1145-14-2267   **Sean Ballentine*** (`seanbal@math.umd.edu`), 9200 Edwards Way, Unit 108, Hyattsville, MD 20783. *Codes With Hierarchical Locality from Maps Between Algebraic Curves.*

In applications of coding to distributed storage systems it is important to consider the efficiency of the repair of erasures. Locally recoverable codes provide a way to repair simple erasures without having to access every storage node. When constructing locally recoverable codes we fix an erasure threshold under which the recovering can be done locally. In 2015, Sasidharan et al. introduced codes with hierarchical locality, a natural extension of locally recoverable codes in which there are tiers of recoverability handling different amounts of erasures. The main goal of this talk will be to examine constructions of such codes from towers of projective curves. (Received September 25, 2018)