

Abstract Submitted
for the APR17 Meeting of
The American Physical Society

The XENON1T Dark Matter Experiment PATRICK DE PERIO,
Columbia Univ, XENON COLLABORATION — Recent results and status of the XENON1T direct dark matter detector will be presented. XENON1T is a two-phase xenon TPC using 248 low radioactivity PMTs to detect scintillation signals in a 2-ton active liquid xenon target. The detector has been fully operational at the Laboratori Nazionale del Gran Sasso since May 2016, with continuously improving xenon purity and reduction of the internal Kr-85 background source. This talk will summarize the detector performance, calibration, and background studies, discussed in more detail in the following XENON1T talks, which are paving the way towards the world's most sensitive dark matter search.

Patrick de Perio
Columbia Univ

Date submitted: 30 Sep 2016

Electronic form version 1.4