Pierre Le Doussal, ENS Paris

PINNING, GROWTH AND MEMORY(IES)

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Cologne Colloquium in Celebration of Prof. Thomas Nattermann's 70th Birthday

Tuesday, January 30, 2018
4:45 pm
Physikalische Institute Köln
Lecture Hall III
Zülpicher Straße 77

Join us before for coffee and biscuits
at 4:30 pm in the foyer

Prof. Pierre Le Doussal

Prof. Thomas Nattermann

Starting from examples of experimental systems which exhibit growth and pinning I will give an introduction into the physics of elastic systems with quenched disorder in non-equilibrium situations. We review developments in the description of depinning and avalanches, as well as in the study of the Kardar-Parisi-Zhang (KPZ) class of stochastic growth. We introduce some of the analytical methods which lead to predictions testable (and sometimes tested) in experiments. Our last example is the calculation of memory effects in the KPZ class in expanding geometries which illustrates the remarkable connections between growth and disordered systems.

* Afterwards we invite you for drinks in honor of Thomas Nattermann.

University of Cologne