



Contribution ID: 1812 Contribution code: MOPG43

Type: **Poster Presentation**

LCLS multi-bunch improvement plan: recent progress and future work

Monday, 20 May 2024 16:00 (2 hours)

Linac Coherent Light Source (LCLS) copper linac typically functions in a single bunch mode, having a repetition rate of 120 Hertz. Numerous internal projects and external user experiments at the LCLS necessitate X-ray pulse trains consisting of two or multiple pulses. Previously we have reported on implementing a system of two ultra-fast stripline kickers, aimed at correcting pulse train machine trajectory differences. In this proceeding we report on the installation of the second pair of kickers, and discuss other improvements that were made. Our work is particularly focused on long pulse separation, greater than 200 ns.

Footnotes

Funding Agency

Paper preparation format

Region represented

North America

Primary author: Dr HALAVANAU, Aliaksei (SLAC National Accelerator Laboratory)

Co-authors: MARINELLI, Agostino (SLAC National Accelerator Laboratory); LE, An (SLAC National Accelerator Laboratory); KRASNYKH, Anatoly (SLAC National Accelerator Laboratory); PELLEGRINI, Claudio (University of California, Los Angeles); HUGYIK, John (SLAC National Accelerator Laboratory); LUCHINI, Kristi (SLAC National Accelerator Laboratory); BEUKERS, Tony (SLAC National Accelerator Laboratory); HUANG, Zhirong (SLAC National Accelerator Laboratory)

Presenter: Dr HALAVANAU, Aliaksei (SLAC National Accelerator Laboratory)

Session Classification: Monday Poster Session

Track Classification: MC2: Photon Sources and Electron Accelerators: MC2.A06 Free Electron Lasers