



ICTS String Seminar

- Title** : Imprint of the black hole interior on thermal four-point correlators
- Speaker** : Joydeep Chakravarty (McGill University, Canada)
- Date** : Tuesday, 03 March 2026
- Time** : 3:00 PM (IST)
- Abstract** : We consider correlators smeared against directed wavepackets over a thermal state dual to a single-sided planar AdS black hole. In the large frequency limit, our measurement is simplified using a bulk WKB description. We propose a dictionary that maps the action of smeared boundary operators to flat-space oscillators near an interior bulk point on the thermal state, by analytically continuing late-time operators from the right to the left boundary via an integral transform. Using the dictionary the smeared correlator factorizes to a flat-space like scattering amplitude about the interior event. Our transformed correlators describe local physics in the two-sided black hole interior, while incurring a suppression of $O(\exp(-\beta\omega/2))$. These measurements necessitate a non-trivial time ordering of operators living on boundary hyperboloids which are causally connected to the past light cone of the bulk point, as well as on a corresponding future branch.
- Venue** : Emmy Noether Seminar Room
Zoom Link: <https://icts-res-in.zoom.us/j/88092766911?pwd=R3ZrVk9yeW96ZmQ4ZG9KRzVhenRKZz09>
Meeting ID: 880 9276 6911
Passcode: 232322