

## ICTS String Seminar

- Title : Holographic interpretation of Bulk entanglement entropy
- Speaker : Gautam Mandal, (TIFR, Mumbai)
- Date : Wednesday, May 13, 2020
- Time : 03:00 pm
- Abstract : We propose a holographic interpretation of entanglement entropy (EE) of a spatial subregion A in the bulk, in terms of the reduced density matrix for an appropriate sub algebra of observables in the boundary field theory/boundary quantum mechanics. The construct in the boundary theory corresponds to partitioning of the target space and is called a target space EE. We discuss this in the context of supergravity dual of Dp brane field theories, in particular for D0 brane quantum mechanics. We find qualitative agreement between the bulk and boundary calculations.
- ICTS virtual seminar : Please register at <https://docs.google.com/forms/d/e/1FAIpQLSf0jLgoqiOgDnxbEBGiuIWiOmh9WX8caH-pr13qDBZOO91img/viewform>  
(Links to join the seminars will be sent to your registered email address)

Recordings of past talks can be found here:

<https://www.youtube.com/channel/UCw9LdPQ5t7Q7muD0qzn70TA>