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Type: **Parallel session talk**

Direct tests of T, CP, CPT symmetries in transitions of neutral K mesons with the KLOE experiment

Monday 21 August 2023 09:00 (18 minutes)

The entanglement in the neutral kaon pairs produced at the DAΦNE ϕ -factory is a unique tool to test discrete symmetries. The exchange of in and out states required for a genuine test involving an antiunitary transformation implied by time-reversal is implemented exploiting the entanglement of $K^0\bar{K}^0$ pairs produced at a ϕ -factory. We will present the final result of the first direct test of CPT and T symmetries in neutral kaon transitions performed at KLOE.

Collaboration / Activity

KLOE-2

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