Deguang Han, David R Larson, Sam L Scholze* (scholzsl@uwec.edu) and Wenchang Sun. Signal Reconstruction from Frame Erasures.

In this talk, I will discuss three new, efficient methods of reconstruction from frame erasures. Where older reconstruction procedures require an $n \times n$ matrix inversion to reconstruct an n-dimensional signal from L erasures, each of these methods only requires an $L \times L$ matrix inversion. Algorithms for each reconstruction scheme will be presented. We will then discuss the stability of each reconstruction scheme in the presence of additive channel noise. Numerical experiments will also be presented pertaining to channel noise. (Received February 12, 2018)