

Abstract Submitted
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An improved design for the Beta-decay Paul Trap¹ LOUIS VARRIANO, GUY SAVARD, University of Chicago, Argonne National Laboratory, JASON A. CLARK, Argonne National Laboratory, NICHOLAS D. SCIELZO, Lawrence Livermore National Laboratory, DAN BURDETTE, University of Notre Dame, MARY T. BURKEY, AARON T. GALLANT, Lawrence Livermore National Laboratory, TSVIKI Y. HIRSH, Soreq NRC, Yavne 81800, Israel — The Beta-decay Paul Trap (BPT) at Argonne National Laboratory measures the beta-neutrino angular correlation coefficient $a_{\beta\nu}$ in the pure Gamow-Teller decay of ${}^8\text{Li}$ and ${}^8\text{B}$ (decaying to ${}^8\text{Be}^* \rightarrow 2\alpha$) to search for a tensor component of the weak interaction. The BPT has an ultimate measurement goal of 0.1

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