

Solar neutrino results with the full data period until Super-Kamiokande-IV

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As the world's largest water Cherenkov detector, Super-Kamiokande (SK) has confirmed the MSW effect through observation of solar neutrino. A newly developed spallation removal method for SK-IV has improved the signal efficiency by 12.6%. The measurements from SK-I to SK-IV have verified the day-night asymmetry and large mixing angle results. The flux has been measured with high precision, and SK has set stringent limits on potential periodic variations to reaffirm the stability of the solar core. With gadolinium doped since SK-VI to tag the spallation backgrounds more efficiently, it is promising that SK would provide new physics results, such as hep flux limit.

Collaboration you are representing

Super-Kamiokande

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