Winter Colloquium Series

Some Applications of the Combinatorial Nullstellensatz and Discharging Method

Dr. Sogol Jahanbekam
University of Colorado, Denver

Abstract:

The Discharging Method is a tool in a two-step approach to inductive proofs of some problems in graph theory. It is used to prove that a global hypothesis guarantees the existence of some desirable local configurations. The Combinatorial Nullstellensatz is an algebraic tool in combinatorics and number theory. In graph theory it is applied to prove the existence of certain configurations or labelings in graphs. In this talk we briefly talk about these two techniques. We then apply them in some graph coloring and graph labeling problems.

Monday, February 22, 11:05 - 11:50am in 3-1639