Status of Direct Determination of Solar Neutrino Fluxes after Borexino

Tuesday 14 May 2024 16:15 (5 minutes)

We determine the solar neutrino fluxes from the global analysis of the most up-to-date terrestrial and solar neutrino data including the final results of the three phases of Borexino. The analysis are performed in the framework of three-neutrino mixing with and without accounting for the solar luminosity constraint. We discuss the independence of the results on the input from the Gallium experiments. The determined fluxes are then compared with the predictions provided by the latest Standard Solar Models. We quantify the dependence of the model comparison with the assumptions about the normalization of the solar neutrino fluxes produced in the CNO-cycle as well as on the particular set of fluxes employed for the model testing.

Would you be interested in presenting a poster? (this will not impact the decision on your talk)

no

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