

Search for dark matter with XENONnT

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XENONnT is a dual-phase time projection chamber with 5.9 tons of liquid Xenon (LXe) at INFN Gran Sasso National Laboratory (Italy) which aims at the direct detection of dark matter particles. XENONnT features a larger target mass with respect to previous detectors of the XENON project and it also benefits of some key upgrades which improve its sensitivity: a LXe purification system, a dedicated distillation column for Radon removal and a neutron veto to identify neutrons from detector material. XENONnT has started to collect science data and the analysis is ongoing. An update on the status of the project will be presented.

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