

Iterative Reconstruction for Inverse Medium Scattering

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The Inverse Medium Scattering Problem deals with the reconstruction of material properties of an object from the electro-magnetic or acoustic field scattered by that object. Due to the properties of the measured data as well as the underlying operator efficient reconstruction is considered challenging.

In this talk I present a novel, iterative reconstruction methodology for that problem. Further, I will discuss the performance properties on several synthetic and real-world examples.