Contribution ID: **112** Type: **Dark Matter**

ENHANCED Supernova AXION EMISSIVITY BY PIONIC PROCESSES

Thursday 20 May 2021 14:45 (15 minutes)

Axions might be copiously emitted during a supernova explosion, leading to an additional energy-loss channel that would shorten the duration of the neutrino burst. In this context, I will revise the axion bounds from SN 1987A neutrino observation.

I will present recent results on axions from supernovae including(a) a state-of-the-art calculation of the axion emission via nucleon-nucleon bremsstrahlung;(b) an investigation of the axion emission via pionic Compton processes

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Session Classification: Axions 1