

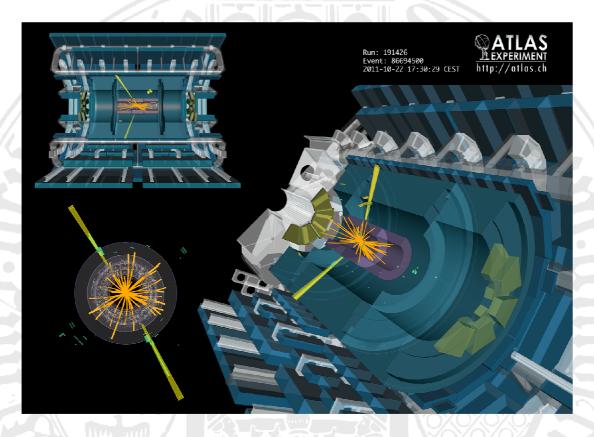
-akultät für Mathematik und Physik



## **PHYSIKALISCHES KOLLOQUIUM**

## AM 12. MAI 2014 UM 17 UHR C.T.

IM GROBEN HÖRSAAL



## IMPLICATIONS OF THE DISCOVERY OF THE HIGGS BOSON

## **PROF. DR. MATTHIAS NEUBERT** INSTITUTE OF PHYSICS, UNIVERSITY MAINZ

The discovery of a new kind of particle - the Higgs boson - at the CERN Large Hadron Collider has marked the beginning of a new era in fundamental physics. Physicists are now eagerly exploring the properties of this mysterious new particle. The Higgs boson mediates a new kind of force, whose strength is proportional to the masses of the particles involved. It contains the key to understanding the mass of all elementary particles in the Universe, it offers new ways to search for physics beyond the Standard Model of particle physics, and it may have dramatic consequences for the fate of the Universe.