

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

Dr. Bill Kay

Department of Mathematics, Ryerson University

Date: Wednesday, January 30, 2019

Time: 10am

Location: ENG 210

Induced Saturation in Posets

Abstract:

In Graph Theory, we say that a graph G is H saturated if G contains no copy of H as a subgraph, but on addition of any edge G contains a copy of H . For example, any bipartite graph is triangle saturated. The *saturation number* of a graph H (denoted $\text{sat}(n, H)$) is the minimum number of edges in an H saturated graph on n vertices. Saturation serves as a complementary question to extremal numbers and has been well studied in the case of graphs. Note that for any combinatorial object with a subobject relation we have a notion of saturation. In this talk, we introduce (induced) saturation in the realm of Partially Ordered Sets (Posets).

Joint work with Michael Ferrara, Lucas Kramer, Ryan R. Martin, Benjamin Reiniger, Heather C. Smith, Eric Sullivan

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