

1023-S1-723

Russell D. Blyth* (blythrd@slu.edu), Department of Mathematics & Computer Science, Saint Louis University, 220 N. Grand Blvd., St. Louis, MO 63103. *Using XGAP to explore the structure of groups.*

The GAP package XGAP provides a graphical interface for GAP in an X Window environment. We discuss examples that show how to use the capability of XGAP to display and interactively explore subgroup lattice diagrams to help students in a first abstract algebra class investigate concepts in group theory. (Received September 21, 2006)