

1145-VS-2526      **Sam Kottler\*** ([sam.kottler@coloradocollege.edu](mailto:sam.kottler@coloradocollege.edu)). *Parameters of locally recoverable codes with multiple recovery sets*. Preliminary report.

A code is a set of vectors, called codewords. Usually we look at codes that actually form vector spaces. Codes can be used for redundancy and error correction, when storing or transferring data. One way to do this is with locally recoverable codes (LRCs) in which any position of a codeword can be recovered from a fixed subset of other positions, called a recovery set. An interesting problem is called the availability problem, which addresses constructing LRCs with multiple disjoint recovery sets for each position. This project studied minimum distance and other parameters of families of such codes constructed from curves over finite fields. (Received September 25, 2018)