1.	Record Nr.	UNINA9910438140203321
Titolo	Applied Inverse Problems : Select Contributions from the First Annual Workshop on Inverse Problems / / edited by Larisa Beilina
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2013
ISBN	9781461478164 1461478162
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (xiii, 197 pages) : illustrations (chiefly color)
Collana	Springer Proceedings in Mathematics & Statistics, , 2194-1017 ; ; 48
Altri autori (Persone)	BeilinaLarisa
Disciplina	515.35 530.15537
Soggetti	Mathematical physics Mathematical analysis Mathematical Physics Analysis
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"ISSN: 2194-1009." "ISSN: 2194-1017 (electronic)."
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Theoretical and Numerical Study of Iteratively Truncated Newton's Algorithm, Anatoly B. Bakushinsky, Alexandra B. Smirnova, and Hui Liu -- Approximate Global Convergence in Imaging of Land Mines from Backscattered Data, L. Beilina and M. V. Klibanov -- Time-adaptive FEM for Distributed Parameter Identification in Biological Models, L. Beilina and I.Gainova -- Adaptive finite element method in reconstruction of dielectrics from backscattered data, L. Beilina, M. P. Hatlo Andresen, H. E. Krogstad -- A Posteriori Error Estimates for Fredholm Integral Equations of the First Kind, N. Koshev and L. Beilina.- Inverse Problems in Geomechanics: Diagnostics and Prediction of the State of Rock Masses with Estimating Their Properties, L. A. Nazarova and L.A. Nazarov -- A Globally Convergent Numerical Method for Coefficient Inverse Problems with Time-Dependent Data, Aubrey Rhoden, Natee Patong, Yueming Liu, Jianzhong Su and Hanli Liu -- Adaptive FEM with relaxation for a hyperbolic coefficient inverse problem, L. Beilina and M. V. Klibanov -- Error Estimation in Ill-posed Problems in Special Cases, A. G. Yagola, Y. M. Korolev.- Stable numerical methods of approaching

quantum mechanical molecular force fields to experimental data, G. Kuramshina, I. Kochikov and A. Yagola -- On the Alternating Method for Cauchy Problems and its Finite Element Discretisation, Thouraya N. Baranger B. Tomas Johansson and Romain Rischette.

Sommario/riassunto	This proceedings volume is based on papers presented at the First Annual Workshop on Inverse Problems which was held in June 2011 at the Department of Mathematics, Chalmers University of Technology. The purpose of the workshop was to present new analytical developments and numerical methods for solutions of inverse problems. State-of-the-art and future challenges in solving inverse problems for a broad range of applications was also discussed. The contributions in this volume are reflective of these themes and will be beneficial to researchers in this area.