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Cherenkov Diffraction Radiation Beam Position studies at Diamond Light Source

Tuesday, 10 September 2024 16:00 (1h 30m)

This paper will show beam position studies performed using a Cherenkov Diffraction Radiation (ChDR) based Beam Position Monitor (BPM) at Diamond Light Source (DLS). Displaying the characterisation of the BPM using the 3 GeV electron beam at DLS and comparing the effectiveness of this prototype to an existing Inductive Beam Position Monitor (IBPM) in use in the DLS Booster To Storage (BTS) transfer line. The functionality of the BPM is explored, utilising both wideband and narrowband ChDR emission with the application of filters to the ChDR detection system.

Footnotes

Funding Agency

I have read and accept the Privacy Policy Statement

Yes

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