

Department of Mathematics and Statistics Colloquium  
Student Research Presentations

*The Critical Group of  $KG_{n,2}$*

Ian Hill

Abstract: Let  $KG_{n,k}$  denote the graph with vertices being the subsets of length  $k$  of a set of length  $n$ , where two vertices are adjacent if they are disjoint. This is the Kneser graph. We will look at the critical group of  $KG_{n,2}$  and show a combinatorial approach to prove that a set of configurations of the graph generates the group.

*Dimension Reduction of Gene Expression Data*

Jaylen Lee

Abstract: This study compares elastic net regression models to principal component regression, supervised principal component regression,  $Y$ -aware principal component regression, and partial least squares regression models and their ability to predict tissue age based on DNA methylation levels.

**Wednesday, December 7 at 3:45 in Roop 103**

**refreshments at 3:30**