

Measurement of solar neutrino fluxes with Borexino

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Solar neutrinos have been pivotal to the discovery of neutrino flavor oscillations and are a unique tool to probe the reactions that keep the Sun shine. The Borexino experiment located in the Gran Sasso National Laboratory, is an organic liquid scintillator detector conceived for the real time spectroscopy of low energy solar neutrinos. Thanks to the unprecedented background levels, Borexino performed the first flux measurements of the several solar neutrino components which power the Sun. We review these breakthrough results and we also discuss the upcoming future of Borexino, which is entering the precision era of solar neutrino measurements.

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