1145-52-2313   **Dustin G. Mixon*** (`mixon.23@osu.edu`). *SqueezeFit: Label-aware dimensionality reduction.*
Given labeled points in a high-dimensional vector space, we seek a low-dimensional subspace such that projecting onto this subspace maintains some prescribed distance between points of differing labels. Intended applications include k-nearest neighbors and compressive classification. This talk will introduce a semidefinite relaxation of this problem, along with various performance guarantees. (Joint work with Culver McWhirter (OSU) and Soledad Villar (NYU).) (Received September 25, 2018)