## 1156-91-413 **Olivia J. Chu\***, ochu@princeton.edu. *Evolutionary and Behavioral Dynamics in Group-Structured Populations*. Preliminary report.

It is well known that population structure is crucial to a system's dynamics. In human populations, group memberships are critical. Humans often meet and interact with each other due to common group memberships. There exist network-based models to study human dynamics, but they generally do not allow for the multiple group affiliations that we see in real societies. In this talk, I will discuss a model that explores how behaviors influence how membership in multiple groups materializes in the first place, as well as the dynamics that arise out of interactions in an evolutionary game theory setting in which individuals are already distributed across groups. (Received January 28, 2020)