TITLE: Changing Neighbors: Actions Models and Graph Products for Dynamics in and of Social Networks

Diffusion in social networks has recently become the topic of study for several groups of logicians. Several types of novel model transformers have been suggested, from defining particular operations modeling individual diffusion phenomena, to more generic approaches like transition systems and "dynamic transformations". So far, these approaches have dealt only with diffusion of properties through fixed networks, but not with the dynamics of networks themselves.

In this talk, I will illustrate how standard tools from dynamic epistemic logic -- action models and product update -- may be used as a generic framework for defining model transformers capturing diffusion processes in social networks. However, by the nature of product update, the ways the social network itself may be altered by it and action models are limited. The talk is concluded by introducing and discussing alternative graph products and their network modifying powers.