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Todd Kapitula* (tmk5@calvin.edu), Department of Mathematics and Statistics, Grand Rapids, MI 49546. *Plurality and Stability in Continuous Time Opinion Formation on Weighted Directed Graphs*. Preliminary report.

Ideas that challenge the status quo either evaporate and are forgotten, or eventually become the new status quo. An ODE mathematical model of such behavior arises when taking a mean field approximation over a large number of interacting individuals. Such a model was recently derived and analyzed by Strogatz et al. for the case of one community. Working with four undergraduate students at SUMMER@ICERM 2016 at Brown University, the Strogatz model was extended to include multiple communities and their interaction by using a weighted directed graph. Preliminary results will be presented concerning the dynamics associated with the extension. (Received January 17, 2017)