

Detection of Gravitational Waves from Core-Collapse Supernovae

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Abstract

Core-collapse supernovae are violent deaths of massive stars. They are natural targets for multimessenger astronomy, and observing gravitational waves might provide some insight about the mechanism and properties of these explosions. In this talk, I will discuss searches and extraction of physical information from gravitational waves from core-collapse supernovae. I will outline some efforts toward estimating physical parameters, reconstructing the waveforms from multidimensional supernova simulations, and enhanced algorithms for detecting gravitational waves from supernovae.