

Abstract Submitted
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Upsilon measurements at RHIC with an upgraded sPHENIX detector ANTHONY FRAWLEY, Florida State University, PHENIX EXPERIMENT COLLABORATION — The three Upsilon states provide a powerful probe of color screening in the QGP created in heavy ion collisions at the LHC and at RHIC. With the addition of outer tracking layers and additional electron capability, the proposed sPHENIX detector at RHIC would enable Upsilon measurements at RHIC energies with separation of the three states and statistical precision comparable with that of the LHC experiments. In combination, Upsilon data from the LHC and from sPHENIX at RHIC would show the effects of widely different energy densities and underlying bottom quark production rates on the modification of the three Upsilon states in the QGP. We will discuss the expected performance for Upsilon measurements of the sPHENIX detector with the proposed additional capabilities.

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