

**COLLOQUIUM**  
**UNIVERSITY OF PITTSBURGH**  
**FRIDAY FEBRUARY 29, 2008**  
704 THACKERAY HALL  
4:00 P.M.

**PROFESSOR DANIEL SPIRN**  
**UNIVERSITY OF MINNESOTA**

**TITLE: STABILITY OF VORTEX SHEETS**

**ABSTRACT:** Vortex Sheets for incompressible, ideal fluids arise in physical situations. Mathematically the equations that model vortex sheets are difficult since they couple a hyperbolic equation with a nonlocal operator. I will discuss some background on the well-posedness of the equations, and then I will describe some rigorous results on the stability and instability of such vortex sheets.

Refreshments served at 3:30 p.m.  
in the Math Dept. COMMON ROOM, Thackeray 705