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Status of the MUSE experiment at PSI^1 ALEXANDER GOLOS-SANOV, University of Basel, MUSE COLLABORATION — It is rare to have a discrepancy in such a fundamental property as the proton size, and yet during the past decade measurements of proton charge radius using muon and electron have disagreed by several standard deviations. The MUon proton Scattering Experiment (MUSE) at the Paul Scherrer Institute in Switzerland aims to shed more light on this puzzle, by measuring the elastic scattering of muon and electron (and their antimatter counterparts) on protons in one apparatus. An overview of the puzzle and the status of the MUSE experiment will be presented.

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