



ICTS

INTERNATIONAL
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TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS String Seminar

Title : Modular properties of Generalised Gibbs Ensembles

Speaker : Adarsh Sudhakar (HRI)

Date : Monday, 05 October 2026

Time : 03:30 PM (IST)

Abstract : We study the modular properties of the torus partition functions of 2d CFTs in the case where the Hamiltonian is perturbed by the zero mode of a holomorphic field. Concrete computations involving Generalised Gibbs ensembles (GGE) associated to the (integrable) Boussinesq hierarchy suggests that the modular S-transforms of symmetrised n-point functions of the charges of the hierarchy take a simple form. Based on this observation, we conjecture a general formula for the asymptotic expansion (in the fugacities) for the S-transformed generalised characters in a rational CFT. Assuming certain properties for the S-transform, we also provide a derivation for this formula. The talk will be based on 2508.16258 [hep-th] and 2603.28244 [hep-th].

Venue : Chern Lecture Hall

ZoomMeeting: <https://icts-res-in.zoom.us/j/88092766911?pwd=R3ZrVk9yeW96ZmQ4ZG9KRzVhenRKZz09>

Meeting ID: 880 9276 6911

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