



Department of
Theoretical Physics

THE QUANTUM SPACETIME SEMINAR SERIES

Holographic RG Flows for Class S Line Defects

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Time: 11.30 am

Venue: A-304, TIFR



In the recent past, mysterious six dimensional $(2,0)$ SCFTs have captured the attention of High Energy Physics community because of their geometrical and algebraic applications besides being a playground for conjecturing and testing various dualities. Such theories admit natural existence of loop operators which have been classified for certain subset of theories known as "class S" with trivial ranked Lie algebra. The classification is identified by the homotopy classes of non-self intersecting loops on relevant Riemann surface. In this talk, I will present my work on loop operators of intractable higher ranked theories undergoing the "Renormalization Group" by using the AdS/CFT dictionary and "witnessing" the evolution from gravity side. This is described by a set of "flow equations" satisfying the expectations of genuine loop operators obtained from the "weak coupling" regime.

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