ICTS String Seminar

Title : Quantum evolution of charged de Sitter black holes

Speaker : Arindam Bhattacharjee (University of Warsaw, Poland)

Date : Wednesday, 11 March 2026

Time : 3:30 PM (IST)

Abstract : In this talk we consider charged black holes with positive cosmological constant and study their evolution via Hawking radiation. Near extremality, we see that the radiation is no longer thermal and significantly differ from semiclassical expectations. In the low-temperature regime, the near-horizon physics can be effectively captured by a one-dimensional Schwarzian theory coupled to the far-horizon de Sitter quantum field theory. Using this picture we study the energy transfer rate for black holes with temperatures both above and below the ambient de sitter temperature. Finally we compare our results with their flat space counterparts.

Venue : Emmy Noether Seminar Room
Zoom Link: https://icts-res-in.zoom.us/j/88092766911?pwd=R3ZrVk9yeW96ZmQ4ZG9KRzVhenRKZz09
Meeting ID: 880 9276 6911
Passcode: 232322