## 概率论系列报告

报告题目(Title): The hitting probabilities and Fourier dimensions of random covering sets 报告人(Speaker):李兵(华南理工大学) 时间(Time): 10月14日(周一)下午 2:00-3:00 地点(Venue): 北京大学理科一号楼 1513

摘要 (Abstract): A general covering problem addresses the question whether each point is covered by infinitely many sets and leads to the study of a type of limsup set which naturally appear in probability theory, fractal geometry, number theory and dynamical system etc. Radom covering problem dates back to 1897 when Borel investigated questions related to random placement of circular arcs in the unit circle. The Dvoretzky random covering problem is to find the conditions for which almost surely every point on the circle is covered infinitely many times by a sequence of random intervals with decreasing lengths and random initial points (an i.i.d. sequence of random variables uniformly distributed on the circle). It has drawn a lot of interest of many mathematicians for the last decades and the sizes of the random covering sets have been widely studied. The Hausdorff and Fourier dimensions, hitting probabilities of random covering sets will be given in the talk.

欢迎奉加