1135-97-276 **Julie Barnes*** (jbarnes@email.wcu.edu). Mathematical visualization using Wikki Stix, yarn, or pipe cleaners. Preliminary report.

In this talk, we discuss using hands-on class activities involving Wikki Stix, yarn, or pipe cleaners to help students more deeply understand topics from a variety of undergraduate mathematics courses. Examples include physically acting out function transformations, using properties of derivatives to graph associated functions, and dynamically demonstrating the epsilon-delta definition of continuity. In all cases we look at logistical considerations and observed benefits from using these activities. (Received August 17, 2017)