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**GRMHD Simulations of LISA Counterparts**

JEREMY SCHNITTMAN, NASA Goddard

It is now widely appreciated that the scientific value of gravitational wave (GW) observations, and LISA in particular, will be significantly enhanced with the accompanying electromagnetic (EM) observations of the GW sources. However, to date, there are no confirmed EM signatures of binary black holes, so we are entirely dependent on theoretical models for how they may be identified in a deep field of faint galaxies with z>1. We report here on the current state-of-the-art in general relativistic magneto-hydrodynamic (GRMHD) simulations of circumbinay accretion disks around supermassive black holes (SMBHs). In particular, we focus on the astrophysical questions that might be answered by these simulations with, and without GW counterparts.