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Significance of the TRIUMF Weak Interaction Symmetry Test

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The TRIUMF Weak Interaction Symmetry Test (TWIST) experiment uses unique features of muons to do a model independent search for new physics, and to provide constraints on properties of the weak interaction that are complementary to those coming from collider experiments, nuclear decay measurements, and astrophysics inputs. TWIST has provided the world's best measurements of 3 out of 4 parameters describing the distribution of positrons in polarized muon decay, and even more precise results are expected. This talk will discuss the physics output of TWIST, and give a brief update on the status of the experiment.

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