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Electromagnetic field dynamics in Binary Neutron Stars CARLOS PALENZUELA, Canadian Institute for Theoretical Astrophysics (CITA), MATTHEW ANDERSON, Lousiana State University, ERIC HIRSCHMANN, Brigham Young University, LUIS LEHNER, Perimeter Institute for Theoretical Physics, STEVEN LIEBLING, Long Island University, DAVID NEILSEN, Brigham Young University, PATRICK MOTL, Indiana University Kokomo — Neutron star mergers represent one of the most promising sources of gravitational waves (GW) within the bandwidth of advLIGO. In addition to GW, strong magnetic fields may offer the possibility of a characteristic electromagnetic signature allowing for concurrent detection. In this talk we present results from numerical evolutions of such mergers, studying the dynamics of both the gravitational and electromagnetic degrees of freedom.

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