

Séminaire de matrices, cordes et géométries aléatoires

Jeudi 12/09/2019, 16h00-17h00

Orme des Merisiers Salle Claude Itzykson, Bât. 774

Areas and entropies in BFSS/gravity duality

Tarek Anous

The BFSS matrix model provides an example of gauge-theory / gravity duality where the gauge theory is a model of ordinary quantum mechanics with no spatial subsystems. If there exists a connection between areas and entropies in this model similar to the Ryu-Takayanagi formula, the entropies must be more general than the usual subsystem entanglement entropies. I will give a brief overview of the BFSS/D0 brane geometry duality and describe general features of the extremal surfaces in the bulk. I will then discuss the possible entropic quantities in the matrix model that could be dual to the ‘regulated areas’ (which I will define) of these extremal surfaces.
