



Einladung zum Oberseminar Wissenschaftliches Rechnen

Julius-Maximilians-Universität Würzburg
Lehrstuhl für Wissenschaftliches Rechnen IX

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An ℓ^p -Tikhonov regularization scheme for a linear inverse source problem

When solving inverse source problems, one tries to reconstruct properties of the source of electromagnetic or acoustic waves - like position, shape and size - from some observations of the wave away from the source. We are concerned with the specific problem of reconstructing compactly supported sources in two dimensions from measurements of the far field of the radiated wave. When using classical regularization methods to solve this problem, one finds that the reconstructed source is spread very far in the considered region even if the original source had small support. We show how to apply sparsity-promoting ℓ^p -Tikhonov regularization and look at some numerical results.

Ort: Raum 30.02.003 (2. Stock) (Mathegeb. 30 West) Zeit: Mittwoch, 6. Mai 2015, 10.00 Uhr

Zu diesem Vortrag laden wir Sie herzlich ein.

gez. Prof. Dr. Alfio Borzi
gez. Prof. Dr. Roland Griesmaier