

# Stabilization by rough noise for an epitaxial growth model

Johannes Rimmelé (Augsburg)

In this article we study a model from epitaxial thin-film growth. It was originally introduced as a phenomenological model of growth in the presence of a Schwoebbel barrier, where diffusing particles on a terrace are not allowed to jump down at the boundary.

Nevertheless, we show that the presence of arbitrarily small space-time white noise due to fluctuations in the incoming particles surprisingly eliminates all non-linear interactions in the model and thus has the potential to stabilize the dynamics and suppress the growth of hills in these models.