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Current Status and Future Prospects of the SNO+ Experiment

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— SNO+ is a kilo-tonne scale low background neutrino detector with the ability to study a broad range of physics topics. The experiment completed taking data with water filling its innermost volume and the collaboration has published results on invisible nucleon decay search and ^8B solar neutrino flux measurement. Currently, the internal water is being replaced by organic liquid scintillator, providing the scope for measurement of reactor, geo, and low-energy solar neutrinos. Finally, the scintillator will be loaded with tellurium-130 in order to search for neutrinoless double beta decay ($0\nu\beta\beta$), the main physics goal of SNO+.

This talk will give an overview of the SNO+ experiment, its current status and results to date. The preparation for $0\nu\beta\beta$ and the projected sensitivity will also be presented.

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