## Interactive theorem proving, automated reasoning, and dynamical systems Jeremy Avigad, Carnegie Mellon University

In computer science, the phrase "formal verification" refers to the use of formal, logic-based methods to verify claims about hardware and software design. Formal methods are used to verify properties of hybrid systems, which model the way systems with discrete and analog components evolve over time. They are also used to verify the correctness of mathematical proofs. In this talk, I will survey the new technology, and explore ways that it might be relevant to research in dynamical systems.