



ICTS Seminar

Title : ZZ instanton amplitudes in minimal string theory

Speaker : Raghu Mahajan (Stanford University)

Date : Wednesday, 21 December 2022

Time : 03:00 pm (IST)

Abstract : We use insights from string field theory to analyze and cure the divergences in the cylinder diagram in minimal string theory, with both boundaries lying on a ZZ brane. Minimal string theory refers to the theory of two-dimensional gravity coupled to a minimal model CFT that serves as the matter sector; it includes JT gravity as a limiting case. ZZ branes are akin to D-instantons, and give rise to features that reflect the underlying discreteness of the dual theory. The exponential of the cylinder diagram represents the one-loop determinant around the instanton saddle. The finite result for this one-loop constant computed using the string field theory procedure agrees precisely with independent calculations in the dual double-scaled matrix integrals performed by several authors many years ago.

Venue : **Hybrid Mode**

Offline: Emmy Noether Seminar Room

Online: Please click on the below link to join the meeting

<https://icts-res-in.zoom.us/j/82481959079?pwd=ZkYybkVDQXlMVHE4TUx5eXptZFNvdz09>

Meeting ID: 824 8195

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