

Abstract Submitted
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AdS/CFT Correspondence and Heavy Ion Collisions¹ JAMES AL-SUP, University of Tennessee, CHAD MIDDLETON, Rhodes College, GEORGE SIOPSIS, University of Tennessee — We study perturbations of the gravity dual to a perfect fluid model recently found by Janik and Pirschanski. We solve the Einstein equations in the bulk Anti-de Sitter space for a metric ansatz which includes off-diagonal terms. Through holographic renormalization, we show that these terms give rise to heat conduction in the corresponding gauge theory on the boundary. Our results might be relevant to understanding experimental results at heavy ion colliders such as RHIC.

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