

Stability of stationary solutions to Allen-Cahn type opinion formation models

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In this talk, after a short introduction to the kinetic theory, its methods and applications, we would like to introduce an Allen-Cahn type equation obtained from an integro-differential Boltzmann equation exposed in [3] for the description of opinion formation and perform a linear stability analysis with the help of some classical tools of spectral theory. Our analysis compares a nonlinear and a simplified linear model and their different microscopic interaction rules and such models are investigated from the numerical point of view as well. Moreover, a possible generalisation of the analysis to the continuous-opinion model presented in [5] is suggested.

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