Seminar, Department of Physical Sciences, Bose Institute, Kolkata

Towards a complete classification of holographic entropy inequalities, and beyond...

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Abstract: In this talk, I will review some of the recent progress of the holographic entropy cone (HEC) program. In particular, I will focus on an exponential speed-up of generating contraction maps, the completeness of the contraction map proof method, and a triality between holographic entropy inequalities (HEIs), contraction maps, and partial cube graphs. This enables us, in principle, to find all holographic entropy inequalities. Lastly, I will give concrete examples of the application of the HEC program to two non-holographic problems, namely, towards conjecture generation of quantum entanglement entropy inequalities and calculation of topological entanglement entropy in a TQFT.

Date/time: December 24, 2024 (Tuesday) at 03:00 PM

Venue: LH1 (Ground floor, UAC, BI)