IPAC'23 - 14th International Particle Accelerator Conference



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Recent progress at the UV to visible light-based diagnostic beam lines at MAX IV

Thursday, 11 May 2023 16:30 (2 hours)

The beam emittances at the MAX IV 3 GeV fourth generation storage ring are evaluated using synchrotron radiation in the UV to visible energy range. The methods used are combined measurements with various diffraction obstacles and controlled light polarizations. The resolution capability is well covering the needs for the design emittances of the ring. However, accelerator studies often go beyond the design criteria, and in this report, we have especially studied the resolution limit of the vertical emittance measurement.

Funding Agency

Footnotes

I have read and accept the Privacy Policy Statement

Yes

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