## Advanced Topics in Theoretical Physics



## LOCALIZATION IN SUPERSYMMETRIC GAUGE THEORIES

Nouman Muteeb 11am Friday, October 20

In this talk I will first briefly discuss the basics of Equivariant Localization technique and how it is fruitfully applied in the context of four dimensional supersymmetric gauge theories with eight supercharges. Then I will describe the computation of partition function of the this supersymmetric gauge theory on four dimensional hemi-sphere with suitable boundary conditions. Finally there will be a brief discussion on how various partition function/wavefunctions on hemi-sphere are related to various amplitudes in two dimensional Liouville field theory in the context of AGT-correspondence

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