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Heavy flavor electron - hadron correlations in p+p and Au+Au collisions at PHENIX JIAYIN SUN, Stony Brook University, PHENIX COLLABORATION — A surprising discovery at RHIC is the large suppression of heavy quarks in heavy ion collisions. Perturbative QCD predicted much less suppression for heavy mesons than π^0 mesons, however the measured suppression of charm and bottom quarks traversing Quark-Gluon Plasma from measurements is significantly larger than expected. Two particle correlations are used to study the propagation of hard partons traversing the hot matter produced by heavy ion collisions. Azimuthal correlations between electrons from decay of D and B mesons and charged hadrons are important measurements, for they provide additional information on how heavy quarks interact with the hot medium when compared with correlations of light hadrons. As a reference for heavy ion measurements, heavy flavor electron - hadron correlations are also measured for p+p collisions. We will present recent results of heavy flavor electron - hadron correlations for Au+Au and p+p collisions in the PHENIX experiment.

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