

Table of Contents

Static Light Scattering	1
<i>Kim E. Andersen and Martin B. Hansen (Aalborg University, Denmark)</i>	
Thermodynamic Geometry Determines Optimal Temperature Profile in Distillation Column	15
<i>Bjarne Andresen (University of Copenhagen, Denmark) and Peter Salamon (San Diego State University, USA)</i>	
Inversion of Seismic AVO Data	31
<i>Torben Bach, Thomas B. Espersen, Jacob M. Pedersen, Klaus B. Rasmussen (Ødegaard A/S, Denmark), Richard Hinkley (Texaco Britain Limited), and William R. Pillet (Fina Exploration Minh Hai B.V., Vietnam)</i>	
Generalized Fourier Transforms and Inverse Scattering	42
<i>Svend Berntsen (Aalborg University, Denmark)</i>	
Multi-Step Samplers for Improving Efficiency in Probabilistic Geophysical Inference	50
<i>Miguel Bosch (Universidad Central de Venezuela), Christophe Barnes (Institut de Physique du Globe, France), and Klaus Mosegaard (University of Copenhagen, Denmark)</i>	
Full Waveform Inversion of Seismic Data for a Viscoelastic Medium	68
<i>Marwan Charara (Schlumberger), Christophe Barnes and Albert Tarantola (Institut Physique du Globe, France)</i>	
Integrating Surface Reflection Data Inversion and Offset-VSP Modeling for Imaging of Converted S-Waves in Gulf Coast Hydrocarbon Reservoirs ..	82
<i>Hugues Djikpéssé (Institut de Physique du Globe, France) and Christophe Barnes (Jason Geosystems, The Netherlands)</i>	
Inversion for the Moment Tensor and Source Location Using Love- and Rayleigh-Type Waves.	97
<i>L. Engell-Sørensen (University of Bergen, Norway) and G. F. Panza (University of Trieste, Italy)</i>	
Resolution of Cole-Cole Parameters Based on Induced Polarization Data ..	120
<i>Flemming Effersø (University of Aarhus, Denmark)</i>	
The Resolution Function in Linearized Born and Kirchhoff Inversion	129
<i>Leiv-J. Gelius (University of Oslo, Norway) and Isabelle Lecomte (NOR-SAR, Norway)</i>	

SVD Analysis of a 3D Inverse Thermal Model	142
<i>Lykke Gemmer and Søren B. Nielsen (University of Aarhus, Denmark)</i>	
Optimization Tools for Tikhonov Regularization of Nonlinear Equations Using the L-curve and its Dual	155
<i>Mårten Gulliksson and Per-Åke Wedin (Umeå University, Sweden)</i>	
The PP-TSVD Algorithm for Image Restoration Problems	171
<i>Per Chr. Hansen, Michael Jacobsen, Jan M. Rasmussen, and Heino Sørensen (Technical University of Denmark)</i>	
Smooth versus Sharp Frechet Kernels in Time-Distance Helioseismology ..	187
<i>Jesper Munk Jensen, Bo Holm Jacobsen, and Jørgen Christensen-Dalsgaard (University of Aarhus, Denmark)</i>	
Covariance Modelling for Merging of Multi-Sensor Ocean Surface Data ...	203
<i>Olwijn Leeuwenburgh (National Survey and Cadastre, Denmark)</i>	
Inversion of 2D Geoelectrical Data by Iterated Multichannel Deconvolution	217
<i>Ingelise Møller (Aarhus University, Denmark)</i>	
Image Reconstruction as an Inverse Problem	241
<i>Frank P. Pijpers (Aarhus University, Denmark)</i>	
Resolution Studies of Fluid Flow Models Near the Core-Mantle Boundary Using Bayesian Inversion	255
<i>Camilla Rygaard-Hjalsted, Klaus Mosegaard, and Niels Olsen (University of Copenhagen, Denmark)</i>	
Inversion of GPS Occultation Data for Atmospheric Profiling	276
<i>Stig Syndergaard (Danish Meteorological Institute)</i>	
A Limited Memory BFGS Method for an Inverse Problem in Atmospheric Imaging	292
<i>Curtis R. Vogel (Montana State University, USA)</i>	