

MATHEMATICS DEPARTMENT
North Carolina State University

DIFFERENTIAL EQUATIONS SEMINAR

Wednesday, March 31
2:35 p.m. 330 Harrelson Hall

Rudy Horne

Department of Mathematics
University of North Carolina at Chapel Hill

“Optical pulse interactions: Four-wave mixing and randomness in return-to-zero systems”

In optical communications systems, a limiting factor concerning transmission of light pulses along an optical fiber is pulse interactions. One effect caused by pulse interactions is the growth of four-wave mixing products. In this talk, we will discuss the theory concerning the growth of FWM products and how this growth is affected by random dispersion. We will present evidence indicating that FWM product growth can be reduced in the presence of random dispersion.

Graduate students are invited to attend.

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