Poster session 1 - Monday 4 July

P1.074 **A new technique to load 130te in liquid scintillator for neutrinoless double beta decay experiments**

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on behalf of SNO+ collaboration

The SNO+ collaboration has developed a new method to load liquid scintillator with tellurium in the form of an organometallic complex. This approach will be used in Phase I of the SNO+ experiment to achieve a 0.5% loading of natural Te by weight (corresponding to approximately 265kg of 130Te in the fiducial volume) with high light yield, enabling a projected 90% CL half-life sensitivity of 1.96×10^{26} years after 5 years of running. Details of this technique will be described along with the potential application in future higher loading phases.