

國立政治大學統計學系

學術演講

主講人：Prof. Arthur B. Yeh (Department of Applied Statistics and Operations Research, Bowling Green State University)

題目：An Extension of Holm's Weighted Step-Down Multiple Testing Procedure with Applications to Quality Control

時間：民國 110 年 5 月 3 日 (星期一) 下午 1：30

地點：國立政治大學逸仙樓 050101 教室

摘要：

Holm's seminal work in 1979 (and later in 1999) of a sequentially rejective multiple testing procedure (which comes to be known as Holm's step-down procedure) has gained prominence in the last 10-15 years, especially in the area of micro-array gene expression data analysis. In this presentation, I will discuss an extension of the Holm's step-down procedure, particularly with respect to the weighted step-down testing procedure. The extension is a proposed confidence method that uses parameter priority, while keeping the elegance and simplicity of Holm's weighted testing procedure. I will also discuss the utilization of Holm's step-down procedure for constructing control charts for monitoring a mixture of correlated variables, continuous, counts, and categorical variables.

If time permits, I will briefly discuss a second extension of the Holm's weighted step-down procedure. The second extension is a proposed weighted step-down confidence method that generates pre-scribed level of confidence regions for simultaneous estimation of vectors of parameters. In essence, the second extension gives rise to weighted step-down confidence region procedure for vectors of parameters.

歡迎參加

統計系敬邀