

On the ejecta properties of binary quark star or quark star-black hole mergers

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The Bodmer-Witten conjecture proposes that strange quark matter (SQM) is the true ground state of strong interaction matter, suggesting that self-bound strange quark stars could be the physical nature of all compact stars. However, distinguishing between quark stars and neutron stars remains challenging with current astronomical observations. In this talk, I will explore the properties of the ejecta coming from binary quark star or quark star-black hole mergers and compare these properties to those from binary neutron star mergers.

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