

SOE 2: Invited Talk Rainer Hegselmann: Opinion Formation

Time: Monday 9:30–10:15

Location: H11

Invited Talk

SOE 2.1 Mon 9:30 H11

Two-armed bandits versus Carnapian truth seekers and epistemic free riders with bounded confidence — ●RAINER HEGSELMANN — Frankfurt School of Finance & Management, Adickesallee 32-34, 60322 Frankfurt

In its original version, the so-called bounded confidence model only knows the exchange of opinions among individuals. The individuals may have formed their opinions beforehand through systematic experience (observation, experimentation), but no signal from the external world enters the modeled social exchange process. Later, Ulrich Krause and I extended the model to include a signal from the external world acting on the social exchange process. However, we put all details of this influence process into a black box.

In my talk I will present how this black box can be opened: The social exchange process of the bounded confidence model is linked to an explicitly modeled experimentation and evaluation of experimentally obtained data. The starting point is a community that has a choice between n strategies ($n = 2$), each leading to success with a constant but unknown probability. Such problems are known as n -armed-bandit-problems. It is further assumed that the community consists only partly of truth-seekers who 'conscientiously', following certain rules from Carnap's inductive logic, evaluate their experiences. Another part of the community consists of epistemic free riders, who do no statistics at all, but opportunistically follow their close-by neighbors. The talk will show that such a setting allows to answer questions about the efficiency of different epistemic policies.