

Phase Separation in Nonlocal Multispecies Models

Martin Burger
FAU Erlangen-Nürnberg
martin.burger@fau.de

In this talk we discuss some nonlocal variational problems arising as macroscopic steady states of some many particle systems with different species. We will demonstrate the emergence of phase separation effects, explained from relations to Cahn-Hilliard Systems, and network formation, whose theoretical understanding is still rather open. We will also comment on corresponding evolution equations formulated in terms gradient flows, e.g. in Wasserstein spaces.