Contribution ID: **201** Contribution code: **MOP078** Type: **Poster Presentation**

Proposal to measure bunch lengths using a pulse dilation photomultiplier tube

Monday 11 August 2025 16:00 (2 hours)

Electron bunches in storage rings are typically short (˜100 ps) and separated by long periods of time (>2 ns). A pulse dilation photomultiplier tube offers a new way of measuring high bandwidth optical pulses using low bandwidth oscilloscopes. Experiments performed by others have demonstrated a temporal resolution of 12 ps, meeting requirements for electron bunches expected for the Advanced Photon Source Upgrade. Compared to electrooptical streak cameras, we think that this may be a preferred technique for measuring the longitudinal profile of bunches in electron storage rings.

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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