BLACK HOLES IN DENSE STAR CLUSTERS Aspen Center for Physics 2015 Aspen Winter Conference January 17–22, 2015

TITLE: 3-D GRMHD Simulations of Accreting Binary Black Holes

SPEAKER: Scott Noble (Tulsa)

In this talk, we will present our latest results on 3-d GRMHD simulations of accreting binary black holes during the post-Newtonian inspiral phase of their evolution. The goal of our work is to explore whether these systems provide a unique means to identify and characterize them with electromagnetic observations. We will present results that show how our predicted light curves vary with respect to binary separation, mass ratio, and the order of accuracy in post-Newtonian approximation.