



ICTS String Seminar

- Title** : Twisted eleven-dimensional supergravity and exceptional simple infinite dimensional super-Lie algebras
- Speaker** : Surya Raghavendran (University of Edinburgh, United Kingdom)
- Date** : Wednesday, 01 January 2025
- Time** : 3:30 PM (IST)
- Abstract** : I will describe a holomorphic-topological field theory in eleven-dimensions which captures a 1/16-BPS subsector of eleven-dimensional supergravity. Remarkably, asymptotic symmetries of the theory on flat space and on twisted versions of the $AdS_4 \times S^7$ and $AdS_7 \times S^4$ backgrounds recover three of the five infinite dimensional exceptional simple super-Lie algebras. I will discuss some applications of this fact, including character formulae for indices counting multigravitons and the contours of a program to holographically describe 1/16-BPS local operators in the 6d (2,0) SCFTs of type A_{N-1} . This talk is based on joint work, much in progress, with Ingmar Saberi and Brian Williams.
- Venue** : Emmy Noether Seminar Hall
Zoom Link: <https://icts-res-in.zoom.us/j/88092766911?pwd=R3ZrVk9yeW96ZmQ4ZG9KRzVhenRKZz09>
Meeting ID: 880 9276 6911
Passcode: 232322