Stephen G Hartke\* (hartke@unl.edu), Department of Mathematics, University of Nebraska, Lincoln, NE 68588-0130. Computer Methods for Finding Graph Decompositions. Preliminary report.

Integer programming is a powerful technique for modeling and solving combinatorial search problems. However, the common methods of solving integer programs fare poorly when there is a large amount of symmetry present. We will discuss the use of canonical labellings to reduce the search space for the particular application of finding regular graph decompositions. (Received February 04, 2008)