

## **abstract**

ANALYSIS/MATHEMATICAL PHYSICS SEMINAR

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

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Over the past decades, much attention has been devoted to the detection of small inhomogeneities in materials or tissues, using non-invasive techniques, primarily electromagnetic wave-fields. The characterization of the signature of small inclusions is now well understood. But many questions remain regarding their accurate localisation, especially in non-homogeneous media. In contrast, during the same period it was shown that inhomogeneous media are more favorable than homogeneous ones for time reversal experiments, involving active sources. The last part of this will be devoted to recent results on the enhanced resolution available in structured media, and their consequences for the imaging of small inhomogeneities.