Elisha Peterson* (elisha.peterson@usma.edu), MADN-Math, United States Military Academy, 646 Swift Road, West Point, NY 10996. Multivariable Calculus Java Applets with Blaise. Preliminary report.

This talk will feature several Java mathlets created using Blaise, a collection of utilities developed by the author for visualizing and exploring mathematics. The emphasis will be on mathlets that help students to visualize sometimes difficult concepts such as the divergence and curl of vector fields, the Fundamental Theorem of Line Integrals, Green's Theorem, Stoke's Theorem, and the Divergence Theorem. We will also discuss the process of creating applets with Blaise, and how the mathlets have impacted students' understanding of these topics. (Received September 21, 2009)