

Abstract Submitted
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Current Status of
the TAMUTRAP Facility MICHAEL MEHLMAN, Texas A&M Univ — The primary goal of the upcoming Texas A&M University Penning Trap (TAMUTRAP) facility is to test the standard model for the presence of a scalar current in the beta decay of T=2 superallowed beta-delayed proton emitters. By observing the shape of the proton energy spectrum one can deduce the beta-neutrino correlation parameter due to kinematic effects that expose the neutrino momentum. The TAMUTRAP decay station is centered around a unique, compensated cylindrical Penning trap, which is employed to both confine and detect the protons from these decays with high efficiency. This talk will provide a general overview of the TAMUTRAP facility and its current status. In particular, offline tests of the electrostatic beam transport system will be discussed, and the current status and development schedule for the phase-space reducing radio frequency quadrupole cooler/buncher will be presented.

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