



Contribution ID: 683

Type: Poster

Characterising collectivity with virtual photons at HADES

Tuesday 5 September 2023 17:30 (2h 10m)

Electromagnetic probes have been established as promising tools to study early times in the collision system of maximum temperature and density.

In this contribution, a focus is set on the investigation of collective observables. Namely, the directed flow v_1 , elliptic flow v_2 as well as the radial flow of virtual photons are measured. After the isolation of the thermal contribution, a systematic study as a function of the invariant mass may allow unique insights into the time evolution of the systems collectivity.

The analysis is based on Ag+Ag collisions collected at the High-Acceptance-DiElectron-Spectrometer (HADES) at $\sqrt{s_{NN}} = 2.55$ GeV and $\sqrt{s_{NN}} = 2.42$ GeV. Therefore, the created matter is characterised by high baryon densities and moderate temperatures, similar to neutron star mergers, and serves as an important reference to deliver constraints to the equation of state.

Category

Experiment

Collaboration (if applicable)

HADES

Primary author: SCHILD, Niklas

Presenter: SCHILD, Niklas

Session Classification: Poster Session

Track Classification: EM Probes