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

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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

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