國 立 中 央 大 學

統 計 研 究 所

學 術 演 講

主 講 人：**James C. Fu 教授（Department of Statistics, University of Manitoba, Winnipeg, Canada）**

講　　題：**Boundary Crossing Probabilities for High-Dimensional Brownian Motion**

時　　間：**105 年 12 月 13 日（星期二）上午 11：00 ～ 12：00**

地　　點：**中央大學鴻經館 M429室**

茶　　會：**上午 10：30 ～11：00**　　地　　點：**鴻經館 510 室**

ABSTRACT

Fu and Wu (2010) studied the two-sided non-linear boundary crossing probabilities for one-dimensional Brownian motion and the related processes by using the finite Markov chain imbedding technique. The technique provides an efficient numerical method to compute the boundary crossing probabilities. Boundary crossing probabilities for one-dimensional Brownian motion have been discussed in considerable many studies; however, there isn't any general result on boundary crossing probability for high-dimensional Brownian motion. In this manuscript, we extend the Fu and Wu's results for high-dimensional Brownian motion. In particular, we obtain the rate of convergence for high-dimensional boundary crossing probabilities. Numerical results are also provided to illustrate our results.

◎敬請張貼

歡迎參加◎