RYERSON UNIVERSITY
DEPARTMENT OF MATHEMATICS
GRAPHS AT RYERSON (G@R) SEMINAR

Dr. Andrei Raigorodskii

Faculty of Innovations and Advanced Technology, DIHT MIPT & Yandex

Date: Friday, January 27, 2017
Time: 11am
Location: ENG 210

The independence numbers and the chromatic numbers of random subgraphs of Kneser graphs and their generalizations

Abstract:

The independence number of a graph is the maximum number of pairwise disjoint vertices in it. Kneser's graph is a classical object of combinatorics. Its vertices are subsets of an n-element set, and its edges are pairs of sets that are disjoint. The independence number of Kneser's graph is given by the famous Erdos–Ko–Rado theorem, and the chromatic number was determined by Lovasz using the topological method. We consider random subgraphs of Kneser's graph and its natural generalizations. We prove concentration results for the independence numbers and the chromatic numbers of these subgraphs.

All Faculty, staff, students and guests are welcome to attend