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The First WIMP results from XENONnT

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The main goal of the XENONnT detector is the direct detection of Weakly Interacting Massive Particles (WIMPs), aiming to improve the sensitivity by one order of magnitude than XENON1T. The first science run has been completed in 2021 with a total exposure of 1.1 tonne*year. An extremely low electronic recoil background of 15.8 events/(t y keV) has been achieved thanks to the reduction of Kr-85 and Rn-222. More data is being accumulated now. In this talk, I will give an overview of the XENONnT experiment as well as its first WIMP search results.

Submitted on behalf of a Collaboration?

Yes

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