

**Speaker: Saket Saurabh**

**Title: Two Families Theorem in Graph Theory and Combinatorics**

Abstract:

The Two-Families Theorem of Bollobas for extremal set systems and its generalization to subspaces of a vector space of Lovasz are the cornerstones in extremal set theory with numerous applications in graph and hypergraph theory, combinatorial geometry and theoretical computer science.

We refer to Gil Kalai's blog

<http://gilkalai.wordpress.com/2008/12/25/lovaszs-two-families-theorem>

for more information on these theorems. In this talk we will survey these two results and show its applications in the domain of combinatorics and graph theory.