

TITLE: Opinion dynamics in social networks – a logic approach

Opinion dynamics in social networks have been widely studied by philosophers, statisticians, economists, engineers and others using a variety of different mathematical models. An early, and well-known, example of such a model is the model by DeGroot, Lehrer and Wagner, where individual's opinions are model by real numbers between 0 and 1 and where the dynamic is given a simple averaging over network neighbors as the updating rule. Another kind of models is simple diffusion models, where opinions are modeled as discrete entities and the dynamic is some form of threshold dynamics. In this talk, I will briefly sketch such models of opinion dynamics and introduce several logics to reason about them. In addition to explaining how logics can be used to reason about opinion dynamics in social networks, I will also try and argue why a logic approach to social network analysis is a fruitful enterprise