

WICHITA STATE UNIVERSITY
Department of Mathematics and Statistics

*The Lecture Series in the
Mathematical Sciences Presents Our Guest:*

Prof. Christian Wolf
Wichita State University

*"Natural measures in dynamics or can we compute the size
of a dynamical system by knowing only one orbit"*

Abstract:

In this talk we introduce a new class of natural measures which generalize physical and SRB measures to measures which are supported on invariant sets that are not necessarily attractors. We then study existence and uniqueness of these measures for the family of Hénon maps, and compare these measures with the previously introduced measures of maximal dimension. The existence of these measures is related to the question whether one can compute the size of a dynamical system (i.e. the Hausdorff dimension of its compact invariant sets) by knowing only one orbit. The talk will be accessible to a general audience including graduate students.

Friday, April 23, 2004
3:00 PM in 372 Jabara Hall

*Please come join us for refreshments before the lecture
at 2:30 p.m. in room 353 Jabara Hall.*