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Measurement of single electrons from heavy flavor decays in d+Au collisions by PHENIX J. MATTHEW DURHAM, Stony Brook University, PHENIX COLLABORATION — Measurements of heavy quarks (charm and bottom) produced in relativistic collisions of heavy ions have provided significant insight into the dynamics of the dense partonic matter created at RHIC. The PHENIX detector is well suited to make measurements of these quarks through their semileptonic decay channels. By subtracting a cocktail of electrons and positrons from other sources, the contribution from open heavy flavor can be identified. PHENIX measurements of single electrons from Au+Au collisions at 200 GeV have shown significant azimuthal anisotropy in heavy quark emission from the medium, as well as large suppression at high transverse momentum. However, a full interpretation of this data requires quantitative measurements of cold nuclear matter effects, which can be accessed through single electron from heavy flavor decays from the 2008 RHIC d+Au Run will be discussed.

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