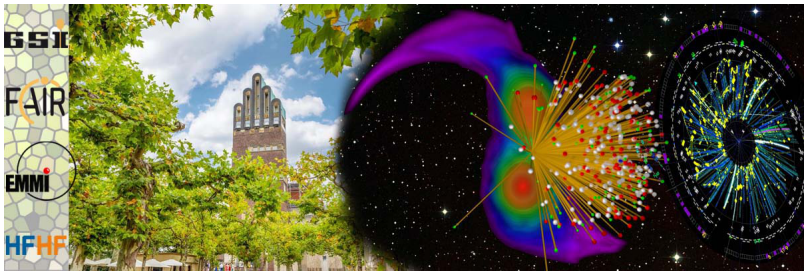

Contribution ID: **66** Type: **Oral**

ASY-EOS II – observable and expectations

Monday, 18 September 2023 17:20 (30 minutes)

Elliptic flow as measured in heavy-ion collisions has proven to be very effective in constraining nuclear matter equation of state at supra-saturation densities. In particular neutron-to-proton and neutron-to-charged particles elliptic flow ratio in Au+Au at 400 MeV/nucleon collisions, measured at GSI in FOPI-LAND and ASY-EOS experiments, have allowed to investigate the symmetry energy behavior up to about 1.5 ρ_0. Our future plans foresee the measure of the neutron-to-proton elliptic flow ratio excitation function in Au+Au collisions at GSI from 250 to 800 MeV/nucleon. This will allow to extend the studies toward higher densities than before and to get more precise constraints. The obtainable results, in conjunction to the novel ones coming from multi-messenger astronomy, could be of great importance in the field.

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