

Abstract Submitted  
for the DNP08 Meeting of  
The American Physical Society

**Azimuthal Correlations of Electrons from Heavy Flavor Decay with Hadrons at PHENIX** ANNE SICKLES, Brookhaven National Laboratory, PHENIX COLLABORATION — One unexpected recent result from heavy-ion collisions is the large suppression and elliptic flow of electrons from heavy flavor decay. Further measurements of properties of electrons from heavy flavor decay are crucial to understanding the origin of this suppression and heavy flavor measurements are expected to be sensitive to the properties of the produced matter. We study the azimuthal correlations between electrons from heavy flavor decay and hadrons. Two particle correlations have been used extensively to study the propagation of hard partons through the produced matter in heavy-ion collisions. We apply techniques developed for direct photon-hadron correlations to statistically subtract correlations of electrons arising from Dalitz decays and photon conversions from the inclusive electron-hadron correlations and we present the current status of two-particle correlations between electrons from heavy flavor decay and charged hadrons in Au+Au collisions in the PHENIX experiment.

Anne Sickles  
Brookhaven National Laboratory

Date submitted: 30 Jun 2008

Electronic form version 1.4