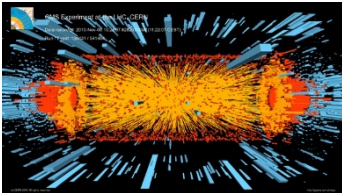


Colloquium of the RTG 1620 at Bielefeld University January 14, 2015

11:00 – 12:00
H16



Dr. Stefan Stricker

Technische Universität Wien

Using black hole formation to study thermalization

Holography is an idea originating from black hole physics where the entropy of the black hole is proportional to its area. This means that all the information is encoded in the boundary of the black hole. String theory provides a concrete realization of the holographic principle. I will introduce the gauge/gravity duality and show how it can be used to gain insight into the thermalization process of strongly coupled systems, such as the quark gluon plasma or cold atomic gases.

14:00 – 15:00
H2



Dr. Harald Krüger

Max-Planck-Institute for Solar System Research, Göttingen

Rosetta – Rendezvous with a Comet

Comets are among the oldest remnants left over from the beginning of our solar system. They are considered key in understanding this very early phase. The European Rosetta mission is the first to orbit and to land on a cometary nucleus. After 10 years of interplanetary cruise, Rosetta arrived at comet 67P/Churyumov-Gerasimenko in August 2014, and in November 2014 the lander Philae successfully landed on the nucleus surface. I will give an overview about the Rosetta mission, its scientific goals and the results achieved so far.

15:00 – 16:00
H2

Prof. Dr. Andreas Hüttemann

Universität zu Köln

Reduction and Coherence

Reduction may mean a lot of different things. Despite this diversity, a common thread running through different accounts of reduction is a concern with coherence between two or more theories, models or other forms of descriptions. Acknowledging these two points helps us to better understand some controversial cases of reduction concerning, e.g., quantum mechanics or the relation between statistical mechanics and thermodynamics.

16:00 – 16:30
in front of H2

Coffee

Contact: Prof. D. Schwarz, dschwarz@physik.uni-bielefeld.de
secretariat: gudrun@physik.uni-bielefeld.de