

ICTS String Seminar

- Title** : Holography of information in a ball of finite radius
- Speaker** : Ashik H (ICTS-TIFR, Bengaluru)
- Date** : Wednesday, 29th May 2024
- Time** : 03:00 PM (IST)
- Abstract** : The principle of Holography of information states that all information available in the bulk of spacetime is also available near its boundary at spatial infinity. However, physical observers never have access to spatial infinity. Therefore, we ask the question: "Is information contained in a ball of finite radius also holographic in nature?". Phrased differently, we ask whether correlation functions on the boundary of the ball capture all the information of all correlators in the bulk of the ball. In this work, we answer this question in the affirmative within the confines of linearised quantum gravity for generic low-energy (free Klein-Gordon) states in flat space. Interestingly, unlike at infinity, massive and massless fields can be captured within our framework.
- Venue** : Madhava Lecture Hall
- Zoom Link: <https://icts-res-in.zoom.us/j/88092766911?pwd=R3ZrVk9yeW96ZmQ4ZG9KRzVhenRKZz09>
- Meeting ID: 880 9276 6911
- Passcode: 232322