



Contribution ID: 1453 Contribution code: THPC50

Type: **Poster Presentation**

Updates to the impedance database for the Diamond-II storage ring

Thursday, 23 May 2024 16:00 (2 hours)

Impedance is a significant concern in modern storage rings like Diamond-II, due to instabilities limiting maximum bunch charge and other potential effects such as emittance dilution. Significant changes have been made to the Diamond-II impedance database, partly driven by progress in engineering design work, and partly by the requirements of particle tracking simulations and increase in available computing resources. We present an overview of the current state of the Diamond-II impedance database, focusing on the most significant updates and additions.

Footnotes

Funding Agency

Paper preparation format

LaTeX

Region represented

Europe

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Session Classification: Thursday Poster Session

Track Classification: MC5: Beam Dynamics and EM Fields: MC5.D04 Beam Coupling Impedance Theory, Simulations, Measurements, Code Development