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Measurement of single electrons from heavy flavor decays in d+Au collisions at  $\sqrt{s} = 200$  GeV by PHENIX J. MATTHEW DURHAM, Stony Brook University, PHENIX COLLABORATION — Heavy quarks (c and b) produced in the early stages of heavy ion collisions carry valuable information about the dense partonic matter produced at RHIC. This information can be accessed through measurements of single electrons from semi-leptonic decays of these quarks. Present measurements in Au+Au collisions indicate a significant spectral modification as indicated by suppression at high transverse momentum. This measurement, along with significant azimuthal anisotropy, provides the most direct experimental evidence for the low viscosity of the matter formed in RHIC collisions. A full quantitative understanding of these phenomena requires experimental measurements of cold nuclear matter effects as inferred from single electron measurements in d+Au. The status of PHENIX measurements of single electrons from heavy flavor decays at mid rapidity from the 2008 RHIC d+Au run will be discussed.

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