

AtmoHEAD: Atmospheric Monitoring for High-Energy Astroparticle Detectors



ID de Contribution: 20

Type: **Poster**

Design of a 2-elastic plus 2-Raman lines optical module for a Raman lidar for CTA

mardi 11 juin 2013 15:05 (5 minutes)

CTA is an advanced facility for ground-based gamma-ray astronomy in the GeV-TeV regime, currently in the Preparatory Phase. For a correct reconstruction of gamma-ray energies and fluxes, a precise monitoring of the atmospheric transmission is needed. With this aim, the IFAE and UAB institutes are building a specific Raman lidar.

For the optical module, we have foreseen to read-out from the lidar return 2 elastic (355 and 532 nm) and two Raman (387, 607) lines. In this contribution, we will discuss the design of the optical module, the light beam transportation, the solution for the custom made dichroic mirrors, interference filters.

Auteur principal: DORO, Michele (University of Padova and INFN)

Co-auteurs: Dr OSCAR, Blanch (Institut de Fisica d'Altes Energies); Dr VANIA, Da Deppo (CNR-Institute for Photonics and Nanotechnologies UOS Padova LUXOR, Via Trasea 7, 35131 Padova, Italy); Prof. LLUIS, Font (Universitat Autònoma de Barcelona); Mlle ALICIA, Lopez Oramas (Institut de Fisica d'Altes Energies); Prof. MARTINEZ, Manel (IFAE Barcelona); Dr GAUG, Markus (Universitat Autònoma de Barcelona)

Orateur: DORO, Michele (University of Padova and INFN)

Classification de Session: Poster session

Classification de thématique: Poster contributions