1172-11-266 Mckenzie West* (westmr@uwec.edu), María Chara, Beth Malmskog, Ernest Guico and Bianca Thompson. Explicit Examples of Codes from Curves. Preliminary report.

Mathematical codes are used to store information efficiently while still allowing for recovery in the case of partial loss. More recently work has begun to construct codes using the algebraic geometric properties of curves over finite fields. In this talk, we'll discuss the general construction of codes from curves and provide a few explicit examples. This is a preliminary report of work started at the inaugural Rethinking Number Theory workshop. (Received August 30, 2021)