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MUSE experiment status - Recent test program¹ SHRADDHA DOGRA, Rutgers University, New Brunswick, MUSE COLLABORATION — The Muon proton Scattering Experiment (MUSE) uses the PiM1 beam line of the Paul Scherrer Institute is aiming to simultaneously measure elastic scattering of electrons and muons from a liquid hydrogen target to extract the charge radius of the proton. By comparing the two measured scattering cross sections, the experiment will provide more data for the proton radius puzzle and determine if the radius is the same when using different particle types in obtaining the proton radius. This presentation will show test run results from the summer 2019 beam time, which is measuring detector performance and beam properties, and performing initial cross section tests

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