

Abstract Submitted
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Searches for chirality-flipping interactions via cyclotron-radiation spectroscopy¹ A. GARCIA, M. FERTL, University of Washington, M. GUIGUE, Pacific Northwest National Laboratory, P. KAMMEL, University of Washington, A. LEREDDE, P. MUELLER, Argonne National Laboratory, R.G.H. ROBERTSON, G. RYBKA, University of Washington, G. SAVARD, Argonne National Laboratory, H.E. SWANSON, University of Washington, B.A. VANDEVENDER, Pacific Northwest National Laboratory, A. YOUNG, North Carolina State University — The measurement of the beta spectrum from ${}^6\text{He}$ allows for sensitive searches of tensor (chirality flipping) interactions. A source that delivers about 10^{10} ${}^6\text{He}$ atoms per second in a stable fashion exists at the University of Washington. The recent demonstration by the Project 8 collaboration that detection of cyclotron radiation yields excellent energy resolution for electrons of 32 keV emitted from a gaseous source invites application of the technique to higher-energy betas. Calculations and considerations showing the applicability of the technique for the ${}^6\text{He}$ case will be presented.

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