1. Record Nr. UNISA996466617403316

Autore	Schuster Thomas <1971->
Titolo	The method of approximate inverse : theory and applications / / Thomas Schuster
Pubbl/distr/stampa	Berlin, Germany ; ; New York, New York : , : Springer, , [2007] ©2007
ISBN	1-280-85346-8 9786610853465 3-540-71227-5
Edizione	[1st ed. 2007.]
Descrizione fisica	1 online resource (XIV, 202 p. 35 illus.)
Collana	Lecture notes in mathematics ; ; 1906
Classificazione	31.76 MAT 150f MED 385f PHY 013f SI 850
Disciplina	515.357
Soggetti	Inverse problems (Differential equations) Tomography
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Revised habilitation - Universitat des Saarlandes, Saarbrucken, 2004.
Nota di bibliografia	Includes bibliographical references (pages [189]-195).
Nota di contenuto	Inverse and Semi-discrete Problems -- Ill-posed problems and regularization methods -- Approximate inverse in L 2-spaces -- Approximate inverse in Hilbert spaces -- Approximate inverse in distribution spaces -- Conclusion and perspectives -- Application to 3D Doppler Tomography -- A semi-discrete setup for Doppler tomography -- Solving the semi-discrete problem -- Convergence and stability -- Approaches for defect correction -- Conclusion and perspectives -- Application to the spherical mean operator -- The spherical mean operator -- Design of a mollifier -- Computation of reconstruction kernels -- Numerical experiments -- Conclusion and perspectives -- Further Applications -- Approximate inverse and X-ray diffractometry -- A filtered backprojection algorithm -- Computation of reconstruction kernels in 3D computerized tomography -- Conclusion and perspectives.

Sommario/riassunto	Inverse problems arise whenever one tries to calculate a required quantity from given measurements of a second quantity that is associated to the first one. Besides medical imaging and non-destructive testing, inverse problems also play an increasing role in other disciplines such as industrial and financial mathematics. Hence, there is a need for stable and efficient solvers. The book is concerned with the method of approximate inverse which is a regularization technique for stably solving inverse problems in various settings such as L2-spaces, Hilbert spaces or spaces of distributions. The performance and functionality of the method is demonstrated on several examples from medical imaging and non-destructive testing such as computerized tomography, Doppler tomography, SONAR, X-ray diffractometry and thermoacoustic computerized tomography. The book addresses graduate students and researchers interested in the numerical analysis of inverse problems and regularization techniques or in efficient solvers for the applications mentioned above.

2.

Record Nr.	UNISALENTO991001744769707536
Autore	Garnsey, Peter
Titolo	Carestia nel mondo antico : risposte al rischio e alla crisi / Peter Garnsey
Pubbl/distr/stampa	Scandicci : La nuova Italia, 1997
ISBN	8822128133
Descrizione fisica	xxvi, 429 p., [2] c. di tav. ; 21 cm.
Collana	Biblioteca di cultura [La Nuova Italia] ; 225
Classificazione	R-XV/C
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Monografia

3. Record Nr. UNINA9910557134503321

Autore	Benini Stefano
Titolo	Carbohydrate-Active Enzymes : Structure, Activity and Reaction Products
Pubbl/distr/stampa	Basel, Switzerland, : MDPI - Multidisciplinary Digital Publishing Institute, 2020
Descrizione fisica	1 online resource (408 p.)
Soggetti	Biology, life sciences Research & information: general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Sommario/riassunto	Carbohydrate-active enzymes are responsible for both biosynthesis and the breakdown of carbohydrates and glycoconjugates. They are involved in many metabolic pathways; in the biosynthesis and degradation of various biomolecules, such as bacterial exopolysaccharides, starch, cellulose and lignin; and in the glycosylation of proteins and lipids. Carbohydrate-active enzymes are classified into glycoside hydrolases, glycosyltransferases, polysaccharide lyases, carbohydrate esterases, and enzymes with auxiliary activities (CAZy database, www.cazy.org). Glycosyltransferases synthesize a huge variety of complex carbohydrates with different degrees of polymerization, moieties and branching. On the other hand, complex carbohydrate breakdown is carried out by glycoside hydrolases, polysaccharide lyases and carbohydrate esterases. Their interesting reactions have attracted the attention of researchers across scientific fields, ranging from basic research to biotechnology. Interest in carbohydrate-active enzymes is due not only to their ability to build and degrade biopolymers-which is highly relevant in biotechnology-but also because they are involved in bacterial biofilm formation, and in glycosylation of proteins and lipids, with important health implications. This book gathers new research results and reviews to broaden our understanding of carbohydrate-active enzymes, their mutants and their

reaction products at the molecular level.