

## Tata-Infosys Lecture Series

## **Black holes in AdS/CFT**

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**Date / Time : 2**<sup>nd</sup> **Lecture :** 29<sup>th</sup> January, 2019, 02.30 pm

Venue: A-304, TIFR



We study the index of large N SCFTs with gravity duals, and account for the thermodynamics of certain supersymmetric AdS black holes. More concretely, we shall: explore a generalized Cardy formula for higher dimensional SCFT and use it to count large supersymmetric AdS black holes; explore deconfinement phase transitions; study novel large N and large charge saddle points which exhibit certain features reminiscent of hairy black holes, among others.