Contribution ID: **928** Contribution code: **MOPM063** Type: **Poster Presentation**

Collimator studies in the Diamond-II storage ring

Monday 2 June 2025 16:00 (2 hours)

To understand the risk of damage to the collimator blades and the permanent magnets in Diamond-II, the BDSIM code has been used to model the beam losses. To improve the accuracy, the engineering model and 3D field maps have been used to build the machine model. Energy deposition in the main storage ring components and the fluence of secondary particles (particularly neutrons) have been determined. This paper explains the simulation process and give the BDSIM tracking results.

Footnotes

Paper preparation format

Word

Region represented

Europe

Funding Agency

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Session Classification: Monday Poster Session

Track Classification: MC1 :Colliders and Related Accelerators: MC1.A04 Circular Accelerators and Storage Rings