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KLOE-2 High Energy Tagger Detector

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In order to have access to the reaction $e^+e^- \to e^+e^-\gamma\gamma$ in the energy region of the phi meson production, new detectors along the (DAFNE) beam line have to be installed in order to detect the scattered e^+e^-.
The HET detector is used for measuring the deviation of leptons from their main orbit by determining their position and timing so to tag gg physics events and disentangle them from background.
The HET detectors are placed at the exit of the DAFNE dipole magnets, 11 m away from the IP, both on positron and electron arm. The HET sensitive area is made up of a set of 28 plastic scintillators.
A dedicated DAQ electronics board based on a Xilinx Virtex-5 FPGA have been developed for this detector. It provides a MultiHit TDC with a time resolution of the order of 500 ps and the possibility to acquire data any 2.1 nsec, thus allowing to clearly identify the correct bunch crossing.
First results of the commissioning run are presented.

for the collaboration

KLOE-2

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