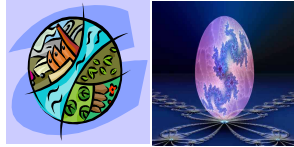


Special Colloquium Series, Spring & Fall 2005:

**Between Nature and Science:
Advanced Modeling Concepts for Environmental Sciences**



Alan Hastings
Distinguished Professor
Environmental Science and Policy
University of California, Davis



Transient dynamics: the key to ecological understanding

Thursday April 21st

4:00-5:00pm

PES 3001

Light refreshments provided

Almost all analysis of mathematical models in ecology has focused on asymptotic behavior. I will first discuss what the relevant ecological time scales are, and therefore how relevant the asymptotic analysis may or may not be. Arguing through the use of examples, and also using ideas drawn from dynamical systems, I will both discuss the importance of transients, and how their presence may be analyzed mathematically.

Alan Hastings received his Ph.D. in Applied Mathematics from Cornell in 1977. He was on the faculty at Washington State University from 1977-1979 and has been at UC Davis since 1979, first in the Department of Mathematics and then in the Department of Environmental Science and Policy, where he is currently a Distinguished Professor. He previously served as department chair. He has been President of the Society for Mathematical Biology and is currently the editor of the *Journal of Mathematical Biology*. His research has used mathematics in the study of a variety of problems in ecology and population biology, including chaotic dynamics, marine reserves, spread of invasive species, dynamics in population genetics, metapopulation dynamics, and the dynamics of marine species.

Upcoming Speakers:

28-Apr	Vit Klemes	"Some Thoughts About Stochastic Hydrologic Modeling Inspired by the Canadian Wilderness"
12-May	Constantino Tsallis	"Nonextensive Statistical Mechanics - Introduction and Applications"
19-May	John Rundle	TBA
2-Jun	Jim Crutchfield	"Multiagent Dynamical Systems"

Sponsored By: John Muir Institute for the Environment, Computational Science and Engineering Center, Department of Civil and Environmental Engineering, Department of Land, Air, and Water Resources, Department of Chemical Engineering and Materials Science, Soil Sciences, Atmospheric Sciences, and Hydrologic Sciences Graduate Groups, College of Agriculture and Environmental Sciences, U.C. Cooperative Extension