





## **RESULTS AND DEVELOPMENTS OF A TRANSPARENT BEAM PROFILER FOR CONVENTIONNAL AND FLASH HADRONTHERAPY**

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## CONTEXT —

Hadrontherapy is a highly precise cancer treatment modality requiring accurate beam profile measurements to ensure effective and safe dose delivery. The advent of FLASH therapy, which uses ultra-high dose rates to minimize damage to healthy tissues, presents new challenges in beam monitoring due to the unprecedented intensities involved. The development of a reliable, ultra-thin, and transparent beam profiler capable of operating under these conditions is therefore critical for both conventional and FLASH hadrontherapy. The PEPITES detector has been designed to meet these demands.

