

ASTROPHYSICAL WEEK 1 PROGRAM

Monday

Tuesday

Wednesday

Thursday

Friday

9:30-
10:05

A.B. Balantekin
Entanglement of astrophysical neutrinos

E. Resconi
High energy neutrino astronomy: status and prospects

A. Smirnov
Dark nature of neutrino mass

De Gouvea.
Majorana versus Dirac, beyond Neutrinoless Double-Beta Decay

R. Surman
Neutrinos and heavy element nucleosynthesis

10:15-
11:45

Coffee break

Coffee break

Coffee break

Coffee break

Coffee break

10:45-
11:20

Y.Z. Qian
Beyond-standard-model neutrino physics and core-collapse supernovae

C. Argüelles
New physics with astrophysical neutrinos: new ideas and opportunities

M. Sen
Exploring the origin of neutrino mass in dark alleys

L. Graf
Lepton number violation -- the key to neutrino physics?

Y. Perez-Gonzalez
Insights into the final moments of a primordial black hole: a high-energy neutrino perspective

Lunch break

Lunch break

Lunch break

Lunch break

Lunch break

14:00-
14:35

K. Scholberg
Scattering in neutrino alley

M. Mukhopadyay
Neutrino signatures from extreme astrophysical phenomena

K. Sumiyoshi
Neutrinos and matter in neutron stars and supernovae

M.V. Garzelli
Prompt neutrinos in the atmosphere and at colliders

S. Ge
Fermion Oscillation in Dense Matter

14:45-
15:20

T. Mueller
Towards the discovery of the Diffuse Supernova Neutrino Background

T. Pitik
Neutrino and multi wavelength emission from interaction-powered transients

U. Michiru (15')
Updated constraints and future prospects on majoron dark matter

E. Bertuzzo
Probing right handed dipoles at the intensity frontier

J. Lattimer
Neutron star mass and radius constraints, and correlations connecting them to the dense matter equation of state

15:25-
16:00

M. Spurio
Neutrino telescopes in the context of multimessenger astrophysics

Z. Xiong
Fast neutrino flavor conversions in a supernova: Emergence, evolution and effects

Z. Berezhiani
Sterile Neutrino Candidates: The Good, The Bad, The Ugly

ASTROPHYSICAL WEEK 2 PROGRAM

Monday

Tuesday

Wednesday

Thursday

Friday

9:30-
10:05

G.C. McLaughlin
Neutrinos and nucleosynthesis in neutron star mergers

A. Ianni
Solar neutrinos from an experimental perspective

I. Tamborra
Messengers from the cosmos

G. Sigl
Some aspects of collective effects in neutrino oscillations

G. Pagliaroli
Core-collapse supernovae detection with neutrinos and gravitational waves

10:15-
11:45

Coffee break

Coffee break

Coffee break

Coffee break

Coffee break

10:45-
11:20

D. Radice
Neutrinos in Neutron Star Mergers

M. Giannotti
Axions from the sky: perspectives on the detection of solar and other stellar axions

T. Janka
Neutrinos in and from core-collapse supernovae

D. Fiorillo
Subtleties and surprises of neutrino quantum kinetic equations

E. Amstron
Inferring supernova matter profiles from neutrino flavor physics

Lunch break

Lunch break

Lunch break

Lunch break

Lunch break

14:00-
14:35

T.K. Poddar
Neutrino astronomy and neutrino physics

F. Villante
Solar models, solar neutrinos and helioseismology

M. Mori
Long-term supernova neutrino simulation and analysis method

S. Abbar
AI for Collective Neutrino Oscillations: From Detection of FFCs to Prediction of the Asymptotic States

M. Chakraborty
Fast oscillations and sterile neutrinos

14:45-
15:20

K. Mori
Impacts of sterile neutrinos on supernova dynamics

K. Tobioka
MeV sterile neutrinos in light of the Cabibbo-angle anomaly

L. Johns
The thermodynamics of oscillating neutrinos

H. Parkkinen (15')
Quantum transport theory for neutrinos with flavor and particle-antiparticle mixing

G. Raffelt
Supernovae as Particle Physics Laboratories

15:25-
16:00

Y. Pehlivan
Plane waves and entangled neutrinos

S. Petcov
Neutrino Masses, Mixing and Leptonic CP-Violation - Theory and Tests in Future Experiments

Y. Martinez-Soler
New Clues about Light Sterile Neutrinos

R. Akaho
Boltzmann neutrino transport simulation of core-collapse supernovae and the collective neutrino flavor instability

END OF « NEUTRINO FRONTIERS »