

Physikalisches Kolloquium

Christian Stegmann, DESY Zeuthen

**»Multimessenger-Astronomy with Gammas and Neutrinos –
Hunting Cosmic Accelerators«**

Einführung: G. Drexlin

In the last decade, astronomy with high-energy gamma rays and just recently with high-energy neutrinos has opened new windows to the Cosmos with view to the most extreme places in our Universe. High-energy particles are produced in supernova remnants, black holes in active galaxies and other celestial objects - cosmic accelerators in which atomic nuclei and electrons are accelerated to extreme energies. In contrast to what has been expected in the past, high-energy phenomena are not exceptions in the Universe but occur in the life cycles of many cosmic objects and thus influence the evolution of these objects. Consequently, high-energy gamma ray and neutrino astronomy have changed or are about to change from experimental methods to well-established fields of astroparticle physics with a bright future. Its results are important building blocks for the understanding of the evolution of our Milky Way and the Universe. In the presentation an overview of the recent developments in gamma-ray and neutrino astronomy will be given.

Freitag, 25.04.2014, 17 Uhr c.t.,

**KIT, Campus Süd,
Otto-Lehmann-Hörsaal, Physik-Flachbau (Geb. 30.22).
Anschließend Nachsitzung im Gastdozentenhaus „Heinrich Hertz“**