

Abstract Submitted
for the APR11 Meeting of
The American Physical Society

Muon Decay Parameters from TWIST: Results and Limiting Systematic Uncertainties RICHARD MISCHKE, TRIUMF, TWIST COLLABORATION — The TRIUMF Weak Interaction Symmetry Test (TWIST) collaboration has completed a simultaneous measurement of the muon decay parameters ρ , δ , and $P_\mu\xi$, [1] which tests the standard model (SM) in a purely leptonic process and provides improved limits for relevant extensions to the SM. The final results along with implications for physics beyond the SM will be summarized. The talk will focus on the successes and surprises in trying to reduce systematic uncertainties to the level of 10^{-4} of the parameter values.

[1] R. Bayes et al., Phys. Rev. Lett. (to be published); arXiv:1010.4998v2 [hep-ex]

Richard Mischke
TRIUMF

Date submitted: 14 Jan 2011

Electronic form version 1.4