

## **Solar neutrinos: status and prospects**

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The Sun is an ideal laboratory for the study of fundamental neutrino properties, as well as neutrinos are unique messengers from the solar core. Over the last forty years, the study of solar neutrinos has significantly contributed to progress in both astrophysics and elementary particle physics. After summarizing the groundbreaking results achieved by solar neutrino experiments in the past – the discovery of neutrino oscillations – I will focus on recent results from SNO, SuperKamiokande and Borexino. Open questions, like the vacuum-to-matter transition of the solar neutrino oscillations, or the solar metallicity problem, can be addressed by a precise determination of the solar neutrino fluxes in the low and intermediate energy region ( $< 4$  MeV). I will give an outlook on the potential of future large neutrino detectors for high-precision solar neutrino spectroscopy.