

## **Institut für Physik**

## Theoriekolloquium

Am 28. November 2019 um 14.15 Uhr in W2 1-143 hält

Frau Prof. Dr. Betti Hartmann (Brasilien und Spanien)

einen Vortrag mit dem Titel

The AdS/CFT correspondence - String Theory in the lab?

The Anti-de Sitter/Conformal Field Theory (AdS/CFT) correspondence is one of the most important results of String Theory. It states that a gravity theory in Anti-de Sitter space-time (AdS) is dual to a Conformal Quantum Field Theory on the boundary of AdS. The duality connects strongly coupled Quantum Field Theories to weakly coupled gravity theories. In recent years it has been suggested that this fact can be used to gain easier access to strongly coupled Quantum Field Theories. Examples are real-time, high density processes in Quantum Chromodynamics as well as high temperature superconductivity which is presumably driven by strong interaction processes. In both cases experimental data exists which can be used to test the correspondence. In this talk I will motivate the AdS/CFT correspondence, explain its potential and point out future directions.

Interessierte sind herzlich eingeladen.

gez. Prof. Dr. Jutta Kunz