Bernard P Brooks* (bpbsma@rit.edu), 85 Lomb Memorial Dr, Rochester, NY 14623, and Nicholas DiFonzo and David S Ross. Mathematical modelling of rumor transmission during a dialogue.

A dynamical system based upon empirical rumor research is derived to model rumor transmission in a dialogue. The propagation function addresses five factors of rumor transmission identified in the literature; uncertainty, anxiety, belief, novelty and ingroup/outgroup connection status. Monte Carlo simulations of the dialogue rumor propagation function flowing over various network topologies are presented. (Received September 26, 2006)