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**The MUon proton Scattering Experiment (MUSE) at the Paul Scherrer Institute<sup>1</sup>**

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While consistent results for the charge radius of the proton have been extracted from elastic electron-scattering data and through the spectroscopy of atomic hydrogen, high-precision studies of muonic hydrogen found notably smaller values for the charge radius. This so-called proton-radius puzzle raises questions ranging from experimental and methodological issues to physics beyond the standard model. The puzzle certainly calls for new measurements. The MUon proton Scattering Experiment (MUSE) at the Paul Scherrer Institute (PSI) will provide elastic scattering data off the proton with electron and muon beams of positive and negative charge in a four-momentum-transfer range from 0.002 to 0.08 GeV<sup>2</sup>. Each of the four sets of data will allow the extraction of the proton charge radius; in combination, the data test possible differences of the electron and muon interactions and additionally two-photon exchange effects. The experiment is presently being commissioned at PSI. An overview of the experiment will be presented.

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