



Department of  
Theoretical Physics

# THE QUANTUM SPACETIME SEMINAR SERIES

## Modular Bootstrap with some applications to thermalization

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**Date:** Nov. 26, 2018

**Time:** 11.30 am

**Venue:** A-304, TIFR



In this talk I will review some recent developments in bootstrapping operator product expansion (OPE) coefficients of two dimensional conformal theories. We will derive certain asymptotic formulae for the OPE coefficients relevant for the eigenstate thermalization hypothesis. We shall also briefly discuss the deviations from thermality at the level of reduced density matrices. The third part of the talk will focus on non-local probes of thermality. Finally we shall investigate other constraints on the conformal blocks coming from crossing symmetry that reproduces features of the black hole S-matrix. If there is time, I will discuss some recent progress on generalized Gibbs ensembles.