

Abstract:

Dislocations are line defects moving in crystals.

I will give an introduction to the modelling of the dynamics of these dislocations.

Geometrically, the motion is described by the normal velocity to the line which depends on the whole shape of the line itself.

I will present some recent results and will show that in a certain limit the motion of a single dislocation is well approximated by a variational anisotropic mean curvature motion.