

Latest results from KLOE-2

Saturday, 31 May 2014 10:00 (0:30)

Collaboration

KLOE-2 Collaboration

Abstract content

The KLOE experiment in year 2013-14 obtained several results on i) CPT symmetry test with neutral kaons, ii) charged kaon branching fraction to 3 charged pions, iii) $\gamma\text{-}\gamma$ physics; iv) on the isospin-violating decay $\eta \rightarrow \pi^+\pi^-\pi^0$, sensitive to the light-quark mass ratio, v) on the form factors (TFF) in $\Phi \rightarrow \eta e^+e^-$ and $\Phi \rightarrow \pi^0 e^+e^-$ transitions, and on vi) searches for the U-boson. We present these results and give a status report on the experiment that successfully completed the detector upgrade a) to improve vertex reconstruction near the beam interaction region with a cylindrical tracking chamber (IT) based on GEM technology, b) to increase the acceptance for low polar angle photons with two stations of LYSO calorimeters (CCALT), and c) to reconstruct particles passing through the DAFNE final focusing region with two sampling calorimeters (QCALT) of tungsten/scintillator-tiles.

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