

國立政治大學統計學系 學術演講

主講人：姜杰 助理教授 (淡江大學數學系)

題目：Tolerance interval-based hypothesis testing for the similarity between two independent populations

時間：民國 114 年 3 月 3 日 (星期一) 下午 1:30

地點：國立政治大學樓逸仙樓 050101 教室

摘要：

In many fields, determining whether two responses are equivalent or similar is often of interest. However, how similar is similar? Testing the mean difference traditionally offers a statistical answer to the question, but this might be not enough when the two populations have heterogeneous variances. Furthermore, an additional test for assessing variances may lead to multiple adjustments for the error rates. In this study, we suggest testing whether a certain proportion of the test population is included within a certain proportion of the reference population. In doing so, accuracy and precision can be assessed simultaneously by tolerance interval-based hypothesis testing. An asymptotic distribution is derived to calculate statistical characteristics such as power, p-value, and required sample size. Suitable statistical properties are demonstrated by simulation.

歡迎參加

統計系敬邀