1128-05-155 **Ewa Joanna Infeld*** (evainfeld@ryerson.ca), 350 Victoria Street, Toronto, ON M5B 2K3, Canada. *Iterated Local Anti-Transitivity Network*. Preliminary report.

In adversarial networks such as certain market graphs, nodes are adjacent if they are antagonists, negatively correlated stocks or exhibit opposing characteristics. Negative correlation is also studied in social networks, where anti-transitivity makes precise the adage "the enemy of my enemy is my friend." We present a simplified, deterministic model for negative correlation in complex networks called the Iterated Local Anti-Transitivity Network. It is a recursively generated graph with low clustering. At each time-step, for each existing node x, we create a clone x' and connect it to every node y that has existed at the previous step that was not in the neighbor set of x. We then recover several properties of this graph, including the degree distribution, average distance, cop number, and the clustering coefficient. This is joint work with A. Bonato, H. Pokhrel and P. Pralat. (Received February 23, 2017)