Meeting: 1003, Atlanta, Georgia, SIAMMINI1, SIAM Minisymposium on Undergraduate Linear Algebra and Differential Equations: Projects, Problems, and Issues

1003-15-226 **Gilbert Strang** and **William Briggs***, Department of Mathematics, University of Colorado at Denver, Denver, CO 80217. *Seeing and Hearing Eigenvalues in Animation.*

The course website web.mit.edu/18.06 has been helpful to students of linear algebra. This summer we added a new way to demonstrate the meaning and purpose of eigenvalues: graphics with sound. The AMS Special Session will see and discuss two 3-minute examples – one on powers of matrices and the other on the visualization of eigenvectors. (There are parallel Java applets for the user to input other matrices. The graphics with voiceover explanation need only to download FlashPlayer.) We hope that these examples, which select five matrices for illustration, will give students a more active understanding of linear algebra. (Received August 31, 2004)