



DESY Seminar

20 October 2005, 17:00, DESY Hörsaal

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Recent Results and the Third Phase of SNO

The Sudbury Neutrino Observatory (SNO) has entered the third and final phase of operation. I will report on the latest physics results from the first two phases. Firstly we have published a paper with the first complete analysis of the phase II data which include a measurement of the charged current solar ${}^8\text{B}$ neutrino spectrum and updated solar flux measurement. Secondly the periodicity of the solar neutrino signal has been studied. For the final phase of SNO, neutral current detectors were installed in the heavy water. I will report about the installation and the initial performance of the counters.

As SNO data taking will come to an end by December 2006 a fraction of the Collaboration will be moving on to SNO+, a new liquid scintillation experiment to study open questions in solar neutrinos, geo-neutrinos and double beta decay with the existing facilities. I will report on the motivation of SNO+ and the progress of SNOLAB.

- Tea and cookies will be served at 16:45 in the lobby.
- After the seminar there is a chance for private discussions with the speaker over wine and pretzels also in the lobby.