Séminaire

le mardi 17 décembre à 15h55 au laboratoire LEGI, amphiteatre K118 Site Bergès 1209 Rue de la Piscine, 38610 Gières.

Anisotropy of surface kinetics based on Burton-Cabrera-Frank type model - history and review

By Etsuro Yokoyama (Computer Centre, Gakushuin University, Tokyo, Japan)

Abstract:

30 years ago, a numerical model of the formation of patterns during the growth of snow crystals was done by YK (1990). In that work, anisotropy of surface kinetics derived from the lateral motion of steps, for which the kinetic coefficient has singularities in the form of deep cusps, plays a very important role in the formation of faceting patterns of snow crystals.

This talk is focused on the kinetic coefficient for growth/sublimation of crystals from the following points of view:

- 1) comparison with in-situ measurement of elementary steps grown from vapor, and
- 2) asymmetry of the kinetic coefficient relative to the equilibrium point.