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**Progress on realistic modeling of black hole-neutron star binary mergers** MATTHEW DUEZ, Washington State University, SXS (CALTECH-CORNELL-CITA-WSU) COLLABORATION — Black hole-neutron star (BHNS) binary mergers are important gravitational wave sources and (possibly) gamma ray burst progenitors. The current state of the art of BHNS simulations, while an impressive acheivement, is inadequate in a number of ways-most importantly in its treatment of neutron star matter and neutrino emission. We present a status report on the efforts of the Caltech-Cornell-CITA-WSU collaboration to accurately model BHNS binaries with realistic microphysics.

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