Contribution ID: **53** Type: **Oral presentation**

First experience with the FACT camera

Thursday 14 June 2012 12:20 (20 minutes)

The application of Geiger-mode multi pixel photon devices in the field of ground-based Cherenkov astronomy is currently being evaluated in the FACT (First G-APD Cherenkov Telescope) project. The FACT collaboration built a camera with 1440 pixels for the use in Imaging Atmospheric Cherenkov Telescopes, each pixel consisting of a Hamamatsu MPPC with a solid light collecting cone glued to it. The full trigger and readout electronics is integrated in the camera. The photosensor signals are digitized using the Domino Ring Sampling (DRS4) chip.

In October 2011, the camera was installed in a refurbished HEGRA telescope on the Roque de los Muchachos (La Palma, Spain). Only hours after the completion of the installation, the first air showers were observed. The camera is now being operated for several months both for commissioning and observations, allowing us to evaluate the technology and gain important experience in the operation of such a camera for future projects.

In this talk, the challenges and solutions in the assembly of the optical components as well as our experience with the operation of the camera are presented.

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Session Classification: SiPM applications