Abstract Submitted for the APR10 Meeting of The American Physical Society

Simulating the emission from shocked disks and black holeneutron star mergers MATTHEW ANDERSON, Louisiana State University, LUIS LEHNER, Perimeter Institute, DAVID NEILSEN, Brigham Young University, MIGUEL MEGEVAND, Louisiana State University — Astrophysical systems that radiate strongly in both electromagnetic and gravitational wave bands are of particular interest for study since the combined information can provide access to a number of rich phenomena. We simulate the possible electromagnetic emission from two scenarios: a disk perturbed by a recoiling super-massive black hole and the post-merger remnant disk from a black hole—neutron star merger. We present radiation transfer results from several configurations of these systems using different radiation models.

Matthew Anderson Lousiana State University

Date submitted: 22 Oct 2009 Electronic form version 1.4