강의계획서 해석학특강(역문제) 2003년 2학기

강좌번호 : 3341.721
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Text : H. Ammari and H. Kang, Detection of small inclusions, a book in preparation.

We will study recent mathematical methods to reconstruct electric and elastic inclusions of small size via boundary measurements.

[Contents]

Reconstruction of electric inclusions.

- Layer potentials and transmission problem
- Polarization tensor
- Asymptotic expansion
- Detection of inclusions
- Closely spaced inclusions

Reconstruction of elastic inclusions.

- Layer potentials and transmission problem
- Elastic Moment Tensor
- Asymptotic expansion
- Detection of inclusions

Assignment : A paper will be assigned to each enrolled student and students have to give a talk on the assigned paper. There will be an oral test for final exam.