Abstract Submitted
for the DNP20 Meeting of
The American Physical Society

ϕ meson v_1, v_2 in Au+Au collisions at $\sqrt{s_{NN}}$ = 3 GeV, 7.2 GeV from STAR DING CHEN, University of California, Riverside, STAR COLLABORATION — The ϕ meson is composed of strange quarks ($s\overline{s}$), and has a small cross section with hadrons which reduces the influence of rescattering in the later stage of heavy-ion collisions. Thus the ϕ meson directed flow (v_1) and elliptic flow (v_2) are sensitive to the early stages of the collisions and are important observables for the study of quark-gluon plasma (QGP) phase diagram at RHIC. In this talk, we will present measurements of the ϕ meson v_1, v_2 in Au+Au collisions from the STAR fixed-target program (FXT). The ϕ meson is reconstructed through the channel $\phi \to K^+ + K^-$. We will compare our new results with STAR Beam Energy Scan I (BES-I) results.

Ding Chen
University of California, Riverside

Date submitted: 25 Jun 2020 Electronic form version 1.4