

1106-VX-2263      **David A. Huckaby\*** ([david.huckaby@angelo.edu](mailto:david.huckaby@angelo.edu)). *A Visual Exploration of the Power Method.*

We will proceed through a sequence of Power Method examples that lead students through an exploration of various facets of the method's convergence. For each example, the convergence is illustrated with an animation in MATLAB/MuPAD. The animation in each successive example vividly reveals one or more characteristics of the convergence—some of them surprising—while simultaneously suggesting more questions and prompting further investigation. Through this guided exploration, students gain intuition into how the Power Method works while deepening their understanding of eigenspaces. The exploration can be used as an interactive classroom demo or as a lab assignment. (Received September 16, 2014)