Abstract Submitted for the APR20 Meeting of The American Physical Society

Measurement of RF Cavity Amplitude via Delta-T Phase Scan at LANSCE EN-CHUAN HUANG, CHARLES TAYLOR, PRABIR ROY, JANARDAN UPADHYAY, Los Alamos Natl Lab — The LINAC at the Los Alamos Neutron Science Center (LANSCE) has been testing a phase scan method as a boost to its original the Delta-T method. The Delta-T process optimizes the phase and amplitude set points of each module based on the time-of-flight measurements at two subsequent detectors. The new phase scan method, with the help of an upgrade to a faster readout system, scans over the whole phase range with less time than the original optimization procedure while provides a wealth of information. In this study, I will discuss the amplitudes of the RF modules extracted from the phase scan data, and compare them with the Klystron current measurements and the designed values.

En-Chuan Huang Los Alamos Natl Lab

Date submitted: 09 Jan 2020 Electronic form version 1.4