ID de Contribution: **27** Type: **Poster**

Comparison of collective flow variables for different isotopic combinations in Xe + Sn collisions from 65 to 150 AMeV

mardi 10 septembre 2024 17:10 (10 minutes)

The nuclear symmetry energy indicates the binding energy of the nuclear matter depending on the isospin composition. It is a crucial parameter for the structure and stability of dense nuclear matter which exists in astronomical objects such as the neutron stars. Despite the dedicated efforts for the last several decades using the various collision systems in a wide beam-energy range, the detailed understanding of the nuclear symmetry energy is far from complete due to the experimental and theoretical limitations.
We have performed the multi-dimensional analysis for the directed and elliptic flow parameters in 129Xe + 124Sn collisions at 65 to 150 AMeV and the 129,124Xe + 124,112Sn at 100 AMeV, which were obtained at GSI by using the INDRA detector system in 1998. To reveal any effects that originated from the nuclear symmetry energy, the collective flow parameters between the neutron-rich system and the neutron-poor system have been carefully compared. In this presentation, the recent status of the analysis and the comparison with the model calculations results are presented.

Auteur principal: NAM, Seon ho (Korea University)

Orateur: NAM, Seon ho (Korea University)

Classification de Session: Short presentations

Classification de thématique: Constraints from heavy-ion collisions at intermediate energies