

Abstract Submitted
for the DNP16 Meeting of
The American Physical Society

Update on PEN: A Precise Measurement of the $\pi^+ \rightarrow e^+\nu(\gamma)$ Decay¹ EMIL FRLEZ, Institute for Nuclear and Particle Physics, University of Virginia, PEN COLLABORATION — The PEN experiment acquired an ensemble of $2.1 \cdot 10^7$ π^+ and $2.8 \cdot 10^8$ μ^+ decays at rest during 2008–2010 data collection at the Paul Scherrer Institute, Switzerland. The PEN detector comprises a non-magnetic 3π solid-angle pure 240-module CsI calorimeter, supplemented with mini-TPC beam particle tracking, beam degrader and active target counters, 20-stave segmented plastic hodoscope and two concentric MWPCs for charged particle tracking and discrimination. We present an update of the status of the PEN data analysis, and of the associated systematic effects.

¹Work supported by NSF grants PHY-1307328, 1614839 and others

Emil Frléz
Institute for Nuclear and Particle Physics, University of Virginia

Date submitted: 01 Jul 2016

Electronic form version 1.4