

Modelling heavy-ion collisions at RHIC BES energies with fluid dynamics

Monday 22 September 2025 15:45 (25 minutes)

In this talk, I discuss challenges in modelling collective expansion of baryon-rich medium in heavy-ion collisions at RHIC Beam Energy Scan or FAIR energies. Then I focus on specific approaches of multi-fluid dynamics and single-fluid dynamics with dynamical fluidization. I show generic conclusions from fluid-dynamic modelling at such energies, then present results from the two approaches and discuss strategies to improve them and to provide constraints on the properties of the underlying medium.

Author: Dr KARPENKO, Iurii (FNSPE CTU in Prague)

Presenter: Dr KARPENKO, Iurii (FNSPE CTU in Prague)

Session Classification: Collectivity in high energy collisions: jets, flows, and other mechanisms

Track Classification: Collectivity in high energy collisions: jets, flows, and other mechanisms