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Abstract for an Invited Paper
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Chiral effective-field theory of the nucleon spin structure¹

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I will review the recent chiral EFT calculations of the nucleon (spin) structure functions at low Q^2 , confronted with the Jefferson Lab measurements. The moments of the structure functions correspond with various polarizabilities, and I will explain why one of them — δ_{LT} — is especially interesting. I will also discuss how the spin structure functions at low Q enter in the atomic calculations of the hyperfine splittings and how they are impacting the ongoing experimental program at PSI (Switzerland) to measure the ground-state hyperfine splitting of muonic hydrogen.

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