

Recent Heavy Flavor Measurements from PHENIX at RHIC

Heavy flavor quarks are an important probe of the initial state of the Quark Gluon Plasma formed in heavy-ion collisions. b and c quarks are primarily produced through hard interactions, early in the collision and experience the full time evolution of the medium. Measuring their production in $p + p$ collisions can also give a baseline reference to study larger collision systems, including asymmetric systems and can directly test pQCD calculations.

At PHENIX, both open heavy flavor and quarkonia states can be measured through leptonic decay channels. Some measurements have utilized silicon vertex detectors to determine meson decay lengths in order to separate D mesons from B mesons. Recent measurements have been made in the range of $\sqrt{s_{NN}} = 193 - 510$ GeV, with a variety of collision species, in both forward/backward and central rapidity ranges. In this talk, a review of the recent heavy flavor measurements from PHENIX will be presented.

Summary

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