

# Atomic parity violation

Every atom is exotic. It is merely a (very good) approximation that an atom is dominated by the electromagnetic interaction. According to the electroweak theory of particle physics, the heavy  $Z^0$  neutral gauge boson mediates interactions in atoms that violate parity. Ever since the creation of the field in the early 70s, this atomic parity violation has been an important low-energy test of the Standard Model. In my talk, I review the status of atomic parity violation, the theoretical atomic and particle physics aspects, and the ongoing efforts to improve the state-of-the-art results obtained with cesium.

**Primary author:** Prof. TIMMERMANS, Rob (KVI, Groningen)

**Presenter:** Prof. TIMMERMANS, Rob (KVI, Groningen)

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