

Abstract Submitted
for the DNP10 Meeting of
The American Physical Society

The DRIFT Dark Matter Search ERIC MILLER, University of New Mexico, DRIFT COLLABORATION COLLABORATION — The DRIFT dark matter detector is a 1 cubic meter scale TPC with direction sensitivity to WIMP recoils operating in the Boulby Mine in England. Results on a spin-dependent limit from data taken underground with a 30 Torr CS₂ - 10 Torr CF₄ gas mixture will be presented. The primary source of backgrounds in this data are from low-energy nuclear recoil events due to radon progeny plated out on the detector's wire central cathode. Here we describe a dramatic background reduction resulting from the installation of a new thin-film central cathode. We also describe a new technique which promises to fully fiducialize the chamber, potentially eliminating this source of background entirely.

Eric Miller
University of New Mexico

Date submitted: 02 Jul 2010

Electronic form version 1.4