東海大學統計學系學術演講

時　間：114 年 9 月 23 日（星期二下午 14:10~15:00）

地　點：管理學院新大樓 M242

主講人：彭健育 教授 (中央研究院 統計科學研究所)

講　題：Optimal test planning for degradation analysis

Abstract

Before conducting a degradation test, it is essential to determine fundamental issues about decision variables. These include determining the required sample sizes, the termination time of sample testing, and the number of measurements, particularly in initial experiments with limited budgets. Consequently, devising cost-constrained optimal test plans becomes a practical concern in degradation tests for highly reliable products. In this talk, I will provide an overview of stochastic processes and their optimal test plans. Some challenges associated with (accelerated) testing plans will be discussed. The development of these optimal test plans, along with their theoretical properties, serves to bring the engineering and statistical communities closer, enabling them to address real-world problems with a more solid foundation.