

1035-R1-1901 **Susan Schmoyer*** (susan.schmoyer@usma.edu), Department of Mathematical Sciences, Thayer Hall, West Point, NY 10996, and **Heather A Jackson** (heather.jackson@usma.edu), Department of Mathematical Sciences, Thayer Hall, West Point, NY 10996. *Self-discovery Techniques for Bridging the Gap between Precalculus and Calculus*. Preliminary report.

The leap from college algebra to calculus is difficult for many students. We believe exposure to calculus concepts before students enter a formal calculus course is the key to bridging this gap. The payoff is even greater when students make calculus connections themselves through discovery activities. In this talk we explore hands-on techniques that lead pre-calculus college students to major calculus concepts on their own. Some of these techniques lend themselves to the use of technology; thus, we will also include a discussion of the effectiveness of these technology-driven exercises in helping students better visualize calculus connections. (Received September 20, 2007)