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Spectroscopy of exotic atoms

Monday 17 October 2016 09:30 (30 minutes)

In this talk an overview of some recent spectroscopy measurements and planned activities in the field of exotic atoms will be presented. Exotic bound states such as muonic and pionic atoms, muonium, positronium and antiprotonic helium are systems which offer the
possibility to test bound-state QED, to perform test of fundamental symmetries, to extract fundamental constants such as masses and coupling constants, to determine nuclear parameters such as charge radii and quadrupole moments, and other parameters related with the strong and the weak interactions. This talk will be devoted to
laser spectroscopy of muonic atoms and the related proton radius puzzle, but it will also cover some aspects of other exotic atoms to show the richness and the liveliness of this field.

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