

Prof. Dr. Christian Stegmann, Head of DESY, Zeuthen site

Vita

Christian Stegmann, born in 1965, was professor at the University of Erlangen-Nürnberg. The astroparticle physicist works at the H.E.S.S. experiment (High Energy Spectroscopic System), a system of Cherenkov detectors in Namibia. This instrument allows scientists to explore cosmic showers of ultra-high energy gamma particles. Since 1 October 2011 he is a member of the DESY Board of Directors and represents the DESY Board of Directors in Zeuthen.

More information:

http://www.desy.de/about_desy/directorate/christian_stegmann/index_eng.html

Comments about the Conference

The detection of the cosmic radiation was the discovery of a century and brought us completely new insights into the cosmos. Furthermore it became a cornerstone of early particle physics. Before the development of particle accelerators, cosmic ray research led to the discovery of many important elementary particles, among them the anti-particle of the electron – the positron – as well as the muon and the pion.

The universe is full of natural particle accelerators, as for example in supernova explosions, in binary star systems, or in active galactic nuclei. So far, only 150 of these objects are known to us, and we have just an initial physical understanding of these fascinating systems.

The Cherenkov Telescope Array will observe thousands of these natural particle accelerators with unprecedented sensitivity.

On either route, with the world's largest neutrino telescope, IceCube in Antarctica, and the gamma-ray telescopes, we expect fascinating insights into the natural particle accelerators in the universe, that will throw new light onto the mysteries of cosmic rays.