

Dedicated experiments on gravitational effects on antimatter in space

Giovanni Piacentino
University of Molise
Italy

We propose an experimental test of the gravitational interaction with antimatter by measuring the branching fraction of the CP violating decay of KL both in space and on the Moon. In fact, even if the theoretical Standard Model explains the CPV with the presence of pure phase in the KMC Kobaiashi, Maskava, Cabibbo matrix, ample room is left for contributions by other interactions and forces to generate CPV in the mixing of the neutral K and B mesons.