

Nuclear Physics in Astrophysics XII

Cluj-Napoca, Romania

7-11 September 2026

Babeş-Bolyai University

FINAL CIRCULAR

dated 20 August 2026

The 12th edition of the Nuclear Physics in Astrophysics conference series will take place in Cluj-Napoca, Romania, from 7 to 11 September 2026. The conference is organized under the auspices of the Nuclear Physics Division of the European Physical Society. It brings together experimental and theoretical nuclear physicists, astronomers and astrophysicists to discuss recent results, new tools and techniques, future perspectives and current challenges across nuclear astrophysics.

CONFERENCE WEBPAGE AND CONTACT

Website: <https://indico.eli-np.ro/event/262/>

Contact: npa12@eli-np.ro

VENUE

Faculty of Economics and Business Administration (FSEGA), Babeş-Bolyai University, Str. Teodor Mihali 58-60, Cluj-Napoca, Romania. The venue is in the eastern part of the city, near Iulius Mall and approximately 9 km from Avram Iancu Cluj International Airport.

Lunch will be taken at Faculty of Economics and Business Administration (FSEGA). For registered participants, the organizers will provide lunch for each day of the conference they will attend.

SCIENTIFIC SCOPE

The Nuclear Physics in Astrophysics XII conference addresses the field of nuclear astrophysics as a whole. Scientific topics include:

1. Cosmology and Big Bang
2. Early stars and galaxies
3. Hydrostatic stellar burning
4. Explosive processes, jets and gamma-ray bursts

5. Cosmochemistry
6. p-, v- and rp-process nucleosynthesis
7. Neutron stars, mergers and gravitational waves
8. Astrophysical s-process
9. Astrophysical r- and i-processes
10. New tools and techniques, data formats and open access
11. Laser-driven nuclear astrophysics experiments

CONFIRMED INVITED SPEAKERS

The invited speakers currently confirmed are listed below. Presentation titles and the detailed timetable are available on the conference webpage.

- Andreas Bauswein, GSI Darmstadt, Neutron stars, mergers, gravitational waves
- Ani Aprahamian, University of Notre Dame, Laser-driven nuclear astrophysics experiments
- Artemis Tsantiri, University of Regina, p-, v- , rp-process nucleosynthesis
- Aurora Tumino, INFN-LNS, Hydrostatic stellar burning
- Clara Dehman, University of Alicante, Neutron stars, mergers, gravitational waves
- Claudia Lederer-Woods, University of Edinburgh, Astrophysical s-process
- Daniel Bemmerer, Helmholtz-Zentrum Dresden-Rossendorf, Early stars and galaxies
- Dario Lattuada, INFN-LNS, Laser-driven nuclear astrophysics experiments
- Eliana Masha, Helmholtz-Zentrum Dresden-Rossendorf, Cosmology and Big Bang
- Eugenia Naselli, CSFNSM & INFN-LNS, New tools and techniques, data formats, and open access
- Federico Ferraro, University of Padua, Explosive processes, jets, gamma-ray bursts
- Gabriel Martinez-Pinedo, Technische Universität Darmstadt, GSI Astrophysical r- and i-processes
- Guy Leckenby, University of Bordeaux, New tools and techniques, data formats, and open access
- Jakub Skowronski, University of Padova, New tools and techniques, data formats, and open access
- Jan Glorius, GSI Darmstadt, p-, v- , rp-process nucleosynthesis
- Jordi Jose, Universitat Politècnica de Catalunya, Explosive processes, jets, gamma-ray bursts
- Jorge Lerendegui Marco, Instituto de Física Corpuscular (CSIC-UV), Explosive processes, jets, gamma-ray bursts
- Marialuisa Aliotta, University of Edinburgh, Early stars and galaxies
- Mikahil Beznogov, IFIN-HH, Neutron stars, mergers, gravitational waves
- Moshe Gai, University of Connecticut, New tools and techniques, data formats, and open access

access

- Nan Liu, Boston University, Cosmochemistry
- Nicholas de Sereville, IJCLab, Explosive processes, jets, gamma-ray bursts
- Nicole Vassh, TRIUMF, Astrophysical r- and i-processes
- Rene Reifarth, LANL, p-, v-, rp-process nucleosynthesis
- Roland Diehl, Max Planck Institute for extraterrestrial Physics, Cosmochemistry
- Rosanna Depalo, Università degli Studi di Milano, Hydrostatic stellar burning
- Silke Merchel, University of Vienna, Cosmochemistry
- Steffen Turkat, TU Dresden, Cosmology and Big Bang

SCIENTIFIC PROGRAMME (OVERVIEW)

The detailed timetable is available on the conference webpage. The overview below follows the current schedule distribution; minor adjustments may still occur. All times are Europe/Bucharest.
<https://indico.eli-np.ro/event/262/page/39-tentative-schedule-distribution-of-topics>

Monday, 7 September	09:00 Registration Cosmology and Big Bang Cosmochemistry Astrophysical s-process 17:30 Poster Pitch 1 18:00 Welcome Reception
Tuesday, 8 September	Hydrostatic stellar burning Early stars and galaxies Astrophysical s-process Poster Pitch 2 Conference photo 16:30 Poster session
Wednesday, 9 September	Astrophysical r- and i-processes Laser-driven nuclear astrophysics experiments 14:30 Social excursion to Salina Turda
Thursday, 10 September	Neutron stars, mergers and gravitational waves p-, v- and rp-process nucleosynthesis New tools and techniques 18:00 Conference Dinner
Friday, 11 September	Explosive processes, jets and gamma-ray bursts New tools and techniques 15:00 Concluding remarks and prizes

CONTRIBUTIONS AND PRESENTATION FORMAT

Invited talks are allocated 30 minutes and contributed oral presentations 15 minutes, including discussion and speaker changeover. All oral sessions are plenary, with no parallel sessions.

POSTER PRESENTATIONS AND POSTER PITCHES

The main poster session is scheduled for Tuesday afternoon. Poster presenters are also included in one of the two poster-pitch sessions on Monday or Tuesday. Presenters should follow the assignment shown in the final timetable. Each poster presenter will be given a chance to present their work in a one-minute poster pitch in the plenary session. During this pitch, their one-slide summary will be displayed. Please, upload the poster pitch as a PDF file to the indico page, or send it by e-mail to npa12@eli-np.ro

Posters should be printed on A0 size paper (841 × 1189 mm) or smaller size but fitting this envelope and brought to the conference desk upon registration. If you need suggestions where to print your poster locally in Cluj Napoca, please contact us on email. Other technical instructions concerning poster dimensions or pitch materials will be communicated through Indico / conference email. The posters will remain on display in the foyer of the lecture hall until the morning of the last day of the conference.

In addition, each participant will have the chance to upload two PDF documents on the indico page of the conference:

1. a PDF version of the poster itself. This should include the abstract ID.
2. a one-slide poster pitch, also as PDF, to be presented in the plenary session, again including the abstract ID.

EPS AND NUPECC PRIZES

Two prizes will be awarded during the closing session on Friday:

- Best Poster Prize

The prizes are provided with the support of the European Physical Society (EPS) and the Nuclear Physics European Collaboration Committee (NuPECC).

REGISTRATION AND PAYMENT

The registration deadline was 16 August 2026. Registered participants with outstanding payment, invoice or reimbursement-document questions should contact the organizers at npa12@eli-np.ro. Bank transfers should include “NPA2026” and the participant's full name in the payment reference.

EUROPEAN PHYSICS JOURNAL WEB OF CONFERENCES TOPICAL COLLECTION “NUCLEAR PHYSICS IN ASTROPHYSICS”

On the occasion of the conference, the European Physical Journal Web of Conferences has opened a Topical Collection called “Nuclear Physics in Astrophysics”, lead editors Dr. Calin Ur, Dr. Yi Xu and Dr. Dimiter Balabanski, under a closed call for contributions.

NPA-XII SCHOOL

The conference will be preceded by the Nuclear Physics in Astrophysics School XII at Babeş-Bolyai University, 31 August-4 September 2026. School webpage:

<https://indico.eli-np.ro/event/280/>

FINAL INFORMATION

Participants are encouraged to check the conference webpage shortly before travelling for any final updates to the detailed timetable, poster-pitch arrangements and social-event meeting points.

We look forward to welcoming you to Cluj-Napoca for NPA-XII!

<https://indico.eli-np.ro/event/262/> | npa12@eli-np.ro

Dimiter Balabanski - Co-chair, ELI-NP / IFIN-HH, Romania
Horia Pasca - Co-chair, Babeş-Bolyai University, Romania
Daniel Andreica - Babeş-Bolyai University, Romania
Alessandra Fantoni - INFN-LNF, Italy
Kabita Kundalia - Scientific Secretary, ELI-NP / IFIN-HH, Romania
Razvan Lica - IFIN-HH, Romania
Araceli Lopez-Martens - IJCLab, France
Ana Lupoae - ELI-NP / IFIN-HH, Romania
Teodora Madgearu - Scientific Secretary, ELI-NP / IFIN-HH, Romania
Haridas Pai - ELI-NP / IFIN-HH, Romania
Adriana Raduta - IFIN-HH, Romania
Laurentiu Serban - ELI-NP / IFIN-HH, Romania
Calin A. Ur - ELI-NP / IFIN-HH, Romania
Yi Xu - ELI-NP / IFIN-HH, Romania