Abstract Submitted for the MAR11 Meeting of The American Physical Society

Electromagnetic and gravitational signatures of black hole and neutron star mergers STEVEN LIEBLING, Long Island University — Astrophysical binary systems composed of some combination of compact objects (black holes(BH) and neutron stars(NS)) are extremely interesting dynamical systems. Such systems are generally extremely good radiators of gravitational waves, and, in at least some cases, they should be excellent electromagnetic sources. As such, they hold great promise for concurrent detection from both recently completed gravitational wave observatories and from conventional telescopes. I describe recent results achieved with a fully relativistic adaptive code for the merger of BH-BH, BH-NS, and NS-NS systems with magnetic fields.

Steven Liebling Long Island University

Date submitted: 19 Nov 2010 Electronic form version 1.4