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Status of the Cylindrical-GEM Project for the KLOE-2 Inner Tracker

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The status of the R&D on the Cylindrical-GEM (CGEM) detector foreseen as Inner Tracker for KLOE-2, the upgrade of the KLOE experiment at the DAFNE phi-factory, will be presented.

The R&D includes several activities: i) the construction and complete characterization of the full-size CGEM prototype, equipped with 650 micrometer pitch 1-D longitudinal strips; ii) the study of the 2-D readout with XV patterned strips and operation in magnetic field (up to 1.5T), performed with small planar prototypes in a dedicated test at the H4-SPS beam facility; iii) the characterization of the single-mask GEM technology for the realization of large-area GEM foils.

In addition, a finite element simulation of the mechanics has been carried out, for the design of the final detector, together with specific load tests of the materials and structure used for the construction of the prototype.

Summary (Additional text describing your work. Can be pasted here or give an URL to a PDF document):

http://www.lnf.infn.it/~erika/summary_delucia.pdf

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