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QED is not Imperiled by the Proton's Running Radii

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Abstract: The root mean square of the proton's charge distribution can be measured in various ways. The corresponding results of Pohl et al., based on the Lamb Shift in muonic hydrogen, and those compiled by CODATA (the general-physics equivalent of the Particle-Data Group) on ordinary hydrogen and e-p scattering are 5 standard deviations away from each other. This has been interpreted in diverse manners, including the demise of QED, the greatest blow ever to the Standard Model. I shall remind the audience of some of the atomic physics one may have forgotten and describe the muonic-hydrogen experiment, as well as the analysis of the rest of the data. My conclusion will be that "news of QED's death..."

Más información: http://www.ft.uam.es/seminarios.html