ICTS String Seminar

Title : Semiclassical analysis of finite cut-off JT gravity on a disk

Speaker : Soumyadeep Chaudhuri (Université Libre de Bruxelles, Belgium)

Date : Wednesday, 04 December 2024

Time : 3:30 PM (IST)

Abstract : In this talk I will present the computation of the partition function of finite cut-off JT gravity (with positive, zero or negative curvature) defined on a disk and coupled to conformal matter with central charge c. The analysis is done in a regime where c is a large negative number, while the magnitude of the cosmological constant scales linearly with |c| and the length of the boundary of the disk is kept finite. In this regime, the gravitational path integral is dominated by a smooth geometry corresponding to a saddle point of the action. By systematically taking into account the quantum fluctuations about this saddle point, one can obtain a perturbative expansion of the partition function in powers of 1/|c|. I will present the results for the leading and the first subleading terms in this expansion.

Venue : Online
Zoom Link: https://icts-res-in.zoom.us/j/88092766911?pwd=R3ZrVk9yeW96ZmQ4ZG9KRzVhenRKZz09
Meeting ID: 880 9276 6911
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