1126-11-362 Beth Malmskog* (beth.malmskog@gmail.com), Katie Haymaker and Gretchen Matthews.

Locally Recoverable Codes with Multiple Recovery Sets: A General Fiber Product Construction.

Locally recoverable codes (LRCs) have benefits for distributed storage applications. Barg, Tamo, and Vladut recently constructed LRCs with one and two recovery sets from algebraic curves. This talk presents a generalization of this construction to $t \ge 3$ recovery sets, using iterated fiber products of curves. Codes with arbitrarily many recovery sets are constructed, employing maximal curves from fiber products devised by Van der Geer and Van der Vlugt. (Received January 17, 2017)