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Characterising the hot and dense fireball with virtual photons at HADES

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Anisotropic flow serves as a central observable for characterising collectivity in heavy-ion collisions. While all particles experience flow, virtual photons, decaying into lepton pairs, may serve as particularly interesting probes in this context. They can penetrate the strongly interacting medium and deliver information about conditions in the early stages of maximum temperature and density. Thereby, they may give insights about the time evolution of the collectivity in the system.

In this contribution, we present measurements of anisotropic flow coefficients from Ag+Ag collisions, collected at the High-Acceptance-DiElectron-Spectrometer (HADES) at $\sqrt{s_{NN}} = 2.55$ GeV. A particular focus is set on the multidifferential analysis of the directed flow v_1 and elliptic flow v_2 in terms of centrality, rapidity, transverse momentum and invariant mass.

Primary author: SCHILD, Niklas

Presenter: SCHILD, Niklas

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