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XENONnT Dark Matter Experiment: Recent Status and Latest Results

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One of the open questions in modern physics today concerns the nature of Dark Matter (DM). The XENONnT experiment, the successor of XENON1T, is the latest of the XENON project primarily conceived for DM direct detection and it is currently taking data for the second science run at the underground Laboratori Nazionali del Gran Sasso, in Italy. It consists in a dual-phase time projection chamber containing 5.9-tonne of liquid xenon as active target. Thanks to the increased target compared to its predecessor, it reached an unprecedented purity and background level which allows for different rare events searches. This talk will focus on an overview of the XENONnT experiment and its performance as well as on the latest results and future projections.

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