APPLIED MATHEMATICS COLLOQUIUM

THE EXTENDED MALKUS-ROBBINS DYNAMO AS A PERTURBED LORENZ SYSTEM

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Recent investigations of some self-exciting Faraday-disk homopolar dynamos have yielded the classic Lorenz equations as a special limit when one of the principal bifurcation parameters is zero. In this talk we focus upon one of those models (a simple extension to the Malkus-Robbins dynamo) and illustrate what happens to some of the lowest order unstable periodic orbits as this parameter is increased from zero.

MONDAY, APRIL 4, 2005
4:15 PM
Building 4, Room 231

Refreshments at 3:30 PM in Building 2, Room 349.

Applied Math Colloquium: http://www-math.mit.edu/amc/spring05
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