

Department of Mathematics and Statistics
COLLOQUIUM

*Boundaries for
Graph Ramsey
Numbers*



Garth Isaak
Lehigh University

A standard party problem is to show that any group of 6 Facebook users contains either a group of 3 mutual friends or 3 mutual non-friends. Ramsey Theory is (roughly) the study of when certain friend/nonfriend patterns are forced to appear in groups. We will review tiny bits of the rich and well known history of classical Ramsey theory, where the patterns are cliques of friends or non-friends, as well as graph Ramsey Theory, where other patterns must appear. Finally, for certain patterns where graph Ramsey numbers can be easily determined, we will discuss more recent work exploring the structure of largest groups avoiding the specified patterns.

TUESDAY, OCTOBER 29

SCIENCE CENTER 199

Refreshments 4:15

Talk 4:30