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**Sarah E. Anderson\*** ([sarah5@g.clemson.edu](mailto:sarah5@g.clemson.edu)), St. Paul, MN 55105. *Stopping sets of algebraic geometric codes from hyperelliptic curves.*

Stopping sets are combinatorial structures that govern the performance of a linear code over the binary erasure channel when coupled with an iterative decoding algorithm. For a code  $C$  with parity-check matrix  $H$  and a set  $S$  of column indices of  $H$ ,  $S$  is a stopping set of  $C$  if and only if the restriction of  $H$  to  $S$  does not have a row of weight 1. Stopping sets of algebraic geometric codes were first studied in 2014 by Zhang, Fu, and Wan. They determine stopping sets of algebraic geometric codes from the rational function field and elliptic function fields by studying related Reimann-Roch spaces. In this talk, we classify stopping sets of algebraic geometric codes codes over hyperelliptic function fields of genus 2. (Received August 10, 2015)