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Consensus for the Hegselmann–Krause type model with non-invasive control

This is a joint work with Prof. Agnieszka B. Malinowska.

In the presentation, the Hegselmann–Krause type model with leadership is considered. We look for optimal control strategies for the system to attain a consensus in such a way that the control mechanism is included in the leader dynamics. Necessary optimality conditions are obtained by the use of the weak maximum principle for control problems on time scales. The validity of the proposed control strategy is illustrated by examples.

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