

MATHEMATICS DEPARTMENT  
North Carolina State University

## DIFFERENTIAL EQUATIONS SEMINAR

Wednesday, November 20, 2002  
2:35 p.m. 330 Harrelson Hall

**John Franke**

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### “Attractors for discrete periodic dynamical systems”

A mathematical framework is introduced to study attractors of discrete, nonautonomous dynamical systems that depend periodically on time. A structure theorem for such attractors is established which says that the attractor of a time-periodic dynamical system is the union of attractors of certain autonomous maps. If the nonautonomous system is a perturbation of an autonomous map, properties that the nonautonomous attractor inherits from the autonomous attractor are discussed. Examples from population biology are presented.

**Graduate students are invited to attend.**

For questions, comments, and offers to talk, contact Steve Schecter, [schecter@math.ncsu.edu](mailto:schecter@math.ncsu.edu).  
Please visit the DE Seminar web page at [www.math.ncsu.edu/seminars.html](http://www.math.ncsu.edu/seminars.html).