<u>ICTS Colloquium</u>

Title   :   Graph entropy and the zero-error capacity of channels

Speaker: Jaikumar Radhakrishnan, Tata Institute of Fundamental Research, Mumbai

Date   :   Monday, April 2, 2018

Time   :   3:00 PM

Venue :   Madhava Lecture Hall, ICTS Campus, Bangalore

Abstract: We will derive Hansel's inequality about graph covering using probabilistic and information-theoretic arguments. Based on this inequality, we will show bounds on the rate at which one can communicate across certain channels when no error is allowed. We will derive everything from scratch. (The talk will be based on joint work with Siddharth Bhandari, Marco Dalai and Venkat Guruswami.)