國 立 東 華 大 學 應 用 數 學 系
專 題 演 講

主講人：鄧文舜教授

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講　　題：Averaged Shifted Chi-square Test

時　　間：100年9月30日(星期五)15:10-16:50

摘　　要

A simple procedure based on the average of shifted chi-square statistics (ASCS) is proposed to improve the classical chi-square procedure for testing whether a random sample has been drawn from a specified continuous distribution. We repeatedly partition the sample space for a number of, say ℓ, times to obtain ℓ respective chi-square statistics. The proposed test statistics is defined as the average value of the resultant ℓ shifted chi-square statistics. We prove that the proposed ASCS is asymptotically distributed as a weighted sum of a finite number of simple chi-square variables by the theory of *U*-statistics. The proposed procedure is shown to be markedly less sensitive to the choice of anchor position and Monte Carlo experiments demonstrate that it leads to noticeable gains in power. (This is a joint work with J.-S. Wu)

上列演講地點於理學院A324會議室舉行

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