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Advancing Materials Studies for High-Power Proton Accelerators in J-PARC and Relevant Activities under RaDIATE Collaboration

Friday, October 24, 2025 8:30 AM (30 minutes)

In modern proton accelerators, the survivability of beam-intercepting devices, such as targets, beam windows and beam dumps, under intense beam irradiation is a key factor limiting the achievement of higher beam power. To address this global challenge, Radiation Damage in Accelerator Target Environments (RaDIATE) collaboration was established, with Fermilab acting as the leading institution. J-PARC joined the collaboration in 2017 and has contributed to its research efforts. This presentation will introduce the activities to tackle the studies and relevant activities under the RaDIATE collaboration to date, as well as their future plans.

Footnotes

Funding Agency

I have read and accept the Privacy Policy Statement

Yes

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