Contribution ID: **27** Type: **not specified**

# KASCADE-Grande: an overview and first results

*Thursday, 21 June 2007 09:00 (15 minutes)*

The KASCADE-Grande experiment, located at Forschungszentrum Karlsruhe, is a multi-component extensive air-shower experiment to study cosmic rays and their interactions at primary energies 10ˆ14-10ˆ18eV.
After detailed investigations of the knee in the spectrum with the original KASCADE experiment, the main goal of the extended Grande array is the detection of the expected iron knee in the spectrum at around 10ˆ17eV, and the measurement of the composition in the expected transition region between galactic and extragalactic components. Due to its multi-component characteristics, basically the KASCADE experiment enriched by two arrays of scintillator detectors (Grande and Piccolo) with the aim of providing large acceptance area (0.5kmˆ2) and prompt trigger signal, KASCADE-Grande is a suitable array to provide refined measurements even in the 10ˆ16-10ˆ18eV region. An overview of the experiment, its performance and first results based on two years of data taking will be presented.

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**Session Classification:** Parallel Session: EAS and Gamma Detection