

Session Program

22 June 2025 to 3 July 2025



Carpathian Summer School of Physics 2025

Student Communications

Sinaia, Romania

Hotel International**** 1st. Avram Iancu Street, Sinaia 106100, Romania

Monday 23 June

17:00

Student Communications

Session | **Location:** Sinaia, Romania, Hotel International**** 1st. Avram Iancu Street, Sinaia 106100, Romania

17:00–17:20

Development of a detection system for identification of multinucleon transfer reactions near 00

Speaker

Silvia Ise

17:20–17:40

Direct measurement of the carbon-carbon fusion cross section at stellar energies

Speaker

Yunzhen Li

17:40–18:00

Experimental Study of the $^{13}\text{C}(\alpha, n)^{16}\text{O}$ Neutron Source Reaction in Stellar

Speaker

Yihua Fan

18:00

Tuesday 24 June

16:40

Student Communications

Session | **Location:** Sinaia, Romania, Hotel International**** 1st. Avram Iancu Street, Sinaia 106100, Romania

16:40–17:00

Development efforts toward a Matrix Ion Detector for CRYRING@ESR

Speaker

Andrei Hotnog

17:00–17:20

Improvement of a Plastic Scintillator with Different Coatings for Gamma-Ray Redection

Speaker

Jonathan Méndez

17:20–17:40

Neutron shielding studies for underground large detectors

Speaker

Denis Barbu

17:40–18:00

Development of a Neutron Dosimeter: Instrumentation and Applications in Radiation Protection

Speaker

Ignacio Corazza

18:00

Wednesday 25 June

12:05

Student Communications

Session | **Location:** Sinaia, Romania, Hotel International**** 1st. Avram Iancu Street, Sinaia 106100, Romania

12:05–12:25

CBS calculations in the rare-earth mass region

Speaker

Dimitrios Papadopoulos

12:25–12:45

In-beam gamma-ray spectroscopy of neutron-rich nuclei around the N=20 island of inversion

Speaker

Bellona Bles

12:45–13:05

The beta decay of Rb and Cs Isotopes

Speaker

YiHui Liu

13:05

Thursday 26 June

16:40

Student Communications

Session | **Location:** Sinaia, Romania, Hotel International**** 1st. Avram Iancu Street, Sinaia 106100, Romania

16:40–17:00

Monte Carlo simulations of LPA VHEE dose distributions in water phantom

Speaker

Ionut Slabu

17:20–17:40

Measurement of the $^{18}\text{O}(\alpha, n)^{22}\text{Ne}$ reaction with DRAGON in inverse kinematics

Speaker

Dhruval Shah

17:40–18:00

Proton and Alpha induced reactions on light nuclei for nuclear structure and astrophysics

Speaker

Virender Ranga

18:00–18:20

Experimental Nuclear Methods and Application of the EMPIRE Statistical Reaction Code for Determining Cross-Sections of The Reaction $^{12}\text{C}+^{19}\text{F}$

Speaker

Andrei Cristian Opincă

18:20

Friday 27 June

17:00

Student Communications: Sponsors presentation and experiment

Session | **Location:** Sinaia, Romania, Hotel International**** 1st. Avram Iancu Street, Sinaia 106100, Romania

17:00–17:20

Proton-neutron pairing and quartetting in $N=Z$ nuclei in the framework of the Quark-Meson Coupling model

Speaker

Theodor Popa

17:20–17:50

Methods for Dose, LET and Energy Measurements in Ultra-High Dose Rate (UHDR) Beams

Speaker

Radu Alin Vasilache

17:50–18:30

Vacuserv presentation followed by experiments

Speaker

Mircea Lupaş

18:30

Tuesday 1 July

17:50

18:10

Student Communications

Session | **Location:** Sinaia, Romania, Hotel International**** 1st. Avram Iancu Street, Sinaia 106100, Romania

17:50–18:10

Nuclear Pasta and Neutron Star Dynamics

Speaker

Lowri Mathias

Wednesday 2 July

17:10

Student Communications

Session | **Location:** Sinaia, Romania, Hotel International**** 1st. Avram Iancu Street, Sinaia 106100, Romania

17:10–17:30

Modeling ^{97}Tc Electron Capture for Neutrino Mass Applications

Speaker

Vasile-Alin Sevestrean

17:30–17:50

Exploring Double-Layered Targets Efficiency in Laser-Driven Photon Source Production

Speaker

Dragana-Biliana Dregnici

17:50–18:10

Toward Understanding of Nuclear Spin Relaxation at Zero-to-Ultralow Fields

Speaker

Florin Teleanu

18:10