

Abstract Submitted  
for the DNP08 Meeting of  
The American Physical Society

**A review of the characterization KATRIN detector section** BRANDON WALL, University of Washington, KATRIN COLLABORATION — A short review of the Karlsruhe Tritium Neutrino (KATRIN) experiment's detector section and preliminary data from the characterization of the focal plane detector will be presented. KATRIN's goal is to attain a mass sensitivity of .2 eV by measuring the shape of the tritium beta decay spectrum at the end point. There are essentially three main sections to the KATRIN's detector: a tritium source, spectrometers, and a detector section. The beta decay electrons are emitted from a gaseous tritium source and magnetically guided to a pre-spectrometer then to the main spectrometer. The pre-spectrometer removes the electrons 100 eV below the endpoint energy. The main spectrometer, with an energy resolution of .93 eV, allows us to achieve the .2 eV sensitivity. Finally a silicon PIN diode array detects the analyzed electrons. The array is 94 millimeters in diameter, 500 microns thick and segmented into 144 sections of equal area. I will discuss the performance front-end electronics and of the characterization of the array with a precision electron gun.

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Date submitted: 07 Jul 2008

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