1035-M1-1567 **David Strong*** (`David.Strong@pepperdine.edu`), Natural Science Division, Pepperdine University, 24255 Pacific Coast Highway, Malibu, CA 90263. *A Java Applet and Tutorial for the Jacobi, Gauss-Seidel and SOR Methods.*

I will discuss a Java applet, tutorial and exercises that are designed to allow both students and instructors to experiment with and visualize the Jacobi, Gauss-Seidel and SOR Methods in solving systems of linear equations. The applet is for working with 2 x 2 systems. The tutorial includes an analysis (using eigenvalues and spectral radius) of these methods. The exercises are designed to be done using the applet in order to more easily investigate ideas and issues that are often not dealt with when these methods are first introduced, but that are fundamental to numerical analysis and linear algebra, such as eigenvalues/vectors and convergence rates. (Received September 20, 2007)