

1067-J1-2379 **Paul E Seeburger*** (pseeburger@monroecc.edu), 1000 E. Henrietta Rd., Rochester, NY 14623.
Making Calculus Come Alive with Dynamic Visualization. Preliminary report.

A tour of several Java applets developed by the presenter to help students visualize calculus. Although the presenter has developed over 100 applets for various calculus textbooks, all of the applets demonstrated in this presentation can be found on the presenter's webpage. Illustrated concepts include piece-wise functions, tangent lines, sketching derivative graphs from the graph of a function, Riemann sums, accumulation/area functions and the Fundamental Theorem of Calculus, slope fields, washer and shell methods, volumes with a common cross-section, 3D graphs of functions of two variables, parametric curves and surfaces, etc. In addition to his work on applets for visualizing single variable calculus, the presenter is also the PI of an NSF funded project that focuses on helping students visualize multivariable calculus. See <http://web.monroecc.edu/calcNSF>. (Received September 22, 2010)