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## The electromagnetic signature of the IP-Glasma initial state

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Currently the IP-Glasma initial state, coupled with a viscous hydrodynamic evolution, provides the best description of hadronic flow coefficients and their fluctuations in heavy ion collisions [1]. In this work we perform the first calculation of electromagnetic radiation using IP-Glasma initial conditions. We include the contributions from pQCD photons arising from the initial hard scatterings at the early stages of the collision, and we go beyond the usual popular formulations of the fluid evolution by using a Israel-Stewart viscous hydrodynamical description that takes into account all second order terms, including those related to bulk viscous pressure. We also highlight the effect of initial flow, which appears naturally in the IP-Glasma profile. We investigate how such additional theoretical ingredients affect the electromagnetic spectra, as well as the azimuthal anisotropy coefficients. More specifically, we check how these features help in explaining the large values of photon elliptic and triangular flow observed by the PHENIX and ALICE collaborations. We further investigate how a simultaneous fit of hadronic and electromagnetic observables can enhance agreement with data of the latter without compromising the interpretation of hadron data.

[1] C. Gale, S. Jeon, B. Schenke, P. Tribedy, R. Venugopalan, Phys. Rev. Lett. 110 (2013)

## On behalf of collaboration:

None

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