

650th ASRC Seminar

Date: Friday, November 25, 10:00 ~

Location: The 5th meeting room, No. 1
Laboratory Building

Speaker: Professor Bao-An Li
(Texas A&M University-Commerce)

Title: Probing High-Density Symmetry Energy with
Heavy-Ion Reactions

Abstract: To pin down the Equation of State (EOS) of neutron-rich nucleonic matter has long been a major science driver for both nuclear physics and astrophysics. Nuclear symmetry energy encoding the energy cost of converting protons into neutrons in nuclear medium has been the most uncertain part of the EOS of neutron-rich nucleonic matter especially at high densities. The magnitude and density dependence of nuclear symmetry energy determine the radii and cooling rates of neutron stars as well as the strain amplitude and frequencies of gravitational waves from spiraling neutron star binaries. Heavy-ion reactions provide a unique means in terrestrial laboratories to probe the symmetry energy of neutron-rich matter. In this talk, I will discuss the main issues concerning the high-density symmetry energy, its astrophysical impacts and examples of current efforts to constrain it both experimentally and theoretically.

なお、今回のセミナーは、第55回「原子核ハドロン物理セミナー」を兼ねております。セミナー内容は

http://silver.j-parc.jp/hadron/hadron_seminar/index.htmlでご覧になれます。

<Contact>

Toshiki Maruyama (81-5457)
Advanced Science Research Center