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*Queen's Papers in Pure and Applied Mathematics* 1972

Algorithms and Discrete Applied Mathematics Apurva Mudgal 2021-01-28 This book constitutes the proceedings of the 7th International Conference on Algorithms and Discrete Applied Mathematics, CALDAM 2021, which was held in Rupnagar, India, during February 11-13, 2021. The 39 papers presented in this volume were carefully reviewed and selected from 82 submissions. The papers were organized in topical sections named: approximation algorithms; parameterized algorithms; computational geometry; graph theory; combinatorics and algorithms; graph algorithms; and computational complexity.

Scientific and Technical Aerospace Reports 1995 Lists citations with abstracts for aerospace related reports obtained from world wide sources and announces documents that have recently been entered into the NASA Scientific and Technical Information Database.

**Issues in Applied Mathematics: 2011 Edition** 2012-01-09 Issues in Applied Mathematics / 2011 Edition is a ScholarlyEditions™ eBook that delivers timely, authoritative, and comprehensive information about Applied Mathematics. The editors have built Issues in Applied Mathematics: 2011 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Applied Mathematics in this eBook to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Issues in Applied Mathematics: 2011 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

*Frontiers and Prospects of Contemporary Applied Mathematics* Daqian Li 2005 This collection of articles covers the hottest topics in contemporary applied mathematics. Multiscale modeling, material computing, symplectic methods, parallel computing, mathematical biology, applied differential equations and engineering computing problems are all included. The book contains the latest results of many leading scientists and provides a window on new trends in research in the field. Sample Chapter(s). Chapter 1: An Iterative BEM for the Inverse Problem of Detecting Corrosion in a Pipe (467 KB). Contents: An Iterative BEM for the Inverse Problem of Detecting Corrosion in a Pipe (J Cheng et

al.); Optimal Order Integration on the Sphere (K Hesse & I H Sloan); Inverse Problems in Bioluminescence Tomography (M Jiang et al.); Global Dynamic Properties of Protein Networks (F-T Li et al.); Distance Geometry Problem and Algorithm Based on Barycentric Coordinates (H-X Huang & C-J Wang); On Ill-Posedness and Inversion Scheme for 2-D Backward Heat Conduction (J-J Liu); Error Analysis on Scrambled Quasi-Monte Carlo Quadrature Rules Using Sobol Points (R-X Yue); and other papers. Readership: Graduate students and researchers in applied mathematics.

**Information Computing and Applications** Baoxiang Liu 2012-09-07 This book constitutes the refereed proceedings of the Third International Conference on Information Computing and Applications, ICICA 2012, held in Chengde, China, in September 2012. The 100 revised full papers were carefully reviewed and selected from 1089 submissions. The papers are organized in topical sections on internet computing and applications, multimedia networking and computing, intelligent computing and applications, computational statistics and applications, cloud and evolutionary computing, computer engineering and applications, knowledge management and applications, communication technology and applications.

**Applied and Industrial Mathematics in Italy III** Enrico De Bernardis 2010 This book provides an up-to-date overview of research articles in applied and industrial mathematics in Italy. This is done through the presentation of a number of investigations focusing on subjects as nonlinear optimization, life science, semiconductor industry, cultural heritage, scientific computing and others. This volume is important as it gives a report on modern applied and industrial mathematics, and will be of specific interest to the community of applied mathematicians. This book collects selected papers presented at the 9th Conference of SIMAI. The subjects discussed include image analysis methods, optimization problems, mathematics in the life sciences, differential models in applied mathematics, inverse problems, complex systems, innovative numerical methods and others. Sample Chapter(s). Chapter 1: Multichannel Wavelet Scheme for Color Image Processing (759 KB). Contents: Existence and Uniqueness for a Three Dimensional Model of Ferromagnetism (V Berti et al.); Wave Propagation in Continuously-Layered Electromagnetic Media (G Caviglia & A Morro); Mathematical Models for Biofilms on the Surface of Monuments (F Clarelli et al.); Conservation Laws with Unilateral Constraints in Traffic Modeling (R M Colombo et al.); On a Model for the Codiffusion of Isotopes (E Comparini et al.); Multiscale Models of Drug Delivery by Thin Implantable Devices (C D'Angelo & P Zunino); A Mathematical Model of Duchenne Muscular Dystrophy (G Dell'Acqua & F Castiglione); A Dissipative System Arising in Strain-Gradient Plasticity (L Giacomelli & G Tomassetti); Material Symmetry and Invariants for a 2D Fiber-Reinforced Network with Bending Stiffness (G Indelicato); Kinetic Treatment of Charge Carrier and Phonon Transport in Graphene (P Lichtenberger et al.); Mathematical Models and Numerical Simulation of Controlled Drug Release (S Minisini & L Formaggia); A Lattice Boltzmann Model on Unstructured Grids with Application in Hemodynamics (G Pontrelli et al.); Toward Analytical Contour Dynamics (G Riccardi & D Durante); Thermo-Mechanical Modeling of Ground Deformation in Volcanic Areas (D Scandura et al.); and other papers. Readership: Researchers in applied and computational mathematics.

*Theory of Computing and Systems* Danny Dolev 1992-05-06 ISTCS '92, the Israel Symposium on the Theory of Computing and Systems, came about spontaneously as a result of informal interaction between a group of people who viewed the conference as an appropriate expression of Israeli strength in theoretical aspects of computing and systems. The enthusiasm that the symposium created resulted in the submission of a large number of extremely high quality papers, which led in turn to strict acceptance criteria. This volume contains nineteen selected papers representing the cream of Israeli talent in the field, on a variety of active and interesting topics in the theory of computing and systems.

Monte Carlo and Quasi-Monte Carlo Methods Bruno Tuffin 2020-05-01 This book presents the refereed proceedings of the 13th International Conference on Monte Carlo and Quasi-Monte Carlo Methods in Scientific Computing that was held at the University of Rennes, France, and organized by Inria, in July 2018. These biennial conferences are major events for Monte Carlo and quasi-Monte Carlo researchers. The proceedings include articles based on invited lectures as well as carefully selected contributed papers on all theoretical aspects and applications of Monte Carlo and quasi-Monte Carlo methods. Offering information on the latest developments in these very active areas, this book is an excellent reference resource for theoreticians and practitioners interested in solving high-dimensional computational problems, arising, in particular, in finance, statistics and computer graphics.

*Recent Developments in the Numerics of Nonlinear Hyperbolic Conservation Laws* Rainer Ansorge 2012-09-14 In January 2012 an Oberwolfach workshop took place on the topic of recent developments in the numerics of partial differential equations. Focus was laid on methods of high order and on applications in Computational Fluid Dynamics. The book covers most of the talks presented at this workshop.

**05-5000 - 05-5036** 2005

Foundations of Applied Mathematics Michael D. Greenberg 2013-11-26 Classic text/reference suitable for undergraduate and graduate engineering students. Topics include real variable theory, complex variables, linear analysis, partial and ordinary differential equations, and other subjects. Includes answers to selected exercises. 1978 edition.

*Production and Inventory Management with Substitutions* J. Christian Lang 2009-11-25 Quantitative approaches for solving production planning and inventory management problems in industry have gained growing importance in the past years. Due to the increasing use of Advanced Planning Systems, a widespread practical application of the sophisticated optimization models and algorithms developed by the Production Management and Operations Research community now seem within reach. The possibility that products can be replaced by certain substitute products exists in various application areas of production planning and inventory management. Substitutions can be useful for a number of reasons, among others to circumvent production and supply bottlenecks and disruptions, increase the service level, reduce setup costs and times, and lower inventories and thereby decrease capital lockup. Considering the current trend in industry towards shorter product life cycles and greater product variety, the importance of substitutions appears likely to grow. Closely related to substitutions are flexible bills-of-materials and recipes in multi-level production systems. However, so far, the aspect of substitutions has not attracted much attention in academic literature. Existing lot-sizing models matching complex requirements of industrial optimization problems (e.g., constrained capacities, sequence-dependent setups, multiple resources) such as the Capacitated Lot-Sizing Problem with Sequence-Dependent Setups (CLSD) and the General Lot-Sizing and Scheduling Problem for Multiple Production Stages (GLSPMS) do not feature in substitution options.

*Error Estimates for Well-Balanced Schemes on Simple Balance Laws* Debora Amadori 2015-10-23 This monograph presents, in an attractive and self-contained form, techniques based on the L1 stability theory derived at the end of the 1990s by A. Bressan, T.-P. Liu and T. Yang that yield original error estimates for so-called well-balanced numerical schemes solving 1D hyperbolic systems of balance laws. Rigorous error estimates are presented for both scalar balance laws and a position-dependent relaxation system, in inertial approximation. Such estimates shed light on why those algorithms based on source terms handled like "local scatterers" can outperform other, more standard, numerical

schemes. Two-dimensional Riemann problems for the linear wave equation are also solved, with discussion of the issues raised relating to the treatment of 2D balance laws. All of the material provided in this book is highly relevant for the understanding of well-balanced schemes and will contribute to future improvements.

**Two-Fluid Model Stability, Simulation and Chaos** Martín López de Bertodano 2016-11-09 This book addresses the linear and nonlinear two-phase stability of the one-dimensional Two-Fluid Model (TFM) material waves and the numerical methods used to solve it. The TFM fluid dynamic stability is a problem that remains open since its inception more than forty years ago. The difficulty is formidable because it involves the combined challenges of two-phase topological structure and turbulence, both nonlinear phenomena. The one dimensional approach permits the separation of the former from the latter. The authors first analyze the kinematic and Kelvin-Helmholtz instabilities with the simplified one-dimensional Fixed-Flux Model (FFM). They then analyze the density wave instability with the well-known Drift-Flux Model. They demonstrate that the Fixed-Flux and Drift-Flux assumptions are two complementary TFM simplifications that address two-phase local and global linear instabilities separately. Furthermore, they demonstrate with a well-posed FFM and a DFM two cases of nonlinear two-phase behavior that are chaotic and Lyapunov stable. On the practical side, they also assess the regularization of an ill-posed one-dimensional TFM industrial code. Furthermore, the one-dimensional stability analyses are applied to obtain well-posed CFD TFMs that are either stable (RANS) or Lyapunov stable (URANS), with the focus on numerical convergence.

**Oswaal CBSE Term 2 Applied Mathematics Class 12 Sample Question Papers Book (For Term-2 2022 Exam)** Oswaal Editorial Board 2022-02-21 • 15 Sample Papers in each subject. 5 solved & 10 Self-Assessment Papers • Includes all latest typologies of Questions as specified in the latest CBSE Board Sample Paper for Term-II Exam released on 14th January 2022 • On-Tips Notes & Revision Notes for Quick Revision • Mind Maps for better learning

**Queen's Papers in Pure and Applied Mathematics** Queen's University (Kingston, Ont.) 1966

*Mathematical Software - ICMS 2020* Anna Maria Bigatti 2020-07-07 This book constitutes the proceedings of the 7th International Conference on Mathematical Software, ICMS 2020, held in Braunschweig, Germany, in July 2020. The 48 papers included in this volume were carefully reviewed and selected from 58 submissions. The program of the 2020 meeting consisted of 20 topical sessions, each of which providing an overview of the challenges, achievements and progress in a environment of mathematical software research, development and use.

*Issues in Applied Mathematics: 2013 Edition* 2013-05-01 Issues in Applied Mathematics / 2013 Edition is a ScholarlyEditions™ book that delivers timely, authoritative, and comprehensive information about Mathematical Physics. The editors have built Issues in Applied Mathematics: 2013 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Mathematical Physics in this book to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Issues in Applied Mathematics: 2013 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

Applied Mathematics in Engineering and Reliability Radim Bris 2016-04-12 Applied Mathematics in Engineering and Reliability contains papers presented at the International Conference on Applied Mathematics in Engineering and Reliability (ICAMER 2016, Ho Chi Minh City, Viet Nam, 4-6 May 2016). The book covers a wide range of topics within mathematics applied in reliability, risk and engineering, including:- Risk and Relia

**Provable Security** Joon Sang Baek 2008-10-17 This book constitutes the refereed proceedings of the Second International Conference on Provable Security, ProvSec 2008, held in Shanghai, China, October 30 - November 1, 2008. The 25 revised full papers presented were carefully reviewed and selected from 79 submissions. The papers are organized in topical sections on Encryption, Signature, Analysis, Application of Hash Functions, Universal Composability, and Applications.

*Bridging Mind and Model* Peter J. Costa 1994

**Mathematical Modelling and Nonstandard Schemes for the Corona Virus Pandemic** Sarah Marie Treibert

Optimization Theory Based on Neutrosophic and Plithogenic Sets Florentin Smarandache 2020-01-14 Optimization Theory Based on Neutrosophic and Plithogenic Sets presents the state-of-the-art research on neutrosophic and plithogenic theories and their applications in various optimization fields. Its table of contents covers new concepts, methods, algorithms, modelling, and applications of green supply chain, inventory control problems, assignment problems, transportation problem, nonlinear problems and new information related to optimization for the topic from the theoretical and applied viewpoints in neutrosophic sets and logic. All essential topics about neutrosophic optimization and Plithogenic sets make this volume the only single source of comprehensive information New and innovative theories help researchers solve problems under diverse optimization environments Varied applications address practitioner fields such as computational intelligence, image processing, medical diagnosis, fault diagnosis, and optimization design

**Advances in Applied and Computational Mathematics** Fengshan Liu 2006 .

*Proceedings of the Conference on Applied Mathematics and Scientific Computing* Zlatko Drmac 2005-12-05 This book brings together contributed papers presenting new results covering different areas of applied mathematics and scientific computing. Firstly, four invited lectures give state-of-the-art presentations in the fields of numerical linear algebra, shape preserving approximation and singular perturbation theory. Then an overview of numerical solutions to skew-Hamiltonian and Hamiltonian eigenvalue problems in system and control theory is given by Benner, Kressner and Mehrmann. The important issue of structure preserving algorithms and structured condition numbers is discussed. Costantini and Sampoli review the basic ideas of the abstract schemes and show that they can be used to solve any problem concerning the construction of spline curves subject to local constraints. Kvasov presents a novel approach in solving the problem of shape preserving spline interpolation. Formulating this problem as a differential multipoint boundary value problem for hyperbolic and biharmonic tension splines he considers its finite difference approximation. Miller and Shishkin consider the Black-Scholes equation that, for some values of the parameters, may be a singularly perturbed problem. They construct a new numerical method, on an appropriately fitted piecewise-uniform mesh, which is parameter-uniformly convergent.

*Topological Optimization and Optimal Transport* Maïtine Bergounioux 2017-08-07 By discussing topics

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such as shape representations, relaxation theory and optimal transport, trends and synergies of mathematical tools required for optimization of geometry and topology of shapes are explored. Furthermore, applications in science and engineering, including economics, social sciences, biology, physics and image processing are covered. Contents Part I Geometric issues in PDE problems related to the infinity Laplace operator Solution of free boundary problems in the presence of geometric uncertainties Distributed and boundary control problems for the semidiscrete Cahn-Hilliard/Navier-Stokes system with nonsmooth Ginzburg-Landau energies High-order topological expansions for Helmholtz problems in 2D On a new phase field model for the approximation of interfacial energies of multiphase systems Optimization of eigenvalues and eigenmodes by using the adjoint method Discrete varifolds and surface approximation Part II Weak Monge-Ampere solutions of the semi-discrete optimal transportation problem Optimal transportation theory with repulsive costs Wardrop equilibria: long-term variant, degenerate anisotropic PDEs and numerical approximations On the Lagrangian branched transport model and the equivalence with its Eulerian formulation On some nonlinear evolution systems which are perturbations of Wasserstein gradient flows Pressureless Euler equations with maximal density constraint: a time-splitting scheme Convergence of a fully discrete variational scheme for a thin-film equation Interpretation of finite volume discretization schemes for the Fokker-Planck equation as gradient flows for the discrete Wasserstein distance

**C# for Financial Markets** Daniel J. Duffy 2013-01-14 A practice-oriented guide to using C# to design and program pricing and trading models In this step-by-step guide to software development for financial analysts, traders, developers and quants, the authors show both novice and experienced practitioners how to develop robust and accurate pricing models and employ them in real environments. Traders will learn how to design and implement applications for curve and surface modeling, fixed income products, hedging strategies, plain and exotic option modeling, interest rate options, structured bonds, unfunded structured products, and more. A unique mix of modern software technology and quantitative finance, this book is both timely and practical. The approach is thorough and comprehensive and the authors use a combination of C# language features, design patterns, mathematics and finance to produce efficient and maintainable software. Designed for quant developers, traders and MSc/MFE students, each chapter has numerous exercises and the book is accompanied by a dedicated companion website, <http://www.datasimfinancial.com/forum/viewforum.php?f=196&sid=f30022095850dee48c7db5ff62192b34>, providing all source code, alongside audio, support and discussion forums for readers to comment on the code and obtain new versions of the software.

*Numerical Simulations of Incompressible Flows* M. M. Hafez 2003 This book consists of 37 articles dealing with simulation of incompressible flows and applications in many areas. It covers numerical methods and algorithm developments as well as applications in aeronautics and other areas. It represents the state of the art in the field. Contents: Navier-OCoStokes Solvers; Projection Methods; Finite Element Methods; Higher-Order Methods; Innovative Methods; Applications in Aeronautics; Applications Beyond Aeronautics; Multiphase and Cavitating Flows; Special Topics. Readership: Researchers and graduate students in computational science and engineering."

*Inference for Diffusion Processes* Christiane Fuchs 2013-01-18 Diffusion processes are a promising instrument for realistically modelling the time-continuous evolution of phenomena not only in the natural sciences but also in finance and economics. Their mathematical theory, however, is challenging, and hence diffusion modelling is often carried out incorrectly, and the according statistical inference is considered almost exclusively by theoreticians. This book explains both topics in an illustrative way which also addresses practitioners. It provides a complete overview of the current state of research and presents important, novel insights. The theory is demonstrated using real data applications.

**Computing Qualitatively Correct Approximations of Balance Laws** Laurent Gosse 2013-03-30  
Substantial effort has been drawn for years onto the development of (possibly high-order) numerical techniques for the scalar homogeneous conservation law, an equation which is strongly dissipative in L1 thanks to shock wave formation. Such a dissipation property is generally lost when considering hyperbolic systems of conservation laws, or simply inhomogeneous scalar balance laws involving accretive or space-dependent source terms, because of complex wave interactions. An overall weaker dissipation can reveal intrinsic numerical weaknesses through specific nonlinear mechanisms: Hugoniot curves being deformed by local averaging steps in Godunov-type schemes, low-order errors propagating along expanding characteristics after having hit a discontinuity, exponential amplification of truncation errors in the presence of accretive source terms... This book aims at presenting rigorous derivations of different, sometimes called well-balanced, numerical schemes which succeed in reconciling high accuracy with a stronger robustness even in the aforementioned accretive contexts. It is divided into two parts: one dealing with hyperbolic systems of balance laws, such as arising from quasi-one dimensional nozzle flow computations, multiphase WKB approximation of linear Schrödinger equations, or gravitational Navier-Stokes systems. Stability results for viscosity solutions of onedimensional balance laws are sketched. The other being entirely devoted to the treatment of weakly nonlinear kinetic equations in the discrete ordinate approximation, such as the ones of radiative transfer, chemotaxis dynamics, semiconductor conduction, spray dynamics or linearized Boltzmann models. "Caseology" is one of the main techniques used in these derivations. Lagrangian techniques for filtration equations are evoked too. Two-dimensional methods are studied in the context of non-degenerate semiconductor models.

#### **Applied Mechanics Reviews** 1974

**Parallel Processing and Applied Mathematics** Roman Wyrzykowski 2002-06-12 This book constitutes the thoroughly refereed post-proceedings of the 4th International Conference on Parallel Processing and Applied Mathematics, PPAM 2002, held in Naleczow, Poland, in September 2001. The 101 papers presented were carefully reviewed and improved during two rounds of reviewing and revision. The book offers topical sections on distributed and grid architectures, scheduling and load balancing, performance analysis and prediction, parallel non-numerical algorithms, parallel programming, tools and environments, parallel numerical algorithms, applications, and evolutionary computing and neural networks.

#### *Energy Research Abstracts* 1982

Mathematics, Informatics, and Their Applications in Natural Sciences and Engineering George Jaiani 2019-01-11 This book presents eleven peer-reviewed papers from the 3rd International Conference on Applications of Mathematics and Informatics in Natural Sciences and Engineering (AMINSE2017) held in Tbilisi, Georgia in December 2017. Written by researchers from the region (Georgia, Russia, Turkey) and from Western countries (France, Germany, Italy, Luxemburg, Spain, USA), it discusses key aspects of mathematics and informatics, and their applications in natural sciences and engineering. Featuring theoretical, practical and numerical contributions, the book appeals to scientists from various disciplines interested in applications of mathematics and informatics in natural sciences and engineering.

**Process Monitoring for Gamma Distributed Product under Neutrosophic Statistics Using Resampling Scheme** Abdullah M. Almarashi In this article, a repetitive sampling control chart for the

gamma distribution under the indeterminate environment has been presented. The control chart coefficients, probability of in-control, probability of out-of-control, and average run lengths have been determined under the assumption of the symmetrical property of the normal distribution using the neutrosophic interval method.

Issues in Logic, Operations, and Computational Mathematics and Geometry: 2013 Edition 2013-05-01  
Issues in Logic, Operations, and Computational Mathematics and Geometry: 2013 Edition is a ScholarlyEditions™ book that delivers timely, authoritative, and comprehensive information about Random Structures and Algorithms. The editors have built Issues in Logic, Operations, and Computational Mathematics and Geometry: 2013 Edition on the vast information databases of ScholarlyNews.™ You can expect the information about Random Structures and Algorithms in this book to be deeper than what you can access anywhere else, as well as consistently reliable, authoritative, informed, and relevant. The content of Issues in Logic, Operations, and Computational Mathematics and Geometry: 2013 Edition has been produced by the world's leading scientists, engineers, analysts, research institutions, and companies. All of the content is from peer-reviewed sources, and all of it is written, assembled, and edited by the editors at ScholarlyEditions™ and available exclusively from us. You now have a source you can cite with authority, confidence, and credibility. More information is available at <http://www.ScholarlyEditions.com/>.

**Cryptology and Network Security** David Pointcheval 2006-11-27 This book constitutes the refereed proceedings of the 5th International Conference on Cryptology and Network Security, CANS 2006, held in Suzhou, China, December 2006. The 26 revised full papers and 2 invited papers cover encryption, authentication and signatures, proxy signatures, cryptanalysis, implementation, steganalysis and watermarking, boolean functions and stream ciphers, intrusion detection, and disponibility and reliability.

**Applied Mathematics for Environmental Problems** María Isabel Asensio 2021-02-23 This book contains some contributions presented at the Applied Mathematics for Environmental Problems minisymposium during the International Congress on Industrial and Applied Mathematics (ICIAM) held July 15-19, 2019 in Valencia, Spain. The first paper addresses a simplified physical wildfire spread model, based on partial differential equations solved with finite element methods and integrated into a GIS to provide a useful and efficient tool. The second paper focuses on one of the causes of the unpredictable behavior of wildfire, fire-spotting, through a statistical approach. The third paper addresses low-level wind shear which represents one of the most relevant hazards during aircraft takeoff and landing. It presents an experimental wind shear alert system that is based on predicting wind velocities obtained from the Harmonie-Arome model. The last paper addresses the environmental impact of oil reservoirs. It presents high-order hybridizable discontinuous Galerkin formulation combined with high-order diagonally implicit Runge-Kutta schemes to solve one-phase and two-phase flow problems through porous media. All the contributions collected in this volume are interesting examples of how mathematics and numerical modelling are effective tools in the field of environmental problems.

**Spectral and High Order Methods for Partial Differential Equations ICOSAHOM 2014** Robert M. Kirby 2015-11-26 The book contains a selection of high quality papers, chosen among the best presentations during the International Conference on Spectral and High-Order Methods (2014), and provides an overview of the depth and breadth of the activities within this important research area. The carefully reviewed selection of papers will provide the reader with a snapshot of the state-of-the-art and help initiate new research directions through the extensive biography.

