NuSym25 1st circular

Dear Colleagues,

We are pleased to announce that the XIIIth International Symposium on Nuclear Symmetry Energy, "NuSym25", will be held during September 8–12, 2025 at Integrated Innovation Building (IIB), RIKEN Kobe Campus in Kobe, Japan.

[Scientific scope]

The symposium will address experimental and theoretical investigations of the equation-of-state (EoS) of nuclear matter at various isospin asymmetries. Such investigations include efforts in nuclear structure, nuclear reactions and heavy-ion collisions, as well as in astrophysical observations of compact stars and associated phenomena. An important role of the symposium is to unify efforts of the nuclear physics and astrophysics communities in addressing common research challenges.

[Topics of NuSym symposium]

Topics of the NuSym symposium are related to the nuclear equation-of-state (EoS) and symmetry energy that can be probed by laboratory experiments, by astrophysical observations, and by microscopic theories:

- Nuclear structure and reactions
- Heavy-ion collision experiments and transport model simulations
- Microscopic calculations of neutron-rich dense nuclear matter
- Isospin and spin dependence of nuclear interactions and correlations
- Clustering in isospin-asymmetric nuclear systems
- Strangeness in nuclei and nuclear matter
- Astrophysical multi-messenger observations and nucleosynthesis
- Theory of compact stars including neutron star mergers and supernovae
- Future experiments and facilities

The scientific sessions will consist of invited talks and contributed oral and poster presentations from the submitted abstracts.

Webpage for the symposium is : <u>https://indico2.riken.jp/e/NuSym25</u> Information on lodging and travel is available on our website.

[Important dates]

2nd circular: around end of March, 2025 Registration and abstract submission open: around end of March, 2025 Abstract submission deadline: around end of June, 2025 Notification of abstract acceptance: middle of July, 2025 VISA application deadline: middle of July, 2025 Registration deadline: end of August, 2025 NuSym25 scientific sessions: September 8–12th, 2025 The symposium venue has been reserved from September 7th to 13th to accommodate satellite workshops, including the workshop on transport models. Should you wish to organize a satellite workshop, please contact the symposium organizers for further arrangements.

[Contact]

We would appreciate it if you could bring this Symposium to the attention of your colleagues. Participation of young researchers is strongly encouraged. You can contact us at the following address: nusym2025@ml.riken.jp Please do not hesitate to contact us if you need an invitation letter for visa application.

[International Advisory Committee]

Thomas Aumann (GSI/Technische Universität Darmstadt) Abdelouahad Chbihi (GANIL) Gianluca Colò (Università degli Studi di Milano) Maria Colonna (INFN, LNS) Pawel Danielewicz (MSU) Arnaud Le Fèvre (GSI) Tetsuo Hatsuda (RIKEN iTHEMS) Byungsik Hong (Korea University) Kei lida (Kochi University) Bao-An Li (TAMU-Commerce) Jerzy Lukasik (IFJ-PAN) Jérôme Margueron (IRLNPA, FRIB) Hirokazu Tamura (Tohoku University) Xiaodong Tang (Institute of Modern Physics, Chinese Academy of Sciences) Wolfgang Trautmann (GSI) Betty Tsang (MSU) Tomohiro Uesaka (RIKEN Nishina Center) Giuseppe Verde (INFN Catania) Hermann Wolter (Univ. Munich) Zhigang Xiao (Tsinghua University, Beijing) Sherry Yennello (Texas A&M)

[Local Organizing Committee]

Tadaaki Isobe (RIKEN Nishina Center; Chair) Natsumi Ikeno (Kobe University) Mizuki Kurata-Nishimura (RIKEN Nishina Center) Tomoya Naito (RIKEN iTHEMS; Scientific Secretary) Akira Ono (Tohoku University) Hajime Sotani (Kochi University) Kenichi Yoshida (RCNP, the University of Osaka) Juzo Zenihiro (Kyoto University) [The previous NuSym symposia]

- 12th edition at GANIL, Caen (France) in 2024
- 11th edition at GSI, Darmstadt (Germany) in 2023
- 10th edition at Catania (Sicily, Italy) in 2022
- Special Online Edition in 2021
- 9th edition at Da Nang (Vietnam) in 2019
- 8th edition at Hanwha Resort, Haeundae, Busan (South Korea) in 2018
- 7th edition at GANIL, CAEN (France) in 2017
- 6th edition at Tsinghua University, Beijing (China) in 2016
- 5th edition at IFJ/PAN, Krakow (Poland) in 2015
- 4th edition at University of Liverpool (UK) in 2014
- 3rd edition at MSU/FRIB, East Lansing, MI (USA) in 2013
- 2nd edition at Smith College, MA (USA) in 2011
- 1st edition at RIKEN, Wako (Japan) in 2010