

MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
DEPARTMENT OF MATHEMATICS

# Simple Person's Applied Math Seminar (SPAMS)

Thursday, October 24, 2019

6:00pm – 7:00pm      Room : 2 - 132



**Sandeep Silwal**

*(Electrical Engineering and Computer Science, MIT)*

**“Applications of entropy to combinatorics”**

## **Abstract**

Information theory is a well developed area of mathematics with many theorems and tools. One such useful result from this field is the fact that among all discrete random variables with a fixed support, the one with the largest entropy is the uniform distribution. In this talk, I give examples of how to use this property along with other tools from information theory to give some lower bounds in combinatorics.