

1116-H1-1258 **Gilbert Strang***, Mathematics, E17-421, MIT, 77 Massachusetts Ave., Cambridge, MA 02139.
Eigenvalues and Singular Values in Theory and Practice.

The Singular Value Decomposition completes the “big picture” of linear algebra. It finds orthonormal bases for all 4 fundamental subspaces, and it diagonalizes A . The SVD has become central in so many applications (like face recognition). This talk and the website math.mit.edu/linearalgebra of the new edition ILA5 will include videos to show ideas and applications of two diagonalizations: eigenvalues and singular values. (Received September 18, 2015)