

# 中央研究院統計科學研究所

## 學術演講

講題：Landmark Alternating Diffusion: Efficient Sensor Fusion Through Landmark Diffusion

演講人：Prof. Mao-Pei Tsui (崔茂培 教授)

Department of Mathematics, National Taiwan University

時間：2025-05-19 (Mon.) 10:30-12:00

地點：Auditorium, B1F, Institute of Statistical Science; The tea reception will be held at 10:10.

備註：Online live streaming through Cisco Webex will be available.

### Abstract

Alternating Diffusion (AD) is a powerful sensor fusion algorithm but suffers from computational limitations. We introduce Landmark Alternating Diffusion (LAD), an efficient alternative inspired by landmark diffusion. LAD uses a landmark set to streamline the fusion process, achieving superior computational efficiency compared to AD. We theoretically analyze LAD and demonstrate its application to automatic sleep stage annotation using EEG data, showing comparable performance with significantly reduced computation time. This is joint work with Xing-Yuan Yeh, Hau-Tieng Wu, and Ronen Talmon.



中央研究院

統計科學研究所