



ICTS Synopsis Seminar

Title : Holography, Cosmology and Tachyons

Speaker : Ashik H (ICTS-TIFR, Bengaluru)

Date : Tuesday, 05 May 2026

Time : 10:00 AM – 11:30 AM (IST)

Abstract : Quantum theories of gravity have some unique features compared to ordinary quantum field theories. One such property is the unusual localisation of information. In this talk, we will first discuss this in the simple case of a scalar field theory coupled to gravity in asymptotically flat space-time. We show that even for finite space-time regions, information is holographic in nature and this follows from the gravitational Gauss' law. We will then discuss the implications of the gravitational Gauss' law in a cosmological setting where we compute cosmological correlators in gravitationally constrained de-Sitter states. At the end, I'll make some comments about tachyon dynamics in an unstable D-brane which also tells us about an "unusual" localisation of information.

Venue : Emmy Noether Seminar Room

Zoom Link: <https://icts-res-in.zoom.us/j/96464540636?pwd=Uddfojsqjot2dh9qWawhxofquoMr86.1>

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