Nao Hamamuki

Generalized curvature flow equations appearing in evaporation- condensation model by Mullins

In 1957 Mullins introduced a theory of the development of thermal grooves due to evaporation-condensation. The equation is given by generalized curvature flow equations. In this work it is shown in more general setting that solutions of the generalized curvature flow equations asymptotically converge to the self-similar solution of the well-known curvature flow equations for graph. We also give some estimates for the depth of the thermal groove.