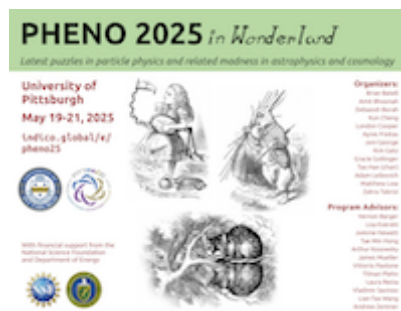


## Session Program

19-21 May 2025



## Phenomenology 2025 Symposium

### *Neutrino*

University of Pittsburgh

Monday 19 May

16:30

Neutrino: BSM

Session | Location: David Lawrence Hall 121, University of Pittsburgh | Convener: Nobuchika Okada

16:30–16:45 LIQUIDating the Gallium Neutrino Anomaly

Speaker  
Dr Garv Chauhan

16:45–17:00 Did MicroBooNE kill MiniBooNE?

Speaker  
Tao Zhou

17:00–17:15  
New Physics versus Quenching Factors in Coherent Neutrino Scattering

Speaker  
Yulun Li

17:15–17:30 Unveiling the Neutrino Magnetic Moment: Constraints from Colliders

Speaker  
Mr Samiur R. Mir

17:30–17:45 Probing New Physics from Neutrino Interactions at MeV and GeV

Speaker  
Sam Carey

17:45–18:00 Tau Tridents at Accelerator Neutrino Facilities

Speaker  
Diego Lopez Gutierrez

18:00–18:15 Hadron Production in Neutrino Beams Through the Looking-Glass

Speaker  
George Parker

18:15–18:30 Continuum-mediated self-interacting neutrinos

Speaker  
Saeid Foroughi-Abari

18:30

## Tuesday 20 May

14:00

### Neutrino: Astrophysics

**Session** | **Location:** David Lawrence Hall 203, University of Pittsburgh | **Convener:** Dibyendu Nanda

14:00–14:15

#### Enhancing Solar Neutrino Sensitivity with Neutron Tagging

##### Speaker

Obada Nairat

14:15–14:30

#### From the Mediterranean to Antarctica, via New Physics?

##### Speaker

Dibya S. Chattopadhyay

14:30–14:45

#### Dark Matter-enhanced Probe of Relic Neutrino Clustering

##### Speaker

Writasree Maitra

14:45–15:00

#### Probing dark matter - neutrino interaction from the double beta decay at PandaX

##### Speaker

Yihong Zhong

15:00–15:15

#### Old neutron stars as a new probe of relic neutrinos and sterile neutrino dark matter

##### Speaker

Takuya Okawa

15:15–15:30

#### Probing scalar non-standard interaction of supernova neutrinos in DUNE

##### Speaker

Sudipta Das

15:30–15:45

#### Diffuse Boosted Cosmic Neutrino Background

##### Speaker

Xiaolin Qi

15:45–16:00

#### Probing Quantumness at Long Baseline Neutrino Experiments

##### Speaker

Murshed Alam

16:00

16:30

### Neutrino: Models, Experimental Signatures

**Session** | **Location:** David Lawrence Hall 203, University of Pittsburgh | **Convener:** Garv Chauhan

16:30–16:45

#### Axion Forces in Axion Backgrounds

##### Speaker

Bingrong Yu

16:45–17:00

**Neutrino Force and Its Implications for Atomic Measurement of the Weinberg Angle****Speaker**

Chinh-san Sieng

17:00–17:15

**Measuring the Neutrino Mass with the Project 8 Experiment****Speaker**

Prof. Luiz de Viveiros

17:15–17:30

**Energy Reconstruction for the Project 8 Experiment****Speaker**

Ehteshamul Karim

17:30–17:45

**Right-Handed Neutrino Masses from the Electroweak Scale****Speaker**

Wenjie Huang

17:45–18:00

**Probing a HN through vector boson fusion and machine learning techniques****Speaker**

Yin-Fa Shen

18:00–18:15

**A Hybrid Type I + III Inverse Seesaw Mechanism in  $U(1)_{R-L}$ -symmetric MSSM****Speaker**

Mr Cem Murat Ayber

18:15–18:30

**Global Extraction of the Electromagnetic Response Functions ( $\chi_{\text{cal R}}^{\text{L}}$  and  $\chi_{\text{cal R}}^{\text{T}}$ ) for  $^{12}\text{C}$ ,  $^{40}\text{Ca}$  and  $^{56}\text{Fe}$  and Comparisons to Nuclear Theory and Neutrino/Electron Monte Carlo Generators****Speaker**

Arie Bodek

18:30