

Muon program 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 determining 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, the underlying symmetries of the standard model, the possible extensions of the standard model, and basic weak processes of relevance to solar models and neutrino experiments. The current status and future plans for these projects will be discussed.