School of Natural Sciences

UCMERCED

Quantitative Systems Biology Seminar Series 291

Spatial Population Dynamics: Synchrony, Uncertainty, Spread, and Control

Date:
Friday,
12/09/16

Time:
1:30pm

Location:
COB 267

For More Information Contact:
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By Alan Hastings
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Abstract:

I will delve into several aspects of spatial population dynamics, emphasizing the causes and measurement of synchrony across space as a way of understanding population dynamics and as a problem of great intrinsic interest. I will then more briefly cover laboratory experiments on the unpredictability of spatial population dynamics, and finally cover issues of control of invasive species.

Bio:

Alan Hastings is a Distinguished Professor in the Department of Environmental Science and Policy at the University of California, Davis. Hastings is a theoretical ecologist, recognized for his work on dynamics of ecological populations and for his theoretical work on questions of applied interest including management using marine reserves and control of invasive species. Hastings received a Bachelor's degree in Mathematics in 1973 and a Ph.D. in Applied Mathematics in 1977 from Cornell University. He was an assistant professor of Mathematics at Washington State University from 1977-1979 and joined the faculty at the University of California, Davis in 1979. He has published almost 300 journal articles and co-edited the Encyclopedia of Theoretical Ecology and is founding editor in chief of the journal Theoretical Ecology. Hastings is an elected member of the National Academy of Sciences, a fellow of the American Academy of Arts and Sciences, the American Association for the Advancement of Science, the Ecological Society of America and the Society for Industrial and Applied Mathematics. He received the Robert H. MacArthur Award from the Ecological Society of America in 2006.