

1163-AI-1177 **Gretchen Matthews*** (gmatthews@vt.edu), Department of Mathematics, Virginia Tech,
Blacksburg, VA 24061. *Toward classifying multipoint codes.*

Algebraic geometry codes are defined by specifying divisors G and D on a curve X over a finite field; codewords arise as functions specified by G are evaluated at points in the support at D . The resulting code is called a one-point code if the support of G has cardinality one and a multipoint code otherwise. Algebraic geometry codes have been shown to have remarkable properties in terms of classical error correction, and they may be studied by considering attributes of the curve and divisors. Closely related are Weierstrass semigroups which govern the dimension of the code. In this talk, we consider to what extent curve automorphisms and Weierstrass semigroups influence the classification of multipoint Hermitian codes, meaning those defined on the Hermitian curve. (Received September 14, 2020)