

Pierre-François Rodriguez (IHÉS Bures sur Yvette)

Around random walks and percolation

We will discuss recent progress regarding the geometry of some canonical strongly correlated fields in three and more dimensions.

In particular, we will present results on the percolation problem for level-sets of the Gaussian free field, first investigated by Lebowitz and Saleur in 1986.

We will also describe their links with various fragmentation questions for random walks.