## 國立政治大學統計學系學 術 演 講

主講人: Prof. Paulo Canas Rodrigues (Department of Statistics and Data Science, Federal University of Bahia, Brazil)

題 目:The usefulness of singular spectrum analysis in hybrid methodologies for time series forecasting

時 間:民國 113 年 12 月 16 日 (星期一) 下午 1:30

地 點:國立政治大學逸仙樓 050101 教室

摘 要:

Time series forecasting plays a key role in areas such energy, environment, economy, and finances. Hybrid methodologies, combining the statistical. results of mathematical, and machine learning methods, have become popular for time series analysis and forecasting, as they allow researchers to compensate for the limitations of one approach with the strengths of the other and combine them into new frameworks while improving forecasting accuracy. In this class of methods, algorithms for time series forecasting are applied sequentially, i.e., the second algorithm is applied to the residuals that were not captured by the first one. In this talk, I will discuss several hybrid strategies for time series forecasting that use singular spectrum analysis, classical time series models, and recurrent neural networks, with application to several areas of research. I will also discuss some other ongoing research projects.

