

# 國立中央大學

## 統計研究所

### 學術演講

主 講 人：彭健育 博士（中央研究院 統計科學研究所）

講 題：Measurement Errors in Degradation Analysis

時 間：105 年 03 月 15 日（星期二）上午 11：00 ~ 12：00

地 點：中央大學鴻經館 M605 室

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

### ABSTRACT

Degradation models are widely used to assess the lifetime information for highly reliable products. When there are measurement errors in monotonic degradation paths, unsuitable model assumptions can lead to contradictions between physical/chemical mechanisms and statistical explanations. This study presents a Levy degradation-based process that simultaneously considers the unit-to-unit variability, the within-unit variability and the measurement error in the degradation data. Several case studies show the advantages of the proposed models. This paper also uses a separation-of-variables transformation with a quasi-Monte Carlo-type method to estimate the model parameters and provides a simple model-checking procedure to assess the validity of model assumptions.

◎敬請張貼

歡迎參加◎