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Type: **Poster Presentation**

Estimated heat load and proposed cooling system in the FCC-ee Interaction region beam pipe

Monday 8 May 2023 16:30 (2 hours)

We discuss the beam power loss related to the heating of the beam pipe walls of the FCC-ee interaction region. We analyse the excitation of trapped modes, which can accumulate electromagnetic energy and determine the locations of these modes. We study the unavoidable resistive-wall wake field, which is responsible for the direct beam pipe walls heating. We show the distribution of the heat load along the central part of the interaction region. We also present the cooling system design and results for temperature distribution in interaction region in the operational mode.

Funding Agency

Footnotes

I have read and accept the Privacy Policy Statement

Yes

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