

Contribution ID: 268 Contribution code: TUP002

Type: Poster Presentation

A Beam Chopping Scheme Concept for the New LAMP MEBT

Tuesday 12 August 2025 16:00 (2 hours)

As part of the LANSCE Accelerator Modernization Project (LAMP), the two existing 750-keV Cockcroft Waltons are planned to be replaced by a single radio-frequency quadrupole (RFQ). The new LAMP front-end needs to deliver beams with similar timing patterns to what is currently delivered to the multiple target stations. To accomplish this, the 3-MeV Medium Energy Beam Transport (MEBT) is designed with two choppers that help produce beam timing patterns required by the experimental user facilities. The new RFQ will introduce satellite bunches around the single high-intensity bunch that is required by the users. These satellite bunches need to be removed in the MEBT. This contribution describes the design of LAMP MEBT with a beam chopping scheme and presents simulation results.

Please consider my poster for contributed oral presentation

Yes

Would you like to submit this poster in student poster session on Sunday (August 10th)

No

Footnotes

Funding Agency

Work supported by the U.S. Department of Energy through the Office of Defense Programs of Los Alamos National Laboratory.

I have read and accept the Privacy Policy Statement

Yes

Author: Dr SOSA GUITRON, Salvador (Los Alamos National Laboratory)

Co-authors: DIMITROV, Dimitre (Los Alamos National Laboratory); GORELOV, Dmitry (Los Alamos National Laboratory); DALE, Gregory (Los Alamos National Laboratory); XU, Haoran (Los Alamos National Laboratory); UPADHYAY, Janardan (Los Alamos National Laboratory); Dr LEWELLEN, John (Los Alamos National

Laboratory); BISHOFBERGER, Kip (Los Alamos National Laboratory); RYBARCYK, Lawrence (Los Alamos Na-

tional Laboratory); KURENNOY, Sergey (Los Alamos National Laboratory)

Presenter: Dr SOSA GUITRON, Salvador (Los Alamos National Laboratory)

Session Classification: TUP: Tuesday Poster Session

Track Classification: MC5 –Beam Dynamics and EM Fields