

CERN Neutrino Platform Pheno Week 2025

Report of Contributions

Contribution ID: 33

Type: **not specified**

Cosmic QCD epoch at large lepton flavour asymmetries

Monday 17 February 2025 13:40 (30 minutes)

Presenter: OLDENGOTT, Isabel (Bielefeld University)

Session Classification: Neutrino Cosmology

Contribution ID: 34

Type: **not specified**

Cosmological neutrino mass measurements with LSS

Monday 17 February 2025 14:10 (30 minutes)

Presenter: SIMONOVIC, Marko (Florence University, ITALY)

Session Classification: Neutrino Cosmology

Contribution ID: 35

Type: **not specified**

Addressing the cosmological tension in neutrino masses

Monday 17 February 2025 14:40 (15 minutes)

Presenter: HAJJAR MUÑOZ, Rasmi Enrique (IFIC (CSIC-UV))

Session Classification: Neutrino Cosmology

Contribution ID: **36**

Type: **not specified**

Welcome and Introduction

Monday 17 February 2025 13:30 (10 minutes)

Session Classification: Neutrino Cosmology

Contribution ID: 37

Type: **not specified**

Is Cosmology in Conflict with Neutrino Oscillations?

Monday 17 February 2025 16:10 (15 minutes)

Presenter: NAREDO, Daniel (IFT-UAM/CSIC)

Session Classification: Neutrino Cosmology

Contribution ID: **38**

Type: **not specified**

How new physics affects neutrinos at decoupling time

Monday 17 February 2025 15:55 (15 minutes)

Presenter: OVCHYNNIKOV, Maksym (CERN)

Session Classification: Neutrino Cosmology

Contribution ID: 39

Type: **not specified**

Exploring primordial black holes with neutrinos

Monday 17 February 2025 16:25 (15 minutes)

Presenter: CHIANESE, Marco (University of Naples Federico II & INFN)

Session Classification: Neutrino Cosmology

Contribution ID: 40

Type: **not specified**

Recent and ongoing progress towards a precision calculation of N_{eff} in the Standard Model [ONLINE]

Monday 17 February 2025 15:40 (15 minutes)

Presenter: DREWES, Marco (Universite Catholique de Louvain (UCL) (BE))

Session Classification: Neutrino Cosmology

Contribution ID: 41

Type: **not specified**

Thermal effects in freeze-in neutrino dark matter production

Monday 17 February 2025 16:40 (15 minutes)

Presenter: ROSAURO-ALCARAZ, Salvador (INFN Sezione di Bologna, ITALY)

Session Classification: Neutrino Cosmology

Contribution ID: 42

Type: **not specified**

(No) constraints on primordial neutrino asymmetries [Online]

Monday 17 February 2025 16:55 (15 minutes)

Presenter: FROUSTEY, Julien (University of California, Berkeley (USA))

Session Classification: Neutrino Cosmology

Contribution ID: 43

Type: **not specified**

Physics at a neutrino factory

Thursday 20 February 2025 09:00 (30 minutes)

Presenter: GEHRLEIN, Julia (Colorado State University (US))

Session Classification: Accelerator Neutrinos

Contribution ID: 44

Type: **not specified**

Neutrino-antineutrino differentiation at LHC detectors

Thursday 20 February 2025 09:30 (30 minutes)

Presenter: MUKHOPADHYAYA, Biswarup (Harish-Chandra Research Institute, Allahabad, India)

Session Classification: Accelerator Neutrinos

Contribution ID: 45

Type: **not specified**

New physics searches using ProtoDUNE and the CERN SPS accelerator

Thursday 20 February 2025 10:00 (15 minutes)

Presenter: URREA GONZÁLEZ, Salvador (IJCLab)

Session Classification: Accelerator Neutrinos

Contribution ID: 46

Type: **not specified**

Heavy Neutral Leptons via Axion-Like Particles

Thursday 20 February 2025 11:00 (15 minutes)

Presenter: ABDULLAHI, Asli (IFT (Universidad Autónoma de Madrid))

Session Classification: Accelerator Neutrinos

Contribution ID: 47

Type: **not specified**

Neutrino Decay and Open Quantum Systems

Thursday 20 February 2025 11:15 (15 minutes)

Presenter: PARKER, George Arthur (Johannes Gutenberg University Mainz)

Session Classification: Accelerator Neutrinos

Contribution ID: 48

Type: **not specified**

Probing Physics Beyond Standard Model Using MicroBooNE Data

Thursday 20 February 2025 11:30 (15 minutes)

Presenter: KUMAR, Karan (Columbia University)

Session Classification: Accelerator Neutrinos

Contribution ID: 49

Type: **not specified**

Dark photon portal to dark matter, long-lived particles and gravitational waves

Thursday 20 February 2025 11:45 (30 minutes)

Presenter: KAHLHOEFER, Felix (Karlsruhe Institute of Technology)

Session Classification: Accelerator Neutrinos

Contribution ID: 50

Type: **not specified**

Physics with TeV Neutrinos from the LHC

Thursday 20 February 2025 12:15 (30 minutes)

Presenter: ROJO CHACON, Juan (Nikhef National institute for subatomic physics (NL))

Session Classification: Accelerator Neutrinos

Contribution ID: 51

Type: **not specified**

Neutrino Cross-Section Theory: Uncertainties and Implications for Oscillation Measurements

Tuesday 18 February 2025 09:00 (30 minutes)

Presenter: KABIRNEZHAD, Minoo (Imperial College London)

Session Classification: Neutrino Interactions

Contribution ID: 52

Type: **not specified**

CEvNS

Tuesday 18 February 2025 09:30 (30 minutes)

Presenter: DE ROMERI, Valentina (IFIC CSIC/UV (Valencia, Spain))

Session Classification: Neutrino Interactions

Contribution ID: 53

Type: **not specified**

Comparative study of a theoretical approach for (anti)neutrino-nucleon/nucleus deep Inelastic scattering and GENIE DIS model [ONLINE]

Tuesday 18 February 2025 11:00 (15 minutes)

Presenter: SINGH, Alka (Aligarh Muslim University)

Session Classification: Neutrino Interactions

Contribution ID: 54

Type: **not specified**

EFT study of neutrino data

Tuesday 18 February 2025 11:15 (15 minutes)

Presenter: PRAKASH, Suraj (IFIC (UV-CSIC))

Session Classification: Neutrino Interactions

Contribution ID: 55

Type: **not specified**

Weak charged current induced associated particle production from the nucleon target [Online]

Presenter: FATIMA, Atika

Session Classification: Neutrino Interactions

Contribution ID: 56

Type: **not specified**

Constraining ν SMEFT at Current and Future Colliders

Tuesday 18 February 2025 11:30 (15 minutes)

Presenter: BOLTON, Patrick (Jožef Stefan Institute)

Session Classification: Neutrino Interactions

Contribution ID: 57

Type: **not specified**

Heavy Neutral Lepton searches at ICARUS-NuMI

Tuesday 18 February 2025 11:45 (15 minutes)

Presenter: HERNANDEZ GARCIA, Josu (Instituto de Física Corpuscular (IFIC), CSIC-UV)

Session Classification: Neutrino Interactions

Contribution ID: 58

Type: **not specified**

Long Baseline neutrino experiments

Tuesday 18 February 2025 13:30 (30 minutes)

Presenter: VALLARI, Zoya (Ohio State University)

Session Classification: Accelerator Neutrinos

Contribution ID: 59

Type: **not specified**

Impact of cross-section uncertainties on BSM searches

Tuesday 18 February 2025 14:00 (30 minutes)

Presenter: LI, Shirley (UC Irvine)

Session Classification: Accelerator Neutrinos

Contribution ID: **60**

Type: **not specified**

The MicroBooNE beyond-Standard-Model physics programme

Tuesday 18 February 2025 14:30 (15 minutes)

Presenter: EVANS, Justin (University of Manchester (UK))

Session Classification: Accelerator Neutrinos

Contribution ID: **61**

Type: **not specified**

Searches for the MiniBooNE low-energy excess with MicroBooNE [Online]

Tuesday 18 February 2025 15:30 (15 minutes)

Presenter: LUO, Xiao

Session Classification: Accelerator Neutrinos

Contribution ID: 62

Type: **not specified**

Status of NOvA and T2K tension after Neutrino 2024 and possible role of neutrino non-standard interactions [Online]

Tuesday 18 February 2025 15:45 (15 minutes)

Presenter: Dr CHATTERJEE, Sabya Sachi (IPhT CEA-Saclay)

Session Classification: Accelerator Neutrinos

Contribution ID: 63

Type: **not specified**

Model Independent Time Reversal Violation study with DUNE and T2HK

Tuesday 18 February 2025 16:00 (15 minutes)

Presenter: SHARMA, Kiran (Karlsruhe Institute of Technology(1), IIT Bhilai(2))

Session Classification: Accelerator Neutrinos

Contribution ID: **64**

Type: **not specified**

Majorana Phase in neutrino oscillations

Tuesday 18 February 2025 16:15 (15 minutes)

Presenter: PRADHAN, Akhila Kumar (INDIAN INSTITUTE OF TECHNOLOGY BOMBAY)

Session Classification: Accelerator Neutrinos

Contribution ID: 65

Type: **not specified**

Constraining non-standard neutrino interactions with neutral current events at long-baseline oscillation experiments

Tuesday 18 February 2025 16:30 (15 minutes)

Presenter: PINHEIRO, Joao Paulo (Universitat de Barcelona)

Session Classification: Accelerator Neutrinos

Contribution ID: 66

Type: **not specified**

Probing CP Violation with Neutrino Disappearance Alone [Online]

Tuesday 18 February 2025 16:45 (15 minutes)

Presenter: DENTON, Peter (Brookhaven National Laboratory)

Session Classification: Accelerator Neutrinos

Contribution ID: 67

Type: **not specified**

CP violation in light neutrino oscillations and heavy neutrino decays

Tuesday 18 February 2025 17:00 (15 minutes)

Presenter: XING, Zhi-zhong (Institute of High Energy Physics, Chinese Academy of Sciences)

Session Classification: Accelerator Neutrinos

Contribution ID: **68**

Type: **not specified**

Summary Workshop Neutrinos@CERN

Wednesday 19 February 2025 09:00 (30 minutes)

Presenter: DE ROECK, Albert (CERN)

Session Classification: Neutrino Masses

Contribution ID: **69**

Type: **not specified**

Neutrino Mass Models and Prospects for Neutrino Experiments

Wednesday 19 February 2025 09:30 (30 minutes)

Presenter: ZHOU, Shun (Institute of High Energy Physics, Chinese Academy of Sciences, Beijing)

Session Classification: Neutrino Masses

Contribution ID: 70

Type: **not specified**

Heavy Neutral Lepton and Collider Signatures

Wednesday 19 February 2025 10:45 (15 minutes)

Presenter: MITRA, Manimala (Institute of Physics (IOP))

Session Classification: Neutrino Masses

Contribution ID: 71

Type: **not specified**

Neutrinoless Double Beta Decay from Scalar Leptoquarks: Interplay with Neutrino Mass and Flavor Physics

Wednesday 19 February 2025 11:00 (15 minutes)

Presenter: GOSWAMI, Srubabati (Physical Research Laboratory)

Session Classification: Neutrino Masses

Contribution ID: 72

Type: **not specified**

Xenon-gas TPC reconstruction capabilities for neutrino-less double beta decay searches

Wednesday 19 February 2025 11:15 (15 minutes)

Presenter: POMPA, Federica (SUBATECH)

Session Classification: Neutrino Masses

Contribution ID: 73

Type: **not specified**

Modular invariant neutrino mass models and their implications for cosmology

Wednesday 19 February 2025 11:30 (15 minutes)

Presenter: WANG, Xin (University of Southampton)

Session Classification: Neutrino Masses

Contribution ID: 76

Type: **not specified**

Hints of Quasi-Dirac Neutrinos in the IceCube measurements of the Diffuse Flux

Friday 21 February 2025 09:30 (15 minutes)

Presenters: PORTO SILVA, Yago P (Universidade Estadual de Campinas); PORTO, Yago

Session Classification: Astro-Neutrinos

Contribution ID: 79

Type: **not specified**

Simulating the multi-particle Neutrino Fast Flavor Instabilities (FFI) in a Many-Body Supernova system

Friday 21 February 2025 11:30 (15 minutes)

Presenter: LARAIB, Zoha

Session Classification: Astro-Neutrinos

Contribution ID: **80**

Type: **not specified**

Neutrino physics with gravitational waves

Friday 21 February 2025 12:00 (15 minutes)

Presenter: MARFATIA, Danny

Session Classification: Astro-Neutrinos

Contribution ID: **81**

Type: **not specified**

Ultra-high-energy cosmogenic neutrinos from new physics [ONLINE]

Friday 21 February 2025 12:15 (15 minutes)

Presenter: HOSTERT, Matheus

Session Classification: Astro-Neutrinos

Contribution ID: **82**

Type: **not specified**

Infrared neutrino mass models and how to test them

Wednesday 19 February 2025 11:45 (15 minutes)

Presenter: ETTENGRUBER, Manuel (Max-Planck-Institut for Physics)

Session Classification: Neutrino Masses

Contribution ID: 83

Type: **not specified**

Threshold effects on the massless neutrino in the canonical seesaw mechanism

Wednesday 19 February 2025 12:00 (15 minutes)

Presenter: ZHANG, Di (Technical University of Munich)

Session Classification: Neutrino Masses

Contribution ID: **84**

Type: **not specified**

SN Neutrinos

Presenter: FIORILLO, Damiano (DESY)

Session Classification: Astro-Neutrinos

Contribution ID: 85

Type: **not specified**

UHE muons at KM3NeT in the context of the anomalous ANITA-IV events

Friday 21 February 2025 09:45 (15 minutes)

Presenter: BERTÓLEZ-MARTÍNEZ, Antoni (Departament de Física Quàntica i Astrofísica, Universitat de Barcelona)

Session Classification: Astro-Neutrinos

Contribution ID: **86**

Type: **not specified**

Multi-messenger probes of the cosmic neutrino background and dark matter

Friday 21 February 2025 10:00 (15 minutes)

Presenter: HERRERA, Gonzalo (TUM, MPP)

Session Classification: Astro-Neutrinos

Contribution ID: 87

Type: **not specified**

The role of neutrinos in supernova physics

Friday 21 February 2025 11:00 (30 minutes)

Presenter: FIORILLO, Damiano (Niels Bohr International Academy, Niels Bohr Institute, University of Copenhagen, 2100 Copenhagen, Denmark)

Session Classification: Astro-Neutrinos

Contribution ID: **88**

Type: **not specified**

Gravitational waves probes of leptogenesis

Friday 21 February 2025 11:45 (15 minutes)

ABC Federal University

Presenter: SAVIANO, Ninetta (INFN Napoli)

Session Classification: Astro-Neutrinos

Contribution ID: 89

Type: **not specified**

(Ultra-)high energy neutrinos and physics opportunities

Friday 21 February 2025 09:00 (30 minutes)

Presenter: ESTEBAN, Ivan (University of the Basque Country)

Session Classification: Astro-Neutrinos

Contribution ID: **90**

Type: **not specified**

Group Photo

Thursday 20 February 2025 12:45 (10 minutes)