Ergodicity of Stochastic Curve Shortening Flows

Max von Renesse (TU Berlin)

We discuss a model of curvature flow for a $1+1$ dimensional interface in an $2D$ isotropic Brownian flow. Well posedness of the dynamics is established in the classical variational SPDE framework, using a modified coercivity condition. In the additive noise case we also show ergodicity by adapting the lower bound technique proposed recently by Komorowski, Peszat and Szarek.