

Abstract for an Invited Paper
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Detection of Neutrinos from Galactic and Cosmic Supernovae¹

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Detecting neutrinos is the key to understanding core-collapse supernovae, but this is notoriously difficult due to the small interaction cross section of neutrinos and the low frequency of supernovae. The prospects for detecting Galactic supernovae depend almost completely on the probability of a fluctuation from the low supernova rate; the detection aspects are largely under control. The prospects for detecting Cosmic supernovae instead depend almost completely on the detection aspects, especially regarding reducing detector backgrounds; the supernova rate and neutrino flux of the universe are now rather well measured or predicted. After decades of effort and patience, we have good reasons to anticipate that detecting supernova neutrinos is within reach.

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