1077-B1-355 **Anne M. Burns*** (aburns@liu.edu), Department of Mathematics, Long Island University, Brookville, NY 11548. *Variation of Parameters.* Preliminary report.

Varying the parameters in a system of differential equations can produce some attractive animations. A system of differential equations involving two dependent variables, x(t) and y(t), can be viewed as a vector field in the xy-plane. For each t a vector in the plane is obtained. This vector has a length and a direction. Traditionally the vector field is plotted over a rectangular grid. In this presentation I will show how to choose certain paths along which to plot the vector field and how to assign colors as functions of length and/or direction. Some of the parameters that can be continuously changed are: the path along which the vector field is plotted, the constants in the equations x(t) and y(t) and the coefficients in the formulas for color and vector lengths. (Received August 25, 2011)