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Status update on the measurement of the β-ν angular correlation with trapped ^{8}B ions[1] ADRIAN PEREZ GALVAN, Argonne National Laboratory, BPT COLLABORATION — Measurements of the β-ν angular correlation coefficient ($a_{\beta\nu}$) in β-decay provide information on the presence of possible exotic interactions beyond the Standard Model. The ^{8}Li-^{8}B radioactive mirror nuclei represent a particularly attractive system for these studies due to their small masses, large Q-value, and a triple-correlation that enhance the sensitivity to detect so-called "New Physics." Furthermore, it is possible to search for the existence of second-class-currents in the Standard Model and to test the Conserved-Vector-Current hypothesis by comparing correlation measurements in ^{8}Li and ^{8}B. Our collaboration has already performed a measurement of $a_{\beta\nu}$ with trapped ^{8}Li ions using the Beta-Decay Paul Trap at Argonne National Laboratory with an uncertainty of approximately 1 percent. Tests with a small sample of ^{8}B decays obtained during a preliminary run showed that a measurement of comparable sensitivity is feasible. In this talk we present the current status on the ongoing effort to achieve a high statistics measurement using trapped ^{8}B ions.

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