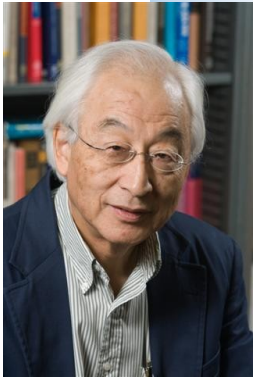


The Department of Physics and Astronomy
Presents Research Seminar Speaker

Dr. Howard Lee

Department of Physics
University of Georgia



Friday February 5, 2010

Time: 3:00-4:00 p.m.

Location: MB 0.302

What is Chaos?

As a prototypical 1d chaotic map, the logistic map has played an important role in elucidating the chaotic behavior in nature. By necessity nearly all the studies on this map have been numerical and numerically driven. It has been found recently that the dynamical behavior of 3-cycle in this map can actually be studied analytically.* There is a new theorem by a Ukrainian mathematician A Sharkovskii, according to which the existence of a 3-cycle implies the existence of all other cycles. Thus there exists chaos. The dynamical behavior of the logistic map will be discussed at an introductory level.

* M H Lee, J. Math. Phys. (Dec. 2009)