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Two Decades of KASCADE and KASCADE-Grande Measurements: Some Achievements

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At a few PeV the energy spectrum of high-energy cosmic rays exhibits a sudden change of the spectral index, usually known as the knee of the spectrum. The origin of this knee is seen as key for the understanding of galactic cosmic rays. KASCADE-Grande investigated with a multi-detector installation (including LOPES for measuring the radio emission of air showers) the elemental composition of cosmic rays in the energy region of the knee in detail. The history of KASCADE, the most important results, as well as the implications of these results for the understanding of cosmic ray physics will be summarized in this contribution. In addition, lessons learnt from KASCADE for future experiments will be discussed.

Collaboration

KASCADE-Grande

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