概率论系列报告

报告题目(Title)：**No exceptional words for site percolation on Z^3**

报告人(Speaker)：Pierre Nolin(City University of Hong Kong)

时间(Time)： 5 月 18 日(周一)下午 2:00-3:00

地点(Venue)：zoom 会议 (ID：966 3881 7180)

摘要(Abstract)： Bernoulli percolation is a model for random media introduced by Broadbent and Hammersley in 1957. In this process, each vertex of a given graph is occupied or vacant, with respective probabilities p and 1-p, independently of the other vertices (for some parameter p). It is arguably one of the simplest models from statistical mechanics displaying a phase transition as the parameter p varies, i.e. a drastic change of behavior at some critical value p_c, and it has been widely studied. Benjamini and Kesten introduced in a 1995 paper the problem of embedding infinite binary sequences into a Bernoulli percolation configuration, known as percolation of words. We give a positive answer to their Open Problem 2, which had stayed widely open since then: for percolation on Z^3 with parameter p=1/2, we prove that almost surely, all words can be embedded. We also discuss various extensions of this result. This talk is based on a joint work with Augusto Teixeira (IMPA) and Vincent Tassion (ETH Zürich).

欢迎参加