Computational properties of network attractors

Peter Ashwin¹,

 1 Mathematics and Physics Sciences Departament, University of Exeter, UK

Models consisting of a network of coupled nonlinear dynamical systems naturally arise in a variety of applications, especially as models for both natural and artificial neural systems. This talk will discuss some progress towards understanding the nonlinear dynamics of how properties such as input-dependent finite state computation may arise in such systems. Heteroclinic networks and their close cousins, excitable networks, are valuable tools to help understand their input-dependent computational properties.

This submission is for a contributed session