

Modelling Deterministic Dynamics from Data by Professor Michael Small!

Professor Michael Small presents at the next [DARE Seminar](#)

There has been a lot of recent interest in various computational methods that allow one to extract models of the deterministic evolution operator of a dynamical system from time series data. These methods have become increasingly successful as they are able to leverage increasing computational resource available today. Michael will start by contrasting these efforts against some earlier attempts to do this (including some of his own) and then move on to describe his recent work with reservoir computers.

Viewed in this setting, reservoir computers are a pattern generator which appear particularly appropriate to the task of reconstructing dynamics, as their memory mimics the role of Takens' theorem in delay reconstruction. Michael will briefly explore some of these ideas and finish by describing our attempts to quantify the performance of reservoirs and apply them to modelling tasks in industrial settings.

When - Tuesday at 1.00pm	
Join Zoom Meeting	
Phone one-tap:	Australia: +61731853730,,81655654438# or +61861193900,,81655654438#
Meeting URL:	https://uni-sydney.zoom.us/j/81655654438?from=addon
Meeting ID:	816 5565 4438