Abstract Submitted
for the DNP20 Meeting of
The American Physical Society

Measurement of Low-Momentum Direct Photons in Small System Collisions at PHENIX ARUN KINGAN, Stony Brook University, PHENIX COLLABORATION — Results from small collision systems at RHIC and LHC have shown interesting evidence of collective behavior, hinting at the onset of QGP in small collision systems. Photons do not interact strongly with the medium produced in high-energy heavy-ion collisions. By measuring the photons emitted early on in the collision (i.e. direct photons or photons not produced by hadron decays) information about the environment in which they were produced can be obtained. With access to large datasets of p+p and p/d/3He+Au collisions at 200 GeV, PHENIX is in an ideal position to search for indications of thermal photon emissions in these systems. In this talk, the measurements of low-momentum direct photons from p+p and p+Au collisions reaching down to 0.6 GeV/c will be presented and the status of the measurement in d/3He+Au will be discussed

Arun Kingan
Stony Brook University

Date submitted: 26 Jun 2020 Electronic form version 1.4