INFN News

XENONNT: FIRST RESULTS ON WIMP RESEARCH PRESENTED



New results of XENONnT, the latest detector of the XENON project dedicated to the direct search for Weakly Interacting Massive Particles (WIMPs), particles that could make up dark matter, were presented in a seminar held on March 22 at the INFN Gran Sasso National Laboratories. With an experimental exposure of just over one ton-year, the data analysis confirms the high sensitivity achieved in this phase by the detector thanks to the reduction

of background radiation. In this way, XENONnT obtained new inner limits rate for the interaction of dark matter with the nuclei of ordinary matter. The results have been reported in an article submitted to Physical Review Letters and in the preprint already available on the XENON website (https://xenonexperiment.org/).).