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AdS/CFT Correspondence and Heavy Ion Collisions<sup>1</sup> JAMES AL-SUP, University of Tennesse, Knoxville, GEORGE SIOPSIS, University of Tennessee, CHAD MIDDLETON, Mesa State College — We study an extension of the gravity dual to a perfect fluid model found by Janik and Peschanski. By relaxing one of the constraints, namely invariance under reflection in the longitudinal direction, we introduce a metric ansatz which includes off-diagonal terms. We also include an R-charge following Bak and Janik. We solve the Maxwell-Einstein equations and through holographic renormalization, we show that the off-diagonal components of the bulk metric give rise to heat conduction in the corresponding CFT on the boundary. Our results might be relevant to understanding experimental results at heavy ion colliders such as RHIC.

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