Abstract Submitted
for the MAR14 Meeting of
The American Physical Society

Bridging the gap: From computational agent-based models to analytical tractability LOUISE DYSON, LUIS F. LAFUERZA, ALAN J. MCKANE, BRUCE EDMONDS, Univ of Manchester — In order to investigate complex inter-dependent systems such as those found in the biological and social sciences, one is often left trying to examine complicated, descriptive models. To aid in understanding these it would be helpful to develop tools for examining how these relate to simpler models with understandable and analysable mechanisms. We describe a way of analysing the formation of a social network in a complex computational model that represents voting patterns in a population of agents who may live, work and form friendships together. Once the network is formed, we examine the spread of "intention to vote" and compare our findings with those found in the descriptive, agent-based model.

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Date submitted: 10 Jan 2014 Electronic form version 1.4