1086-P5-2271 **Audrey Malagon*** (amalagon@vwc.edu) and **Lisa Driskell** (ldriskel@coloradomesa.edu).

Keychain Ziplines: A practical way to study velocity in the calculus classroom.

This talk will discuss an inquiry-based calculus activity to introduce the concepts of average velocity and instantaneous velocity. Using materials that are easy to find, students create a "zipline" for a weighted keychain and measure distances and times to calculate average velocities. They then explore the idea of instantaneous velocity. This activity has been tested as a first day activity in classrooms at a variety of institutions and we have found it to work well as a team building activity and introduction to the first concepts of calculus. (Received September 25, 2012)