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Abstract for an Invited Paper
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Final Results on Muon Decay from TWIST¹

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The TWIST Collaboration is exploring the space-time structure of muon decay through precision measurements of the muon decay (Michel) parameters ρ , δ , and $P_\mu\xi$. TWIST has already reported measurements of these parameters that improve on the previous world knowledge by factors of two ($P_\mu\xi$) to five (ρ and δ) and provide the best current limits on right-handed interactions in muon decay. Analysis of the final TWIST data is well along. It should achieve an additional factor of two in precision for ρ and δ and up to a factor of three in precision for $P_\mu\xi$ compared to our previous results. At present, we expect to unblind the analysis late in 2009. The final results will be presented, and their implications for extensions to the Standard Model will be discussed.

¹Presented on behalf of the TWIST Collaboration.