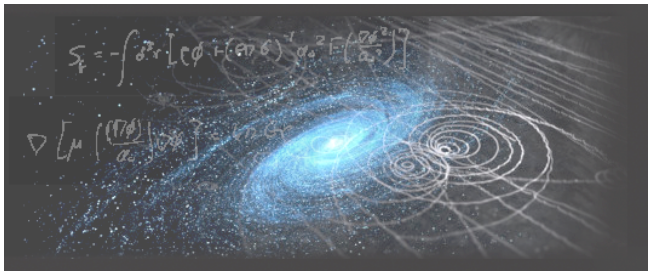

Contribution ID: **77** Type: **not specified**

Solar neutrinos from XENONnT and a first look at the ABALONE photosensor

Tuesday, 22 October 2024 15:30 (15 minutes)

While mainly build for the search for dark matter, the extremely low background and high sensitivity of the latest detector of the XENON collaboration, XENONnT, also allows for the detection of other rare events, such as the interaction of solar neutrinos with the Xenon nuclei. We present the first measurement of **C**oherent **E**lastic **N**eutrino-**N**ucleus **S**cattering (CEνNS) from neutrinos produced by boron-8 decay in the sun with a statistical significance of 2.7 σ.
In addition we will have a first look at results from the novel photodetector called ABALONE. A candidate for future dark matter experiments, which we are currently characterising in our lab at Stockholm university.

Summary

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