TBA

Mardi 27 Mars 2018, 10 :30
IHES, Amphi. Léon Motchane(Cours des Professeurs Permanents de l'IHES)
Domaines : hep-th

Titre : *The Self-Avoiding Walk Model (4/4)*

Orateur : **Hugo Duminil-Copin (IHES)**

Résumé : *The course will focus on rigorous results for the self-avoiding walk model on lattices, with a special emphasis on low-dimensional ones. The model is defined by choosing uniformly at random among random walk paths starting from the origin and without self-intersections. Despite its simple definition, the self-avoiding walk is difficult to comprehend in a mathematically rigorous fashion, and many of the most important problems illustrating standard challenges of critical phenomena remain unsolved. The model is combinatorial in nature but many questions about the stochastic properties of these random paths can be solved by combining nice combinatorial features with probabilistic techniques. In the course, we will describe some of the recent techniques developed in the area, including the use of discrete holomorphicity to understand the model on the hexagonal lattice.*