XVII Workshop on Neutrino Telescopes
Palazzo Franchetti - Venice, 13-17 March 2017

Poster Session
Submission of Abstract

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Title: How to maximize the chances of seeing neutrinos from supernova while searching for dark matter.

Abstract: The neutrinos emitted from core-collapse supernovas allow us to investigate the physics of the gravitational collapse. The conventional detectors, based on water or hydrocarbon, will measure electron antineutrinos providing precious information on timing, useful for many purposes. However, in order to probe the other types of neutrinos, detection of neutral-current events is necessary. WIMP dark matter detectors offer an interesting chance in this sense. Their very low background and excellent threshold make them able to detect neutral current events due to supernova neutrino interactions with the nuclei. We argue that a fast trigger, provided by conventional detectors, can contribute to improve their sensitivity to supernova neutrinos.

Summary: Core-collapse supernova neutrinos. Neutral-current. Coherent scattering. Detection of supernova neutrinos via NC interactions with non-supernova detectors. Supernova detector trigger.