

NuSym23, 11th International Symposium on Nuclear Symmetry Energy

Darmstadt (Germany), September 18-22, 2023

The nuclear equation-of-state and the symmetry energy in laboratory experiments, astrophysical observations, and microscopic theories

Dear Colleagues,

we are glad to announce that the 11th International Symposium on Nuclear Symmetry Energy (NuSym 2023) will be held in Darmstadt (Germany) on September 18-22, 2023, at the GSI Helmholtz Centre for Heavy-Ion Research. The event is organized and supported by GSI, the Facility for Antiproton and Ion Research (FAIR), the ExtreMe Matter Institute (EMMI), and by the Helmholtz Forschungsakademie Hessen für FAIR (HFHF).

The symposium will address experimental and theoretical investigations of the equation of state of asymmetric nuclear matter. Such studies include efforts in nuclear structure, nuclear reactions and heavy-ion collisions, as well as in astrophysical observations of compact stars and associated phenomena (neutron stars and core collapse supernovae, among others). Significant implications of gravitational wave signals, soft X-rays, astro-particle physics and neutrino observations will be discussed. Students and postdocs are especially encouraged to participate.

The website of the conference can be found at https://indico.gsi.de/event/17017/ and will be updated soon. For any information, please contact us at the following email address: nusym2023@gsi.de.

Topics:

- nuclear structure and direct reactions
- heavy-ion collision experiments
- transport model simulations of heavy-ion reactions

- microscopic calculations of neutron-rich, dense nuclear matter
- isospin dependence of nuclear effective interactions
- clustering in isospin-asymmetric nuclear systems
- astrophysical, multi-messenger observations
- theory of compact stars and neutron star mergers
- supernova theory for neutrino emission and nucleosynthesis
- investigations at existing and future accelerator facilities
- detector developments

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We welcome your participation and we would very much appreciate if you could forward this message to those who might be interested in the conference.

We look forward to meeting you in Darmstadt.

On behalf of the Local Organising Committee,

Arnaud Le Fèvre (GSI) – <u>a.lefevre@gsi.de</u> Yvonne Leifels (GSI) – <u>y.leifels@gsi.de</u>