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Review of present experimental and theoretical status of the proton radius puzzle

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The discrepancy between the measured Lamb shift in muonic hydrogen and expectations from electron-proton scattering and hydrogen spectroscopy has become known as the proton radius puzzle, whose most "mundane" resolution requires a $\sim 5\sigma$ shift in the value of the Rydberg constant. I review the status of spectroscopic and scattering measurements, recent theoretical developments, and implications for fundamental physics.

Summary

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