

DEPARTMENT OF COMPUTER SCIENCE

SEMINAR

**2025 SERIES** 

## On the Identifiability of ODEs/SDEs for Causal Inference

DATE & TIME 12 MAY 2025 (MON) 9:30 - 10:30 AM

DLB111, 1/F, DAVID C.LAM BUILDING, SHAW CAMPUS



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## ABSTRACT

ODEs/SDEs have recently gained significant attention in machine learning and causal inference. However, the theoretical aspects, for example, identifiability and asymptotic properties of statistical estimation are still obscure. In this presentation, I will present our recent results on identifiability of linear ODE/SDEs from observational data. These identifiability conditions are crucial in causal inference using linear ODE/SDEs as they enable the identification of the post-intervention distributions from its observational distribution.



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