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Current Status of the XENON10 Experiment AARON MAN-ALAYSAY, University of Zurich, XENON COLLABORATION — The XENON10 experiment is the first-phase of the XENON dark matter direct detection program. The detector is a 10 kg dual-phase liquid xenon time projection chamber, recording energy deposition in the form of scintillation and ionization, produced when particles interact with the xenon atoms. In this manner, the detector is able to discriminate between electronic and nuclear recoils, with background-rejection power better than 99%. Deployed at the Gran Sasso underground laboratory in Assergi, Italy in the summer of 2006, the detector collected science data from August 2006 through October 2007, stopping sporadically for calibrations and an upgrade. I discuss results of the latest analyses for WIMP-nucleon cross sections.

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