Efficient scientific inference using stochastic dynamical systems

Questions about the mechanistic operation of biological systems are naturally formulated as stochastic processes, but confronting such models with data can be challenging. In this talk, I describe the essence of the difficulty, highlighting both the technical issues and the importance of the "plug-and-play property". I then illustrate some effective approaches to efficient inference based on such models. I conclude by sketching promising new developments and describing some open problems.

Link to the seminar:
https://zoom.us/j/99170569864?pwd=aXpPYmxrMTB6dXpNd1Z1YkduejdYdz09