

Stochastic structure of .critical. percolative and growth systems

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Abstract: More than 50 years of studies of percolative and growth systems led to a very reach body of knowledge, and introduction of deep mathematical concepts in fields ranging from Probability and Ergodic Theory, Dynamical Systems, to Complex and Harmonic Analysis.

In my talk I will review recent progress in this area, will explain new techniques and ideas, and their relation with some well known concepts of renormalization. In particular, I will focus on studies of stochastic interacting systems such as spread of viruses in dynamically changing networks, electron deposition or formation of patterns in DLA growth.