Synchronization of Chaotic Systems

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Abstract

The phenomenon of chaotic synchronization has attracted much attention in the last decade due to its applicability in modeling and safe communications, as well as its importance in biological and physical systems. Until recently a mathematical framework for the description and analysis of this phenomenon was still lacking. In this talk I will give a number of examples of chaotic synchronization, and argue that many of them can naturally be described in terms of normally hyperbolic invariant manifolds.