

MATHEMATICS DEPARTMENT
North Carolina State University

DIFFERENTIAL EQUATIONS SEMINAR

Wednesday, October 4, 2006
3:00 p.m. 330 Harrelson Hall

Michael Sever

Department of Mathematics
Hebrew University of Jerusalem

**“Existence of solutions of nonlinear
Helmholtz systems”**

An existence theorem is obtained for a class of semilinear elliptic systems obtained from a variational principle and modeled on nonlinear Helmholtz systems. The proof is a constructive algorithm, based on showing that the underlying functional satisfies the Palais-Smale condition. This talk will emphasize the possible development of a useful computational algorithm based on this approach.

Graduate students are invited to attend.

For questions, comments, and offers to talk, contact Steve Schechter, schechter@math.ncsu.edu. Please visit the DE Seminar web page at www.math.ncsu.edu/seminars.html.