

Universidade Federal da Paraíba Centro de Ciências Exatas e da Natureza Programa de Pós-Graduação *Stricto Sensu* em Física

Colóquio

"Spin models critical behavior from the out-of-equilibrium dynamics generated by rough surfaces"

RESUMO: Spin models Monte Carlo methods are used to map the corresponding spin-like configurations to a solid-on-solid growth model. The growth exponents, and the Hurst exponent, are calculated. From the dynamics generated by this far-from-equilibrium kinetic roughening of the surface one is able to characterize the corresponding equilibrium magnetic properties of the original model, such as the high temperature Berezinskii-Koserlitz-Thouless (BKT) transitions, the low temperature long-range ordered phase transitions, as well as the conventional second-order phase transitions. The method is applied to the two-dimensional XY and clock models.

Prof. Dr. João Antônio Plascak UFPB

7/abr/2016

16h00

Auditório da Pós-Graduação em Física (novo prédio)