

Yuko Nagase

Existence of solution for a stochastic CH/AC equation

In this presentation, we consider a Cahn-Hilliard/Allen-Cahn equation which was introduced by Karali-Katsoulakis as a simplification of a mesoscopic model for multiple microscopic mechanism in surface process. In a suitable scaling, its singular limit is mean curvature flow, similarly to Allen-Cahn equation, but with a different mobility. We consider a stochastic version of this equation and show existence of solution and of its density.

This is a joint work with Prof. D.C. Antonopoulou, Prof. G.D. Karali and Prof. A. Millet.