



ID de Contribution: 48

Type: **Oral presentation**

The Major Atmospheric Gamma Ray Imaging Cherenkov Telescope

lundi 3 mai 2010 17:00 (30 minutes)

MAGIC is a system of two Imaging Atmospheric Cherenkov Telescopes (IACTs). During the construction novel technologies have been developed, which nowadays represent the state of the art techniques on the market. The 17m diameter reflector is composed of light weight sandwich structured aluminium and glass mirrors, mounted on a carbon fiber tube dish structure. The overall focusing is kept at optimum by using the active mirror control system. These light-weight components allow repositioning times of less than 20s over 180deg in azimuth - one of the requirements to catch the high energy gamma ray radiation from gamma ray bursts. The large reflector, together with small diameter, high quantum efficiency photomultipliers in combination with improved triggering and readout system result in an energy threshold of 25 GeV, the lowest among current IACTs. MAGIC reached the energy range covered by satellite experiments and gives the unique opportunity to detect new, distant sources. The new techniques used in MAGIC as well as recent discoveries and scientific results will be discussed.

Please indicate "poster" or "plenary" session. Final decision will be made by session coordinators.

plenary

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Classification de Session: Cherenkov detectors in astroparticle physics

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