

Session Program

24-30 Aug 2025

**The XIX International Conference on Topics in
Astroparticle and Underground Physics
(TAUP2025)**

Neutrino Physics and Astrophysics

Xichang Qionghai Hotel
Xichang, Sichuan, China

Monday 25 August

14:00

Neutrino Physics and Astrophysics: parallel session 1A

Session | **Location:** North Hall #1

14:00–14:20

Latest KamLAND-Zen results and the impact of muon spallation on the θ search

Speaker

Kelly Weerman

14:20–14:40

The CUORE experiment: current status and road ahead

Speaker

Alice Campani

14:40–15:00

Search for Neutrinoless Double-Beta Decay in ^{76}Ge with the LEGEND experiment at Gran Sasso

Speaker

Alberto Garfagnini

15:00–15:20

Status of the SuperNEMO Demonstrator and First Physics Data

Speaker

Xalbat Aguerre

15:20–15:40

The CUPID neutrinoless double-beta decay experiment

Speaker

Irene Nutini

15:40

14:00

Neutrino Physics and Astrophysics: parallel session 1B

Session | **Location:** North Hall #2

14:00–14:20

Double Chooz Single-Detector Physics Results

Speaker

Philipp Soldin

14:20–14:40

Recent Results from MicroBooNE's Search for a Low-Energy-Excess Anomaly under the Electron Hypothesis and additional BSM Studies

Speaker

Xiangpan Ji

14:40–15:00

New results from MicroBooNE's search for a Low-Energy-Excess anomaly in the photon and e^+e^- channels

Speaker

Xiao Luo

15:00–15:20

The latest reactor neutrino oscillation results and reactor neutrino flux and spectrum measurement results from Daya Bay**Speaker**

Zhe Wang

15:20–15:40

Precision Neutrino Physics: Status and Outlook in the 3 ν Paradigm**Speaker**

Antonio Marrone

15:40

16:00

Neutrino Physics and Astrophysics: parallel session 2A**Session** | **Location:** North Hall #1

16:00–16:20

Search for Neutrinoless Double-Beta Decay of Xe-136 with the PandaX-4T Detector**Speaker**

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16:20–16:40

Design and prospect of the CDEX-300 neutrinoless double beta decay experiment**Speaker**

Wenhan Dai

16:40–17:00

AMoRE-II construction status**Speaker**

SeungCheon Kim

17:00–17:20

R&D program for neutrinoless double beta decay search at JUNO**Speaker**

Gaosong Li

17:20–17:40

AXEL: high-pressure Xe gas TPC for neutrinoless double beta decay search**Speaker**

Junya Hikida

17:40–18:00

Toward a background-free ton-scale $0\nu\beta\beta$ bolometric experiment: Status and Prospects of BINGO**Speaker**

Claudia Nones

18:00–18:20

New physics in Neutrinoless double beta decay**Speaker**

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18:20

16:00

Neutrino Physics and Astrophysics: parallel session 2B**Session** | **Location:** North Hall #2

16:00–16:20

LHC Neutrino Physics at the FASER Experiment

Speaker

Tomohiro Inada

16:20–16:40

The FLArE Experiment at the Forward Physics Facility for High Energy Neutrino and Dark Matter Searches at LHC**Speaker**

Wenjie Wu

16:40–17:00

Neutrino Physics with the SND@LHC Experiment**Speaker**

Onur Durhan

17:00–17:20

IceCat-2: An Updated Catalog of High-Energy Neutrino Alerts from IceCube**Speaker**

Nora Valtonen-Mattila

17:20–17:40

IceCube Search for MeV Neutrinos from Mergers using Gravitational Wave Catalogs**Speaker**

Nora Valtonen-Mattila

17:40–18:00

Investigating Neutrino Emission from Gamma-Ray (Galactic) Sources with KM3NeT/ARCA and ANTARES**Speaker**

Vittorio Parisi

18:00–18:20

Detection of a Muon Burst Coincident with KM3-230213A**Speaker**

Francesco Nozzoli

18:20

Tuesday 26 August

14:00

Neutrino Physics and Astrophysics: parallel session 3A

Session | Location: North Hall #1

14:00–14:20

A study of neutrinoless double electron capture of $^{40}\mathrm{Ca}$ with the AMoRE-I experiment

Speaker

Bijaya Sharma

14:20–14:40

Benchmarking $0\beta\beta$ -decay nuclear matrix elements with the MONUMENT Experiment

Speaker

Elizabeth Mondragón

14:40–15:00

Detector response study of cryogenic scintillating $\mathrm{Li}_2\mathrm{MoO}_4$ detectors for next generation $0\nu\beta\beta$ search

Speaker

Benjamin Schmidt

15:00–15:20

High-precision study of $2\nu\beta\beta$ of $^{130}\mathrm{Te}$ from the CUORE experiment

Speaker

Stefano Dell'Oro

15:20–15:40

Improving the sensitivity to effective Majorana mass with combined analysis of multiple $0\nu\beta\beta$ transitions in large xenon detectors

Speaker

俞 韩

15:40

14:00

Neutrino Physics and Astrophysics: parallel session 3B

Session | Location: North Hall #2

14:00–14:20

Solar neutrino results with the full data period until Super-Kamiokande-IV

Speakers

Benda Xu, Yiyang Wu

14:20–14:40

Measurement of Solar Boron-8 Neutrinos via Coherent Elastic Neutrino-Nucleus Scattering with XENONnT

Speaker

Ms Kexin Liu

14:40–15:00

Progress of solar pp neutrino search with XENONnT

Speaker

Prof. Jingqiang Ye

15:00–15:20

Measuring ^{40}Ar -solar neutrino charged-current interactions in the DEAP-3600 dark matter detector**Speaker**

Shawn Westerdale

15:20–15:40

Search for neutron decay into an antineutrino and a neutral kaon in Super-Kamiokande**Speaker**

Koki Yamauchi

15:40

16:00

Neutrino Physics and Astrophysics: parallel session 4A**Session** | **Location:** North Hall #1

16:00–16:20

The Way Forward for Neutrinoless Double Beta Decay Using Liquid Xenon**Speaker**

David Sinclair

16:20–16:40

Search for Double Beta Plus Decays with NuDoubt++**Speaker**

Stefan Schoppmann

16:40–17:00

Sensitivity of the CUPID experiment to $0\nu\beta\beta$ decay of ^{100}Mo **Speaker**

Pia Loaiza

17:00–17:20

Status of the NvDEx experiment**Speaker**

Dr Hao Qiu

17:20–17:40

The NEXT-100 experiment**Speaker**

Samuele Torelli

17:40–18:00

CUPID-CJPL: a cryogenic bolometer testbed**Speakers**

Hao Chen, Long Ma

18:00–18:20

Search for Double Beta Decay Modes of ^{134}Xe with EXO-200 Phase-II**Speakers**

Gaosong Li, Thomas Brunner

18:20

16:00

Neutrino Physics and Astrophysics: parallel session 4B**Session** | **Location:** North Hall #2

16:00–16:20

Physics potential of detecting solar neutrinos at JUNO

Speaker

Marco Beretta

16:20–16:40

Research and Development of Jinping Neutrino Experiment**Speaker**

Dr Wentai Luo

16:40–17:00

Detecting Solar Neutrinos and Fermionic Dark Matter with ^{136}Xe in nEXO**Speaker**

Glenn Richardson

17:00–17:20

Detecting Solar neutrinos with the CYGNO gas TPC**Speaker**

Samuele Torelli

17:20–17:40

Testing the Gallium Anomaly Without Using Gallium Detectors**Speaker**

Emilio Ciuffoli

17:40–18:00

Imaginariness in Neutrino Systems: A Resource-Theoretic Perspective**Speaker**

Neetu Raj Singh Chundawat

18:00

Wednesday 27 August

14:00

Neutrino Physics and Astrophysics: parallel session 5A

Session | **Location:** North Hall #1 | **Convener:** Henry Wong

14:00–14:20

First observation of reactor antineutrinos by coherent scattering with CONUS+

Speaker

Manfred Lindner

14:20–14:40

Experiment nuGeN at Kalinin NPP. Status and latest results.

Speaker

Alexey Lubashevskiy

14:40–15:00

New Limits on Neutrino-Nucleus Elastic Scattering at Kuo- Sheng Nuclear Reactor

Speaker

Dr Manoj Kumar Singh

15:00–15:20

Status and recent results from the CONNIE experiment with Skipper-CCDs

Speaker

Alexis Armando Aguilar-Arevalo

15:20–15:40

New results from the commissioning of the NUCLEUS experiment at the Technical University of Munich

Speaker

Elisabetta Bossio

15:40

14:00

Neutrino Physics and Astrophysics: parallel session 5B

Session | **Location:** North Hall #2

14:00–14:20

Prospects for detecting fast-time features in the neutrino lightcurve of nearby supernovae in neutrino telescopes

Speaker

Jakob Beise

14:20–14:40

Towards imaging Earth's large-scale structures by directional geoneutrino detection with Ocean Bottom Detector

Speaker

Zhihao Xu

14:40–15:00

Dissecting the diffuse supernova neutrino background flux over wide energy range in upcoming era

Speaker

Yosuke Ashida

15:00–15:20 The TeV astrophysics of the Sun**Speaker**

Prof. Kenny Chun Yu Ng

15:20–15:40 Power reactor monitoring with antineutrinos by the DANSS detector**Speaker**

Dmitry Svirida

15:40

16:00

Neutrino Physics and Astrophysics: parallel session 6A**Session** | **Location:** North Hall #1**16:00–16:20 RED-100: Results and status****Speaker**

Ekaterina Kozlova

16:20–16:40 First performance of the Ricochet experiment at ILL**Speaker**

Valentina Novati

16:40–17:00 Status and prospects of the CICENNS Experiment**Speaker**

Xiang Xiao

17:00–17:20 Progress of CryoCsl detector R&D from COHERENT**Speaker**

苏 楷俤

17:20–17:40**Status and prospects of RECODE program with PPC Germanium detector****Speaker**

Yufeng Wang

17:40–18:00**RELICS: Search for Coherent Elastic Neutrino-Nucleus Scattering from reactor neutrinos using LXeTPC****Speaker**

jiachen yu

18:00–18:20**Status of Neutrino-Nucleus Scattering Observations in the NEON Experiment****Speaker**

Seo Hyun Lee

18:20–18:40**Non-Standard Neutrino Interactions with Coherent Elastic Neutrino-Nucleus Scattering at TEXONO****Speaker**

Sevgi Karadağ

18:40

16:00

Neutrino Physics and Astrophysics: parallel session 6B**Session** | **Location:** North Hall #2

16:00–16:20

Updated background simulation and detector design for AMoRE-II**Speaker**

Eunju Jeon

16:20–16:40

OPOSSUM - Optimal Particle identification Of Single Site events with Underground MKIDs detectors**Speaker**

andrei puiu

16:40–17:00

Search for double electron capture in Sn-112 using gamma-ray TES**Speaker**

Atsuto Takeuchi

17:00–17:20

Study of Li_2MoO_4 and $\text{Na}_2\text{Mo}_2\text{O}_7$ crystals for ^{100}Mo neutrinoless double beta decay search with cryogenic bolometers:**Speaker**

Mr Deyong Duan

17:20–17:40

The CROSS demonstrator: structure, performance and physics reach**Speaker**

Dr Andrea Giuliani

17:40–18:00

Calculation and comparison of sensitivities in $0\nu\beta\beta$ experiments based on key parameters**Speaker**

Xiao Yu

18:00

Thursday 28 August

14:00

Neutrino Physics and Astrophysics: parallel session 7A

Session | **Location:** North Hall #1

14:00–14:20 **The SAND detector of the DUNE experiment**

Speaker

Denise Casazza

14:20–14:40 **The Short-Baseline Near Detector at Fermilab**

Speaker

Thomas Wester

14:40–15:00 **Commissioning of the JUNO detector**

Speaker

Iwan Morton-Blake

15:00–15:20 **Status and Prospect of JUNO-TAO**

Speaker

Ruhui Li

15:20–15:40 **Development of the calibration sources for the JUNO experiment**

Speaker

Akira Takenaka

15:40

14:00

Neutrino Physics and Astrophysics: parallel session 7B

Session | **Location:** North Hall #2

14:00–14:20 **Update on the ECHo Experiment**

Speaker

Raghav Pandey

14:20–14:40 **Status of the Ptolemy project**

Speaker

Dr Nicola Rossi

14:40–15:00 **The first neutrino mass measurement of HOLMES experiment**

Speaker

Dr Sara Gamba

15:00–15:20 **Technologies for a Future Neutrino Mass Experiment with Tritium**

Speaker

Neven Kovac

15:20–15:40

Helicity-changing decays of relic neutrinos and detections in PTOLEMY-like experiments

15:40

Speaker

Jihong Huang

16:00

Neutrino Physics and Astrophysics: parallel session 8A**Session** | **Location:** North Hall #1

16:00–16:20

The Status and Perspectives of GRAND**Speaker**

Guoyuan Huang

16:20–16:40

Recent results from Baikal-GVD**Speaker**

Dmitry Zaborov

16:40–17:00

TRIDENT: Advancing Future Deep-sea Neutrino Observatory**Speaker**

Xin Xiang

17:00–17:20

Sensitivity for ultra-high-energy neutrinos with the Radio Neutrino Observatory in Greenland (RNO-G)**Speaker**

Jethro Stoffels

17:20–17:40

High-energy neutrinos from low-luminosity gamma-ray bursts**Speaker**

Bing Theodore Zhang

17:40–18:00

Status and Prospects of the TRIDENT Neutrino Telescope**Speaker**

Iwan Morton-Blake

18:00

16:00

Neutrino Physics and Astrophysics: parallel session 8B**Session** | **Location:** North Hall #2

16:00–16:20

Impact of coherent scattering on relic neutrinos boosted by cosmic rays**Speaker**

Jiajun Liao

16:20–16:40

Searching for sterile neutrinos at the keV scale with the KATRIN experiment**Speaker**

Andrea Nava

16:40–17:00

Probing new light particles in tritium beta decay with the KATRIN experiment**Speaker**

Joscha Lauer

17:00–17:20

Latest Constraints on Sterile Neutrinos from the KATRIN Experiment

Speaker

Shailaja Mohanty

17:20–17:40

Search for keV-Scale Sterile Neutrinos via ^3H Beta Decay in LiF Crystals**Speaker**

Dr KyungRae Woo

17:40–18:00

Searches for New Physics in the DANSS Experiment**Speaker**

Igor Alekseev

18:00–18:20

Testing the Gallium neutrino anomaly with CEvNS?**Speaker**

Giovanni Benato

18:20