## AtmoHEAD: Atmospheric Monitoring for High-Energy Astroparticle Detectors



ID de Contribution: 3 Type: Talk

## Elve observation with the Fluorescence Detectors of the Pierre Auger Observatory

mercredi 12 juin 2013 09:30 (35 minutes)

The elves are transient luminous events triggered by cloud-to-ground lightning return strokes. These events appear as rapidly expanding rings along the lower boundary of the ionosphere, on timescales of the order of 1 ms. The Fluorescence Detectors of the Pierre Auger Observatory can provide 3D imaging of elves with an unprecedented resolution. A dedicated trigger has been designed based on 60 elve candidates, recorded by chance as part of a prescaled sample (1 in a 100) of minimum bias events that did not contain usable air shower data. In this contribution a detailed description of the trigger, and an analysis of the first events collected is presented.

Auteur principal: Dr TONACHINI, Aurelio Siro (Università degli Studi di Torino, ITALY)

Co-auteur: OBSERVATORY, The Pierre Auger (The Pierre Auger Observatory)

Orateur: Dr TONACHINI, Aurelio Siro (Università degli Studi di Torino, ITALY)

Classification de Session: Wednesday morning 1

Classification de thématique: Aerosols and interdisciplinary studies