

Abstract Submitted
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Features in the energy and time distributions of neutrinos from a supernova burst and their detection with a multi-kiloton liquid argon detector GLEB SINEV, KATE SCHOLBERG, Duke University — A multi-kiloton underground liquid argon detector will be an invaluable tool for investigating supernova bursts, recording thousands of neutrinos from a supernova event at 10 kpc in a 40 kt configuration. In this talk we explore the capacity of such a detector to observe various core-collapse-related physics signatures. We examine the time and energy resolutions required to distinguish features in the neutrino energy spectrum as a function of time.

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