带有固执个体的级联观点动力学的同步研究（洪奕光）

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This article investigates a two-timescale opinion dynamics model, named the concatenated Friedkin–Johnsen (FJ) model, which describes the evolution of the opinions of a group of agents over a sequence of discussion events. The topology of the underlying graph changes with the event, in the sense that the agents can participate or less to an event, and the agents are stubborn, with stubbornness that can vary from one event to the other. Concatenation refers to the fact that the final opinions of an event become initial conditions of the next event. We show that a concatenated FJ model can be represented as a time-varying product of stochastic transition matrices having a special form. Conditions are investigated under which a concatenated FJ model can achieve consensus in spite of the stubbornness. Four different sufficient conditions are obtained, mainly based on the special topological structure of our stochastic matrices.

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