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**High-Mass Magnetized Binary Neutron Star Mergers and Short Gamma-Ray Bursts** BRUNO GIACOMAZZO, University of Trento — We present new fully general relativistic magnetohydrodynamic (GRMHD) simulations of the merger of high-mass binary neutron star (BNS) systems. We considered BNSs that produce an hypermassive neutron star that promptly collapses to a spinning black hole (BH) surrounded by a magnetized accretion disk. We investigated whether such systems may launch relativistic jets and hence power short gamma-ray bursts. We considered the effects of different equations of state, different mass ratios, and different magnetic field configurations. For all cases we present a detailed study of the matter dynamics and of the magnetic field evolution, with particular attention to its global structure and possible emission of relativistic jets.

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