

Hadron and heavy-ion accelerators/colliders - High-Power Target Facilities

Sunday 29 October 2023 09:15 (1h 10m)

Outside of colliding beam facilities, a primary beam itself is rarely of experimental interest. These beams are used to produce secondary particles with particular properties optimized for a particular set of experimental questions. Targets are the beam intercepting devices designed to effect this conversion, and they and their supporting devices are the subject of this discussion. We will discuss the various constraints that impact target systems design, including such effects as radiation and thermomechanical effects. We will then look at a number of case studies of different target systems in operation or under design to understand the interplay of universal and context specific optimization choices and their impact on operational limitations and service lifetimes.

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