

INAC International School & OMEG2024 Pre-Symposium



Second Circular

This is the second announcement of the INAC International School and Pre-Symposium of the OMEG2024 ([School Website](#)). This event will be held at Beihang University (BUAA) in Beijing, China, from September 2 to 6, 2024, one week before the OMEG2024 symposium in Chengdu, China ([17th OMEG conference](#)). The program consists of a one-day pre-symposium followed by a four-day school, featuring frontier-level research talks and fostering discussions on advanced topics in nuclear and astrophysics.

The following topics are discussed in the Pre-Symposium:

- Big-Bang cosmology, primordial nucleosynthesis and dark matter
- Element distribution in the Universe and Galactic evolution
- Explosion dynamics and nucleosynthesis in supernovae and neutron star mergers
- Stellar evolution and nucleosynthesis
- Neutrinos and weak interactions in physics and astrophysics

Notice: We are accepting a few abstracts from participants and young researchers to give talks in the pre-symposium. This is also a good chance to practice presentation skills!

The INAC International School will offer lectures on the following research topics:

- Big-Bang cosmology and dark matter
Lecturers: **Tatsushi Shima** (RCNP, Osaka University)
- Stellar Evolution and Stellar Modelling
Lecturers: **Marco Limongi** (Osservatorio Astronomico di Roma, INAF)
- Supernova Physics and Supernova Simulation
Lecturers: **Tomoya Takiwaki** (National Astronomical Observatory of Japan)
Shuai Zha (Yunnan Observatories, CAS)
- EOS of Dense Nuclear Matter and Neutron Stars and Quark Stars
Lecturers: **Ang Li** (Xiamen University)

- Observations, Chemical Abundances in Stars
Lecturers: **Jianrong Shi** (National Astronomical Observatories, CAS)
Haining Li (National Astronomical Observatories, CAS)
- Nuclear Physics in Astrophysics
Lecturers: **Jie Meng** (Peking University)
Xiaodong Tang (Institute of Modern Physics, CAS)
- Neutrinos Physics in Astrophysics
Lecturers: **Yufeng Li** (Institute of High Energy of Physics, CAS)
- Nucleosynthesis in supernovae and neutron star mergers
Lecturers: **Jordi José** (Departament de Física, Universitat Politècnica de Catalunya)
Xilu Wang (Institute of High Energy of Physics, CAS)
- Cosmic Radioactivities & Gamma-ray Observations
Lecturers: **Roland Diehl** (Max Planck Institute)

Besides lectures, three tools/codes are selected for participants to engage in group activities and develop their projects. We will also provide tutorial lectures and support on each tool:

1. **FRANEC code** (Stellar Evolution)
Lecturers: Marco Limongi (Osservatorio Astronomico di Roma, INAF)
2. **TALYS code** (Nuclear Reactions Simulation)
Lecturers: Yi Xu (Extreme Light Infrastructure - Nuclear Physics, Romania)
3. **Pysme & Pymoog** (Observation, Spectroscopy analysis)
Lecturers: Mingjie Jian (Stockholm University)

All tutorial lectures will include exercises designed to deepen the understanding of the given codes. To practice these tutorials and solve exercises, we have scheduled 10-15 hours of group activity time. During this time, participants can choose problems from specific topics or explore multiple areas based on their backgrounds. We encourage participants to expand on the given problems and strive for creative outcomes through discussions with their group members. On the final day, we plan to organize a student session where participants can present their results and discuss them with other attendees.

*The group with the best presentation will receive an award!

Venue

6th floor, Peng Huanwu Collaborative Center for Research and Education, Beihang University, Beijing, China

Important Dates

- June 3, 2024: Start of Registration
- August 25, 2024: End of Registration
- September 2, 2024: OMEG2024 Pre-Symposium
- September 3-6, 2024: INAC International School

Registration fee

CNY 500. The event includes lunch boxes, a banquet, and coffee breaks. We do not charge any fee if you only attend the pre-symposium (please see [Application information](#) for details). We also reserved about 30 rooms at the Wuke Hotel (物科宾馆), hotel fee is 400 CNY/night. Details are noticed in the [Trip & Accommodation](#).

Visa

If you need assistance during the visa process, please contact ircbbc@buaa.edu.cn

Local Organizing Committee

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Dukjae Jang (Beihang University): Co-Chair
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Soonchul Choi (CENS, Institute for Basic Science)
Yong-Beom Choi (Pusan National University)
Ruoyu Fang (University of Notre Dame)
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Host

Institute for Nuclear Astrophysics of China (INAC)
Peng Huanwu Collaborative Center for Research and Education and School of
Physics, BUAA
Cosmology and Nuclear Astrophysics (COSNAP)

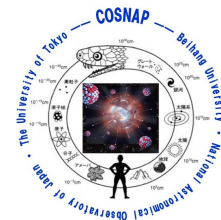
Sponsor

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National Natural Science Foundation of China, and National Key R&D Program of
China.

Contacts

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