

**Session Program**

**24-28 Jul 2017**

**15th International Conference on Topics in  
Astroparticle and Underground Physics,  
TAUP2017**

***Neutrino Parallel***

Other Institutes

Laurentian University 935 Ramsey Lake Rd, Sudbury, ON P3E 2C6

# Sunday 23 July

13:00

## Neutrino Parallel: Neutrino 1

**Session** | **Location:** UPPER FRASER L FA056 | **Convener:** Hiro Tanaka

13:00–13:15 **Overview on neutrino electromagnetic properties**

**Speaker**

Prof. Alexander Studenikin

13:15–13:30

**Limiting the effective magnetic moment of Solar neutrinos with the Borexino detector**

**Speakers**

Livia Ludhova, Prof. Livia Ludhova

13:30–13:45

**Atomic Many-Body Effects in Neutrinos and Dark Matters Detection**

**Speaker**

Mr Chih-Pan Wu

13:45–14:00

**Flavor evolution in astrophysical environments and nonlinear feedback**

**Speaker**

Amelie Chatelain

14:00–14:15

**Local density of relic neutrinos with minimal mass**

**Speaker**

Sergio Pastor

14:15–14:30

**Sensitive search for double electron capture on  $^{124}\text{Xe}$  in XMASS**

**Speaker**

Katsuki Hiraide

14:30–14:45

**Search for the Two Neutrino Double Electron Capture with XENON1T**

**Speaker**

Mr Alexander Fieguth

14:45–15:00

**NO TALK**

15:00

15:30

## Neutrino Parallel: Neutrino 2

**Session** | **Location:** UPPER FRASER L FA056 | **Convener:** Jeanne Wilson-Hawke

15:30–15:45

**Status of the SNO+ Experiment**

**Speaker**

Erica Caden

15:45–16:00

**First results of CUPID-0**

**Speaker**

Dr Stefano Pirro

16:00-16:15 **Initial Results from the MAJORANA DEMONSTRATOR**

**Speaker**  
Thomas Caldwell

16:15-16:30 **The NEXT experiment for neutrinoless double beta decay searches**

**Speaker**  
Ander Simón Estévez

16:30-16:45

**Latest results from NEMO-3 and commissioning status of SuperNEMO**

**Speaker**  
Mr Thibaud LE NOBLET

16:45-17:00

**Discovery probability of next-generation neutrinoless double-beta decay experiments**

**Speaker**  
Dr Giovanni Benato

17:00-17:15 **nEXO: a tonne-scale next-generation double-beta decay experiment**

**Speaker**  
Ryan MacLellan

17:15-17:30 **NO TALK**

17:30

# Monday 24 July

13:30

## Neutrino Parallel: Neutrino 3

Session | Location: FA055 and FA056 | Convener: David Sinclair

13:30–13:45

### Investigation of double beta decay of $^{58}\text{Ni}$ at the Modane Underground Laboratory

**Speaker**

Ekaterina Rukhadze

13:45–14:00

### The Large Enriched Germanium Experiment for Neutrinoless Double Beta Decay (LEGEND)

**Speaker**

John Wilkerson

14:00–14:15

### Neutrino-less double beta decay of $^{48}\text{Ca}$ studied by $\text{CaF}_2$ (pure) scintillators

**Speaker**

Dr Saori Umehara

14:15–14:30

### Spectral analysis for the MAJORANA DEMONSTRATOR experiment

**Speaker**

Dr Lukas Hehn

14:30–14:45

### The neutrino mass experiment KATRIN

**Speaker**

Florian Fraenkle

14:45–15:00

### The Electron Capture in $^{163}\text{Ho}$ Experiment

**Speakers**

Dr Stephan Scholl, for the ECHo Collaboration

15:00–15:15

### Overview of Project 8 and Progress Towards Tritium Operation

**Speaker**

Dr Walter Pettus

15:15–15:30

### Rare Low-Energy Event Searches with the MAJORANA DEMONSTRATOR

**Speaker**

Ms Gulden Othman

15:30

16:00

## Neutrino Parallel: Neutrino 4

Session | Location: FA055 and FA056 | Convener: Clarence Virtue

16:00–16:15

### Three-flavour neutrino oscillations and beyond

**Speaker**

Mariam Tórtola

16:15–16:30

**New Measurement of Atmospheric Neutrino Oscillations with IceCube****Speaker**

Tyce DeYoung

16:30–16:45

**Testing the Neutrino Mass Ordering with Multiple Years of IceCube/DeepCore****Speakers**

Martin Leuermann, Martin Leuermann

16:45–17:00

**Searches for Tau Neutrino Appearance in IceCube-DeepCore****Speaker**

Michael Larson

17:00–17:15

**Neutrino Oscillation Physics with IceCube Gen2/Phase1****Speaker**

Ken Clark

17:15–17:30

**The ICARUS detector****Speaker**

daniele gubin

17:30–17:45

**More results from the OPERA experiment****Speaker**

Nicoletta Mauri

17:45–18:00

**The latest T2K results on neutrino oscillations and neutrino-nucleus interactions****Speaker**

Dr Mark Scott

18:00

## Tuesday 25 July

13:00

### Neutrino Parallel: Neutrino 5

Session | Location: FA055 and FA056 | Convener: Chris Jillings

13:00–13:15 **Recent results from NOvA**

**Speaker**

Kirk Bays

13:15–13:30

**CAPTAIN: Current Neutron and Future Stopped Pion Neutrino Measurements**

**Speaker**

Lisa Whitehead

13:30–13:45 **Hyper-Kamiokande**

**Speaker**

Hidekazu TANAKA

13:45–14:00 **The 2nd Hyper-Kamiokande detector in Korea**

**Speaker**

Seon-Hee Seo

14:00–14:15 **The Hyper-K near detector programme**

**Speaker**

Dr Jeanne Wilson

14:15–14:30 **Sensitivity of the DUNE Experiment to CP Violation**

**Speaker**

Lisa Whitehead

14:30–14:45 **Measurements of the Neutrino Flux Using the DUNE Near Detector**

**Speaker**

James Robert Sinclair

14:45–15:00 **The Monte Carlo simulation of the Borexino detector**

**Speaker**

Simone Marcocci

15:00

15:30

### Neutrino Parallel: Neutrino 6

Session | Location: FA055 and FA056 | Convener: Chris Jillings

15:30–15:45 **Recent Solar neutrino Results from Super-Kamiokande**

**Speaker**

Yuuki Nakano

15:45–16:00 **The Super-Kamiokande Gadolinium Project**

**Speaker**

Hiroyuki Sekiya

16:00-16:15 **Solar neutrino flux at keV energies**

**Speaker**

Mr Edoardo Vitagliano

16:15-16:30 **Astroparticle Physics in Hyper-Kamiokande**

**Speaker**

Dr Takatomi Yano

16:30-16:45 **Supernova Neutrinos at the DUNE Experiment**

**Speaker**

Amanda Weinstein

16:45-17:00 **Recent Results from the ANTARES Neutrino Telescope**

**Speaker**

Vincent Bertin

17:00-17:15

**The Diffuse Supernova Neutrino Background: an update on the theory and detection prospects**

**Speaker**

Dr Cecilia Lunardini

17:15-17:30 **Scanning the Earth with solar neutrinos and DUNE**

**Speaker**

Ara Ioannisyan

17:30

## Wednesday 26 July

13:00

### Neutrino Parallel: Neutrino 7

**Session** | **Location:** FA055 and FA056 | **Convener:** Thierry Lasserre

13:00–13:15 **Latest Results from Double Chooz**

**Speaker**

Ralitsa Sharankova

13:15–13:30 **New Results from RENO**

**Speaker**

Seon-Hee Seo

13:30–13:45 **Recent results of Daya Bay Reactor Neutrino Experiment**

**Speaker**

Haoqi Lu

13:45–14:00

**PROSPECT: The Precision Reactor Oscillation and Spectrum Experiment**

**Speaker**

Dr Karsten Heeger

14:00–14:15 **Status of JUNO**

**Speaker**

Dr Zhimin WANG

14:15–14:30

**Neutrino geoscience and reactor monitoring with direction-sensitive detectors**

**Speaker**

Michael Leyton

14:30–14:45 **Crustal geoneutrino signal expected at SNO+**

**Speaker**

Dr Marica Baldoncini

14:45–15:00 **Non-Standard Interactions: oscillation versus scattering data**

**Speaker**

Pilar Coloma

15:00

15:30

### Neutrino Parallel: Neutrino 8

**Session** | **Location:** FA055 and FA056 | **Convener:** Jeanne Wilson-Hawke

15:30–15:45

**The SoLiD experiment: Search for sterile neutrinos at the SCK•CEN BR2 reactor**

**Speaker**

Luis MANZANILLAS

15:45–16:00 **Search for light sterile neutrinos with the CeSOX experiment**

**Speaker**

Mr Thierry Lasserre

16:00–16:15

**Status of the DANSS project: in pursuit of a light sterile neutrino****Speaker**

Dr Yury Shitov

16:15–16:30

**Search for eV Sterile Neutrinos - The Stereo Experiment****Speaker**

Stefan Schoppmann

16:30–16:45

**Secret interactions for sterile neutrinos and cosmological implications****Speaker**

Dr Ninetta Saviano

16:45–17:00

**The sterile neutrino: a combined view of cosmological limits with oscillation searches****Speaker**

Jack Elvin-Poole

17:00–17:15

**Updates on atmospheric neutrino and proton decay results in Super-Kamiokande****Speaker**

Dr Kimihiro Okumura

17:15–17:30

**Measuring the neutrino mass hierarchy with KM3NeT/ORCA****Speaker**

Jannik Hofestädt

17:30