中央研究院統計科學研究所
學 術 演 講

講 題：Online Change Point Detection via Copula Based Markov Models

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時 間：2021年11月29日（星期一）上午10:30-12:00

地 點：中央研究院統計科學研究所 B1F 演講廳

※茶 會：上午10：10開始

※實體與線上視訊同步進行

Abstract

The time series analysis is a critical issue in the varied fields such as finance, industry, and biology. However, due to the possibility of the structure change, the corresponding problem such as loss or damage can be expected. See the stock market during the financial crisis in 2008 and also the COVID-19 in 2020 for instance. Hence, the corresponding change point for structure change is worth to study. In order to detect the change point online for time series data or correlated date, we propose the model for online change point detection via copula based Markov models where the time serial data is described by copula based Markov model and the change point detection based on the run length distribution using the Bayesian approach. Finally, the performance of the proposed method is illustrated through numerical and empirical studies.

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