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Neutron Star - Black Hole Mergers: Gravitational waves and implications for short GRBs¹ PABLO LAGUNA, Penn State, FRED RASIO, EM-MANOUELA RANTSIOU, Northwestern University, SHIHO KOBAYASHI, Liverpool University — A promising source of gravitational radiation in LIGO's sensitivity window is the inspiral and coalescence of a binary system consisting of a BH and a NS. There is additional interest in BH-NS binaries because they could play a key role as the central engine for short GRBs. If this is indeed the scenario, BH-NS binaries will give us a unique opportunity for *multi-messenger* astronomy, namely mergers that would be able to be seen both in the electromagnetic and gravitational windows. We present results of general relativistic SPH simulations of BH-NS merger, including estimates of the gravitational waves emitted during these astronomical events.

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