

Merger of neutron-star binaries

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Mergers of neutron-star binaries (binary neutron stars and black hole-neutron star binaries) are among the promising sources for ground-based gravitational wave detectors. They are also a promising site for nucleosynthesis of heavy elements and an invaluable experimental field for high-density nuclear matter. I will talk on our current understanding on the process of the neutron-star mergers, emphasizing the mass ejection processes, the resulting electromagnetic counterparts, and r-process nucleosynthesis.