Astrophysical neutrino theory

*Monday, 16 December 2019 11:15 (30 minutes)*

**Presenter:** ANDO, Shin’ichiro

**Session Classification:** Atmospheric and high energy neutrinos, gravitational waves
Double-Beta Decay Experiments

Monday, 16 December 2019 14:15 (30 minutes)

Presenter: DETWILER, Jason

Session Classification: Neutrinoless double beta decay
Recent results from CUORE

Monday, 16 December 2019 14:45 (30 minutes)

Presenter: OUELLET, Jon
Session Classification: Neutrinoless double beta decay
nuclear matrix element, overview

Monday, 16 December 2019 16:15 (30 minutes)

Presenter: SUHONEN, Jouni
Session Classification: Neutrinoless double beta decay
**APPEC summary**

*Monday, 16 December 2019 16:45 (15 minutes)*

**Presenter:** PASCOLI, Silvia (University of Durham (GB))

**Session Classification:** Neutrinoless double beta decay
Matter effects in neutrino oscillations

Tuesday, 17 December 2019 11:00 (30 minutes)

Presenter: PARKE, Stephen (Fermi National Accelerator Lab. (US))
Session Classification: Short-baseline neutrino oscillation experiments (reactor and SBN)
Recent results from DANSS

Tuesday, 17 December 2019 11:30 (30 minutes)

Presenter: SHITOV, Yury
Session Classification: Short-baseline neutrino oscillation experiments (reactor and SBN)
Overview on reactor sterile neutrinos and latest results from STEREO

Tuesday, 17 December 2019 12:00 (30 minutes)

Presenter: LHUILLIER, David

Session Classification: Short-baseline neutrino oscillation experiments (reactor and SBN)
nuclear theory talk

Tuesday, 17 December 2019 14:00 (30 minutes)

Presenter: GANDOLFI, Stefano

Session Classification: Short-baseline neutrino oscillation experiments (reactor and SBN)
Neutrino cross section measurements

Tuesday, 17 December 2019 14:30 (30 minutes)

Presenter:  DOLAN, Stephen
Session Classification:  Short-baseline neutrino oscillation experiments (reactor and SBN)
Contribution ID: 13

Session Classification: Short-baseline neutrino oscillation experiments (reactor and SBN)
Gravitational wave

Monday, 16 December 2019 11:45 (30 minutes)

**Presenter:** DOOLEY, Kate

**Session Classification:** Atmospheric and high energy neutrinos, gravitational waves
Neutrinos and cosmology

Monday, 16 December 2019 12:15 (30 minutes)

Presenter:  ELEONORA, Di Valentino

Session Classification:  Atmospheric and high energy neutrinos, gravitational waves
atmospheric neutrino physics

Monday, 16 December 2019 10:15 (30 minutes)

Presenter: FEDYNITCH, Anatoli (Kavil IPMU, Japan)

Session Classification: Atmospheric and high energy neutrinos, gravitational waves
Theory overview of neutrinoless double beta decay

Monday, 16 December 2019 15:15 (30 minutes)

Presenter: HARZ, Julia

Session Classification: Neutrinoless double beta decay
Dark matter and onubb

Session Classification: Neutrinoless double beta decay
Flux predictions

Tuesday, 17 December 2019 16:00 (30 minutes)

Presenter: BERRYMAN, Jeff

Session Classification: Short-baseline neutrino oscillation experiments (reactor and SBN)
Reactor neutrino current status

Tuesday, 17 December 2019 16:30 (30 minutes)

Presenter: ZHAN, Liang
Session Classification: Short-baseline neutrino oscillation experiments (reactor and SBN)
Contribution ID: 21

JUNO

Tuesday, 17 December 2019 17:00 (30 minutes)

Presenter: SISTI, Monica

Session Classification: Short-baseline neutrino oscillation experiments (reactor and SBN)
T2K and T2K-Upgrade

Wednesday, 18 December 2019 09:30 (30 minutes)

Presenter: ICHIKAWA, Atsuko

Session Classification: Long-baseline neutrino oscillation experiments (present and future)
Recent results from NOvA

Wednesday, 18 December 2019 10:00 (30 minutes)

**Presenter:** HEWES, Jeremy

**Session Classification:** Long-baseline neutrino oscillation experiments (present and future)
Modular invariance approach to the flavour problem

*Wednesday, 18 December 2019 10:30 (30 minutes)*

**Presenter:** FERUGLIO, Ferrucio

**Session Classification:** Long-baseline neutrino oscillation experiments (present and future)
Contribution ID: 25

DUNE

Wednesday, 18 December 2019 11:30 (30 minutes)

Presenter: MCCONNEY, Nicola (The University of Machester)

Session Classification: Long-baseline neutrino oscillation experiments (present and future)
Hyper-Kamiokande

Wednesday, 18 December 2019 12:00 (30 minutes)

Presenter: PLAYFER, Steve
Session Classification: Long-baseline neutrino oscillation experiments (present and future)
CERN neutrino platform overview

Wednesday, 18 December 2019 12:30 (30 minutes)

Presenter:  BORDONI, Stefania  (Michigan State University (US))

Session Classification:  Long-baseline neutrino oscillation experiments (present and future)
gadolinium-doped Super-Kamiokande (SK-Gd)

*Wednesday, 18 December 2019 14:00 (30 minutes)*

**Presenter:** VAGINS, Mark

**Session Classification:** Supernova and solar neutrinos
Supernova neutrinos

Wednesday, 18 December 2019 14:30 (30 minutes)

Presenter:  JANKA, Thomas

Session Classification:  Supernova and solar neutrinos
Recent results from Borexino

Wednesday, 18 December 2019 15:00 (30 minutes)

Presenter: RE, Alessandra Carlotta
Session Classification: Supernova and solar neutrinos
Heavy Neutral Lepton Experiment (NA62)

Tuesday, 17 December 2019 10:00 (30 minutes)

**Presenter:** Goudzovski, Evgueni (University of Birmingham)

**Session Classification:** Heavy neutral leptons, collider, cosmology
Heavy Neutral Leptons and Non-Minimal Dark Sectors

Tuesday, 17 December 2019 09:30 (30 minutes)

Presenter: HOSTERT, Matheus

Session Classification: Heavy neutral leptons, collider, cosmology
Recent results from KATRIN

Presenter: PARNO, Diana
Session Classification: Direct neutrino mass measurement
Project 8

**Presenter:** FORMAGGIO, Joseph (Massachusetts Institute of Technology)

**Session Classification:** Direct neutrino mass measurement
Prospects in Neutrino Oscillation Experiments

*Monday, 16 December 2019 09:30 (45 minutes)*

**Presenter:** KAJITA, Takaaki

**Session Classification:** Prospects in Neutrino Oscillation Experiments
Recent results from KATRIN

Tuesday, 17 December 2019 15:00 (30 minutes)

**Presenter:** PARNO, Diana (Carnegie Mellon University)

**Session Classification:** Direct neutrino mass measurement
New proton decay result

Wednesday, 18 December 2019 16:00 (30 minutes)

Presenter:  TAKENAKA, Akira

Session Classification:  Neutrino mass and beyond
Project 8

Wednesday, 18 December 2019 16:30 (30 minutes)

Presenter: FORMAGGIO, Joseph (Massachusetts Institute of Technology)
Session Classification: Neutrino mass and beyond
Measurement of $^{144}$Ce - $^{144}$Pr beta-spectra in order to determine the spectrum of electron antineutrinos and search for heavy neutrino with mass of 0.01-1.0 MeV

**Presenter:** Prof. DERBIN (ID: E13), Alexander (Petersburg Nuclear Physics Institute NRC KI)

**Session Classification:** Poster talks
Neutrino Oscillations and Non-Standard Interactions with KM3NeT-ORCA

Monday, 16 December 2019 12:50 (5 minutes)

Presenter: KHAN CHOWDHURY (ID: T2), Nafis Rezwan (IFIC)
Session Classification: Poster talks
VISOS (VISualisation of OScillation) - An outreach and research project for neutrino oscillation

Monday, 16 December 2019 12:55 (5 minutes)

Presenter: HAIDARI (ID: T4), Rasched
Session Classification: Poster talks
Resolving the discrepancy between KamLAND and solar measurements of $\Delta m^2_{21}$ with SNO+

*Monday, 16 December 2019 13:00 (5 minutes)*

**Presenter:** MORTON-BLAKE (ID: T16), Iwan (University of Oxford)

**Session Classification:** Poster talks
Calorimetry Likelihood: A New Particle Identification Method in MicroBooNEr

Monday, 16 December 2019 13:05 (5 minutes)

Presenter:  FOPPIANI (ID: E9), Nicolo (INFN Sezione di Pisa, Universita’ e Scuola Normale Superiore, P)

Session Classification: Poster talks
Seasonal Variation of Solar Neutrino Flux at Super-Kamiokande

Monday, 16 December 2019 13:10 (5 minutes)

Presenter: MOLINA SEDGWICK (ID: T18), Susana (IFIC (CSIC - U. Valencia))

Session Classification: Poster talks
Cosmic Muon Induced Backgrounds in SNO+

Monday, 16 December 2019 17:00 (5 minutes)

Presenter: NOLAN (ID: E1), Lorna
Session Classification: Poster talks
Cosmic Muon Measurements with MicroBooNE

Monday, 16 December 2019 17:05 (5 minutes)

Presenter:  VAN DE PONTSEELE (ID: E7), Wouter
Session Classification:  Poster talks
Neutrinos for Non-Proliferation

Monday, 16 December 2019 17:10 (5 minutes)

Presenter:  KNEALE (ID: E3), Liz (University of Sheffield)
Session Classification:  Poster talks
Design of the Hyper-Kamiokande Outer Detector

Presenter: TAANI (ID: E5), Mahdi (University of Edinburgh / Nagoya University)

Session Classification: Poster talks
Exploring new physics at Planckian scales via neutrino flavour in IceCube’s HESE 7.5

Monday, 16 December 2019 17:20 (5 minutes)

Presenter:  FARRAG (ID: T22), Kareem
Session Classification:  Poster talks
How to monitor your Gd-loaded water Cherenkov detector

Monday, 16 December 2019 17:25 (5 minutes)

Presenter: BOSCHI (ID: E24), Tommaso (Queen Mary University of London)
Session Classification: Poster talks
Studies of Single Transverse Kinematic Variables for Neutrino Interactions on Argon

Tuesday, 17 December 2019 12:30 (5 minutes)

Presenter: BATHE-PETERS (ID: E11), Lars
Session Classification: Poster talks
The hadronic beamline of the ENUBET neutrino beam

Tuesday, 17 December 2019 12:35 (5 minutes)

Presenter: CATERINA DELOGU (ID: E15), Claudia
Session Classification: Poster talks
Contribution ID: 57

The instrumented decay tunnel of the ENUBET neutrino beam

Tuesday, 17 December 2019 12:40 (5 minutes)

Presenter: BRANCA (ID: E17), Antonio

Session Classification: Poster talks
Multi-PMT modules for the Hyper-Kamiokande project

Tuesday, 17 December 2019 12:45 (5 minutes)

Presenter:  MACHADO (ID: E19), Lucas Nascimento
Session Classification:  Poster talks
Baby MIND detector in operation on T2K neutrino beam line

Tuesday, 17 December 2019 12:50 (5 minutes)

Presenter:  PARSA (ID: E21), Saba

Session Classification:  Poster talks
Binding Energy Validation Studies in the NEUT Generator

Tuesday, 17 December 2019 12:55 (5 minutes)

**Presenter:** MCELWEE (ID: E23), Jordan

**Session Classification:** Poster talks
COHERENT neutrinos today and tomorrow

Tuesday, 17 December 2019 17:30 (5 minutes)

**Presenter:** ESTEBAN (ID: T12), Ivan

**Session Classification:** Poster talks
Conspiracies between Cosmology and Neutrinos in CMB

Tuesday, 17 December 2019 17:35 (5 minutes)

Presenter: GHOSHAL (ID: T6), Anish
Session Classification: Poster talks
Minimalistic scotogenic scalar dark matter

Presenter: MATURANA (ID: T8), Ivania
Session Classification: Poster talks
Anomaly-free 2HDM-U(1)s with two generations of right-handed neutrinos

Tuesday, 17 December 2019 17:40 (5 minutes)

Presenter: ORDELL (ID: T10), Astrid
Session Classification: Poster talks
Could the Hubble Tension be Pointing Towards the Neutrino Mass Mechanism?

*Tuesday, 17 December 2019 17:45 (5 minutes)*

**Presenter:** ESCUDERO (ID: T14), Miguel

**Session Classification:** Poster talks
Neutrino physics in slowly rotating BH spacetime and nonlinear electrodynamics

Tuesday, 17 December 2019 17:50 (5 minutes)

Presenter: LAMBIASE (ID: T20), Gaetano
Session Classification: Poster talks
Introduction

Monday, 16 December 2019 09:20 (10 minutes)

Session Classification: Introduction