

Title: Gauge/gravity duality: unification of ideas

Abstract:

I will review some aspects the holographic principle and its consequences, focusing on its most famous incarnation, the AdS/CFT correspondence. This hypothesis has lead to many insights concerning the dynamics of strongly coupled Quantum Field Theory. I will review some of them, including the well known KSS bound as well as some new results concerning the hydrodynamic gradient expansion in N=4 supersymmetric Yang-Mills theory.