DIESE WOCHE

PHYSIKALISCHES KOLLOQUIUM

des Fachbereichs Physik der Johann Wolfgang Goethe-Universität Frankfurt

> Mittwoch, den 03.06.2015, 16 Uhr c.t. Großer Hörsaal, Raum _0.111, Max-von-Laue-Str. 1

Prof. Dr. Karl-Heinz Kampert

Lehrstuhl für Astroteilchenphysik, Bergische Universität Wuppertal

"Cosmic Rays: The Most Energetic Particles in the Universe"

Cosmic Rays have been known for more than a century and their discovery by Victor Hess was awarded with the Nobel Prize in Physics in 1936. Their flux at Earth amounts to about 20% of the natural radioactive dose and particle physicists profit from using them to calibrate their detectors. However, despite being so prominent in our daily life, very little is known about their origin. Furthermore, their energies have been measured to reach out to more than a 100 million times the beam energy in the most powerful man-made particle accelerator, the Large Hadron Collider at CERN. Exploring the nature and origin of these particles is the goal the Pierre Auger Observatory, the worlds largest cosmic ray observatory located in Argentina. This talk addresses the open questions and reports latest results that have advanced our understanding of the most extreme cosmic messengers.

Die Dozenten der Physik

