

GRADUATE STUDENT SEMINAR

4:00 pm, Monday, February 4, 2002

Martin M-105

Alliances in Graphs

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Abstract

Alliances play important roles in ecology, in the military, in society, and in many other applications. Of course, many networks and relationships may be modelled using graphs. In this talk we introduce the brand new study of *offensive* and *defensive alliances* in graphs. Vertices which are allied agree to support each other in the case of an “attack” by vertices that are not part of the alliance. An alliance in which every member is important is called a *critical* alliance. We will study the mathematical properties of alliances, paying special attention to critical alliances.

All graduate students are strongly encouraged to attend. Pizza and discussion afterwards!

For further information see our website at www.ces.clemson.edu/~agorka/seminar/main.html