

## Dynamical Systems & Diff. Equations



### Reconstruction of Small Inhomogeneities from Boundary Measurements

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## About this book

This is the first book to provide a systematic exposition of promising techniques for the reconstruction of small inhomogeneities from boundary measurements. In particular, theoretical results and numerical procedures for the inverse problems for the conductivity equation, the Lamé system, as well as the Helmholtz equation are discussed in a readable and informative manner. The general approach developed in this book is based on layer potential techniques and modern asymptotic analysis of partial differential equations. The book is particularly suitable for graduate students in mathematics.

### Written for:

Researchers and graduate students

### Keywords:

- 35R30, 35B30
- inverse boundary value problems
- layer potential techniques
- reconstruction
- small inhomogeneities