

1014-U1-1026      **Thomas Hern\*** ([hern@bgsu.edu](mailto:hern@bgsu.edu)), Dept. of Mathematics and Stat., Bowling Green State Univ., Bowling Green, OH 43403, and **David Meel** ([meel@bgsu.edu](mailto:meel@bgsu.edu)), Dept of Mathematics and Stat., Bowling Green State Univ, Bowling Green, OH 43403. *In Search of the Singular Value Decomposition.*

We present a web applet which leads to the SVD. We teach this topic in a second linear algebra course. The driving problem is to describe the image of the unit circle under a linear transformation. We want the axes, and their lengths, of the image ellipse (in fact, that it is even an ellipse). The demo was originally developed as part of the ATLAST project, but is now implemented as a platform independent applet. It can be used as a tool for student projects and labs, as well as for classroom demos. (Received September 26, 2005)