



Department of
Theoretical Physics

THE QUANTUM SPACETIME SEMINAR SERIES

Normalization of ZZ instanton amplitudes in minimal string theory

(Zoom Seminar)

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Zoom link shall be shared separately



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. We focus on theories with worldsheet matter consisting of the $(2,p)$ minimal model plus Liouville theory, with total central charge 26, together with the usual bc-ghosts. The string field theory procedure gives a finite, purely imaginary normalization constant for non-perturbative effects in minimal string theory, or doubly non-perturbative effects in JT gravity. We find precise agreement with the prediction from the dual double-scaled one-matrix integral.

This talk is based on the paper <https://arxiv.org/abs/2202.03448> with Dan Eniceicu, Chitraang Murdia and Ashoke Sen.