

Abstract Submitted
for the APR11 Meeting of
The American Physical Society

Characterization of the KATRIN detector section¹ BRANDON WALL, CENPA, Dept. of Physics, University of Washington, KATRIN COLLABORATION — The **K**arlsruhe **T**ritium **N**eutrino (KATRIN) experiment's goal is to measure the end point shape of the tritium beta decay spectrum and attain a mass sensitivity of 200 meV. KATRIN is located at the Karlsruhe Institute of Technology in Karlsruhe, Germany. There are three main sections: a tritium source, spectrometers, and a detector section. The detector section is the primary US contribution to the experiment. A short review of the KATRIN experiment's detector section and results from its characterization will be presented. I will discuss the performance of the focal plane detector (a monolithic silicon PIN diode array), calibration tools, and the detector back ground rate.

¹This work is supported in part by the U.S. Department of Energy, under Grant #DE-FG02-97ER41020.

Brandon Wall
CENPA, Dept. of Physics, University of Washington

Date submitted: 13 Jan 2011

Electronic form version 1.4