Contribution ID: 430 Contribution code: MOPB089 Type: Poster Presentation

Beam envelope matching for the LANSCE Modernization Project

Monday 26 August 2024 16:00 (2 hours)

The Los Alamos Neutron Science Center (LANSCE) accelerator celebrated fifty years of operation in 2023. The LANSCE Modernization Project (LAMP) aims to ensure the future, by upgrading the aging hardware with a new replacement front end. This includes plans to replace the Cockcroft-Walton generators with a Radio-Frequency Quadrupole (RFQ), the low and medium energy transport (LEBT and MEBT respectively) sections, and drift tube linac (DTL). In this work, we detail the matching for the LAMP MEBT and DTL.

Footnotes

Funding Agency

Work was performed under the auspices of the US Department of Energy by Triad National Security under contract 89233218CNA000001.

Primary author: DUFFY, Leanne (Los Alamos National Laboratory)

Co-authors: DIMITROV, Dimitre (Los Alamos National Laboratory); GORELOV, Dmitry (Los Alamos National Laboratory); HENESTROZA, Enrique (Los Alamos National Laboratory); BISHOFBERGER, Kip (Los Alamos National Laboratory); RYBARCYK, Lawrence (Los Alamos National Laboratory); Dr SOSA GUITRON, Salvador (Los Alamos National Laboratory); KURENNOY, Sergey (Los Alamos National Laboratory)

Presenter: DUFFY, Leanne (Los Alamos National Laboratory)

Session Classification: Monday Poster Session

Track Classification: MC1: Beam Dynamics, Extreme Beams, Sources and Beam-Related Technologies: MC1.1 Beam Dynamics, beam simulations, beam transport