

The Fluorescence Telescopes of the Pierre Auger Observatory

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The Pierre Auger Observatory is the largest extensive air-shower (EAS) experiment in the world. The aim of the experiment is to determine the energy, composition and origin of the UHE cosmic-rays above 1 EeV using two complementary detection techniques: a ground array of water Cherenkov tanks and fluorescence detectors. The fluorescence detectors are fully operational since February 2007. First physics results were presented in 2005. The fluorescence detector plays a major role not only in the calibration of the energy scale of the experiment, but also in the understanding of the systematics of the whole experiment using the data itself. This presentation focuses on the data taken by the 24 fluorescence telescopes. A summary of the current status and overview of the FD detector will be given. The reconstruction performance based on real data and Monte Carlo will be discussed. A summary on the systematics and preliminary results based on FD data are also presented.

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Session Classification: Parallel Session: EAS and Gamma Detection