

# XENONnT Dark Matter Experiment: Recent Status and Latest Results

*Thursday, 30 May 2024 15:30 (20 minutes)*

The XENON collaboration aims at a direct detection of dark matter. The XENONnT detector is operating since 2020 at underground Laboratori Nazionali del Gran Sasso, Italy, and it is currently taking data for the second science run. It is the latest and the biggest of the XENON experiment series. With an impressive 5.9 tons of liquid xenon as its active target mass, XENONnT features substantial upgrades compared to its predecessor XENON1T, enabling unprecedented purity and background reduction. This talk provides a brief overview of the different detector components, emphasizing the working principle of its dual-phase time projection chamber and highlighting the latest results delivered by the experiment.

## Collaboration

## Role of Submitter

I am the presenter

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