THE UNIVERSITY   **OF HONG KONG**

Institute of Mathematical Research
Department of Mathematics

COLLOQUIUM

Understanding forecasting with reservoir computing via synchronization

Professor Juan-Pablo ORTEGA

Nanyang Technological University

Abstract

One possible way to understand reservoir systems' unparalleled ability to forecast deterministic dynamic processes is by using the notion of generalized synchronizations. In this talk, I will explain this observation in detail and show some results that prove the availability of these objects in reservoir computing. Moreover, this construction provides tools to construct bounds for forecasting performances and reservoir initialization techniques that prove very useful in specific applications.

Date:	October 3, 2024 (Thursday)
Time:	4:30 – 6:00 pm
Venue:	Room 210, Run Run Shaw Bldg., HKU

All are welcome