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Beam profile measurement of the ultra-slow muon for the transmission muon microscope

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We have performed a beam profile measurement of the ultra-slow muon for the transmission muon microscope, which is being developed at the Japan Proton Accelerator Research Complex (J-PARC). A laser ionization of thermal muonium generates the ultra-slow muon. The generated ultra-slow muon is extracted by an electrostatic lens and transported to the beam profile monitor, which consists of a micro-channel plate and delay-line anode. In this paper, the results of profile measurements and the beam commissioning status of the ultra-slow muon beamline are reported.

Footnotes

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