Abstract Submitted
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Report on the Measurement of the Beta Asymmetry Parameter, A_β, of ^{37}K SPENCER BEHLING, Cyclotron Institute, Texas A&M University, College Station TX, M. ANHOLM, University of British Columbia, Vancouver BC, D. ASHERY, Tel Aviv University, Tel Aviv, Israel, J.A. BEHR, TRIUMF, Vancouver BC, I. COHEN, Tel Aviv University, Tel Aviv, Israel, I. CRAICIU, TRIUMF, Vancouver BC, B. FENKER, Cyclotron Institute, Texas A&M University, College Station TX, A. GORELOV, TRIUMF, Vancouver BC, G. GWINNER, University of Manitoba, Winnipeg MB, L. KURCHANINOV, K. OLCHANSKI, TRIUMF, Vancouver BC, M. MEHLMAN, D. MELCONIAN, P.D. SHIDLING, Cyclotron Institute, Texas A&M University, College Station TX, S. SMALE, Simon Fraser University, Vancouver BC, TRINAT COLLABORATION — The standard model of particle physics (SM) makes a prediction for the observed angular asymmetry of the emitted β particles coming from the β-decay of a spin polarized nucleus. The TRINAT collaboration based at TRIUMF has a well established program of measuring SM observables in the β-decay of alkali atoms confined in a magneto optical trap (MOT). Recently an experiment was performed to measure A_β of ^{37}K that had been trapped in a MOT and spin polarized via optical pumping. In preparation for this experiment the entire experimental apparatus, the nuclear detectors, the trapping and optical pumping schemes, and the data acquisition systems were upgraded. Details of the upgrades made to the experimental setup and preliminary results from the analysis of the ^{37}K beta asymmetry data will be presented.

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