## 1116-K1-2560Audrey Malagon\* (amalagon@vwc.edu) and Lisa Driskell (ldriskel@coloradomesa.edu).Snails in a Tide Pool & Other New Modeling Applications for Mathematics Courses.

In this talk, we discuss new and innovative modeling scenarios for common calculus and differential equations topics using real world data. Specifically we present an application of linear first order differential equations and limited growth that relates to temperature change in ocean tide pools and the insulation provided by a snail's shell. This project can be done in or out of class. Data used in this scenario was gathered from Virginia Wesleyan College's marine research vessel in collaboration with biology students and faculty with support from the SIMIODE: Systemic Initiative for Modeling Investigations and Opportunities with Differential Equations project. (Received September 22, 2015)