

1056-K1-907 **Paul E Seeburger*** (pseeburger@monroecc.edu), Monroe Community College, 1000 E. Henrietta Rd., Rochester, NY 14623. *Dynamic Visualization Tools for Multivariable Calculus*. Preliminary report.

A tour of an NSF-funded project that seeks to develop geometric intuition in students of multivariable calculus. This online exploration environment allows students (or instructors) to create and freely rotate graphs of functions of two variables, contour plots, vectors, space curves generated by vector-valued functions, regions of integration, vector fields, etc. A series of assessment/exploration activities has also been designed to help students "play" with the 3D concepts themselves, and to assess improvements in geometric understanding gained from these activities. The results of the first year of this assessment will be shared. (Received September 18, 2009)