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## The hyperfine splitting in light muonic atoms

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Spectroscopy in light muonic atoms provides a precision probe of the electroweak structure of light nuclei and has the potential to elucidate new physics. However, the uncertainties in the energy levels of muonic atoms are currently dominated by nuclear theory. In particular, theoretical predictions of the nuclear polarizabilities entering the two-photon exchange contribution to the energy levels must be improved. Here, we employ tools from effective field theory to investigate the two-photon exchange contribution to the hyperfine splitting of muonic deuterium.

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