

1135-91-2813      **Oyita Udiani\*** ([oyita.udiani@nimbios.org](mailto:oyita.udiani@nimbios.org)), NIMBioS, University of Tennessee, Knoxville, TN 37966. *Models of social advocacy on networks.*

Members of the public hold opposing positions on a multitude of social issues. For example, although there is scientific consensus that climate change is caused by human activity, a sampling of popular media makes it clear that opposing discourses are alive and well in the United States. As with many social issues, there are several organizations working at the grassroots to convince the public that climate change is of concern, and should be addressed through changes in policy. Achieving success depends on a number of factors, but none is perhaps more important than understanding how to mobilize and persuade individuals within communities of interest. In this talk, I will introduce a mathematical model to study this question. The model investigates trade-offs between common persuasion strategies (e.g., individual vs. collaborative) relative to their implementation costs and ability to achieve specific network objectives. Examples discussed include campaigns to convert skeptics (maximizing prevalence of beliefs) vs. mobilize converts (maximizing extremism of beliefs). (Received September 26, 2017)