AKSOE 1: Dynamics of Groups and Organizations I

Time: Monday 9:30–10:15 Location: H8

Invited Talk AKSOE 1.1 Mon 9:30 H8 Dynamics of language competition: biligualism and social structure — •VICTOR EGUILUZ — IMEDEA, (CSIC-UIB), Palma de Mallorca, Spain

In the general context of dynamics of social consensus, we study an agent based model for the competition between two languages, addressing the role of bilingualism and social structure. We restrict our work here to the case of socially equivalent languages. In a regular network, we study the formation of linguistic domains and interaction in the

boundaries. We analyze also a small world social structure, in order to capture the effect of long range social interactions throughout the network. In both cases, a final scenario of dominance of one language and extinction of the other is obtained, but with smaller times for extinction in the latter case. We compare our results to our previous work on the agent based Abrams-Strogatz model where bilingualism was not taken into account, discussing the role of bilingual individuals in the problem of language competition depending on each social structure.