Abstract Submitted for the OSS15 Meeting of The American Physical Society

Azimuthally-sensitive two-pion interferometry in U+U collisions at STAR JOHN CAMPBELL, The Ohio State University, STAR COLLABORA-TION — Collisions between uranium nuclei have been produced at the Relativistic Heavy Ion Collider and measured in the STAR detector. Due to the prolate deformation of the nuclei, fully overlapping U+U collisions offer the opportunity to produce highly anisotropic participant zones, similar in shape to mid-central Au+Au collisions, but with twice the size. The larger fireball should be characterized by a long lifetime over which it collectively evolves from its non-trivial initial shape to its final one. The final-state anisotropy of zero-spectator collisions in momentum space (v_n) is under study. We will present an analysis of the coordinate-space anisotropy, measured via azimuthally-sensitive two-pion interferometry ("HBT") of full-overlap collisions, performed differentially via the reduced flow parameter q₂ in U+U collisions at $\sqrt{s_{NN}}$ 193 GeV.

> John Campbell The Ohio State University

Date submitted: 06 Mar 2015

Electronic form version 1.4