

Session Program

15-19 Sept 2025



New Trends in High-Energy Physics 2025 (Dedicated to the memory of Prof. László Jenkovszky)

***Neutrino & Astroparticle Physics,
Gravitational Waves, Neutron Stars***

Wednesday 17 September

10:00

Neutrino & Astroparticle Physics, Gravitational Waves, Neutron Stars: I. Chair: Mahboubeh Shahrbafe Motlagh Co-chair: Cheuk-Yin Wong Session

10:00–10:35 **Recent results from KM3NeT**

Speaker
Revaz Shanidze

10:35–11:00 **Status of JUNO**

Speaker
Yury Malyshkin

11:00

11:30

Neutrino & Astroparticle Physics, Gravitational Waves, Neutron Stars: II. Chair: Revaz Shanidze, Co-chair: Yury Malyshkin (Online section) Session | Location: <https://bsu-edu-ge.zoom.us/j/6103028564> (Passcode: 266786)

11:30–12:00

Strongly Interacting Matter at Extreme Conditions: New Trends in the Neutron Star EOS with Hyperons, Bosonic Dark Matter, and Quark Matter

Speaker
mahboubeh shahrbafe motlagh

12:00–12:30

Impact of Bosonic Dark Matter on Neutron Star Structure and X-ray Pulse Profiles

Speaker
Davood Rafiei Karkevandi

12:30–13:00 **Long-Baseline Neutrino Physics: The NOvA Experiment**

Speaker
Saleh ABUBAKAR

13:00

14:00

Neutrino & Astroparticle Physics, Gravitational Waves, Neutron Stars: III. Chair: Lali Kalandadze, Co-chair: Tamar Berberashvili Session

14:00–14:25 **From Matter to Light: Unveiling Neutrino Non-Standard Interactions**

Speaker
Sudip Jana

14:25–14:50

Questions on possible existence of anomalous particles at ~ 17 MeV & ~ 38 MeV

Speaker
Dr Cheuk-Yin Wong

14:50–15:15 **Q-balls in Polynomial Potentials**

Speaker
Mikheil Sokhashvili

15:15-15:40

Opening up baryon number violating operators

Speaker

Diana Sokhashvili

15:40