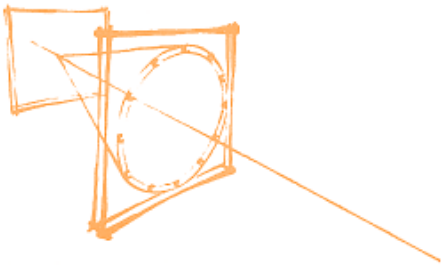

ID de Contribution: **86** Type: **Oral presentation**

Results of the prototype camera for FACT

mardi 4 mai 2010 11:00 (25 minutes)

The maximization of the photon detection efficiency (PDE) is a key issue in the development of cameras for Imaging Air Cherenkov Telescopes (IACT). Geiger-mode Avalanche Photodiodes (G-APD) are a promising candidate to replace the commonly used photomultiplier tubes by offering a larger PDE and a facilitated handling. The FACT project (First G-APD Cherenkov Telescope) evaluates the feasibility of this change by building a camera based on 1440 G-APDs for an existing small telescope. As a first step towards a full camera, a prototype camera module using 144 G-APDs was successfully built and tested. The experiences gained from its operation, including the observation of air showers, are presented. A method to compensate the strong signal variations due to the temperature dependence of the G-APDs gain is described.

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

Classification de thématique: Cherenkov detectors in astroparticle physics