

Filling the gap: the solar neutrino flux at keV energies

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In the last few decades we have entered a new era in neutrino observations, from cosmic neutrino background detection proposals to high energy neutrinos astronomy. As theorists, we have to provide the expected flux at different energies. In this poster, I will present a previous overlooked contribution to the “grand unified neutrino spectrum” at Earth: the Solar neutrino thermal flux at keV energies. Besides being a signal, such a flux would also be the background for a futuristic keV sterile neutrino direct detection experiment. I will review the processes contributing to this spectrum, with particular emphasis on thermal effects due to the presence of a plasma.

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