Contribution ID: **45** Type: **Talk**

Black holes as tools - AdS/CFT and the holographic principle (Lecture I)

Wednesday 3 May 2017 09:00 (1h 20m)

Modeling matter at high densities, high temperatures, and at large values of the relevant coupling constant(s) is a quite challenging task. In these lectures, we are going to introduce the AdS/CFT correspondence (more generally called gauge/gravity correspondence or holography), which allows us to map challenging quantum problems at strong coupling to classical gravity problems at small curvature values of spacetime. Applications to heavy ion collisions and neutron star physics will be discussed.

Primary author: KAMINSKI, Matthias (University of Alabama, Tuscaloosa, United States)

Presenter: KAMINSKI, Matthias (University of Alabama, Tuscaloosa, United States)