

UCLA Science Faculty Research Colloquium 2009-10

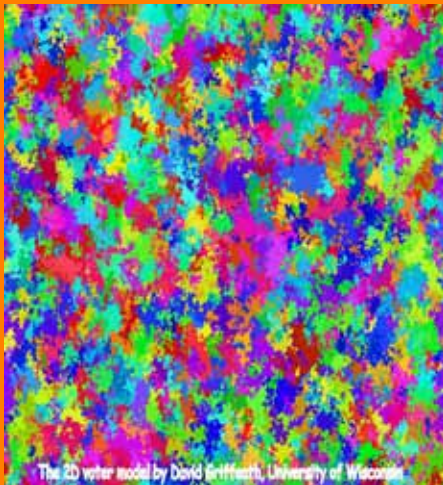


Monday, January 11, 4:00 pm
Physics & Astronomy Building, Rm 1425

Thomas M. Liggett
Professor of Mathematics

Professor Liggett is a member of the National Academy of Sciences. His areas of research are probability theory and interacting particle systems.

“Stochastic Models for Large Interacting Systems in the Sciences”



A forty year old branch of probability theory is devoted to the analysis of large systems, in which individuals evolve in time according to rules that include both randomness and interactions. Dr. Liggett describes a sampling of these systems, together with some areas that partially motivated them: Voter models (population genetics; tumor growth), Glauber dynamics (Ising model for magnetism; Gibbs samplers), contact processes (spread of infection; Reggeon field theory), and exclusion processes (messenger RNA; traffic flow). The main issues that are dealt with involve the long time behavior of the system, and how it is affected by the details of the evolution rules.

Free Admission
Reception immediately following
The series is designed to be of interest to a general audience.

Next Colloquium Talk - February 8, 2010, 4:00 pm, Physics & Astronomy Building, Rm 1425
Dr. Arthur Arnold, Professor of Physiological Science
“Why Are Males and Females Different”

The UCLA Science Faculty Research Colloquium Series is designed to promote interdisciplinary collaborative research, highlight the research of exceptionally distinguished faculty, and enhance education about significant new research in the sciences. The Series is sponsored by the Divisions of Life and Physical Sciences, UCLA College.

For the full schedule of talks in the 2009-2010 Colloquium Series, visit our website at: www.physicalsciences.ucla.edu/colloquium.asp