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# Probing the initial stages of heavy ion collisions with direct photons at PHENIX

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Direct photons are emitted unscathed from all the stages of the relativistic heavy ion collisions and therefore are an excellent probe to study the properties of Quark Gluon Plasma (QGP) as they do not interact strongly with the medium. PHENIX has already measured a direct photon excess in Au+Au collisions at 200 GeV in the low momentum region with respect to p+p collisions. With the results from RHIC and LHC hinting at the onset of QGP in small systems and the access to a large dataset of p+p and p/d/3He+Au collisions at 200 GeV, it will be interesting to examine the production of low momentum direct photons and search for indications of thermal photon emissions in these systems. In this talk, the recent measurements of low-momentum direct photons from p+p, p+Au and Au+Au collisions will be presented and the status of the measurement in d/3He+Au will be discussed.

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