **92**, no. 11, 112003 (2015)

**244. Search for Dinucleon Decay into Kaons in Super-Kamiokande**

M. Litos *et al.*.  
Phys. Rev. Lett. **112**, 131803 (2014).

**243. Search for short baseline  $\nu_e$  disappearance with the T2K near detector**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **91**, 051102 (2015)

**242. Test of Lorentz invariance with atmospheric neutrinos**

K. Abe *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. D **91**, no. 5, 052003 (2015)

**241. Limits on Sterile Neutrino Mixing using Atmospheric Neutrinos in Super-Kamiokande**

K. Abe *et al.* [The Super-Kamiokande Collaboration].  
Phys. Rev. D **91**, 052019 (2015)

**240 Neutrino Oscillation Physics Potential of the T2K Experiment**

K. Abe *et al.* [T2K Collaboration].  
PTEP **2015**, no. 4, 043C01 (2015)

**239. Search for Trilepton Nucleon Decay via  $p \rightarrow e^+\nu\nu$  and  $p \rightarrow \mu^+\nu\nu$  in the Super-Kamiokande Experiment**

V. Takhistov *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. Lett. **113**, 101801 (2014)

**238. Search for Proton Decay via  $p \rightarrow \nu K^+$  using 260 kiloton-year data of Super-Kamiokande**

K. Abe *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. D **90**, 072005 (2014)

**237. Measurement of the Inclusive Electron Neutrino Charged Current Cross Section on Carbon with the T2K Near Detector**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. Lett. **113**, 241803 (2014)

**236. Measurement of the inclusive  $\nu_\mu$  charged current cross section on iron and hydrocarbon in the T2K on-axis neutrino beam**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **90**, 052010 (2014)

**235. Measurement of the neutrino-oxygen neutral-current interaction cross section by observing nuclear de-excitation  $\gamma$ -rays**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **90**, 072012 (2014)

**234. Measurement of the intrinsic electron neutrino component in the T2K neutrino beam with the ND280 detector**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **89**, 092003 (2014)

**233. Precise Measurement of the Neutrino Mixing Parameter  $\theta_{23}$  from Muon Neutrino Disappearance in an Off-axis Beam**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. Lett. **112**, 181801 (2014)

**232. First Indication of Terrestrial Matter Effects on Solar Neutrino Oscillation**

A. Renshaw *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. Lett. **112**, no. 9, 091805 (2014)

**231. Observation of Electron Neutrino Appearance from a Muon neutrino Beam**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. Lett. **112**, 061802 (2014)

**230. Supernova Relic Neutrino Search with Neutron Tagging at Super-Kamiokande-IV**

H. Zhang *et al.* [Super-Kamiokande Collaboration].  
Astropart. Phys. **60**, 41 (2015)

**229. Measurement of Neutrino Oscillation Parameters from Muon Neutrino Disap-**

**pearance with an Off-axis Beam**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. Lett. **111**, 211803 (2013)

**228. Calibration of the Super-Kamiokande Detector**

K. Abe, Y. Hayato, T. Iida, K. Iyogi, J. Kameda, Y. Kishimoto, Y. Koshio and L. Marti *et al.*.  
Nucl. Instrum. Meth. A **737**, 253 (2014)

**227. Search for Nucleon Decay via  $n \rightarrow \bar{\nu}\pi^0$  and  $p \rightarrow \bar{\nu}\pi^+$  in Super-Kamiokande**

K. Abe *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. Lett. **113**, 121802 (2014)

**226. Evidence of Electron Neutrino Appearance in a Muon Neutrino Beam**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **88**, 032002 (2013)

**225. Measurement of the Inclusive NuMu Charged Current Cross Section on Carbon in the Near Detector of the T2K Experiment**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **87**, 092003 (2013)

**224. The T2K Neutrino Flux Prediction**

K. Abe *et al.* [T2K Collaboration].  
Phys. Rev. D **87**, 012001 (2013), [Phys. Rev. D **87**, 019902 (2013)]

**223. A Measurement of the Appearance of Atmospheric Tau Neutrinos by Super-Kamiokande**

K. Abe *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. Lett. **110**, 181802 (2013)

**222. Search for Proton Decay via  $p \rightarrow \mu^+ K^0$  in Super-Kamiokande I, II, and III**

C. Regis *et al.* [Super-Kamiokande Collaboration].  
arXiv:1205.6538 [hep-ex]  
Phys. Rev. D **86**, 012006 (2012)

**221. Search for Nucleon Decay into Charged Anti-lepton plus Meson in Super-Kamiokande I and II**

H. Nishino *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. D **85**, 112001 (2012)

**220. Search for GUT Monopoles at Super-Kamiokande**

K. Ueno *et al.* [Super-Kamiokande Collaboration].  
Astropart. Phys. **36**, 131 (2012)

**219. First Muon-Neutrino Disappearance Study with an Off-Axis Beam.**

T2K Collaboration (K. Abe *et al.*),  
Phys. Rev. D **85** 031103 (2012)

**218. The T2K ND280 Off-Axis Pi-Zero Detector**

S. Assylbekov *et al.*.  
Nucl. Instrum. Meth. A **686**, 48 (2012)

**217. Supernova Relic Neutrino Search at Super-Kamiokande.**

Super-Kamiokande Collaboration (K. Bays et al.),  
Phys. Rev. D **85** 052007 (2012)

**216. Measurements of the T2K neutrino beam properties using the INGRID on-axis near detector**

K. Abe *et al.* [T2K Collaboration].  
Nucl. Instrum. Meth. A **694**, 211 (2012)

**215. The Search for  $n - \bar{n}$  oscillation in Super-Kamiokande I**

K. Abe *et al.* [Super-Kamiokande Collaboration].  
Phys. Rev. D **91**, 072006 (2015)

**214. Study of Non-Standard Neutrino Interactions with Atmospheric Neutrino Data in Super-Kamiokande I and II.**

Super-Kamiokande Collaboration (G. Mitsuka et al.),  
Phys. Rev. D **84** 113008 (2011)

**213. Search for Differences in Oscillation Parameters for Atmospheric Neutrinos and Antineutrinos at Super-Kamiokande.**

Super-Kamiokande Collaboration (K. Abe et al.),  
Phys. Rev. Lett. **107** 241801 (2011)

**212. An Indirect Search for WIMPs in the Sun using 3109.6 days of upward-going muons in Super-Kamiokande.**

Super-Kamiokande Collaboration (T. Tanaka et al.),  
Astrophys. J. **78** 724 (2011)

**211. Indication of Electron Neutrino Appearance from an Accelerator-produced Off-axis Muon Neutrino Beam.**

T2K Collaboration (K. Abe et al.),  
Phys. Rev. Lett. **107**, 041801 (2011),

**210. The T2K Experiment.**

T2K Collaboration (K. Abe et al.),  
Nucl. Instr. and Meth. A **659**, 106–135 (2011),

**209. Measurement of Inclusive  $\pi^0$  Production in the Charged-Current Interactions of Neutrinos in a 1.3-GeV Wide Band Beam.**

K2K Collaboration (C. Mariani et al.),  
Phys. Rev. D **83** 054023 (2011)

**208. Solar Neutrino Results in Super-Kamiokande-III.**

Super-Kamiokande Collaboration (K. Abe et al.),  
Phys. Rev. D **83**, 052010 (2011)

**207. Background Study on  $\nu_e$  Appearance from a  $\nu_\mu$  Beam Neutrino Oscillation Experiments with a Large Water Cherenkov Detector.**

C. Yanagisawa, C. K. Jung, P. T. Le, B. Viren,  
Phys. Rev. D **83** 072002 (2011)

**206. Atmospheric neutrino oscillation analysis with sub-leading effects in Super-Kamiokande I, II, and III.**



Super-Kamiokande Collaboration (R. Wendell *et al.*),  
Phys. Rev. D **81**, 092004 (2010),

**205. Search for Astrophysical Neutrino Point Sources at Super-Kamiokande.**

Super-Kamiokande Collaboration (E. Thrane *et al.*),  
Astrophys.J. **704** (2009) 503-512,

**204. Search for Proton Decay via  $p \rightarrow e^+\pi^0$  and  $p \rightarrow \mu^+\pi^0$  in a Large Water Cherenkov Detector.**

Super-Kamiokande Collaboration (H. Nishino *et al.*),  
Phys. Rev. Lett. **102** (2009) 141801,

**203. Search for Neutrinos from GRB 080319B at Super-Kamiokande.**

Super-Kamiokande Collaboration (E. Thrane *et al.*),  
Astrophys.J. **697** (2009) 730-734,

**202. Kinematic reconstruction of atmospheric neutrino events in a large water Cherenkov detector with proton identification.**

Super-Kamiokande Collaboration (M. Fechner *et al.*),  
Phys. Rev. D **79** (2009) 112010,

**201. First Study of Neutron Tagging with a Water Cherenkov Detector.**

Super-Kamiokande Collaboration (H. Watanabe *et al.*),  
Astropart. Phys. **31**, 320 (2009)

**200. Measurement of Single Charged Pion Production in the Charged-current Interactions of Neutrinos in a 1.3 GeV Wide Band Beam.**

K2K Collaboration (A. Rodriguez and L. Whitehead *et al.*),  
Phys. Rev. D **78**, 032003 (2008)

**199. Solar neutrino measurements in Super-Kamiokande-II**

Super-Kamiokande Collaboration (J. P. Cravens *et al.*),  
Phys. Rev. D **78**, 032002 (2008),

**198. Experimental study of the atmospheric neutrino backgrounds for proton decay to positron and neutral pion searches in water Cherenkov detectors.**

K2K Collaboration (S. Mine *et al.*),  
Phys. Rev. D **77**, 032003 (2008),

**197. Search for Matter-Dependent Atmospheric Neutrino Oscillations in Super-Kamiokande.**

Super-Kamiokande Collaboration (K. Abe *et al.*),  
Phys. Rev. D **77**, 052001 (2008),

**196. Study of TeV Neutrinos with Upward Showering Muons in Super-Kamiokande.**

Super-Kamiokande Collaboration (S. Desai *et al.*),  
Astropart. Phys. **29**, 42 (2008),

**195. Search for Supernova Neutrino Bursts at Super-Kamiokande.**

Super-Kamiokande Collaboration (M. Ikeda *et al.*),  
Astrophys. J. **669**, 519 (2007),

**194. Search for Neutral Q-balls in Super-Kamiokande-II.**

Super-Kamiokande Collaboration (Y. Takenaga *et al.*),

Phys. Lett. B **647**, 18-22, (2007),

**193. A Measurement of Atmospheric Neutrino Flux Consistent with Tau Neutrino Appearance.**

Super-Kamiokande Collaboration (K. Abe *et al.*),  
Phys. Rev. Lett. **97**, 171801 (2006),

**192. Search for Diffuse Astrophysical Neutrino Flux Using Ultrahigh Energy Upward-going Muons in Super-Kamiokande I.**

Super-Kamiokande Collaboration (M. E.C. Swanson *et al.*),  
Astrophys. J. **652**, 206-215 (2006),

**191. Measurement of Neutrino Oscillation by the K2K Experiment.**

K2K Collaboration (M.H. Ahn *et al.*)  
Phys. Rev. D **74**, 072003 (2006).

**190. High Energy Neutrino Astronomy Using Upward-going Muons in Super-Kamiokande-I.**

Super-Kamiokande Collaboration (K. Abe *et al.*)  
Astrophys.J.652:198,2006. arXiv:0606413 [astro-ph]

**189. Three Flavor Neutrino Oscillation Analysis of Atmospheric Neutrinos in Super-Kamiokande.**

Super-Kamiokande Collaboration, J. Hosaka *et al.*  
Phys. Rev. D **74**, 032002 (2006). arXiv:0604011[hep-ex]

**188. An Improved Search for  $\nu_\mu \rightarrow \nu_e$  Oscillation in a Long-baseline Accelerator Experiment.**

K2K Collaboration, S. Yamamoto *et al.*  
Phys. Rev. Lett. **96**, 181801 (2006).

**187. Measurement of the Quasi-elastic Axial Vector Mass in Neutrino-Oxygen Interactions.**

K2K Collaboration, R. Gran *et al.*  
Phys. Rev. D **74**, 052002 (2006).

**186. Observation of the Anisotropy of 10-TeV Primary Cosmic Ray Nuclei Flux With the Super-Kamiokande-I Detector.**

Super-Kamiokande Collaboration, G. Guillian *et al.*  
Phys. Rev. D **75**, 062003 (2007).

**185. Solar Neutrino Measurements in Super-Kamiokande-I.**

Super-Kamiokande Collaboration, J. Hosaka *et al.*  
Phys. Rev. D **73**, 112001 (2006).

**184. Search for Coherent Charged Pion Production in Neutrino Carbon Interactions.**

K2K Collaboration, M. Hasegawa *et al.*  
Phys. Rev. Lett. **95**, 252301 (2005).

**183. Search for Nucleon Decay via Modes Favored by Supersymmetric Grand Unification Models in Super-Kamiokande-I.**

Super-Kamiokande Collaboration, K. Kobayashi *et al.*  
Phys. Rev. D **72**, 052007 (2005).

**182. A Measurement of Atmospheric Neutrino Oscillation Parameters by Super-Kamiokande I.**

Super-Kamiokande Collaboration, Y. Ashie *et al.*  
Phys. Rev. D **71**, 112005 (2005).

**181. EVIDENCE FOR MUON NEUTRINO OSCILLATION IN AN ACCELERATOR-BASED EXPERIMENT.**

K2K Collaboration, E. Aliu *et al.*  
Phys. Rev. Lett. **94**, 081802 (2005)

**180. MEASUREMENT OF SINGLE  $\pi^0$  PRODUCTION IN NEUTRAL CURRENT NEUTRINO INTERACTIONS WITH WATER BY A 1.3-GEV WIDE BAND MUON NEUTRINO BEAM.**

K2K Collaboration, S. Nakayama *et al.*  
Phys. Lett. B **619**, 255 (2005).

**179. THE K2K SCIBAR DETECTOR.**

K. Nitta *et al.*  
Nucl. Instrum. Meth. A **535**, 147-151 (2004).

**178. EVIDENCE FOR AN OSCILLATORY SIGNATURE IN ATMOSPHERIC NEUTRINO OSCILLATION.**

Super-Kamiokande Collaboration, Y. Ashie *et al.*  
Phys. Rev. Lett. **93**, 101801 (2004).

**177. SEARCH FOR DARK MATTER WIMPS USING UPWARD THROUGH-GOING MUONS IN SUPER-KAMIOKANDE.**

Super-Kamiokande Collaboration, S. Desai *et al.*  
Phys. Rev. D **70**, 083523 (2004), Erratum-ibid.D70:109901,2004.

**176. SEARCH FOR ELECTRON NEUTRINO APPEARANCE IN A 250 KM LONG BASELINE EXPERIMENT.**

K2K Collaboration, M.H. Ahn *et al.*  
Phys. Rev. Lett. **93**, 051801 (2004).

**175. LIMITS ON THE NEUTRINO MAGNETIC MOMENT USING 1496 DAYS OF SUPER-KAMIOKANDE-I SOLAR NEUTRINO DATA.**

Super-Kamiokande Collaboration, D.W. Liu *et al.*  
Phys. Rev. Lett. **93**, 021802 (2004).

**174. PRECISE MEASUREMENT OF THE SOLAR NEUTRINO DAY / NIGHT AND SEASONAL VARIATION IN SUPER-KAMIOKANDE-1.**

Super-Kamiokande Collaboration, M.B. Smy *et al.*  
Phys. Rev. D **69**, 011104 (2004).

**173. A SEARCH FOR PERIODIC MODULATIONS OF THE SOLAR NEUTRINO FLUX IN SUPER-KAMIOKANDE I.**

Super-Kamiokande Collaboration, J. Yoo *et al.*  
Phys. Rev. D **68**, 092002 (2003).

**172. THE SUPER-KAMIOKANDE DETECTOR.**

Super-Kamiokande Collaboration, Y. Fukuda *et al.*

Nucl. Instrum. Meth. A **501**, 418-462 (2003).

**171. SEARCH FOR ANTI-NU(E) FROM THE SUN AT SUPER-KAMIOKANDE-I.**

Super-Kamiokande Collaboration, Y. Gando et al.

Phys. Rev. Lett. **90**, 171302 (2003).

**170. INDICATIONS OF NEUTRINO OSCILLATION IN A 250 KM LONG BASE-LINE EXPERIMENT.**

K2K Collaboration, S.H. Ahn et al.

Phys. Rev. Lett. **90**, 041801 (2003).

**169. SEARCH FOR SUPERNOVA RELIC NEUTRINOS AT SUPER-KAMIOKANDE.**

Super-Kamiokande Collaboration, M. Malek et al.

Phys. Rev. Lett. **90**, 061101 (2003).

**168. TRACKING PERFORMANCE OF THE SCINTILLATING FIBER DETECTOR IN THE K2K EXPERIMENT.**

K2K Collaboration, B.J. Kim et al.

Nucl. Instrum. Meth. A **497**, 450-466 (2003).

**167. DETERMINATION OF SOLAR NEUTRINO OSCILLATION PARAMETERS USING 1496 DAYS OF SUPERKAMIOKANDE I DATA.**

Super-Kamiokande Collaboration, S. Fukuda et al.

Phys. Lett. B **539**, 179-187 (2002).

**166. SEARCH FOR NEUTRINOS FROM GAMMA-RAY BURSTS USING SUPER-KAMIOKANDE.**

Super-Kamiokande Collaboration, S. Fukuda et al.

Astrophys. J. **578**, 317-324 (2002).

**165. SOLAR B-8 AND HEP NEUTRINO MEASUREMENTS FROM 1258 DAYS OF SUPERKAMIOKANDE DATA.**

Super-Kamiokande Collaboration, S. Fukuda et al.

Phys. Rev. Lett. **86**, 5651-5655 (2001).

**164. CONSTRAINTS ON NEUTRINO OSCILLATIONS USING 1258 DAYS OF SUPERKAMIOKANDE SOLAR NEUTRINO DATA.**

Super-Kamiokande Collaboration, S. Fukuda et al.,

Phys. Rev. Lett. **86**, 5656-5660 (2001). arXiv:0103033[hep-ex]

**163. DETECTION OF ACCELERATOR PRODUCED NEUTRINOS AT A DISTANCE OF 250-KM.**

K2K Collaboration, S.H. Ahn et al.

Phys.Lett.B511:178-184,2001. arXiv:0103001[hep-ex]

**162. TAU NEUTRINOS FAVORED OVER STERILE NEUTRINOS IN ATMOSPHERIC MUON NEUTRINO OSCILLATIONS.**

Super-Kamiokande Collaboration, Y. Fukuda *et al.*

Phys. Rev. Lett. **85:3999-4003,2000**. arXiv:0009001[hep-ex]

**161. N-16 AS A CALIBRATION SOURCE FOR SUPERKAMIOKANDE.**

Super-Kamiokande Collaboration, E. Blaufuss et al.

Nucl.Instrum.Meth.A458:638-649,2001. arXiv:0005014[hep-ex]

160. DESIGN, CONSTRUCTION, AND OPERATION OF SCIFI TRACKING DETECTOR FOR K2K EXPERIMENT.

K2K Collaboration, A. Suzuki *et al.*

Nucl.Instrum.Meth.A453:165-176,2000. arXiv:0004024[hep-ex]

159. INCLUSIVE JET CROSS-SECTIONS IN ANTI-P P COLLISIONS AT  $S^{**}(1/2) = 630$ -GEV AND 1800-GEV.

DØ Collaboration, B. Abbott *et al.*

Nucl.Phys.Proc.Suppl.79:229-231,1999. [HEP-EX 0001063[hep-ex]]

158. NEUTRINO INDUCED UPWARD STOPPING MUONS IN SUPER-KAMIOKANDE.

Super-Kamiokande Collaboration, Y. Fukuda *et al.*

Phys.Lett.B467:185-193,1999. arXiv:9908049[hep-ex]

157. MEASUREMENT OF THE INCLUSIVE DIFFERENTIAL CROSS-SECTION FOR Z BOSONS AS A FUNCTION OF TRANSVERSE MOMENTUM IN ANTI-P P COLLISIONS AT  $S^{**}(1/2) = 1.8$ -TEV.

DØ Collaboration, B. Abbott *et al.*

Phys.Rev.D61:032004,2000. arXiv:9907009[hep-ex]

156. SEARCH FOR R PARITY VIOLATING SUPERSYMMETRY IN THE DI-ELECTRON CHANNEL.

DØ Collaboration, B. Abbott *et al.*

Phys. Rev. Lett. 83:4476-4481,1999. arXiv:9907019[hep-ex]

155. SMALL ANGLE MUON AND BOTTOM QUARK PRODUCTION IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.8$ -TEV.

DØ Collaboration, B. Abbott *et al.*

Phys. Rev. Lett. 84:5478-5483,2000. [HEP-EX 9907029[hep-ex]]

154. EXTRACTION OF THE WIDTH OF THE W BOSON FROM MEASUREMENTS OF  $\sigma(P \text{ ANTI-P} \rightarrow W + X) \times B(W \rightarrow E \text{ NEUTRINO})$  AND  $\sigma(P \text{ ANTI-P} \rightarrow Z + X) \times B(Z \rightarrow E E)$  AND THEIR RATIO.

DØ Collaboration, B. Abbott *et al.*

Phys.Rev.D61:072001,2000. arXiv:9906025[hep-ex]

153. STUDIES OF W W AND W Z PRODUCTION AND LIMITS ON ANOMALOUS W W GAMMA AND W W Z COUPLINGS.

DØ Collaboration, B. Abbott *et al.*

Phys. Rev. D60:072002, 1999.

152. THE B ANTI-B PRODUCTION CROSS-SECTION AND ANGULAR CORRELATIONS IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.8$ -TEV.

DØ Collaboration, B. Abbott *et al.*

Phys.Lett.B487:264-272,2000. arXiv:9905024[hep-ex]

151. SEARCH FOR PROTON DECAY THROUGH  $P \rightarrow \text{ANTI-NEUTRINO } K^+$  IN A LARGE WATER CERENKOV DETECTOR.

Super-Kamiokande Collaboration, Y. Hayato *et al.*

Phys. Rev. Lett. 83 (1999) 1529-1533.

150. SEARCH FOR SECOND GENERATION LEPTOQUARK PAIRS DECAYING TO MUON NEUTRINO + JETS IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.8$ -TEV.

DØ Collaboration, B. Abbott *et al.*

Phys. Rev. Lett. 83, 2896-2901 (1999). arXiv:9904023[hep-ex]

149. MEASUREMENT OF RADON CONCENTRATIONS AT SUPER-KAMIOKANDE.

Super-Kamiokande Collaboration, Y. Takeuchi *et al.*

Phys. Lett. B452 (1999) 418-424.

148. SEARCH FOR BOTTOM SQUARKS IN ANTI-P P COLLISIONS AT  $S^{**}(1/2) = 1.8$ -TEV.

DØ Collaboration, B. Abbott *et al.*

Phys. Rev. D60:031101, 1999.

147. SEARCH FOR CHARGED HIGGS BOSONS IN DECAYS OF TOP QUARK PAIRS.

DØ Collaboration, B. Abbott *et al.*

Phys. Rev. Lett. 82:4975-4980, 1999.

146. SEARCH FOR SQUARKS AND GLUINOS IN EVENTS CONTAINING JETS AND A LARGE IMBALANCE IN TRANSVERSE ENERGY.

DØ Collaboration, B. Abbott *et al.*

Phys. Rev. Lett. 83, 4937-4942 (1999).

145. OBSERVATION OF THE EAST - WEST ANISOTROPY OF THE ATMOSPHERIC NEUTRINO FLUX.

Super-Kamiokande Collaboration, T. Futagami *et al.*

Phys. Rev. Lett. 82 5194-5197 (1999).

144. MEASUREMENT OF THE TOP QUARK PAIR PRODUCTION CROSS-SECTION IN THE ALL JETS DECAY CHANNEL.

DØ Collaboration, B. Abbott *et al.*

Phys. Rev. Lett. 83 1908-1913 (1999).

143. MEASUREMENT OF W AND Z BOSON PRODUCTION CROSS-SECTIONS.

DØ Collaboration, B. Abbott *et al.*

Phys. Rev. D 60, 052003 (1999).

142. CONSTRAINTS ON NEUTRINO OSCILLATION PARAMETERS FROM THE MEASUREMENT OF DAY NIGHT SOLAR NEUTRINO FLUXES AT SUPER-KAMIOKANDE.

Super-Kamiokande Collaboration, Y. Fukuda *et al.*

Phys. Rev. Lett. 82, 1810-1814 (1999).

141. MEASUREMENT OF THE SOLAR NEUTRINO ENERGY SPECTRUM USING NEUTRINO ELECTRON SCATTERING.

Super-Kamiokande Collaboration, Y. Fukuda *et al.*

Phys. Rev. Lett. 82, 2430-2434 (1999).

140. MEASUREMENT OF THE HIGH MASS DRELL-YAN CROSS-SECTION AND LIMITS ON QUARK ELECTRON COMPOSITENESS SCALES.

DØ Collaboration, B. Abbott *et al.*

Phys. Rev. Lett. 82, 4769-4774 (1999).

139. MEASUREMENT OF THE FLUX AND ZENITH ANGLE DISTRIBUTION OF UPWARD THROUGH GOING MUONS BY SUPERKAMIOKANDE. Super-Kamiokande Collaboration, Y. Fukuda *et al.*

Phys. Rev. Lett. 82, 2644-2648 (1999).

138. CONSTRAINTS ON NEUTRINO OSCILLATION PARAMETERS FROM THE MEASUREMENT OF DAY NIGHT SOLAR NEUTRINO FLUXES AT SUPER-KAMIOKANDE.

Super-Kamiokande Collaboration, Y. Fukuda *et al.*

Phys. Rev. Lett. 82, 1810-1814 (1999).

137. SEARCH FOR HIGH MASS PHOTON PAIRS IN P ANTI-P  $\rightarrow$  GAMMA-GAMMA JET-JET EVENTS AT  $S^{**}(1/2) = 1.8$ -TEV.

DØ Collaboration, B. Abbott *et al.*

Phys. Rev. Lett. 82, 2244-2249 (1999).

136. PROBING HARD COLOR SINGLET EXCHANGE IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 630$ -GEV AND 1800-GEV.

DØ Collaboration, B. Abbott *et al.*

Phys. Lett. B 440, 189-202 (1998).

135. MEASUREMENT OF THE TOP QUARK PAIR PRODUCTION CROSS-SECTION IN P ANTI-P COLLISIONS USING MULTIJET FINAL STATES.

DØ Collaboration, B. Abbott *et al.*

Phys. Rev. D 60, 012001 (1999).

134. MEASUREMENT OF THE TOP QUARK MASS IN THE DILEPTON CHANNEL.

DØ Collaboration, B. Abbott *et al.*

Phys. Rev. D 60, 052001 (1999).

133. SEARCH FOR SQUARKS AND GLUINOS IN SINGLE PHOTON EVENTS WITH JETS AND LARGE MISSING TRANSVERSE ENERGY IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.8$ -TEV.

DØ Collaboration, B. Abbott *et al.*

Phys. Rev. Lett. 82, 29-34 (1999).

132. SMALL ANGLE J / PSI PRODUCTION IN P ANTI-P COLLISIONS AT  $S^{**}(1/2) = 1.8$ -TEV.

DØ Collaboration, B. Abbott *et al.*

Phys. Rev. Lett. 82, 35-40 (1999).

131. CALIBRATION OF SUPERKAMIOKANDE USING AN ELECTRON LINAC.

Super-Kamiokande Collaboration, M. Nakahata *et al.*

Nucl. Instrum. Methods A 421 113-129 (1999).

130. THE DIJET MASS SPECTRUM AND A SEARCH FOR QUARK COMPOS-

ITENESS IN ANTI-P P COLLISIONS AT  $S^{**}(1/2) = 1.8\text{-TeV}$ .

DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. Lett. 82, 2457-2462 (1999).

129. THE INCLUSIVE JET CROSS-SECTION IN ANTI-P P COLLISIONS AT  $S^{**}(1/2) = 1.8\text{-TeV}$ .

DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. Lett. 82, 2451-2456 (1999).

128. EVIDENCE FOR OSCILLATION OF ATMOSPHERIC NEUTRINOS.

Super-Kamiokande Collaboration, Y. Fukuda *et al.*  
Phys. Rev. Lett. 81, 1562-1567 (1998).

127. SEARCH FOR PROTON DECAY VIA  $P \rightarrow E + \pi_0$  IN A LARGE WATER CERENKOV DETECTOR.

Super-Kamiokande Collaboration, M. Shiozawa *et al.*  
Phys. Rev. Lett. 81, 3319-3323 (1998).

126. DETERMINATION OF THE ABSOLUTE JET ENERGY SCALE IN THE DØ CALORIMETERS.

DØ Collaboration, B. Abbott *et al.*  
Nucl. Instrum. Methods A 424, 352-394 (1999).

125. Measurements of the Solar Neutrino Flux from Super-Kamiokande's First 300 Days

Super-Kamiokande Collaboration, Y. Fukuda *et al.*  
Phys. Rev. Lett. 81, 1158 (1998).

124. Study of the Atmospheric Neutrino Flux in the Multi-GeV Energy Range

Super-Kamiokande Collaboration, Y. Fukuda *et al.*  
Phys. Letters B 436, 33 (1998).

123. Limits on Anomalous  $WW\gamma$  and  $WWZ$  Couplings

DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. D 58, 031102 (1998).

122. Search for Heavy Pointlike Dirac Monopoles

DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. Lett. 81, 524 (1998)

121. Search for Charge 1/3 Third Generation Leptoquarks in  $\bar{p}$  Collisions at  $\sqrt{s} = 1.8$  TeV

DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. Lett. 81, 38 (1998)

120. Measurement of the Shape of the Transverse Momentum Distribution of  $W$  Bosons Produced in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.8$  TeV

DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. Lett. 80, 5498 (1998)

119. Limits on  $WW\gamma$  and  $WWZ$  Couplings from  $W$  Boson Pair Production

DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. D 58, 051101 (1998)



118. Direct Measurement of the Top Quark Mass at DØ  
DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. D 58, 052001 (1998)
117. A Measurement of the  $W$  Boson Mass  
DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. D 58, 092003 (1998).
116. Measurement of a Small Atmospheric  $\nu_\mu/\nu_e$  Ratio  
Super-Kamiokande Collaboration, Y. Fukuda *et al.*  
Phys. Letters B 433, 9 (1998).
115. Search for the Decay  $b \rightarrow s\mu\mu$   
DØ Collaboration, B. Abbott *et al.*  
Phys. Lett. B 423, 419 (1998).
114. A Measurement of the  $W$  Boson Mass  
DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. Lett. 80, 3008 (1998).
113. Search for First Generation Scalar Leptoquark Pairs in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.8$  TeV  
DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. Lett. 80, 2051 (1998).
112.  $Z\gamma$  Production in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.8$  TeV and Limits on Anomalous  $ZZ\gamma$  and  $Z\gamma\gamma$  Couplings  
DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. D 57, 3817 (1998).
111. Experimental Search for Chargino and Neutralino Production via Gauge-Mediated Supersymmetry Breaking Models  
DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. Lett. 80, 442 (1998).
110. Search for Scalar Leptoquark Pairs Decaying to Electrons and Jets in  $p\bar{p}$  Collisions  
DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. Lett. 79, 4321 (1997).
109. Measurement of the Top Quark Mass Using Dilepton Events  
DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. Lett. 80, 2063 (1998).
108. Color Coherent Radiation in Multijet Events from  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.8$  TeV  
DØ Collaboration, B. Abbott *et al.*  
Phys. Lett. B 414, 419 (1997).
107. Search for the Trilepton Signature from the Associated Production of SUSY  $\tilde{\chi}_1^\pm \tilde{\chi}_2^0$  Gauginos  
DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. Lett. 80, 1591 (1998).
106. Limits on  $WWZ$  and  $WW\gamma$  Couplings from  $p\bar{p} \rightarrow e\nu jjX$  Events at  $\sqrt{s} = 1.8$  TeV

DØ Collaboration, B. Abbott *et al.*  
Phys. Rev. Lett. **79**, 1441 (1997).

105. Measurement of the Top Quark Pair Production Cross Section in  $p\bar{p}$  Collisions  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **79**, 1203 (1997).

104. Studies of Gauge Boson Pair Production and Trilinear Couplings  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. D **56**, 6742 (1997).

103. Direct Measurement of the Top Quark Mass  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **79**, 1197 (1997).

102. Study of the  $ZZ\gamma$  and  $Z\gamma\gamma$  Couplings in  $Z(\nu\nu)\gamma$  Production  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **78**, 3640 (1997).

101. Search for Top Squark Pair Production in the Dielectron Channel  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. D **57**, 589 (1998).

100. Limits on Anomalous  $WW\gamma$  Couplings from  $p\bar{p} \rightarrow W\gamma + X$  Events at  $\sqrt{s} = 1.8$  TeV  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **78**, 3634 (1997).

99. Search for a Fourth Generation  $-1/3$  Quark via Flavor Changing Neutral Current Decay  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **78**, 3818 (1997).

98 Search for Diphoton Events with Large Missing Transverse Energy in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.8$  TeV  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **78**, 2070 (1997).

97. Isolated Photon Cross Section in the Central and Forward Rapidity Region in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.8$  TeV  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **77**, 5041 (1996).

96. Search for additional neutral gauge bosons  
DØ Collaboration, S. Abachi *et al.*  
Phys. Lett. B **385**, 471 (1996).

95. Measurement of the  $W$  boson mass  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **77**, 3309 (1996).

94. Search for anomalous  $WW$  and  $WZ$  production in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **77**, 3303 (1996).

93. Azimuthal decorrelation of jets widely separated in rapidity  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **77**, 595 (1996).
92.  $J/\psi$  production in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV  
DØ Collaboration, S. Abachi *et al.*  
Phys. Lett. B **370**, 239 (1996).
91. Search for light top squarks in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **76**, 2222 (1996).
90. Search for righthanded  $W$  bosons and heavy  $W$ -prime in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **76**, 3271 (1996).
89. Search for supersymmetric  $W(1)$   $Z(2)$  production via trilepton final states in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **76**, 2228 (1996).
88. Jet production via strongly interacting color singlet exchange in  $p\bar{p}$  collisions  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **76**, 734 (1996).
87. Studies of topological distributions of inclusive the three and four jet events in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV with the DØ detector  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. D **53**, 6000 (1996).
86. Search for heavy  $W$  boson in 1.8 TeV  $p\bar{p}$  collisions  
DØ Collaboration, S. Abachi *et al.*  
Phys. Lett. B **358**, 405 (1995).
85. Transverse energy distributions within jets in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV  
DØ Collaboration, S. Abachi *et al.*  
Phys. Lett. B **357**, 500 (1995).
84. Second generation leptoquark search in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **75**, 3618 (1995).
83. Top quark search with the DØ 1992-1993 data sample  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. D **52**, 4877 (1995).
82. A study of the strong coupling constant using  $W$ +jets processes  
DØ Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. **75**, 3226 (1995).
81.  $W$  and  $Z$  boson production in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV  
DØ Collaboration, S. Abachi *et al.*

Phys. Rev. Lett. 75, 1456 (1995).

80. Measurement of the  $WW\gamma$  gauge boson couplings in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV

DØ Collaboration, S. Abachi *et al.*

Phys. Rev. Lett. 75, 1034 (1995).

79. Search for squarks and gluinos in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV

DØ Collaboration, S. Abachi *et al.*

Phys. Rev. Lett. 75, 618 (1995).

78. Limits on anomalous  $ZZ\gamma$  and  $Z\gamma\gamma$  couplings in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV

DØ Collaboration, S. Abachi *et al.*

Phys. Rev. Lett. 75, 1028 (1995).

77. Search for  $W$  boson pair production in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV

DØ Collaboration, S. Abachi *et al.*

Phys. Rev. Lett. 75, 1023 (1995).

76. Observation of the top quark

DØ Collaboration, S. Abachi *et al.*

Phys. Rev. Lett. 74, 2632 (1995).

75. Inclusive  $\mu$  and  $b$ -quark production cross sections in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV

DØ Collaboration, S. Abachi *et al.*

Phys. Rev. Lett. 74, 3548 (1995).

74. Search for the high mass top quark production in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.8$  TeV

DØ Collaboration, S. Abachi *et al.*

Phys. Rev. Lett. 74, 2422 (1995).

73. Search for the top Quark in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV

DØ Collaboration, S. Abachi *et al.*

Phys. Rev. Lett. 72, 2138 (1994).

72. Rapidity gaps between jets in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV

DØ Collaboration, S. Abachi *et al.*

Phys. Rev. Lett. 72, 2332 (1994).

71. The DØ detector

DØ Collaboration, S. Abachi *et al.*

Nucl. Instr. Meth. A 338, 185 (1994).

70. First generation leptoquark search in  $p\bar{p}$  collisions at  $\sqrt{s} = 1.8$  TeV

DØ Collaboration, S. Abachi *et al.*

Phys. Rev. Lett. 72, 965 (1993).

69. Experimental explanation of Tau lepton decay puzzle: discrepancy between the measured and the theoretical Tau lifetimes

Chang Kee Jung

Phys. Rev. D 47, 3994 (1993).

68. Study of inclusive Lambda production in  $e^+e^-$  annihilations at 29 GeV.

HRS Collaboration, T. L. Geld, (listed as C. Jung) *et al.*

Phys. Rev. D 45, 3949 (1992).

67. Measurement of the charged multiplicity of events containing bottom hadrons at  $E_{cm} = 91$  GeV  
MarkII Collaboration, B. A. Schumm *et al.*  
Phys. Rev. D 46, 453 (1992).
66. Measurement of the  $b\bar{b}$  fraction in hadronic  $Z^0$  decays with precision vertex detectors  
MarkII Collaboration, R. G. Jacobsen *et al.*  
Phys. Rev. Lett. 67, 3347 (1991).
65. Search for supersymmetric particles produced in  $Z$  boson decay  
MarkII Collaboration, T. Barklow *et al.*  
Phys. Rev. Lett. 64, 2984 (1990).
64. Direct search for pair production of heavy stable charged particles in  $Z$  decays  
MarkII Collaboration, E. Soderstrom, J. A. McKenna *et al.*  
Phys. Rev. Lett. 64, 2980 (1990).
63. Search for non-minimal neutral Higgs bosons from  $Z$  boson decays  
MarkII Collaboration, S. Komamiya *et al.*  
Phys. Rev. Lett. 64, 2881 (1990).
62. A search for decays of the  $Z$  to unstable neutral leptons with mass between 2.5 and 22 GeV/ $c^2$   
MarkII Collaboration, P. R. Burchat, M. King *et al.*  
Phys. Rev. D 41, 3542 (1990)
61. A search for doubly charged Higgs scalars in  $Z$  decay  
MarkII Collaboration, M. Swartz *et al.*  
Phys. Rev. Lett. 64, 2877 (1990).
60. Measurement of the  $b\bar{b}$  fraction in hadronic  $Z$  decays  
MarkII Collaboration, J. F. Kral *et al.*  
Phys. Rev. Lett. 64, 1211 (1990).
59. Measurements of charged particle inclusive distributions in hadronic decays of the  $Z$  boson  
MarkII Collaboration, G. S. Abrams *et al.*  
Phys. Rev. Lett. 64, 1334 (1990).
58. Determination of  $\alpha_s$  from a differential jet multiplicity distribution in  $e^+e^-$  collisions at  $\sqrt{s} = 29$  and 91 GeV  
MarkII Collaboration, S. Komamiya, F. Le Diberder *et al.*  
Phys. Rev. Lett. 64, 987 (1990).
57. Search for long-lived massive neutrinos in  $Z$  decays  
MarkII Collaboration, C. K. Jung, R. Van Kooten, *et al.*  
Phys. Rev. Lett. 64, 1091 (1990).
56. Test of QED to fourth order by study of four lepton final states in  $e^+e^-$  interactions at 29 GeV  
MarkII Collaboration, M. Petradza *et al.*  
Phys. Rev. D 42, 2180 (1990).

55. Searches for new quarks and leptons in  $Z$  boson decay  
MarkII Collaboration, G. S. Abrams *et al.*  
Phys. Rev. Lett. 63, 2447 (1989).
54. Measurements of  $Z$  boson resonance parameters in  $e^+e^-$  annihilation  
MarkII Collaboration, G. S. Abrams *et al.*  
Phys. Rev. Lett. 63, 2173 (1989).
53. First measurements of hadronic decays of the  $Z$  boson  
MarkII Collaboration, G. S. Abrams *et al.*  
Phys. Rev. Lett. 63, 1558 (1989).
52. Initial measurements of  $Z$  boson resonance parameters in  $e^+e^-$  annihilation  
MarkII Collaboration, G. S. Abrams *et al.*  
Phys. Rev. Lett. 63, 724 (1989).
51. Quark hadronization probed by  $K^0$  mesons  
HRS Collaboration, S. Abachi *et al.*  
Phys. Rev. D 41, 2045 (1990).
50. Measurement of the branching ratio for  $\tau^- \rightarrow e^- \bar{\nu}_e \nu_\tau$   
HRS Collaboration, S. Abachi *et al.*  
Phys. Lett. B 226, 405 (1989).
49. The Mark II detector for the SLC  
MarkII Collaboration, G. Abrams *et al.*  
Nucl. Instr. Meth. A 281, 55 (1989).
48. Study of vector meson production in  $e^+e^-$  annihilation at  $\sqrt{s} = 29$  GeV.  
HRS Collaboration, S. Abachi *et al.*  
Phys. Rev. D 40, 706 (1989).
47. Production cross-section and topological decay branching fractions of the  $\tau$  lepton  
HRS Collaboration, S. Abachi *et al.*  
Phys. Rev. D 40, 902 (1989).
46. Measurement of  $Z$  decays into lepton pairs  
MarkII Collaboration, G. S. Abrams *et al.*  
Phys. Rev. Lett. 63, 2780 (1989).
45. Measurement of the  $D^0$ ,  $D^+$  and  $D_s^+$  meson lifetimes  
HRS Collaboration, D. Averill *et al.*  
Phys. Rev. D 39, 123 (1989).
44. Measurement of upper limits for the decay width of  $D^{*+}$  and  $D^{*0}$   
HRS Collaboration, S. Abachi *et al.*  
Phys. Lett. B 212, 533 (1988).
43. Production cross-section and electroweak asymmetry of  $D^*$  and  $D$  mesons produced in  $e^+e^-$  annihilations at 29 GeV  
HRS Collaboration, P. Baringer *et al.*  
Phys. Lett. B 206, 551 (1988).
42. Measurement of the  $D^0 \rightarrow K^- \pi^+$  branching fraction

- HRS Collaboration, S. Abachi *et al.*  
Phys. Lett. B 205, 411 (1988).
41. Measurement of the inclusive  $K_S^0$  branching fraction in  $\tau$  decay  
HRS Collaboration, R. Tschirhart *et al.*  
Phys. Lett. B 205, 407 (1988).
40. Production of  $\eta$  mesons in  $e^+e^-$  annihilations at  $\sqrt{s} = 29$  GeV  
HRS Collaboration, S. Abachi *et al.*  
Phys. Lett. B 205, 111 (1988).
39. Experimental limits on massive neutrinos from  $e^+e^-$  annihilations at 29 GeV  
HRS Collaboration, C. Akerlof *et al.*  
Phys. Rev. D 37, 577 (1988).
38. Measurement of the spin density matrix of  $D^*$  mesons produced in  $e^+e^-$  annihilations  
HRS Collaboration, S. Abachi *et al.*  
Phys. Lett. B 199, 585 (1987).
37. Charged  $K^*$  production in  $e^+e^-$  annihilations at 29 GeV  
HRS Collaboration, S. Abachi *et al.*  
Phys. Lett. B 199, 151 (1987).
36. Inclusive  $\eta$  production in  $\tau$  decays  
HRS Collaboration, S. Abachi *et al.*  
Phys. Lett. B 197, 291 (1987).
35. Measurement of the  $\tau$  lepton lifetime  
HRS Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. 59, 2519 (1987).
34. Hadron production in  $e^+e^-$  annihilation at  $\sqrt{s} = 29$  GeV  
HRS Collaboration, M. Derrick *et al.*  
Phys. Rev. D 35, 2639 (1987).
33. Production of strange baryons in  $e^+e^-$  annihilations at 29 GeV  
HRS Collaboration, S. Abachi *et al.*  
Phys. Rev. Lett. 58, 2627 (1987).
32. Measurement of the lifetime of hadrons containing b quark  
HRS Collaboration, J. M. Brom *et al.*  
Phys. Lett. B 195, 301 (1987).
31. Evidence for the decay  $\tau^+ \rightarrow \pi^+ \eta \bar{\nu}_\tau$   
HRS Collaboration, M. Derrick *et al.*  
Phys. Lett. B 189, 260 (1987).
30. Limit on  $\tau$  decay to seven charged particles  
HRS Collaboration, B. G. Bylsma *et al.*  
Phys. Rev. D 35, 2269 (1987).
29.  $\nu_\tau$  mass limit  
HRS Collaboration, S. Abachi *et al.*

Phys. Rev. D 35, 2880 (1987).

28. Charged particle multiplicity distributions in  $e^+e^-$  annihilation at 29 GeV: A comparison with hadronic data

HRS Collaboration, M. Derrick *et al.*

Z. Phys. C 35, 323 (1987).

27. Production and fragmentation of the  $D^{*0}$  meson in  $e^+e^-$  annihilations

HRS Collaboration, E. H. Low *et al.*

Phys. Lett. B 183, 232 (1987).

26. A drift chamber constructed of aluminized mylar tubes

P. Baringer, C. Jung, H. O. Ogren and D. R. Rust

Nucl. Instr. Meth. A 254, 542 (1987).

25. Observation of tensor and scalar mesons produced in  $e^+e^-$  annihilation at 29 GeV

HRS Collaboration, S. Abachi *et al.*

Phys. Rev. Lett. 57, 1990 (1986).

24. Experimental study of the reactions  $e^+e^- \rightarrow e^+e^-$  and  $e^+e^- \rightarrow \gamma\gamma$  at 29 GeV

HRS Collaboration, M. Derrick *et al.*

Phys. Rev. D 34, 3286 (1986).

23. Study of quark fragmentation in  $e^+e^-$  annihilation at 29 GeV: Charged particle multiplicity and single particle rapidity distributions

HRS Collaboration, M. Derrick *et al.*

Phys. Rev. D 34, 3304 (1986).

22. Search for wrong sign  $D^0$  decays

HRS Collaboration, S. Abachi *et al.*

Phys. Lett. B 182, 101 (1986).

21. Asymmetry in the angular distribution of inclusive  $\Lambda$  baryons from  $e^+e^-$  annihilations at  $\sqrt{s} = 29$  GeV

HRS Collaboration, S. Abachi *et al.*

Phys. Lett. B 181, 403 (1986).

20.  $\Lambda$  production in  $e^+e^-$  annihilations at 29 GeV: A comparison with LUND model predictions

HRS Collaboration, P. Baringer *et al.*

Phys. Rev. Lett. 56, 1346 (1986).

19. Precision tests of QED by direct comparison of  $e^+e^- \rightarrow \gamma\gamma$  and  $e^+e^- \rightarrow e^+e^-$  at 29 GeV

HRS Collaboration, M. Derrick *et al.*

Phys. Lett. B 166, 468 (1986).

18. New results from Bhabha scattering at 29 GeV

HRS Collaboration, M. Derrick *et al.*

Phys. Lett. B 166, 463 (1986).

17. Measurement of the  $F^+$  meson lifetime

HRS Collaboration, C. Jung (C.K. Jung in spires) *et al.*



Phys. Rev. Lett. 56, 1775 (1986).

16. Limit on the mass of  $\nu_\tau$  below the muon mass

HRS Collaboration, S. Abachi *et al.*

Phys. Rev. Lett. 56 (1986).

15. Rapidity dependence of the charged particle multiplicity distributions in  $e^+e^-$  annihilation at 29 GeV

HRS Collaboration, M. Derrick *et al.*

Phys. Lett. B 168, 299 (1986).

14. Measurement of the topological branching ratios of  $\tau$  leptons

HRS Collaboration, C. Akerlof *et al.*

Phys. Rev. Lett. 55, 570 (1985).

13. Experimental limits on monojet production in  $e^+e^-$  annihilation at 29 GeV

HRS Collaboration, C. Akerlof *et al.*

Phys. Lett. B 156, 271 (1985).

12. Production of  $\phi$  and  $F \rightarrow \phi\pi$  in  $e^+e^-$  annihilation at 29 GeV

HRS Collaboration, M. Derrick *et al.*

Phys. Rev. Lett. 54, 2568 (1985).

11. Neutral  $K^*(890)$  and  $\rho^0$  production in  $e^+e^-$  annihilation at  $\sqrt{s} = 29$  GeV

HRS Collaboration, M. Derrick *et al.*

Phys. Lett. B 158, 519 (1985).

10. Comparison of light quark and charm quark fragmentation

HRS Collaboration, P. Kesten *et al.*

Phys. Lett. B 161, 412 (1985).

9. Inclusive charged particle production near the kinematic limit in  $e^+e^-$  annihilation at 29 GeV

HRS Collaboration, M. Derrick *et al.*

Phys. Lett. B 164, 199 (1985).

8. Comparison of charged particle multiplicities in quark and gluon jets produced in  $e^+e^-$  annihilation at 29 GeV

HRS Collaboration, M. Derrick *et al.*

Phys. Lett. B 165, 449 (1985).

7. Observation of  $\tau$  lepton decay to five charged particles

HRS Collaboration, I. Beltrami *et al.*

Phys. Rev. Lett. 54, 1775 (1985).

6. Measurement of the reaction  $e^+e^- \rightarrow \tau^+\tau^-$  at  $\sqrt{s} = 29$  GeV

HRS Collaboration, K. K. Gan *et al.*

Phys. Lett. B 153, 116 (1985).

5. New results on the reaction  $e^+e^- \rightarrow \mu^+\mu^-$  at  $\sqrt{s} = 29$  GeV

HRS Collaboration, M. Derrick *et al.*

Phys. Rev. D 31, 2532 (1985).

4. Study of quark fragmentation in  $e^+e^-$  annihilations at 29 GeV: Global jet paramete-

ters and single particle distributions  
HRS Collaboration, D. Bender *et al.*  
Phys. Rev. D 31, 1 (1985).

3. Search for heavy neutral particles in  $e^+e^-$  annihilations at 29 GeV  
HRS Collaboration, D. Errede *et al.*  
Phys. Lett. B 149, 519 (1985).

2. Charm quark production and fragmentation in  $e^+e^-$  annihilations at 29 GeV  
HRS Collaboration, M. Derrick *et al.*  
Phys. Rev. Lett. B 146, 261 (1984).

1. Inclusive  $D^0$  and  $D^+$  production in  $e^+e^-$  annihilations at 29 GeV  
HRS Collaboration, M. Derrick *et al.*  
Phys. Rev. Lett. 53, 1971 (1984).

#### PUBLICATIONS: Significant Non-refereed Public Articles

56. Deep Underground Neutrino Experiment (DUNE) Near Detector Conceptual Design Report

A. Abed Abud *et al.* [DUNE].  
arXiv:2103.13910 [physics.ins-det].

55. Experiment Simulation Configurations Approximating DUNE TDR

B. Abi *et al.* [DUNE].  
arXiv:2103.04797 [hep-ex].

54. Supernova Neutrino Burst Detection with the Deep Underground Neutrino Experiment

B. Abi *et al.* [DUNE].  
arXiv:2008.06647 [hep-ex].

53. Deep Underground Neutrino Experiment (DUNE), Far Detector Technical Design Report, Volume II: DUNE Physics

B. Abi *et al.* [DUNE].  
arXiv:2002.03005 [hep-ex].

52. J-PARC Neutrino Beamline Upgrade Technical Design Report

K. Abe *et al.* [T2K and J-PARC Neutrino Facility Group].  
arXiv:1908.05141 [physics.ins-det].

51. T2K ND280 Upgrade - Technical Design Report

K. Abe *et al.* [T2K].  
arXiv:1901.03750 [physics.ins-det].

50. The DUNE Far Detector Interim Design Report, Volume 3: Dual-Phase Module

B. Abi *et al.* [DUNE Collaboration].  
arXiv:1807.10340 [physics.ins-det]  
FERMILAB-DESIGN-2018-04

49. The DUNE Far Detector Interim Design Report, Volume 2: Single-Phase Module

B. Abi *et al.* [DUNE Collaboration].  
arXiv:1807.10327 [physics.ins-det]  
FERMILAB-DESIGN-2018-03

48. The DUNE Far Detector Interim Design Report Volume 1: Physics, Technology and Strategies

B. Abi *et al.* [DUNE Collaboration].  
arXiv:1807.10334 [physics.ins-det]  
FERMILAB-DESIGN-2018-02

47. The Single-Phase ProtoDUNE Technical Design Report

B. Abi *et al.* [DUNE Collaboration].  
arXiv:1706.07081 [physics.ins-det]  
FERMILAB-DESIGN-2017-02

46. Proposal for an Extended Run of T2K to  $20 \times 10^{21}$  POT

K. Abe *et al.*.  
arXiv:1609.04111 [hep-ex]

45. Sensitivity of the T2K accelerator-based neutrino experiment with an Extended run to  $20 \times 10^{21}$  POT

K. Abe *et al.* [T2K Collaboration].  
arXiv:1607.08004 [hep-ex]

44. Long-Baseline Neutrino Facility (LBNF) and Deep Underground Neutrino Experiment (DUNE) : Volume 1: The LBNF and DUNE Projects

R. Acciarri *et al.* [DUNE Collaboration].  
arXiv:1601.05471 [physics.ins-det]  
FERMILAB-DESIGN-2016-01

43. Long-Baseline Neutrino Facility (LBNF) and Deep Underground Neutrino Experiment (DUNE) : Volume 4 The DUNE Detectors at LBNF

R. Acciarri *et al.* [DUNE Collaboration].  
arXiv:1601.02984 [physics.ins-det]  
FERMILAB-DESIGN-2016-04

42. Long-Baseline Neutrino Facility (LBNF) and Deep Underground Neutrino Experiment (DUNE) : Volume 2: The Physics Program for DUNE at LBNF

R. Acciarri *et al.* [DUNE Collaboration].  
arXiv:1512.06148 [physics.ins-det]  
FERMILAB-DESIGN-2016-02

41. A Long Baseline Neutrino Oscillation Experiment Using J-PARC Neutrino Beam and Hyper-Kamiokande

K. Abe *et al.* [Hyper-Kamiokande Working Group Collaboration].  
arXiv:1412.4673 [physics.ins-det]

40. Letter of Intent to Construct a nuPRISM Detector in the J-PARC Neutrino Beamline

S. Bhadra *et al.* [nuPRISM Collaboration].  
arXiv:1412.3086 [physics.ins-det]

39. Working Group Report: Baryon Number Violation  
K. S. Babu, E. Kearns, U. Al-Binni, S. Banerjee, D. V. Baxter, Z. Berezhiani, M. Bergevin and S. Bhattacharya *et al.*  
arXiv:1311.5285 [hep-ph]
38. Hyper-Kamiokande Physics Opportunities  
E. Kearns *et al.* [Hyper-Kamiokande Working Group Collaboration].  
arXiv:1309.0184 [hep-ex]
37. Fundamental Physics at the Intensity Frontier  
J. L. Hewett *et al.*  
arXiv:1205.2671 [hep-ex].
36. Henderson Deep Underground Science and Engineering Lab: Unearthing the secrets of the Universe, underground.  
C. K. Jung  
Nuclear Physics B (Proc. Suppl.) 221 125–129 (2011).
35. Report of the US Long Baseline Neutrino Experiment Study.  
V. Barger *et al.*  
FERMILAB-0801-AD-E (May 2007) 109p.
34. MRS Photodiode Coupling With Extruded Scintillator via Y7 and Y11 WLS Fibers.  
D. Beznosko *et al.*  
FERMILAB-FN-0796 (Feb 2007) 5p.
- 33 Background study on  $\nu/e$  appearance in a very long baseline neutrino oscillation experiment with a large water Cherenkov detector  
C. Yanagisawa, C. K. Jung, P. T. Le and B. Viren  
AIP Conf. Proc. 944, 92 (2007)  
*Prepared for Workshop on Next Generation Nucleon Decay and Neutrino Detectors 2006 (NNN06 / Seattle), Seattle, Washington, 21-23 Sep. 2006*
32. NSF DUSEL Solicitation 3 Proposal, Henderson DUSEL: Unearthing The Secrets Of The Universe Underground.  
HUSEP Collaboration  
Submitted to NSF (Jan 2007)
31. Design, Construction, and Initial Performance of Scibar Detector in K2K Experiment.  
K2K Collaboration, S. Yamamoto *et al.*  
IEEE Trans.Nucl.Sci.52:2992-2997,2005.
30. Proposal for Participation in the T2K Long-baseline Neutrino Oscillation Experiment  
C.K. Jung. PI  
Presented to NuSAG committee and Submitted to DOE, June. 2005  
<http://nngroup.physics.sunysb.edu/t2k>.
29. Development of a Conceptual Design and a Science and Engineering Program for DUSEL at the Henderson Mine

C.K. Jung, PI

Submitted to NSF, Feb. 2005

<http://nngroup.physics.sunysb.edu/husep>.

**28. REPORT OF THE SOLAR AND ATMOSPHERIC NEUTRINO EXPERIMENTS  
WORKING GROUP OF THE APS MULTIDIVISIONAL NEUTRINO STUDY.**

H. Back et al.

Part of the APS Neutrino Study, Dec. 2004. arXiv:0412016[hep-ex].

**27. UNO (Underground Nucleon decay and Neutrino Observatory)**

C.K. Jung and C. McGrew

Submitted to the HEPAP Facilities Committee, Feb. 2003

<http://nngroup.physics.sunysb.edu/uno>.

**26. RECENT RESULTS FROM K2K.**

C.K. Jung

Prepared for 20th International Symposium on Lepton and Photon Interactions at High Energies (LP 01), Rome, Italy, 23-28 Jul 2001

Int.J.Mod.Phys.A17:3364-3377,2002

Rome 2001, Lepton and photon interactions at high energies, 456-469.

**25. E1 WORKING GROUP SUMMARY: NEUTRINO FACTORIES AND MUON  
COLLIDERS.**

T. Adams et al.

FERMILAB-CONF-01-307-T (Nov 2001) 24p. [HEP-PH 0111030]

**24. OSCILLATIONS OF ATMOSPHERIC NEUTRINOS.**

C.K. Jung, C. McGrew, T. Kajita, T. Mann

Ann.Rev.Nucl.Part.Sci.51:451-488,2001.

**23. Physics Potential and Feasibility of UNO (UNO Whitepaper).**

UNO Collaboration

Presented at the Snowmass2001 Workshop, Snowmass, Colorado, July 2001

<http://nngroup.physics.sunysb.edu/uno>.

**22. A FEASIBILITY STUDY OF A NEUTRINO SOURCE BASED ON A MUON  
STORAGE RING.**

N. Holtkamp, (ed.) et al.

SLAC-REPRINT-2000-054 (Jun 2000) 158p.

**21. FEASIBILITY OF A NEXT GENERATION UNDERGROUND WATER CERENKOV  
DETECTOR: UNO.**

Chang Kee Jung

In \*Stony Brook 1999, Next generation nucleon decay and neutrino detector\* workshop proceedings. 29-34. [HEP-EX 0005046]

AIP Conf. Proc. 533, 29 (2000)

**20. NEUTRINO MASSES AND OSCILLATIONS.**

C.K. Jung

In \*Tampere 1999, High energy physics\* EPS-HEP99 Conference proceedings. 161-180

19. Breakthrough in Particle Physics: Evidence for Neutrino Oscillations.  
C.K. Jung  
APCTP Bulletin No. 2, 5-13, Nov. 1998
18. K2K: KEK to Kamioka Long-Baseline Neutrino Oscillation Experiment  
C.K. Jung  
Nuclear Physics B66, 415-418, 1998
17. Recent Results and The Status of the Super-Kamiokande Experiment  
C.K. Jung  
Proceedings of the La Thuile '97 Conference: Results and Perspectives in Particle Physics, La Thuile, Italy, 2-8 Mar. 1997
16. Proposal for participation in Long-baseline neutrino oscillation experiment E362 at KEK  
C.K. Jung, PI  
(Dec 1996).
15. W mass measurements from DØ and CDF experiments at TeVatron  
Chang Kee Jung  
FERMILAB-conf-94/334-E, SBHEP-94-2 (Sep. 1994)  
(Proc. of the XXVII International Conference on High Energy Physics, 20-27 July 1994, Glasgow, Scotland, UK).
14. Proposal to participate in the Super-Kamiokande Experiment  
C. B. Bratton *et al.*  
(Dec 1992).
13. Letter of Intent to write a proposal for an experiment to be performed at the SSC by GEM  
B. Barish *et al.*  
GEM-TN-91-35, (Dec 1991).
12. Letter of Intent to write a proposal for an experiment to be performed at the SSC by EMPACT/TEXAS  
R. Steiner *et al.*  
SSCL-SR-1155, (Nov 1990).
11. Search for new particles produced in  $Z$  decays  
R. Van Kooten, C. K. Jung and S. Komamiya  
SLAC-PUB-5246, (May 1990).  
(Presented at 15th APS Division of Particle and Fields General Meeting, Houston, Texas, Jan 3-6, 1990).
10. A precision synchrotron radiation detector using phosphorescent screens  
C. K. Jung *et al.*  
SLAC-PUB-5135, LBL-27997, (Oct 1989).  
(Presented at IEEE Nuclear Science Symposium, San Francisco, Ca., Jan 23-26, 1990.)  
IEEE Nuclear Science, Vol. 37, No. 4, 1502 (Aug. 1990)
9. Measuring the mass and width of the  $Z^0$ : The status of the energy spectrometers  
F. Rouse *et al.*

SLAC-PUB-4977, (May 1989).

(Contributed to Symp. on the 4th Family of Quarks and Leptons, Santa Monica, CA, Feb 23-25, 1989).

8. Recent commissioning experience on the SLC ARCS.

N. Toge *et al.*

SLAC-PUB-4926, (Apr 1989).

(Presented at IEEE Particle Accelerator Conf., Chicago, Ill., Mar 20-23, 1989.)

7. Precision measurements of the SLC beam energy.

J. Kent *et al.*

(Presented at IEEE Particle Accelerator Conf., Chicago, Ill., Mar 20-23, 1989.)

6. Precision synchrotron radiation detectors

M. Levi *et al.*

SLAC-PUB-4921 and LBL-26976.

(Presented at the IEEE Particle Accelerator Conference, Chicago, IL, March 20-23, 1989.)

5. Search strategies for minimal and nonminimal Higgs bosons at high energy  $e^+e^-$  colliders

J. Alexander, D. L. Burke, C. Jung, S. Komamiya and P. R. Burchat

SLAC-PUB-4775.

(Proc. of the 1988 Summer Study on High Energy Physics in the 1990's, Snowmass Colorado, 1988).

4. Beam position measurements at the SLC IP

G. Bowden, D. Burke and C. K. Jung

In 'Tahoe city 1986, proceedings, SLC physics', 420-431 (1986).

3. Tuning the ARCS of the SLAC Linear Collider

T. H. Fieguth *et al.*

SLAC-PUB-4628, (May 1988).

(Contributed to 1st European Particle Accelerator Conf., Rome, Italy, Jun 7-11, 1988.)

2. Measurement of the  $F^+$  meson lifetime

Chang Kee Jung

IUHEE-98, Ph.D. Thesis, (May 1986).

1. Measurement of the  $F^+$  meson lifetime

C. Jung

Moriond 1986: Leptonic V.1, 315.

#### PUBLICATIONS: Books Authored or Edited

1. M.V. Diwan, (ed.), C.K. Jung, (ed.), NEXT GENERATION NUCLEON DECAY AND NEUTRINO DETECTOR. PROCEEDINGS, WORKSHOP, NNN99, STONY BROOK, USA, SEPTEMBER 23-25, 1999.

Melville, USA: AIP (2000) 250 p., 1 CD (AIP conference proceedings. 533)

## INVITED CONFERENCE PRESENTATIONS, COLLOQUIA AND SEMINARS

*These lists do not contain various seminars and talks given at collaboration meetings.*

- **Conference Presentations**

**79. Virtual European Physical Society (EPS) Young Minds Leadership Meeting, May 2021**

**Panel Discussion: Career Advice for Young Physicists - a Holistic Discussion**

**78. Snowmass21 NF09 Workshop, via video, Dec. 2020**

**Flux Determination at (Future) Near Detectors (at the Conventional Neutrino Beam Experiments)**

**77. Conference on Physics of Fundamental Interactions, Section of Nuclear Physics of the Division of the Physical Sciences, Russian Academy of Science, Novosibirsk, Russia, Mar. 2020**

**Neutrino Physics: New Results and Perspectives (Selected Topics with a Focus on Neutrino Oscillations)**

**76. International Center for Advanced Studies (ICAS) End-of-Year workshop Hands-on Lectures, San Martin, Buenos Aires, Argentina, Dec. 2019**

**Pursuit of CP Violation in the Lepton Sector with T2K and DUNE, and their Novel 3D-projection Scintillator Tracker**

**75. Korean Physical Society Pioneer Symposium: Next Generation Neutrino Experiments, Gwangju, S. Korea, October 2019**

**The Status of Deep Underground Neutrino Experiment (DUNE) and Long Baseline Neutrino Facility (LBNF)**

**74. Koichiro Nishikawa Memorial Symposium, KEK, Tsukuba, Japan, September 2019**

**K2K: the Pioneering Long Baseline Neutrino Oscillation Experiment**

**73. DCPIHEP Workshop, Comala, Colima, Mexico, January 2019**

**Status Review of T2K, T2K-II, Hyper-Kamiokande and DUNE**

**72. DUNE Korea Open Workshop, Chung-Ang University, Seoul, Korea, December 2018**

**Overview of DUNE**

**71. Division of Particles and Fields (DPF) Meeting, Fermilab, Batavia, Illinois, August 2017**

**New T2K Neutrino Oscillations Results**

**70. Workshop on Next generation Nucleon decay and Neutrino detectors (NNN16-Beijing), Beijing, China, November 2016**

**Closing Remarks**

**69. Pioneer Session at Korean Physical Society (KPS) Meeting dedicated for DUNE experiment, Gwangju, Korea, October 2016**

**Deep Underground Neutrino Experiment (DUNE) at Long Baseline Neutrino Facility**



(LBNF): An Ultimate Neutrino Oscillation Experiment

68. Dark Matter Research Cluster Workshop, KISTI, Daejeon, Korea, April 2016  
Deep Underground Neutrino Experiment (DUNE) at Long Baseline Neutrino Facility  
(LBNF): An Ultimate Neutrino Oscillation Experiment

67. Workshop on Next generation Nucleon decay and Neutrino detectors 2015 (NNN15)  
and Unification Day 2, Stony Brook, New York, October 2015  
Workshop Introduction

66. The 4th International Workshop on Underground Research Laboratory, Montreal,  
Canada, May 2015  
Very Large Underground Detectors for Neutrino Physics and Nucleon Decay Searches:  
Recent Discovery of Electron Neutrino Appearance from a Muon Neutrino Beam in  
T2K and Future Outlook for Discovery of CP Violation in the Lepton Sector

65. International Committee for Future Accelerators (ICFA) Seminar, Beijing, China,  
October 2014  
Accelerator Neutrinos

64. Annual Phenomenology Symposium, “Pheno2014: Full Steam Ahead”, Pitts-  
burgh, Pennsylvania, May 2014  
Neutrino Oscillations: Present and Future

63. Prospects in Neutrino Physics (NuPhys2013) Conference, London, U.K., Decem-  
ber 2013  
Summary and Prospects (Conference final summary)

62. 2013 American Association for the Advancement of Science (AAAS) Annual Meet-  
ing, Symposium, “Tiny But Mighty: Neutrinos and the New Frontiers of Science”,  
Boston, Massachusetts, February 2013  
The Challenging Art of Creating and Catching Human-Made Neutrinos

61. The International Doctorate Network in Particle Physics, Astrophysics and Cos-  
mology (IDPASC) Neutrino School, Granada, Spain, October 2012  
Invited Lectures: Reactor and Accelerator Neutrino Experiments

60. Workshop on Next generation Nucleon decay and Neutrino detectors (NNN11-  
Zurich), Zurich, Switzerland, November 2011  
Maurice Goldhaber

59. Workshop on Next generation Nucleon decay and Neutrino detectors (NNN10-  
Toyama), Toyama, Japan, December 2010  
Closing Summary

58. SLAC Summer Institute, Menlo Park, California, August 2010  
Proton Decay: A Portal to Grand Unification

57. 1st International Workshop towards the Giant Liquid Argon Charge Imaging Experiment (GLA2010), Tsukuba, Japan, March 2010  
A Survey of Present Long Baseline Neutrino Experiments: OPERA, MINOS, T2K and NOvA (with a bias on the prospects of measuring  $\theta_{13}$ )
56. Workshop on Next generation Nucleon decay and Neutrino detectors (NNN09-Estes Park), Estes Park, Colorado, October 2009  
Ten Years of NNN
55. Perspectives in Particle Physics (A symposium for Paul Grannis' 70th Birthday), Stony Brook, New York, June 2008  
The Neutrino Revolution and Beyond
54. Workshop on Next generation Nucleon decay and Neutrino detectors (NNN07-Hamamatsu), Hamamatsu, Japan, October 2007  
Brief Closing Remarks
53. 23rd International Symposium On Lepton-Photon Interactions At High Energy (LP07), Daegu, Korea, Aug 2007  
Planning the Future Neutrino Projects in Global Context: Ideas, Challenges, and Limitations
52. Workshop On Grand Unification And Proton Decay (GUT 2007), Trieste, Italy, Jul 2007  
Update on the Proton Decay Searches, UNO and U.S. Deep Underground Science and Engineering Lab
51. XXXV International Meeting on Fundamental Physics, Santiago de Compostela, Spain, May 2007  
U.S. Deep Underground Science and Engineering Lab (DUSEL) Initiative, and Henderson DUSEL proposal
50. Workshop on Next generation Nucleon decay and Neutrino detectors (NNN06-UW), University of Washington, Seattle, Washington, September 2006  
Closing remarks and panel discussion
49. PASCOS 2006 Symposium, Ohio State University, Columbus, Ohio, September 2006  
Status of the Proton Decay Experiments and Deep Underground Science and Engineering Lab (DUSEL)
48. XXII International Conference on Neutrino Physics and Astrophysics (Neutrino 2006), Santa Fe, New Mexico, June 2006  
Henderson DUSEL: Unearthing the Secrets of the Universe Underground
47. Science and Engineering at Henderson DUSEL Capstone Workshop, Stony Brook, New York, May 2006

Henderson DUSEL: Overview and Workshop Charge, and Closing Remarks

46. Workshop on Long Baseline Neutrino Oscillation Experiments, Fermilab, Batavia, Illinois, March 2006

Henderson DUSEL: Unearthing the Secrets of the Universe Underground

45. SLAC Summer Institute, Menlo Park, California, August 2005

Proton Decay: A Giant Orphan

44. Deep Underground Science and Engineering Laboratory (DUSEL) NSF Solicitation 1 Workshop, Minneapolis, Minnesota, July 2005

Henderson DUSEL: Unearthing the Secrets of the Universe, Underground, A Brief Look Ahead

43. Next generation Nucleon decay Neutrino detectors Workshop (NNN05-Aussois), Aussois, France, April 2005

UNO: Status and Future Outlook

42. Deep Underground Science and Engineering Laboratory (DUSEL) NSF Solicitation 1 Workshop, Boulder, Colorado, January 2005

Factual Information on The Henderson Mine as a DUSEL Candidate Site

41. Unification Day Workshop, Keystone, Colorado, October 2004

Experimental Status and Future Prospect of the Proton Decay Searches

40. Deep Underground Science and Engineering Laboratory (DUSEL) NSF Solicitation 1 Workshop, Berkeley, August 2004

Large Underground Neutrino and Nucleon decay (NNN) Detectors at DUSEL; DUSEL Proton Decay/Atm nu Working Group Report

39. XXI International Conference on Neutrino Physics and Astrophysics (Neutrino 2004), College de France, Paris, France, June 2004

Future Large Underground Neutrino and Nucleon decay (NNN) Detectors

38. Physics with a Multi-Megawatt Proton Source Workshop, CERN, Geneva, Switzerland, May 2004

UNO (Physics Goals and Status in US)

37. ECFA/BENE Neutrino Study Group Meeting, CERN, Geneva, Switzerland, May 2004

UNO (Physics, Status and R&D Plans)

36. APS Neutrino Study - Superbeam Working Group Meeting, BNL, Uptown, New York, March 2004

UNO as a Neutrino Superbeam Far Detector

35. APS Neutrino Study - Solar and Atmospheric Neutrino Working Group Meeting,

ANL, Argonne, Illinois, December 2003

Atmospheric and Solar Neutrino Capabilities of UNO

34. NYS-APS2003, BNL, Uptown, New York, October 2003

UNO (Underground Nucleon decay and Neutrino Detector)

33. C.N.Yang ITP Neutrino Conference, SUNY at Stony Brook, Stony Brook, New York, October 2002

UNO

32. International Workshop on Nuclear and Particle Physics at JHF (NP02), Univ. of Kyoto, Kyoto, Japan, September, 2002

Status in US

31. International Workshop on Nuclear and Particle Physics at JHF (NP02), Univ. of Kyoto, Kyoto, Japan, September, 2002

BNL-Stony Brook Joint LOI for JHFnu Superconducting Magnets

30. International Workshop on Tau Lepton (TAU2002), Univ. of California, Santa Cruz, California, September, 2002

Selected Results from Super-Kamiokande-I and Status of Super-Kamiokande

29. Linear Collider Workshop (LC2002), Jeju, Korea, August, 2002

Review of Status of Neutrino Physics

28. Symposium in honor of Professor Jogesh Pati's 65th birthday (Patifest), Univ. of Maryland, College Park, Maryland, May 2002

Quest for Grand Unification: Experimental View

27. International conference on Weak Interactions and Neutrinos (WIN02), Christchurch, New Zealand, January 2002

Next Generation Underground Water Cherenkov Detectors

26. A Workshop on "Large Detectors for Proton decay, Supernovae and Atmospheric Neutrinos and Low Energy Neutrinos from High Intensity Beams" (NNN02-CERN), Geneva, Switzerland, January 2002

Summary Talk: "Where do we go from here? US perspective"

25. A Workshop on "Future Opportunities for Neutrino Physics", Victoria, Canada, November 2001

UNO

24. Conference on Underground Science, Lead, South Dakota, October 2001

Atmospheric Neutrinos and Proton Decay Working Group Summary

23. Lepton-Photon International Conference (LP01), Rome, Italy, Jul. 2001

Recent results from K2K experiment

22. Snowmass Workshop on future of the High Energy Physics, Snowmass, CO, Jul. 2001  
Physics potential and feasibility of UNO (Underground Nucleon decay and Neutrino Observatory); Staging neutrino program (Pannel discussion); Proton decay and UNO
21. Neutrino factory Workshop (NuFact01), Tsukuba, Japan, May 2001  
UNO as a far detector for Neutrino Factories
20. BNL Snowmass day Workshop, BNL, Brookhaven, Upton, NY, Mar. 2001  
Neutrino Physics and Proton Decay
19. APS Division of Nuclear Physics annual meeting (DNP00), Willamsburg, VA, Oct. 2000  
Recent Results from Super-Kamiokande and K2K experiments
18. Neurino Workshop, U. of Washington, Seattle, WA, Sep. 2000  
UNO
17. NNN00-Fermilab, Batavia, IL, Aug. 2000  
UNO Proposal Update and General Discussion
16. WIPP (Waste Isolation Pilot Plant) Underground Physics workshop, Carlsbad, NM, Jun. 2000  
Physics Potential and Feasibility of UNO
15. NNN00-UCI Nucleon decay working group Workshop, UCI, Irvine, CA, Feb. 2000  
Proposal for a Ultra Underground Nucleon decay and Neutrino Observatory (UNO) Detector
14. 2000 AAAS Annual Meeting - Symposium on Neutrinos, Washington D.C. February 2000  
Recent Results on Neutrino Oscillations and Solar Neutrinos from Super-Kamiokande
13. International Workshop on Next generation Nucleon decay and Neutrino detector (NNN99), Stony Brook, New York, September 1999  
Nucleon Working Group Synopsis  
Feasibility Study of the Next generation Underground Large Water Cherenkov Detector
12. International Europhysics Conference on High Energy Physics (EPS99), Tampere, Finland, July 1999  
Neutrino Masses and Oscillations
11. Ringberg Euroconference: New Trend in Neutrino Physics, Rottach-Egern, Germany, 24-29 May, 1998  
Status and Prospects of atmosheric neutrino experiments: (SuperK, Sudan II, K2K...)

10. International conference on Weak Interactions and Neutrinos (WIN97), Capri, Italy, June 1997

Status of K2K (KEK E362) Long Baseline Neutrino Oscillation Experiment

9. Fermilab Fixed Target Workshop, Fermilab, Batavia, Illinois, May 1997

Status of K2K (KEK E362) Long Baseline Neutrino Oscillation Experiment

8. La Thuile '97 Conference: Results and Perspectives in Particle Physics, La Thuile, Italy, 2-8 Mar. 1997

New Results from Super-Kamiokande experiment

7. American Chemical Society (ACS) Meeting, Washington D.C., Aug. 1994

Neutrino Physics with the Super-Kamiokande Detector

6. XXVII International Conference on High Energy Physics, Glasgow, Scotland, Jul. 1994

W mass measurements from  $D\bar{0}$  and CDF experiments at TeVatron

5. XXVI International Conference on High Energy Physics, Southern Methodist University, Dallas, Texas, Aug. 1992

An Experimental Explanation of Tau Lepton Decay Puzzle: Discrepancy between the Measured and the Theoretical Tau Lifetimes

4. Annual Meeting of the Division of Particles and Fields of the American Physical Society, Rice University, Houston, Texas, Jan. 1990

Search for Heavy Neutrinos Produced in  $Z$  decays

3. Snowmass Workshop 88, Snowmass, Colorado, Jul. 1988

Search for Non-Minimal Neutral Higgs Particle at 1TeV

2. Twenty first Rencontre de Moriond, Les Arcs, France, Mar. 1986

Measurement of the  $F^\pm$  Meson Lifetime

1. Annual Meeting of the Division of Particles and Fields of the American Physical Society, University of Oregon, Eugene, Oregon, Aug. 1985

Lifetime Measurement of the  $F^\pm$  Mesons

• Colloquia

52. CERN, Geneva, Switzerland, January 2020

Capturing Innovations and Underlying Physics in Sports

51. Schroedinger Colloquium, Faculty of Science, University of Zurich, Zurich, Switzerland, April 2019

Neutrino Revolution and Quest for the origin of the Matter Dominated Universe

50. NCBJ (National Center for Nuclear Research), Warsaw, Poland, March 2019

Capturing Innovations and Underlying Physics in Sports (Selected Topics: Basketball, High Jump, Gymnastics, Baseball, Football and Volleyball)

49. Physics Department, Nazarbayev University, Astana, Kazakhstan, April 2018  
Capturing Innovations and Underlying Physics in Sports (Selected Topics: Basketball, High Jump, Gymnastics and Swimming)

48. Department of Physics and Astronomy, Stony Brook University, Stony Brook, New York, April 2017  
Capturing Innovations and Underlying Physics in Sports (Collaborative presentation with Saget Bedel, New York Times, Multimedia Editor for Sports)

47. Department of Physics, University of Virginia, Charlottesville, Virginia, November 2015  
Discovery of Electron Neutrino Appearance from a Muon Neutrino Beam in T2K and Future Outlook for Discovery of CP Violation in Lepton Sector in DUNE at LBNF

46. Department of Physics and Astronomy, Stony Brook University, Stony Brook, New York, November 2015  
Neutrinos, Nobel Prizes, Breakthroughs and Future

45. Center for Underground Physics (CUP), Institute for Basic Science (IBS), Daejeon, Korea, August 2015  
Discovery of Electron Neutrino Appearance from a Muon Neutrino Beam in T2K and Future Outlook for Discovery of CP Violation in the Lepton Sector in DUNE at LBNF

44. Department of Physics, University of Washington, Seattle, Washington, May 2015  
Discovery of Electron Neutrino Appearance from a Muon Neutrino Beam and Future Outlook for Discovery of CP Violation in Lepton Sector

43. Department of Physics, Columbia University, New York, New York, April 2015  
Discovery of Electron Neutrino Appearance from a Muon Neutrino Beam and Future Outlook for Discovery of CP Violation in Lepton Sector

42. Department of Physics, University of Chicago, Chicago, Illinois, April 2014  
Observation of Electron Neutrino Appearance from a Muon Neutrino Beam

41. Department of Physics and Astronomy, University of California, Riverside, California, March 2014  
Observation of Electron Neutrino Appearance from a Muon Neutrino Beam

40. Department of Physics and Astronomy, Ohio University, Athens, Ohio, December 2013  
Observation of Electron Neutrino Appearance from a Muon Neutrino Beam

39. Department of Physics and Astronomy, Stony Brook University, Stony Brook, New York, October 2013  
Observation of Electron Neutrino Appearance from a Muon Neutrino Beam

38. Dept. of Physics, Indiana University, Bloomington, Indiana, February 2012  
The T2K Experiment: Negotiating the Gatekeeper of the Matter-Antimatter Asymmetry Mystery

37. Physics Division, Los Alamos National Lab (LANL), Los Alamos, New Mexico,

October 2011

The T2K Experiment: Negotiating the Gatekeeper of the Matter-Antimatter Asymmetry Mystery

36. Department of Physics and Astronomy, Stony Brook University, Stony Brook, New York, September 2011

The T2K Experiment: Negotiating the Gatekeeper of the Matter-Antimatter Asymmetry Mystery

35. Dept. of Physics, Oklahoma State University, Stillwater, Oklahoma, Feb. 2007  
Henderson Deep Underground Science and Engineering Laboratory: Unearthing the Secrets of the Universe, Underground

34. Dept. of Geology, The State University of New York at Stony Brook, Stony Brook, New York, February 2006

Henderson Deep Underground Science and Engineering Laboratory: Unearthing the Secrets of the Universe, Underground

33. Dept. of Physics and Astronomy, University of Denver, Denver, Colorado, January 2006

Henderson Deep Underground Science and Engineering Laboratory: Unearthing the Secrets of the Universe, Underground

32. Dept. of Physics and Astronomy, The State University of New York at Stony Brook, Stony Brook, New York, December 2005

Henderson Deep Underground Science and Engineering Laboratory: Unearthing the Secrets of the Universe, Underground

31. Dept. of Physics and Astronomy, University of Connecticut, Storrs, Connecticut, October 2004

Einstein's Dream, Neutrino Revolution and UNO

30. Dept. of Physics, University of Colorado, Boulder, Colorado, September 2004

Einstein's Dream, Neutrino Revolution and UNO

29. Dept. of Physics and Astronomy, The State University of New York at Stony Brook, Stony Brook, New York, April 2004

Einstein's Dream, Neutrino Revolution and UNO

28. Dept. of Physics and Astronomy, Rutgers University, New Brunswick, New Jersey, February 2004

Feasibility and Physics Potential of UNO (Underground Nucleon decay and Neutrino Observatory): Quest for Grand Unification and Neutrino Physics

27. Dept. of Physics, University of Utah, Salt Lake City, Utah, December 2003

Feasibility and Physics Potential of UNO (Underground Nucleon decay and Neutrino Observatory): Quest for Grand Unification and Neutrino Physics

26. Dept. of Physics, Colorado School of Mines, Golden, Colorado, November 2003

Feasibility and Physics Potential of UNO (Underground Nucleon decay and Neutrino Observatory): Quest for Grand Unification and Neutrino Physics

25. Dept. of Physics and Astronomy, Colorado State University, Fort Collins, Col-



orado, November 2003

Feasibility and Physics Potential of UNO (Underground Nucleon decay and Neutrino Observatory): Quest for Grand Unification and Neutrino Physics

24. Dept. of Physics and Astronomy, University of Nebraska, Lincoln, Nebraska, May 2003

Discovery of Neutrino Oscillations in Atmospheric Neutrinos and Its Implications

23. Dept. of Physics, Purdue University, West Lafayette, Indiana, Mar. 2003

Discovery of Neutrino Oscillations in Atmospheric Neutrinos and Its Implications

22. Fermilab Colloquium, FNAL, Batavia, Illinois, June 2002

Physics Potential and Feasibility of UNO: Quest for Grand Unification and Neutrino Physics

21. Dept. of Physics and Astronomy, U. of Minnesota, Minneapolis, Minnesota, March 2002

K2K Experiment

20. Joint Colloquium of Nuclear and Particle Physics Division, LBNL, Berkeley, CA, Apr. 2001

UNO

19. Dept. of Physics, Kyungbuk Univ., Daegoo, Korea, Mar. 2000

Evidence for non-zero neutrino mass: Recent results from the Super-Kamiokande experiment

18. Dept. of Physics, Chonnam Univ., Chonnam, Korea, Mar. 2000

Evidence for non-zero neutrino mass: Recent results from the Super-Kamiokande experiment

17. KIAS (Korean Institute for Advanced Studies), Seoul, Korea Mar. 2000

Evidence for non-zero neutrino mass: Recent results from the Super-Kamiokande experiment

16. Dept. of Physics, Indiana University, Bloomington, Indiana, Oct. 1999

Evidence for non-zero neutrino mass

15. TRIUMF Canadian National lab, Vancouver, Canada, May. 1999

Evidence for non-zero neutrino mass

14. Dept. of Physics, Michigan State University, East Lansing, Michigan Mar. 1999

Evidence for non-zero neutrino mass

13. Dept. of Physics, Rutgers University, Camden, New Jersey, Mar. 1999

Evidence for non-zero neutrino mass

12. Dept. of Physics, University of Oregon, Eugene, Oregon Feb. 1999

Evidence for non-zero neutrino mass

11. Dept. of Physics, University of Michigan, Ann Arbor, Michigan Sep. 1998  
Evidence for non-zero neutrino mass
10. Dept. of Physics and Astronomy, University of Nebraska, Lincoln, Nebraska Apr. 1998  
Pursuit of Neutrino Oscillations: Where are we?
9. Dept. of Physics, Yale University, New Haven, Connecticut Feb. 1998  
Pursuit of Neutrino Oscillations: Where are we?
8. Dept. of Physics and Astronomy, SUNY at Stony Brook, Stony Brook, New York Feb. 1998  
Pursuit of Neutrino Oscillations: Where are we?
7. Dept. of Physics, Rutgers University, Camden, New Jersey, Mar. 1997  
We see stars underground.
6. Physics Division, Brookhaven National Laboratory, Upton, New York, Feb. 1997  
We see stars underground.
5. Dept. of Physics and Astronomy, The University of Kansas, Lawrence, Kansas, Sep. 1996  
We see stars underground.
4. Physics Dept., The State University of New York, Stony Brook, New York, Sep. 1996  
We see stars underground.
3. Physics Dept., Louisiana State University, Baton Rouge, Louisiana, May. 1996  
Recent Results from  $D\bar{0}$  Experiment
2. Physics Dept., University of California, Davis, California, Apr. 1990  
Search for New Neutrinos in  $Z$  Decays
1. Physics Dept., Vanderbilt University, Nashville, TN, Mar. 1990  
Search for New Neutrinos in  $Z$  Decays

- Seminars

53. HEP Seminar, Dept. of Physics and Astronomy, Stony Brook University, Stony Brook, New York, U.S.A., Sep. 2019  
Personal Reflections on the Super-Kamiokande, K2K and T2K Experiments in Japan
52. EP Neutrino Physics Group, CERN, Geneva, Switzerland, Jun. 2019  
Personal Reflections on the Super-Kamiokande, K2K and T2K Experiments in Japan
51. (General Seminar) University of Napoli/INFN, Napoli, Italy, May 2018

## Neutrino Revolution and Quest for the Origin of the Matter Dominated Universe

50. Yale University, New Haven, Connecticut, December 2016

Pursuit of CP Violation in the Lepton Sector: Recent T2K Results, Current Landscape and Future

49. Tsinghua University, Beijing, China, November 2016

Deep Underground Neutrino Experiment (DUNE) at Long Baseline Neutrino Facility (LBNF): An Ultimate Neutrino Oscillation Experiment

48. Brookhaven National Laboratory, Upton, New York, November 2013

Observation of Electron Neutrino Appearance from a Muon Neutrino Beam and more

47. Stanford Linear Accelerator Center, Menlo Park, California, July 2013

Observation of Electron Neutrino Appearance from a Muon Neutrino Beam

46. Department of Physics, University of Zurich, Zurich, Switzerland, November 2011

The T2K Experiment: Negotiating the Gatekeeper of the Matter-Antimatter Asymmetry Mystery

45. Department of Physics, Seoul National University, Seoul, S. Korea, July 2010

Status of the T2K (Tokai to Kamioka) Long Baseline Neutrino Oscillation Experiment

44. Department of Theoretical Physics, University Autonoma de Madrid, Madrid, Spain, October 2009

Status of the T2K (Tokai to Kamioka) Long Baseline Neutrino Oscillation Experiment

43. IFIC (Instituto de Física Corpuscular), University of Valencia, Valencia, Spain, October 2009

Status of the T2K (Tokai to Kamioka) Long Baseline Neutrino Oscillation Experiment

42. Subatomic Physics Group (P-25), Los Alamos National Lab (LANL), Los Alamos, New Mexico, July 2009

Status of the T2K (Tokai to Kamioka) Long Baseline Neutrino Oscillation Experiment

41. Dept. of Physics, Oklahoma State University, Stillwater, Oklahoma, Feb. 2007

T2K (Tokai to Kamioka) Long Baseline Neutrino Oscillation Experiment

40. Physics dept., Univ. of Chicago, Chicago, Illinois, Oct. 2006

Henderson Deep Underground Science and Engineering Laboratory: Unearthing the Secrets of the Universe, Underground

39. Physics Dept., University of Michigan, Ann Arbor, Michigan, Oct. 2006

Henderson Deep Underground Science and Engineering Laboratory: Unearthing the Secrets of the Universe, Underground

38. Stanford Linear Accelerator Center, Menlo Park, California, March 2006

T2K (Tokai to Kamioka) Long Baseline Neutrino Oscillation Experiment

37. Stanford Linear Accelerator Center, Menlo Park, California, March 2006

Henderson Deep Underground Science and Engineering Laboratory: Unearthing the Secrets of the Universe, Underground

36. California Institute of Technology, Pasadena, California, October 2005

UNO & Henderson Deep Underground Science and Engineering Laboratory

35. University of Valencia, Valencia, Spain, June 2005  
Einstein's Dream, Neutrino Revolution and UNO
34. Institute of High Energy Physics (IFAE), Universitat Autònoma de Barcelona, Bellaterra, Spain, April 2005  
Special Seminar 2: Survey of Next generation Nucleon decay Neutrino (NNN) Detectors and Proposed Sites (Including an Introduction to US DUSEL Initiative)
33. Institute of High Energy Physics (IFAE), Universitat Autònoma de Barcelona, Bellaterra, Spain, April 2005  
Special Seminar 1: Einstein's Dream, Neutrino Revolution and UNO
32. Dept. of Physics, Univ. of Washington, Seattle, Washington, March 2003  
Physics Potential and Feasibility of UNO: Quest for Grand Unification and Neutrino Physics
31. Dept. of Physics, Brookhaven National Laboratory, Upton, New York, Feb. 2003  
Recent Results, Current Status and Future Plans of The K2K Experiment
30. CESR lab, Cornell University, Ithaca, New York, Oct. 2002  
Recent Results, Current Status and Future Plans of The K2K Experiment
29. Dept. of Physics, California Inst. of Tech, Pasadena, CA, Jan. 2001  
UNO
28. Dept. of Physics, Brookhaven National Laboratory, Upton, New York, Mar. 2000  
Recent Results from K2K
27. Physics dept., Univ. of Chicago, Chicago, Illinois, Mar. 2000  
Recent Results from Super-Kamiokande
26. Physics dept., Univ. of Rochester, Rochester, New York, Feb. 2000  
Recent Results from K2K
25. CESR lab, Cornell University, Ithaca, New York, Jul. 1998  
Evidence for Non-zero Neutrino Mass
24. Dept. of Physics and Astronomy, SUNY at Stony Brook, Stony Brook, New York  
Jun. 1998  
Special HEP seminar: Evidence for Non-zero Neutrino Mass
23. Dept. of Physics, Brookhaven National Laboratory, Upton, New York, Feb. 1998  
Recent Results from Super-Kamiokande experiment: Neutrino Oscillations
22. Physics dept., Univ. of Rochester, Rochester, New York, Feb. 1997  
We see stars underground: Status of Super-Kamiokande experiment
21. Physics dept., Princeton University, Princeton, New Jersey, Dec. 1996  
We see stars underground: Status of Super-Kamiokande experiment
20. Physics Dept., Univ. of Pennsylvania, Philadelphia, Pennsylvania, Dec. 1996  
Status of the Super-Kamiokande: after half year of running
19. Research Progress Meeting, Physics Division, The Lawrence Berkeley National Laboratory, Berkeley, California, June 1996  
Super-kamiokande Project: Overview and Status

18. Chemistry Dept., The State University New York, Stony Brook, New York, Apr. 1995  
Physical Chemistry Seminar  
The Super-Kamiokande Experiment: Overview and Status
17. Physics Dept., University of Michigan, Ann Arbor, Michigan, Mar. 1995  
The Super-Kamiokande Experiment: Overview and Status
16. Physics Dept., Columbia University, New York, New York, Mar. 1995  
The Super-Kamiokande Experiment: Overview and Status
15. Physics Division, Brookhaven National Laboratory, Upton, New York, Mar. 1994  
The Super-Kamiokande Experiment
14. Physics Dept., Columbia University, New York, New York, Apr. 1992  
An Experimental Explanation of Tau Lepton Decay Puzzle: Discrepancy between the Measured and the Theoretical Tau Lifetimes
13. Physics Dept., Harvard University, Cambridge, MA, Apr. 1990  
Search for long-lived Massive Neutrinos in  $Z$  Decays
12. Physics Dept., The State University New York, Stony Brook, New York, Apr. 1990  
Search for long-lived Massive Neutrinos in  $Z$  Decays
11. Physics Dept., Ohio State University, Columbus, Ohio, Apr. 1990  
Search for long-lived Massive Neutrinos in  $Z$  Decays
10. Physics Dept., University of Florida, Gainesville, Florida, Mar. 1990  
Search for long-lived Massive Neutrinos in  $Z$  Decays
9. Physics Dept., Purdue University, West Lafayette, Indiana, Mar. 1990  
Search for long-lived Massive Neutrinos in  $Z$  Decays
8. Physics Dept., Indiana University, Bloomington, Indiana, Mar. 1990  
Search for long-lived Massive Neutrinos in  $Z$  Decays
7. Physics Division, LBL, Berkeley, California, Feb. 1990  
Search for long-lived Massive Neutrinos in  $Z$  Decays
6. SLAC, Stanford, California, Jan. 1989  
Group C/Group H Seminars  
Beam Position Monitor PARADOX
5. Physics Dept., Indiana University, Bloomington, Indiana, Mar. 1986  
Measurement of the  $F^\pm$  Meson Lifetime

4. Physics Division, ANL, Argonne, Mar. 1986  
Measurement of the  $F^\pm$  Meson Lifetime

3. SLAC, Stanford, Jan. 1986  
Measurement of the  $F^\pm$  Meson Lifetime

2. INFN, Pisa, Italy, Sep. 1985  
Measurements of Heavy Meson Lifetimes at HRS

1. LAPP, Annecy, France, Sep. 1985  
Measurements of Heavy Meson Lifetimes at HRS

• Invited Public Lectures/Speeches

36. The Worlds of Physics Lecture Series, Dept. of Physics and Astronomy, Stony Brook U., SUNY, Stony Brook, New York, Feb. 2022  
Capturing Innovations and Underlying Physics in Sports

35. Sanford Underground Research Lab (SURF), Lead, South Dakota, Deep Talks series, via video, Nov. 2020  
Searching beyond the standard model of particle interactions

34. City of Warsaw, “zapytaj fizyka” (ask physicist), Lecture Series, March 2019  
Universe According to Neutrinos, Nobel Prizes, Breakthroughs and Future

33. Global Summer Institute, Stony Brook University, Stony Brook, New York, July 2018  
Capturing Innovations and Underlying Physics in Sports

32. The Worlds of Physics Lecture Series, Dept. of Physics and Astronomy, Stony Brook U., SUNY, Stony Brook, New York, Apr. 2018  
Universe According to Neutrinos, Nobel Prizes, Breakthroughs and Future

31. Family Weekend, Stony Brook University, Stony Brook, New York, October 2017  
Capturing Innovations and Underlying Physics in Sports

30. University Libraries Presents: STEM Speakers Series, Stony Brook University, Stony Brook, New York, September 2017  
Capturing Innovations and Underlying Physics in Sports

29. Public Lecture on the Occasion of LBNF Groundbreaking Ceremony at Sanford Underground Research Facility (SURF), Lead, South Dakota, July 2017  
Brief Introduction to: Deep Underground Neutrino Experiment (DUNE) at Long Baseline Neutrino Facility (LBNF)

28. Public Lecture organized by the Stony Brook Alumni Association, Stony Brook University, Stony Brook, New York, January 2017  
Capturing Innovations and Underlying Physics in Sports (Collaborative presentation with Saget Bedel, New York Times, Multimedia Editor for Sports)

27. Public Lecture for the Emeritus Faculty Association, Stony Brook University,

Stony Brook, New York, November 2016

Neutrinos, Nobel prizes, Breakthroughs and Future

26. The 5th Global Leader Invitation Talk, Chung-Ang University, Seoul, Korea, October 2016

Hidden relationships between Sports and Physics: What are the physical commonalities among baseball, soccer and volleyball?

25. “Fermilab Arts & Lecture Series Presents” Lecture, Fermi National Accelerator Laboratory, Batavia, Illinois, September 2016

What’s physics got to do with sports

24. T2K Press Conference at International Conference on High Energy Physics (ICHEP), Chicago, Illinois, August 2016

First T2K Result from a Search for Charge-Parity Violation in Neutrinos (First Significant Step toward Elucidating Matter Dominant Universe)

23. Special Public Lecture, Black Hills State University, Spearfish, South Dakota, September 2015

What’s physics got to do with sports? Selected topics including Deflategate

22. The Worlds of Physics Lecture Series, Dept. of Physics and Astronomy, SUNY Stony Brook, Stony Brook, New York, May 2015

What’s physics got to do with sports? Selected topics including Deflategate

21. The first “Science on Tap” show produced by Alan Alda Center for Communicat- ing Science, School of Journalism, Stony Brook University, Stony Brook, New York, February 2012

Physics of Sports

20. Special Public Lecture for Physics Club, Suffolk County Community College, Selden, New York, March 2011

Einstein’s Dream, Neutrino Revolution and Beyond

19. The Worlds of Physics Lecture Series, Dept. of Physics and Astronomy, SUNY Stony Brook, Stony Brook, New York, February 2010

Angels and Demons

18. Invited Lecture, Cardozo College, SUNY at Stony Brook, Stony Brook, New York, November 21, 2008

Physics of Football

17. The Worlds of Physics Lecture Series, Dept. of Physics and Astronomy, SUNY Stony Brook, Stony Brook, New York, March 2008

Physics of Sports: Selected Topics

16. Community Leaders Meeting, Golden, Colorado, August 2005

Henderson Deep Underground Science and Engineering Laboratory: Unearthing the Secrets of the Universe, Underground

15. Phelps Dodge Corporation, Quarterly Meeting, Denver, Colorado, August 2005

Henderson Deep Underground Science and Engineering Laboratory: Unearthing the Secrets of the Universe, Underground

14. Invited Lecture, Universitat Autònoma de Barcelona, Bellaterra, Spain, May 2005  
Introduction to the Oriental Languages
13. Invited Lecture, Internet Based DUSEL Lecture Series, Universitat Autònoma de Barcelona, Bellaterra, Spain, March 2005  
Henderson DUSEL: Unearthing the Secrets of the Universe Underground
12. Invited Presentation, Colorado State Lt. Governor's Office, Denver, Colorado, April 2004  
Neutrino Revolution, Einstein's Dream and the Henderson Mine
11. Invited Lecture, Kyungnam University, Masan, Korea, March 2003  
Uncovering the Mysterious World of Neutrinos: Recent Discoveries and Their Implications
10. Invited Lecture, Kyungsang National University, Jinju, Korea, March 2003  
Uncovering the Mysterious World of Neutrinos: Recent Discoveries and Their Implications
9. The Worlds of Physics Lecture Series, Dept. of Physics and Astronomy, SUNY Stony Brook, Stony Brook, New York, October, 2002  
Uncovering the Mysterious World of Neutrinos: Recent Discoveries and Their Implications
8. High School Students Visit, Dept. of Physics and Astronomy, SUNY Stony Brook, Stony Brook, New York, Sep. 2002  
Undergraduate Research Opportunities in the Stony Brook Nucleon Decay and Neutrino (NN) Group
7. Primetime, Dept. of Physics and Astronomy, SUNY at Stony Brook, Stony Brook, New York, April 2002  
Physics and Astronomy Majors: Who are they and where are they going?
6. LIPTA (Long Island Physics Teachers Association)/BNL/Quarknet Joint Conference, BNL, Upton, New York, October, 2001  
Mysterious World of Neutrinos and Quest for Grand Unification
5. Astronomy Open Night, May 5, 2000, SUNY at Stony Brook  
Nature's rare optical displays: Rainbows, Sundogs, Green Flashes, Mirages, Heiligenschein and more...
4. Special public lecture, June 16, 1998, SUNY at Stony Brook  
Breakthrough in Particle Physics: Neutrinos Weigh!
3. Sigma Pi Sigma, Physics Honorary Society Induction Ceremony Congratulatory Speech, April 20, 1998, SUNY at Stony Brook  
Finding the right career and the balance in life
2. Astronomy Open Night, March 6, 1998, SUNY at Stony Brook  
Underground Neutrino Telescopes: A new way of seeing stars.
1. LSE 310-H: Issues in Science and Engineering, Feb. 5, 1998, Keller Residence Hall Living Learning Center, SUNY at Stony Brook  
Physics and Society: Some Issues in High Energy Physics