

# GLOBAL HARMONIC ANALYSIS



## **NSF-CBMS REGIONAL CONFERENCE IN MATHEMATICAL SCIENCE**

JUNE 20 - 24, 2011  
UNIVERSITY OF KENTUCKY

PRINCIPAL LECTURER:  
STEVEN ZELDITCH,  
NORTHWESTERN UNIVERSITY

The Principal Lecturer will give ten lectures on global harmonic analysis. He will begin with basic examples (constant curvature spaces), give background on pseudodifferential and Fourier integral operators, and derive trace formulas including local Weyl laws for both pseudodifferential and Fourier integral operators. He will discuss applications, including properties of eigenvalues and eigenfunctions and inverse problems. Completely integrable and ergodic systems will be considered in depth.

Complementary lectures will be given by Tanya Christiansen, Christopher Sogge, Peter Topalov, Alejandro Uribe, and Jared Wunsch.

**DEADLINE FOR APPLICATIONS: FEBRUARY 15, 2011**

FURTHER INFORMATION: [www.math.uky.edu/cbms](http://www.math.uky.edu/cbms)  
EMAIL: [cbms2011@uky.edu](mailto:cbms2011@uky.edu)

Co-sponsored by the Department of Mathematics, the College of Arts & Sciences,  
and the Office of the Vice-President for Research.

**UK**  
UNIVERSITY OF  
**KENTUCKY**  
College of Arts and Sciences