1046-11-1159 **Jennifer Paulhus*** (paulhus@math.ksu.edu), Kansas State University, Department of Mathematics, Manhattan, KS 66506. *Decomposing Jacobian varieties using automorphism groups.*

Jacobian varieties of curves which have many elliptic curves in their decompositions have interesting applications to rank and torsion questions. Given a curve X with automorphism group G, idempotent relations in the group ring $\mathbb{Q}[G]$ lead to decompositions of the Jacobian of X. In this talk we briefly explain the techniques involved and some recent results obtained from these techniques. (Received September 14, 2008)