

Workshop on Ghost Particle Hunting: Neutrino Physics and its Applications to World Peace

Report of Contributions

Contribution ID: 1

Type: **not specified**

Morning coffee and refreshments

Contribution ID: 2

Type: **not specified**

Welcome from Dean of College of Natural Sciences

Contribution ID: 3

Type: **not specified**

John Learned: life of accomplishments

Contribution ID: 4

Type: **not specified**

Discovery of Neutrino Oscillations in SuperK and future outlook

Contribution ID: 5

Type: **not specified**

Discussion and reflections

Contribution ID: 6

Type: **not specified**

Coffee Break

Contribution ID: 7

Type: **not specified**

Greetings and Research Highlights from the Vice President for Research and Innovation Syrmos

Tuesday, April 29, 2025 9:05 AM (5 minutes)

Presenter: SYRMOS, Vassilis (University of Hawaii)

Contribution ID: 8

Type: **not specified**

Sponsor: Nalu Scientific

Tuesday, April 29, 2025 9:10 AM (5 minutes)

Presenter: MOSTAFANEZHAD, Isar (Nalu Scientific)

Contribution ID: 9

Type: **not specified**

John Learned: novel ideas about ghost particles

Tuesday, April 29, 2025 9:20 AM (30 minutes)

Presenter: HALZEN, Francis (University of Wisconsin)

Contribution ID: **10**

Type: **not specified**

Solar Neutrino Puzzle

Tuesday, April 29, 2025 9:50 AM (30 minutes)

Presenter: MCDONALD, Art (Queens University)

Contribution ID: 11

Type: **not specified**

Neutrino Oscillations - discovery with SuperK, connections with John Learned discovery with SuperK, status and future outlook

Tuesday, April 29, 2025 11:05 AM (25 minutes)

Presenter: MESSIER, Mark (Indiana University)

Contribution ID: 12

Type: **not specified**

IMB and discovery of 1987A supernovae neutrinos

Tuesday, April 29, 2025 11:30 AM (40 minutes)

Presenter: SVOBODA, Robert

Contribution ID: **13**

Type: **not specified**

Lunch break

Contribution ID: 14

Type: **not specified**

Modern perspectives on Stellar Collapse

Tuesday, April 29, 2025 2:00 PM (30 minutes)

Presenter: VARTANYAN, David (Carnegie Observatories)

Contribution ID: 15

Type: **not specified**

Physics constraints from SN1987A detection

Tuesday, April 29, 2025 2:30 PM (30 minutes)

Presenter: LI, Shirley (University of California Irvine)

Contribution ID: 16

Type: **not specified**

IMB, to SuperK to GadZooks and DSNB

Tuesday, April 29, 2025 3:35 PM (25 minutes)

Presenter: VAGINS, Mark (UC Irvine)

Contribution ID: 17

Type: **not specified**

Modern searches for supernovae

Tuesday, April 29, 2025 4:00 PM (30 minutes)

Author: PERSHEY, Daniel (Florida State University)

Presenter: PERSHEY, Daniel (Florida State University)

Contribution ID: **18**

Type: **not specified**

The road to radio-detection of ultra-high energy neutrinos

Wednesday, April 30, 2025 4:05 PM (25 minutes)

Presenter: GORHAM, Peter (Department of Physics and Astronomy, Univ. of Hawaii)

Contribution ID: **19**

Type: **not specified**

Construction of IMB and searching for proton decay

Co-author: SOOK PARK, Hye (LLNL)

Presenters: SOOK PARK, Hye (LLNL); BIONTA, Richard (LLNL)

Contribution ID: 20

Type: **not specified**

Neutrino Telescopes

Wednesday, April 30, 2025 11:50 AM (30 minutes)

Presenter: KARLE, Albrecht (University of Wisconsin-Madison)

Contribution ID: 21

Type: **not specified**

John Learned: the story of DUMAND

Wednesday, April 30, 2025 9:05 AM (40 minutes)

Presenter: O'CONNOR, Dan (University of Hawaii Hilo)

Contribution ID: 22

Type: **not specified**

DUMAND contributions in the field

Wednesday, April 30, 2025 9:45 AM (30 minutes)

Presenter: RESVANIS, Leonidas (University of Athens)

Contribution ID: 23

Type: **not specified**

Underwater neutrino projects - KM3NeT

Wednesday, April 30, 2025 11:05 AM (25 minutes)

Presenter: COYLE, Paschal (CPPM)

Contribution ID: 24

Type: **not specified**

Cosmic ray measurements at Haleakala

Wednesday, April 30, 2025 2:30 PM (30 minutes)

Presenter: BINDI, Veronica (University of Hawaii)

Contribution ID: 25

Type: **not specified**

Searches of UHE neutrinos at the Pierre Auger Observatory: recent results and future prospects

Wednesday, April 30, 2025 3:00 PM (30 minutes)

Presenter: MUSSA, Roberto

Contribution ID: 26

Type: **not specified**

Physics at Two Lakes

Wednesday, April 30, 2025 2:05 PM (25 minutes)

Author: WILKES, Jeff (University of Washington)

Presenter: WILKES, Jeff (University of Washington)

Contribution ID: 27

Type: **not specified**

Measurements on Mt. Evens

Presenter: WILKES, Jeff (University of Washington)

Contribution ID: 28

Type: **not specified**

SPEAR/SLAC pioneering e-e+ Physics and the APOCRYPHA

Presenter: RESVANIS, Leonidas (University of Athens)

Contribution ID: 29

Type: **not specified**

Strange Nonchaotic Stars and Galactic Communication

Friday, May 2, 2025 9:05 AM (20 minutes)

Presenters: HIPPE, Michael; TBD

Contribution ID: **30**

Type: **not specified**

Acoustic detection of Ultra High Energy Neutrinos

Friday, May 2, 2025 10:00 AM (20 minutes)

Presenter: GRATTA, Giorgio (Stanford University)

Contribution ID: 31

Type: **not specified**

Neutrino Oscillations - reactor: Discovery with KamLAND, status and future outlook

Friday, May 2, 2025 11:30 AM (20 minutes)

Presenter: DETWILER, Jason (University of Washington)

Contribution ID: 32

Type: **not specified**

Geoneutrinos (KamLAND, Hanohano, OBD)

Friday, May 2, 2025 1:35 PM (20 minutes)

Presenter: WATANABE, Hiroko (Tohoku University)

Contribution ID: 33

Type: **not specified**

Frequentist approach to neutrino mass ordering and JUNO reactor neutrino experiment

Friday, May 2, 2025 2:00 PM (15 minutes)

Presenter: XU, Benda (Tsinghua University)

Contribution ID: 34

Type: **not specified**

Overview of reactor monitoring and WATCHMAN project

Friday, May 2, 2025 2:40 PM (30 minutes)

Presenter: BERNSTEIN, Adam

Contribution ID: 35

Type: **not specified**

Remote reactor monitoring (WATCHMAN and other initiatives)

Presenter: COLEMAN, Jonathan (University of Liverpool)

Contribution ID: 36

Type: **not specified**

NuLat and short baseline initiatives - canceled

Friday, May 2, 2025 3:55 PM (10 minutes)

Presenter: CROW, Brian (University of Hawaii)

Contribution ID: 37

Type: **not specified**

Neutrinos in Action: From Research on miniTimeCube to Shaping the World Nonproliferation Landscape

Friday, May 2, 2025 4:10 PM (20 minutes)

Presenter: LI, Viacheslav (LLNL)

Contribution ID: **38**

Type: **not specified**

Open floor for all

Friday, May 2, 2025 4:40 PM (20 minutes)

Contribution ID: 39

Type: **not specified**

Social dinner - John's place

Tuesday, April 29, 2025 6:30 PM (3 hours)

Contribution ID: 40

Type: **not specified**

Neutrino mass constraints from DESI

Presenter: CROKER, Kevin (Arizona State University)

Contribution ID: 41

Type: **not specified**

Construction of IMB and searching for proton decay

Tuesday, April 29, 2025 1:35 PM (25 minutes)

Author: BIONTA, Richard (LLNL)

Co-author: PARK, Hye Sook (LLNL)

Presenters: PARK, Hye Sook (LLNL); BIONTA, Richard (LLNL)

Contribution ID: 42

Type: **not specified**

Zoom Greetings

Wednesday, April 30, 2025 10:15 AM (15 minutes)

Contribution ID: 43

Type: **not specified**

Neutrino mass constraints from DESI

Wednesday, April 30, 2025 4:30 PM (30 minutes)

Author: CROKER, Kevin (Arizona State University)

Presenter: CROKER, Kevin (Arizona State University)

Contribution ID: 44

Type: **not specified**

Strange Nonchaotic Stars and Galactic Communication

Presenter: TBD

Contribution ID: 45

Type: **not specified**

SPEAR/SLAC pioneering e-e+ Physics and the APOCRYPHA

Friday, May 2, 2025 9:30 AM (20 minutes)

Presenter: RESVANIS, Leonidas (University of Athens)

Contribution ID: 46

Type: **not specified**

The Analog to Digital Conversion of IceCube

Wednesday, April 30, 2025 12:20 PM (30 minutes)

Presenter: NYGREN, David (University of Texas at Alrington)

Contribution ID: 47

Type: **not specified**

JUNO detector - technology

Friday, May 2, 2025 2:20 PM (15 minutes)

Presenter: Prof. WANG, Wei (Sun Yat-sen University)

Contribution ID: 48

Type: **not specified**

Workshop Photo

Tuesday, April 29, 2025 10:20 AM (10 minutes)

Contribution ID: 49

Type: **not specified**

Distributed imaging for scintillation detectors

Friday, May 2, 2025 11:05 AM (20 minutes)

Presenter: GRATTA, Giorgio (Stanford University)

Contribution ID: 50

Type: **not specified**

Logistics for the workshop

Tuesday, April 29, 2025 9:15 AM (5 minutes)

Author: MARICIC, Jelena (University of Hawaii, High Energy Physics Group)

Presenter: MARICIC, Jelena (University of Hawaii, High Energy Physics Group)

Contribution ID: 51

Type: **not specified**

The nature of 200 PeV KM3NeT event

Wednesday, April 30, 2025 11:30 AM (20 minutes)

Author: LEARNED, John (University of Hawaii)

Presenter: LEARNED, John (University of Hawaii)

Contribution ID: 52

Type: **not specified**

Discussions of the proceedings

Friday, May 2, 2025 12:00 PM (15 minutes)