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Supernova neutrinos with the JUNO experiment

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The Jiangmen Underground Neutrino Observatory(JUNO) is a multi-purpose neutrino experiment, currently under construction in China. Its central detector is designed as a liquid scintillator detector of a 20kton fiducial mass with energy resolution of $3\%/\sqrt{E(MeV)}$, deployed in a laboratory 700 meters underground shielded by rock. Measuring the neutrino burst from the next nearby supernova is a premier target of low-energy neutrino physics and astrophysics. JUNO will also cooperate
with other neutrino detectors and be prepared to the next core-collapse supernova signal.

For a typical galactic distance of 10kpc and typical SN parameters, JUNO will register about 5000 events f
about 2000 events from \protect $\nu+p \rightarrow \nu+p$, more than 300 events from neutrino-electron sca

In this talk, we will cover the SN neutrino detection in the JUNO experiment and review the potential impl

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