Muon experiments on fundamental symmetries at PSI and TRIUMF.

Ongoing experiments with stopped muons at PSI and TRIUMF are addressing both basic symmetries and SM tests by low energy, high precision measurements. The MuLan experiment at PSI is deteriming the Fermi constant to part-per-million accuracy via the precision measurement of the μ^+ lifetime. The TWIST experiment at TRIUMF and PiBeta experiment at PSI are determining the Michel parameters through non-radiative and radiative muon decay to order-of-magnitude greater accuracy than earlier experiments. The MuCap experiment at PSI is determining the proton's induced pseudoscalar coupling constant and the planned MuSun experiment at PSI will measure the important two-body weak process $\mu^- d \rightarrow nn\nu$. Together these experiments address fundamental constants, underlying symmetries of the standard model, possible extensions of the standard model, and basic weak processes of relevance to solar burning and neutrino detection. The current status and future plans for these projects will be outlined.