

PHYSICS DEPARTMENT COLLOQUIUM

“Laplacian Growth: taming singularities of growing patterns and stochastic geometry”

BY

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A broad class of non-equilibrium growth processes in two dimensions have a common law: the velocity of the growing interface is determined by the gradient of a harmonic field (Laplacian growth). This kind of growth is unstable, giving rise to fractal singular patterns.

Recently it has been recognized that the theory of Laplacian growth is deeply related to fundamental problems of few modern branches of theoretical physics unified under the theme of "Stochastic Geometry".

In the talk I plan to review the problem (defying solution for more than hundred years), some recent progress and connections to branches of physics other than hydrodynamics.

THURSDAY, December 7, 2006
4:00 PM IN 102 JFB
REFRESHMENTS AT 3:30 PM IN 219 JFB