

Abstract Submitted
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ϕ -meson v_2 from Au+Au collisions at $\sqrt{s_{NN}}=62.4$ GeV SARAH-LOUISE BLYTH, Lawrence Berkeley National Laboratory (LBNL), STAR COLLABORATION — In high-energy nuclear collisions, it may be possible to create a phase of matter called the Quark Gluon Plasma (QGP). An observable which is developed at early times in the system and which may provide information about the QGP phase, is the elliptic flow (v_2) of particles. Since the ϕ -meson presumably has a small hadronic interaction cross-section, we expect it to carry v_2 information that is independent of hadronization and freeze-out processes i.e it will be a clean probe of the medium at early stages of the collision. We will present preliminary v_2 results for the ϕ -meson from Au+Au collisions at $\sqrt{s_{NN}}=62.4$ GeV from the STAR experiment at RHIC. We will also compare the elliptic flow of the ϕ -meson with that of other identified particles. In addition, comparison of the results with model expectations will be discussed.

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