

**COLLOQUIUM  
UNIVERSITY OF PITTSBURGH  
FRIDAY, NOVEMBER 8, 2013**

**704 THACKERAY HALL**

**3:30 P.M.**

**JOHN HUNTER**

**DEPT. OF MATHEMATICS  
UNIVERSITY OF CALIFORNIA, DAVIS**

**SPATIAL & SPECTRAL VIEWPOINTS ON NONLINEAR WAVES**

**ABSTRACT:** 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.

**Refreshments served at 3:00 p.m.  
in the Math Dept. COMMON ROOM, Thackeray 705**