Abstract Submitted for the APR05 Meeting of The American Physical Society

Technique for WIMP dark matter detection using pulse-shape discrimination in noble liquids MARK BOULAY, Los Alamos National Lab — The performance of a dual-purpose liquid neon detector (CLEAN) for dark matter and low-energy solar neutrino interactions evaluated with Monte-Carlo simulations will be discussed. The projected sensitivity for CLEAN is less than 10^{-46} cm² for the spin-independent WIMP-nucleon cross-section, and 1% uncertainty for the *pp* solar neutrino flux measurement. The general technique of using scintillation pulse-shape discrimination in noble liquids will be discussed, and progress on a small-scale argon WIMP-dark matter experiment (DEAP) will be presented.

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Date submitted: 14 Jan 2005

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