Spectrum and decays of hadronic atoms

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We describe the spectra and decays of $\pi^+\pi^-$ and $\pi^\pm K^\mp$ atoms within a non-relativistic effective field theory. The evaluations of the energy shifts and decay widths are performed at next-to-leading order in isospin symmetry breaking. The prediction for the lifetime of the $\pi^\pm K^\mp$ atom in its ground-state yields $\tau = (3.7 \pm 0.4) \cdot 10^{-15}$s.

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