

Abstract Submitted
for the FWS16 Meeting of
The American Physical Society

Heavy Flavour Electron-Hadron Azimuthal Correlations In PP Collisions With The Alice Experiment¹ PATRICK STEFFANIC, JENNIFER KLAY, Cal Poly - San Luis Obispo, ALICE COLLABORATION — In the ALICE experiment at the LHC, lead-lead collisions produce a state of matter called the Quark-Gluon Plasma(QGP), while proton-proton collisions do not. Heavy quarks(charm and beauty), created shortly after the collision, are efficient probes of the QGP properties since they experience the full evolution of the medium while interacting with its constituents. We report on electron-hadron azimuthal correlations in pp collisions at 8 TeV measured with ALICE, focusing on electrons from semi-leptonic decays of heavy hadrons. In pp collisions, QGP is not formed; studying them provides a baseline measurement for the understanding of the results in lead-lead collisions, in which QGP is created. Further plans for this analysis will be to report on electron-jet azimuthal correlations to provide a baseline for in-medium modification of heavy flavor jets produced in Pb-Pb collisions.

¹Funding for this research was provided by the National Science Foundation under award number 1307461.

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Date submitted: 06 Oct 2016

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