Contribution ID: **202** Contribution code: **MOP079** Type: **Poster Presentation**

Proposal to streak optical pulses using a solid state optical deflector

Monday 11 August 2025 16:00 (2 hours)

Streak cameras are flexible cameras used to measure the temporal profile of optical pulses. Streak cameras have been employed to measure the longitudinal beam profile on accelerators around the world. In the present work, we highlight a potential alternative to a new streak camera. We consider particularly linear (Pockels) and quadratic (Kerr) electro-optical nonlinearity solid-state streaking systems. Of the possible solid state systems, we motivate the potential advantages of a Potassium Tantalum Niobate KTa1-xNbxO3 crystal as a photon beam deflector to measure the longitudinal profiles of electron beams in accelerators.

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

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I have read and accept the Privacy Policy Statement

Yes

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