## TEMPLE UNIVERSITY

Department of Mathematics

## Applied Mathematics and Scientific Computing Seminar

Room 617 Wachman Hall

Wednesday, 14 March 2012, 4:00 p.m. (tea at 3:45)

## Interval Analysis Techniques for Singular Integrals

by Irina Mitrea Temple University

**Abstract.** In this talk I will discuss spectral properties of singular integral operators which arise naturally in the context of elliptic boundary problems in non-smooth domains. The focus is the Spectral Radius Conjecture, for which I will present both positive and negative results, some of which have been obtained via computer aided proofs.