

Abstract Submitted  
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**Heavy flavor electron  $v_2$  in Au+Au Collisions at  $\sqrt{s_{NN}}=62.4$  GeV** LEI DING, Iowa State University, PHENIX COLLABORATION — Heavy quarks are produced early in relativistic heavy ion collisions and propagate through and interact with the medium created in the collisions. The measurement of azimuthal anisotropy  $v_2$  of single electrons from semi-leptonic decay of open heavy flavor mesons in PHENIX experiment has provided important understanding of the geometrical dependence of partonic energy loss. PHENIX results of  $v_2$  in Au+Au collision at  $\sqrt{s_{NN}}=200$ GeV for heavy-flavor decays are comparable to the  $v_2$  measurements of other hadrons, which is not well understood. We extend the PHENIX systematic study of azimuthal anisotropy by reducing the beam energy to  $\sqrt{s_{NN}}=62.4$ GeV. We will present  $v_2$  of heavy flavor electrons at 62.4GeV.

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