Fioralba Cakoni - Rutgers University, New Brunswick, NJ
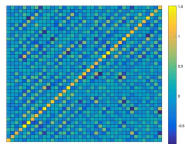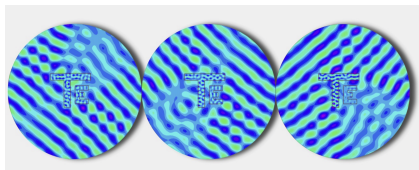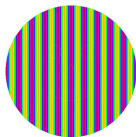
General Area: Inverse problems for partial differential equations: determination of coefficients or interfaces from a knowledge of solutions on a manifold. Subarea: Inverse Scattering Theory

- Study the properties of the linear and compact scattering operator to uncover nonlinear information on the scatterer. Non-iterative reconstruction methods

- In addition it has led to interesting mathematics:
  The transmission eigenvalue problem (non-selfadjoint)
  Non-scattering waves and regularity of free boundaries

88

Inverse Scattering Theory and Transmission Eigenvalues

FIORALBA CAKONI
Rutgers University
Piscataway, New Jersey

DAVID COLTON
University of Delaware
Newark, Delaware

HOUSSEM HADDAR
INRIA and Ecole Polytechnique
Palaiseau, France

CBMS-NSF
REGIONAL CONFERENCE SERIES
IN APPLIED MATHEMATICS

SPONSORED BY
CONFERENCE BOARD OF
THE MATHEMATICAL SCIENCES

SUPPORTED BY
NATIONAL SCIENCE
FOUNDATION

Hobbies ......