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## First Results of XENONnT

*Thursday 1 September 2022 16:10 (20 minutes)*

XENONnT is a dark matter direct detection experiment employing a dual-phase time projection chamber, with 5.9 tonnes of liquid xenon and extremely low radioactivity. It's a multi-purpose particle astrophysics detector, mainly searching for dark matter, axion, and neutrinos. Since 2021, XENONnT has been taking science data and has reached the unprecedentedly low background in the keV region of interest, resulting in one order of magnitude improvement of WIMPs sensitivity compared to its predecessor XENON1T. In this talk, we'll introduce the new results based on the first science data.

### Is this abstract from experiment?

Yes

### Name of experiment and experimental site

XENONnT, INFN Laboratori Nazionali del Gran Sasso

### Is the speaker for that presentation defined?

Yes

### Details

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### Internet talk

Yes

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**Session Classification:** Cosmology, Astrophysics, Gravity, Mathematical Physics

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