Limit Cycles in Dynamical Systems

Abstract:

We look at some examples of limits cycles occurring in physical and biological systems. A generalized Gauss-type predator prey model is examined with functional and numerical responses that satisfy some general assumptions. We compare this with systems for an orbital gravitation problem and Van der Pol's equation for an electronic oscillator. Time permitting we look at a childhood disease model with a vaccination strategy by David Earn and colleagues.

Coffee and cookies will be served.