1024-14-169    **Gretchen L. Matthews\*** (`gmatthe@clemson.edu`), Department of Mathematical Sciences, Clemson University, Clemson, SC 29634-0975. *Automorphisms, isomorphisms, and algebraic geometry codes.*

An algebraic geometry code is an error-correcting code constructed using a curve over a finite field. Such a code is defined by evaluating functions from certain Riemann-Roch spaces at rational points on the curve. In this talk, we discuss automorphisms of the curve and isomorphisms of Riemann-Roch spaces that yield simplified algorithms for algebraic geometry codes. (Received January 07, 2007)