

Pre-Supernova Neutrinos in Direct Detection Experiments

Sunday, 16 June 2019 10:00 (12 minutes)

The next Galactic core-collapse supernova is a highly anticipated event. Even prior to collapse, massive dying stars shine copiously in ‘pre-supernova’ (pre-SN) neutrinos, which can potentially act as efficient SN warning alarms and provide novel information about the very last stages of stellar evolution. We explore the sensitivity to pre-SN neutrinos of large direct dark matter detection experiments, which, unlike dedicated neutrino telescopes, take full advantage of coherent neutrino-nucleus scattering.

Primary author: TAKHISTOV, Volodymyr (UCLA)

Presenter: TAKHISTOV, Volodymyr (UCLA)

Session Classification: Contributed talks IV