

## Institut für Physik Physikalisches Kolloquium

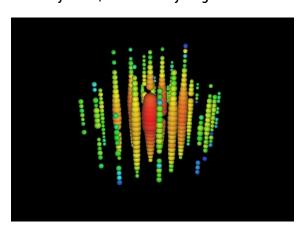


## Mittwoch, 13.01.2016, um **16:00 Uhr**Ort: Reichenhainer Str. 90; Zentrales Hörsaal- und Seminargebäude, Raum 2/N013

## **Prof. Dr. Uli Katz**Universität Erlangen-Nürnberg Erlangen Centre for Astroparticle Physics

## Astronomy and Physics with cosmic neutrinos

Neutrinos are ideal messengers from the Universe as they are neither absorbed nor deflected on their way to us, even if they originate from the remotest cosmic sources. On the other hand, due



to their tiny reaction probability, their detection is highly challenging and requires detectors with gigaton target masses. Recently, the IceCube experiment installed in the glacial ice of the South Pole has unambiguously identified the first high-energy cosmic neutrinos and has thus opened a new window to the Universe. The colloquium will introduce the concept of neutrino astronomy, highlight some of the scientific qustions to be adressed, and present current and future experiments and their results and sensitivities. The talk will conclude

with discussing the use of neutrino astronomy to perform precision measurements in neutrino physics, offering further exciting prospects for the years to come.

Alle Zuhörer sind ab 15:45 zum Kaffee vor dem Hörsaal eingeladen.

