

國立中央大學

統計研究所

學術演講

主 講 人：黃逸輝 教授（淡江大學數學學系）

講 題：**Nonparametric regression calibration in the measurement error models**

時 間：110年05月04日（星期二）上午11：00 ~ 12：00

地 點：鴻經館M327室

茶 會：上午 10：30 ~ 11：00 地 點：鴻經館 M510 室

ABSTRACT

The regression calibration is a convenient method to mitigate the impact caused by the measurement error in covariate. The regression calibration is to substitute the true but unobserved covariate by its conditional mean that conditioning on its surrogate. Since the true covariate is unobserved, the regression calibration may require an underlying distribution assumption on it which is not easy to justify or use deconvolution to estimate it which is slowly converged. In this talk, a nonparametric regression calibration based on error augmentations is proposed. By error augmentation, the regression calibration can be done as a traditional kernel regression estimation. I will also argue that how this approach is feasible for prediction problems in general. Our method is also a solution for the informative censoring problem in an accelerated failure time model when measurement errors present.