



統計科學研究所  
INSTITUTE OF  
STATISTICAL SCIENCE



## 學 術 演 講

講 題：Causal mediation analysis of non-mortality outcomes with follow up truncated by death: Survivor natural direct and indirect effects

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時 間：2024年4月8日(星期一)，10:30-12:00

地 點：統計所B1演講廳

### Abstract

In the context of mediation analysis, the presence of death-truncated variables poses a challenge as conventional measures fail to accurately assess the role of a mediator in the effect of a treatment on a primary non-mortality outcome. This study introduces novel estimands – survivor natural direct and indirect effects – to address this issue. Exchangeability assumptions are employed to mitigate confounding effects, and empirical expressions are derived using information from a pretreatment surrogate variable akin to an instrumental variable. Three estimation approaches – model parameterization, generalized method of moments, and data-adaptive G-computation – are developed and applied using data from a National Emphysema Treatment Trial to illustrate the proposed method.

※ 茶 會：10：10開始。

※ 實體與線上視訊同步進行。