Speaker:
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Title:
Information-flow drives complex systems dynamics

Abstract:
We live in a complex world and are surrounded by complex systems. From a biological cell, made of thousands of different molecules that work together seamlessly, to our global society; a collection of seven billion individuals that try to work and live together. These complex systems display endless signatures of order, disorder, self-organization and self-annihilation. Understanding this complexity is one of the biggest scientific challenges of our time. In this talk I will present some recent developments in the computational aspects needed to understand the dynamics of complex systems. I will also address the danger there is in relying on AI and Bigdata research in uncovering the principles of complexity.