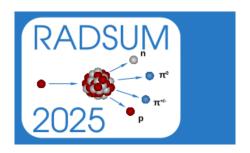
RADSUM - Topical Workshop on RADiation effects in SUperconducting Magnets



Contribution ID: 6 Type: Oral contribution

Proton beam irradiation facility plan at J-PARC and activity on displacement damage study

Thursday 16 January 2025 14:25 (20 minutes)

On 2024, J-PARC achieved the goal of high-power beam operation of 1 MW for the spallation neutron source. The allowable beam power can be said to be determined by the beam intercept materials for the high-power accelerator. J-PARC plans to build a Proton Beam Irradiation facility using 400 MeV protons to study materials, especially beam intercept ones used for the high-intensity proton beam. This facility will be used for a multipurpose purpose, not only for material damage induced by radiation but also for single-event effects (SEEs) studies of semiconductor devices using proton and neutron for space and terrestrial usage and medical RI production. Also, the activity of displacement damage study, in terms of studying displacement cross-section, will be presented.

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