Forecasting Chaotic Physical Processes

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007 Kemeny Hall, 4:00 pm
(Tea 3:30 pm 300 Kemeny Hall)

Abstract

In this talk, we describe recently developed methods for increasing the accuracy of numerical predictions of a dynamical system. The techniques are demonstrated using a three variable differential equation to forecast the behavior of a toy climate fluid dynamics experiment inspired by Lorenz, and the one billion variable state-of-the-art weather model used by the National Weather Service.

This talk should be accessible to undergraduates.