1096-L1-1096 **Harrison E. Stalvey*** (hstalvey1@gsu.edu), **Draga Vidakovic** and **Mariana Montiel**.
Developing the Notion of Function Between Sets of Equivalence Classes from the APOS Perspective. Preliminary report.

A substantial amount of research has explored students' general understanding of the concept of function, but a limited amount of literature exists on how students cope in contexts in which the domain and range are sets of objects that are not single numbers. Here, we report on how mathematics students who are transitioning to advanced mathematics courses might cognitively develop the notion of function between sets of equivalence classes, particularly in the context of $\mathbb{Z}_n$. Using APOS theory as our theoretical framework, we analyze empirical data to determine the possible mental constructions that are involved in understanding the notion of 'well-defined'. We conclude with a genetic decomposition, or a summary of the mental constructions, based on our analysis. (Received September 12, 2013)