

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

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Date: Wednesday, February 13, 2019

Time: 10am

Location: ENG 210

Recent Problems in Hypergraph Saturation

Abstract:

Extremal graph theory is the branch of mathematics concerned with maximizing or minimizing some parameter across a restricted set of graphs. The most studied problem in extremal graph theory involves maximizing the number of edges over all (simple) graphs on a fixed number of vertices that avoid a certain substructure. For example, the seminal problem in this field, solved by Mantel in 1907, studies the maximum number of edges over all triangle-free graphs on n vertices. This was later generalized to all complete graphs by Turán in 1941.

In this talk, we will give a brief overview of extremal problems for graphs and hypergraphs, and then talk about some recent advances on the saturation problem, which is a minimization problem, in some sense the dual of the classical extremal question of maximizing the number of edges.

ALL FACULTY, STAFF, STUDENTS AND GUESTS ARE WELCOME TO ATTEND