Status of the KLOE-2 experiment

Alessandro Di Cicco [1], *on behalf of the KLOE-2 Collaboration*
[1] Roma Tre University and INFN Roma Tre

Abstract

The KLOE-2 experiment at the Frascati National Laboratory of the INFN is being commissioned, together with the e^+e^- collider DAΦNE.
The KLOE apparatus, consisting of a huge Drift Chamber and an Electromagnetic Colorimeter working in a 0.5 T axial magnetic field, has been upgraded with the insertion of an Inner Tracker, two low-angle calorimeters (CCALT and QCALT) and low-angle taggers (LET and HET) for $\gamma\gamma-$physics.
The Inner Tracker has been installed between the interaction region and the Drift Chamber inner wall in order to improve vertex reconstruction and small-angle coverage. The tracking device consists of four co-axial and cylindrical triple-GEM layers, which allow us to keep the material budget below 2% of the radiation length, as required in order to minimize multiple scattering of low-momentum tracks and to reduce low-energy photons conversion.
The LET is a calorimeter made up of LYSO crystals read out by SiPMs. The HET is a plastic-scintillator-based calorimeter read out by scintillating fibers. These detectors have been installed along the beam pipe.
The CCALT is a calorimeter composed of LYSO crystals read out by APDs; it has been inserted inside the interaction region together with the Inner Tracker. The QCALT is a calorimeter made up of plastic-scintillator tiles and absorbing material sandwiches, whose light is collected by wavelength shifters and read out by SiPMs. This detector has been installed on the permanent quadrupoles of the DAΦNE collider.
Cosmic-ray muon and collision data are being acquired in order to optimize the sub-detectors operation in

view of the new data taking campaign. The first results from the commissioning of the KLOE-2 detector will be shown.