DIESE WOCHE

PHYSIKALISCHES KOLLOQUIUM

des Fachbereichs Physik der Johann Wolfgang Goethe-Universität Frankfurt

> Mittwoch, den 23.10.2013, 16 Uhr c.t. Großer Hörsaal, Raum _0.111, Max-von-Laue-Str. 1

Prof. Dr. Martin Ammon

Theoretisch Physikalisches Institut, Friedrich-Schiller-Universität Jena

"From gravity and black holes to Quark-Gluon Plasma & superconductors and back"

What do black holes and quark-gluon plasma or high temperature superconductors have in common? Besides being interesting systems on their own and currently investigated by many different groups, they are intimately connected by relations between gravitational and non-gravitational theories. These relations might help to get new insights into the quark-gluon plasma, high temperature superconductors and other strongly coupled systems.

In this talk I will review the basic theoretical arguments leading to such surprising relations and focus on a few exciting applications towards real-world systems. In the end I will speculate about astonishing consequences for quantum gravity and our universe.

Die Dozenten der Physik

Kolloquium