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Performance of GEM detectors under MUSE running conditions[1]

ANGEL CHRISTOPHER, JESMIN NAZEER, TANVI PATEL, MICHAEL KOHL, Hampton University, MUSE COLLABORATION — The MUSE experiment at Paul-Scherrer Institute (PSI) will measure the proton charge radius by scattering of muons and electrons. The experiment uses a telescope of three Gas Electron Multiplier (GEM) detectors to track beam particles entering the experimental area in order to accurately determine the particle scattering angles and to monitor the beam profile. The readout of the GEM telescope was recently upgraded and extensively tested with beam at PSI. This presentation will show an overview of the data acquired with the GEM telescope in the Fall 2020 test beam time.

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