Spatial and Spectral Viewpoints on Nonlinear Waves

John Hunter, UC Davis

November 8, 2013

Fourier analysis provides a spectral description of a function that is very different from its spatial description: properties that are obvious on the spectral side may not be at all obvious on the spatial side and visa-versa. We'll discuss some problems in nonlinear wave propagation that illustrate this theme. In particular, we'll consider nonlinear surface waves arising in various physical systems that have to be studied from both spectral and spatial viewpoints.

The lecture will take place in Thackeray 704 at 3:30pm. Refreshments will start at 3:00pm.