

**Neven Bilic**

**Title: Thermodynamics of AdS black holes and AdS/CFT correspondence**

**Abstract:** The relationship between a large AdS Schwarzschild BH in  $d+1$  dimensions and AdS planar BH will be studied in the context of AdS/CFT holography. The horizon temperature of a planar BH is not well defined due to the translational invariance of the horizon. As will be shown, this temperature can be fixed by the requirement of the entropy area law. Invoking the AdS/CFT conjecture, the temperature of the boundary CFT fluid can be related to the horizon temperatures  $T_{pl}$  and  $T_{Sch}$  of the AdS planar BH and large AdS Schwarzschild BH.