

1056-14-642

David J Swinarski* (davids@math.uga.edu), Department of Mathematics, University of Georgia, Athens, GA 30602. *Equations of curves with automorphisms*. Preliminary report.

Curves with automorphisms often provide important special examples for study in algebraic and arithmetic geometry. Unfortunately, there is not yet a general algorithm for writing equations for a curve with a given automorphism group. I will use a combination of representation theory and invariant theory to give equations for a few small genus examples which are of interest both in geometric invariant theory and in studying Jacobians of curves. (Received September 15, 2009)