CPT Violation in Atomic Physics

The CPT symmetry is an exact symmetry of local Lorentz-covariant field theories of point particles.

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Strong constraints from g-factor measurements (Dehmelt) of electrons and positrons.

Kaons: $\dfrac{\left|m_{\mathrm{K}} - m_{\bar{\mathrm{K}}}\right|}{m_{\mathrm{K}}} \leq 10^{-18}$

Measurements of 1S-2S hyperfine transitions in hydrogen and antihydrogen

Required accuracy: 10^{-18}