

Abstract Submitted
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Anisotropic flow and jet suppression in ultrarelativistic U+U collisions ANTHONY KUHLMAN, The Ohio State University — Full overlap collisions between large, deformed nuclei, such as U, provide an opportunity to examine a number of unresolved issues from RHIC. These collisions are capable of producing energy densities up to 50% larger than those in central Au+Au collisions, yielding an outstanding laboratory to test the ideal hydrodynamic behavior of v_2 . In addition, in edge-on-edge collisions, the 25% deformation allows the path length dependence of parton energy loss to be tested to large transverse momenta. We illustrate the advantages to be gained from the implementation of a U+U program at RHIC with a number of quantitative calculations and provide a Monte Carlo simulation which demonstrates the results to be expected from such a program. This work is supported by the Department of Energy.

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