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THIS BOOK PROVIDES RELEVANT THEORETICAL FRAMEWORKS AND THE LATEST EMPIRICAL RESEARCH FINDINGS ON GAME BASED LEARNING TO HELP READERS WHO WANT TO IMPROVE THEIR UNDERSTANDING OF THE IMPORTANT ROLES AND APPLICATIONS OF EDUCATIONAL GAMES IN TERMS OF TEACHING STRATEGIES INSTRUCTIONAL DESIGN EDUCATIONAL PSYCHOLOGY AND GAME DESIGN PROVIDED BY PUBLISHER THIS VOLUME CONTAINS THE PROCEEDINGS FROM THREE CONFERENCES THE PISRS 2011 INTERNATIONAL CONFERENCE ON ANALYSIS FRACTAL GEOMETRY DYNAMICAL SYSTEMS AND ECONOMICS HELD NOVEMBER 8 12 2011 IN MESSINA ITALY THE AMS SPECIAL SESSION ON FRACTAL GEOMETRY IN PURE AND APPLIED MATHEMATICS IN MEMORY OF BENOΓ T MANDELBROT HELD JANUARY 4 7 2012 IN BOSTON MA AND THE AMS SPECIAL SESSION ON GEOMETRY AND ANALYSIS ON FRACTAL SPACES HELD MARCH 3 4 2012 IN HONOLULU HI ARTICLES IN THIS VOLUME COVER FRACTAL GEOMETRY AND VARIOUS ASPECTS OF DYNAMICAL SYSTEMS IN APPLIED MATHEMATICS AND THE APPLICATIONS TO OTHER SCIENCES ALSO INCLUDED ARE ARTICLES DISCUSSING A VARIETY OF CONNECTIONS BETWEEN THESE SUBJECTS AND VARIOUS AREAS OF PHYSICS ENGINEERING COMPUTER SCIENCE TECHNOLOGY ECONOMICS AND FINANCE AS WELL AS OF MATHEMATICS INCLUDING PROBABILITY THEORY IN RELATION WITH STATISTICAL PHYSICS AND HEAT KERNEL ESTIMATES GEOMETRIC MEASURE THEORY PARTIAL DIFFERENTIAL EQUATIONS IN RELATION WITH CONDENSED MATTER PHYSICS GLOBAL ANALYSIS ON NON SMOOTH SPACES THE THEORY OF BILLIARDS HARMONIC ANALYSIS AND SPECTRAL GEOMETRY THE COMPANION VOLUME CONTEMPORARY MATHEMATICS VOLUME 600 FOCUSES ON THE MORE MATHEMATICAL ASPECTS OF FRACTAL GEOMETRY AND DYNAMICAL SYSTEMS BOUNDARY VALUE PROBLEMS ON BOUNDED OR UNBOUNDED INTERVALS INVOLVING TWO OR MORE COUPLED SYSTEMS OF NONLINEAR DIFFERENTIAL AND INTEGRAL EQUATIONS WITH FULL NONLINEARITIES ARE SCARCE IN THE LITERATURE THE PRESENT WORK BY THE AUTHORS DESIRES TO FILL THIS GAP THE SYSTEMS COVERED HERE INCLUDE DIFFERENTIAL AND INTEGRAL EQUATIONS OF HAMMERSTEIN TYPE WITH BOUNDARY CONSTRAINTS ON BOUNDED OR UNBOUNDED INTERVALS THESE ARE PRESENTED IN SEVERAL FORMS AND CONDITIONS THREE POINTS MIXED WITH FUNCTIONAL DEPENDENCE HOMOCLINIC AND HETEROCLINIC AMONGST OTHERS THIS WOULD BE THE FIRST TIME THAT DIFFERENTIAL AND INTEGRAL COUPLED SYSTEMS ARE STUDIED SYSTEMATICALLY THE EXISTENCE AND IN SOME CASES THE LOCALIZATION OF THE SOLUTIONS ARE CARRIED OUT IN BANACH SPACE FOLLOWING SEVERAL TYPES OF ARGUMENTS AND APPROACHES SUCH AS SCHAUDER S FIXED POINT THEOREM OR GUO KRASNOSEL SKI FIXED POINT THEOREM IN CONES ALLIED TO GREEN S FUNCTION OR ITS ESTIMATES LOWER AND UPPER SOLUTIONS CONVENIENT TRUNCATURES THE NAGUMO CONDITION PRESENTED IN DIFFERENT FORMS THE CONCEPT OF EQUICONVERGENCE CARATHΓ ODORY FUNCTIONS AND SEQUENCES MOREOVER THE FINAL PART IN THE VOLUME FEATURES SOME TECHNIQUES ON HOW TO RELATE DIFFERENTIAL COUPLED SYSTEMS TO INTEGRAL ONES WHICH REQUIRE LESS REGULARITY PARALLEL TO THE THEORETICAL EXPLANATION OF THIS WORK THERE IS A RANGE OF PRACTICAL EXAMPLES AND APPLICATIONS INVOLVING REAL PHENOMENA FOCUSING ON PHYSICS MECHANICS BIOLOGY FORESTRY AND DYNAMICAL SYSTEMS WHICH RESEARCHERS AND STUDENTS WILL FIND USEFUL THIS BOOK CONTAINS SELECT PAPERS PRESENTED AT THE INTERNATIONAL CONFERENCE ON APPLIED MATHEMATICS AND COMPUTATIONAL INTELLIGENCE ICAMCI 2020 HELD AT THE NATIONAL INSTITUTE OF TECHNOLOGY AGARTALA TRIPURA INDIA FROM 19 20 MARCH 2020 IT DISCUSSES THE MOST RECENT BREAKTHROUGHS IN INTELLIGENT TECHNIQUES SUCH AS FUZZY LOGIC NEURAL NETWORKS OPTIMIZATION ALGORITHMS AND THEIR APPLICATION IN THE DEVELOPMENT OF INTELLIGENT INFORMATION SYSTEMS BY USING APPLIED MATHEMATICS THE BOOK ALSO EXPLAINS HOW THESE SYSTEMS WILL BE USED IN DOMAINS SUCH AS INTELLIGENT CONTROL AND ROBOTICS PATTERN RECOGNITION MEDICAL DIAGNOSIS TIME SERIES PREDICTION AND COMPLICATED PROBLEMS IN OPTIMIZATION THE BOOK PUBLISHES NEW DEVELOPMENTS AND ADVANCES IN VARIOUS AREAS OF TYPE 3 FUZZY INTUITIONISTIC FUZZY COMPUTATIONAL MATHEMATICS BLOCK CHAIN CREAK ANALYSIS SUPPLY CHAIN SOFT COMPUTING FUZZY SYSTEMS HYBRID INTELLIGENT SYSTEMS THERMOS ELASTICITY ETC THE BOOK IS TARGETED TO RESEARCHERS SCIENTISTS PROFESSORS AND STUDENTS OF MATHEMATICS COMPUTER SCIENCE APPLIED SCIENCE AND ENGINEERING INTERESTED IN THE THEORY AND APPLICATIONS OF INTELLIGENT SYSTEMS IN REAL WORLD APPLICATIONS IT PROVIDES YOUNG RESEARCHERS AND STUDENTS WITH NEW DIRECTIONS FOR THEIR FUTURE STUDY BY EXCHANGING FRESH THOUGHTS AND FINDING NEW PROBLEMS THIS BOOK CONCENTRATES ON FIRST BOUNDARY VALUE PROBLEMS FOR FULLY NONLINEAR SECOND ORDER UNIFORMLY ELLIPTIC AND PARABOLIC EQUATIONS WITH DISCONTINUOUS COEFFICIENTS WE LOOK FOR SOLUTIONS IN SOBOLEV CLASSES LOCAL OR GLOBAL OR FOR VISCOSITY SOLUTIONS MOST OF THE AUXILIARY RESULTS SUCH AS ALEKSANDROV S ELLIPTIC AND PARABOLIC ESTIMATES THE KRYLOV SAFONOV AND THE EVANS KRYLOV THEOREMS ARE TAKEN FROM OLD SOURCES AND THE MAIN RESULTS WERE OBTAINED IN THE LAST FEW YEARS PRESENTATION OF THESE RESULTS IS BASED ON A GENERALIZATION OF THE FEFFERMAN STEIN THEOREM ON FANG HUA LIN S LIKE ESTIMATES AND ON THE SO CALLED ERSATZ EXISTENCE THEOREMS SAYING THAT ONE CAN SLIGHTLY MODIFY ANY EQUATION AND GET A CUT OFF EQUATION THAT HAS SOLUTIONS WITH BOUNDED DERIVATIVES THESE THEOREMS ALLOW US TO PROVE THE SOLVABILITY IN SOBOLEV CLASSES FOR EQUATIONS THAT ARE QUITE FAR FROM THE ONES WHICH ARE CONVEX OR CONCAVE WITH RESPECT TO THE HESSIANS OF THE UNKNOWN FUNCTIONS IN STUDYING VISCOSITY SOLUTIONS THESE THEOREMS ALSO ALLOW US TO DEAL WITH CLASSICAL APPROXIMATING SOLUTIONS THUS AVOIDING SOMETIMES HEAVY CONSTRUCTIONS FROM THE USUAL THEORY OF VISCOSITY SOLUTIONS THIS VOLUME CONTAINS THE PROCEEDINGS OF THE VIRTUAL CONFERENCE ON GEOMETRIC AND FUNCTIONAL INEQUALITIES AND RECENT TOPICS IN NONLINEAR PDES HELD FROM FEBRUARY 28 MARCH 1 2021 AND HOSTED BY PURDUE UNIVERSITY WEST LAFAYETTE IN THE MATHEMATICAL CONTENT OF THIS VOLUME IS AT THE INTERSECTION OF VISCOSITY THEORY FOURIER ANALYSIS MASS TRANSPORT THEORY FRACTIONAL ELLIPTIC THEORY AND GEOMETRIC ANALYSIS THE READER WILL ENCOUNTER AMONG OTHERS THE FOLLOWING TOPICS THE PRINCIPAL AGENT PROBLEM MAXWELL S EQUATIONS LIOUVILLE TYPE THEOREMS FOR FULLY NONLINEAR ELLIPTIC EQUATIONS A DOUBLY MONOTONE FLOW FOR CONSTANT WIDTH BODIES AND THE EDGE DISLOCATIONS PROBLEM FOR CRYSTALS THAT DESCRIBES THE EQUILIBRIUM CONFIGURATIONS BY A NONLOCAL FRACTIONAL LAPLACIAN EQUATION THIS VOLUME CONTAINS CONTRIBUTIONS FROM SPEAKERS AT THE 2015 2018 JOINT JOHNS HOPKINS UNIVERSITY AND UNIVERSITY OF MARYLAND COMPLEX GEOMETRY SEMINAR IT BEGINS WITH A SURVEY ARTICLE ON RECENT DEVELOPMENTS IN PLURIPOTENTIAL THEORY AND ITS APPLICATIONS TO KΓ HLER EINSTEIN METRICS AND CONTINUES WITH ARTICLES DEVOTED TO VARIOUS ASPECTS OF THE THEORY OF COMPLEX MANIFOLDS AND FUNCTIONS ON SUCH MANIFOLDS THE MAIN THEME OF THIS BOOK IS RECENT PROGRESS IN STRUCTURE PRESERVING ALGORITHMS FOR SOLVING INITIAL VALUE PROBLEMS OF OSCILLATORY DIFFERENTIAL EQUATIONS ARISING IN A VARIETY OF RESEARCH AREAS SUCH AS ASTRONOMY THEORETICAL PHYSICS ELECTRONICS QUANTUM MECHANICS AND ENGINEERING IT SYSTEMATICALLY DESCRIBES THE LATEST ADVANCES IN THE DEVELOPMENT OF STRUCTURE PRESERVING INTEGRATORS FOR OSCILLATORY DIFFERENTIAL EQUATIONS SUCH AS STRUCTURE PRESERVING EXPONENTIAL INTEGRATORS FUNCTIONALLY FITTED ENERGY PRESERVING INTEGRATORS EXPONENTIAL FOURIER COLLOCATION METHODS TRIGONOMETRIC COLLOCATION METHODS AND SYMMETRIC AND ARBITRARILY HIGH ORDER TIME STEPPING METHODS MOST OF THE MATERIAL PRESENTED HERE IS DRAWN FROM THE RECENT LITERATURE THEORETICAL ANALYSIS OF THE NEWLY DEVELOPED

SCHEMES SHOWS THEIR ADVANTAGES IN THE CONTEXT OF STRUCTURE PRESERVATION ALL THE NEW METHODS INTRODUCED IN THIS BOOK ARE PROVEN TO BE HIGHLY EFFECTIVE COMPARED WITH THE WELL KNOWN CODES IN THE SCIENTIFIC LITERATURE THIS BOOK ALSO ADDRESSES CHALLENGING PROBLEMS AT THE FOREFRONT OF MODERN NUMERICAL ANALYSIS AND PRESENTS A WIDE RANGE OF MODERN TOOLS AND TECHNIQUES THIS BOOK CONSTITUTES THE REFEREED PROCEEDINGS OF THE 21ST INTERNATIONAL CONFERENCE ON INTEGER PROGRAMMING AND COMBINATORIAL OPTIMIZATION IPCO 2020 HELD IN LONDON UK IN JUNE 2020 THE 33 FULL VERSIONS OF EXTENDED ABSTRACTS PRESENTED WERE CAREFULLY REVIEWED AND SELECTED FROM 126 SUBMISSIONS THE CONFERENCE IS A FORUM FOR RESEARCHERS AND PRACTITIONERS WORKING ON VARIOUS ASPECTS OF INTEGER PROGRAMMING AND COMBINATORIAL OPTIMIZATION THE AIM IS TO PRESENT RECENT DEVELOPMENTS IN THEORY COMPUTATION AND APPLICATIONS IN THESE AREAS AN ESSENTIAL COMPANION TO M VISHIK S GROUNDBREAKING WORK IN FLUID MECHANICS THE INCOMPRESSIBLE EULER EQUATIONS ARE A SYSTEM OF PARTIAL DIFFERENTIAL EQUATIONS INTRODUCED BY LEONHARD EULER MORE THAN 250 YEARS AGO TO DESCRIBE THE MOTION OF AN INVISCID INCOMPRESSIBLE FLUID THESE EQUATIONS CAN BE DERIVED FROM THE CLASSICAL CONSERVATIONS LAWS OF MASS AND MOMENTUM UNDER SOME VERY IDEALIZED ASSUMPTIONS WHILE THEY LOOK SIMPLE COMPARED TO MANY OTHER EQUATIONS OF MATHEMATICAL PHYSICS SEVERAL FUNDAMENTAL MATHEMATICAL QUESTIONS ABOUT THEM ARE STILL UNANSWERED ONE IS UNDER WHICH ASSUMPTIONS IT CAN BE RIGOROUSLY PROVED THAT THEY DETERMINE THE EVOLUTION OF THE FLUID ONCE WE KNOW ITS INITIAL STATE AND THE FORCES ACTING ON IT THIS BOOK ADDRESSES A WELL KNOWN CASE OF THIS QUESTION IN TWO SPACE DIMENSIONS FOLLOWING THE PIONEERING IDEAS OF M VISHIK THE AUTHORS EXPLAIN IN DETAIL THE OPTIMALITY OF A CELEBRATED THEOREM OF V YUDOVICH IN THE SIXTIES WHICH STATES THAT IN THE VORTICITY FORMULATION THE SOLUTION IS UNIQUE IF THE INITIAL VORTICITY AND THE ACTING FORCE ARE BOUNDED IN PARTICULAR THE AUTHORS SHOW THAT YUDOVICH S THEOREM CANNOT BE GENERALIZED TO THE L P SETTING THIS BOOK PROVIDES INTERNATIONAL PERSPECTIVES ON THE USE OF DIGITAL TECHNOLOGIES IN PRIMARY LOWER SECONDARY AND UPPER SECONDARY SCHOOL MATHEMATICS IT GATHERS CONTRIBUTIONS BY THE MEMBERS OF THREE TOPIC STUDY GROUPS FROM THE 13TH INTERNATIONAL CONGRESS ON MATHEMATICAL EDUCATION AND COVERS A RANGE OF THEMES THAT WILL APPEAL TO RESEARCHERS AND PRACTITIONERS ALIKE THE CHAPTERS INCLUDE STUDIES ON TECHNOLOGIES SUCH AS VIRTUAL MANIPULATIVES APPS CUSTOM BUILT ASSESSMENT TOOLS DYNAMIC GEOMETRY COMPUTER ALGEBRA SYSTEMS AND COMMUNICATION TOOLS CHIEFLY FOCUSING ON TEACHING AND LEARNING MATHEMATICS THE BOOK ALSO INCLUDES TWO CHAPTERS THAT ADDRESS THE EVIDENCE FOR TECHNOLOGIES EFFECTS ON SCHOOL MATHEMATICS THE DIVERSE TECHNOLOGIES CONSIDERED PROVIDE A BROAD OVERVIEW OF THE POTENTIAL THAT DIGITAL SOLUTIONS HOLD IN CONNECTION WITH TEACHING AND LEARNING THE CHAPTERS PROVIDE BOTH A SNAPSHOT OF THE STATUS QUO OF TECHNOLOGIES IN SCHOOL MATHEMATICS AND OUTLINE HOW THEY MIGHT IMPACT SCHOOL MATHEMATICS TEN TO TWENTY YEARS FROM NOW THE PRESENT VOLUME GATHERS CONTRIBUTIONS TO THE CONFERENCE MICROLOCAL AND TIME FREQUENCY ANALYSIS 2018 MLTFA18 WHICH WAS HELD AT TORINO UNIVERSITY FROM THE 2ND TO THE 6TH OF JULY 2018 THE EVENT WAS ORGANIZED IN HONOR OF PROFESSOR LUIGI RODINO ON THE OCCASION OF HIS 70TH BIRTHDAY THE CONFERENCE S FOCUS AND THE CONTENTS OF THE PAPERS REFLECT LUIGI S VARIOUS RESEARCH INTERESTS IN THE COURSE OF HIS LONG AND EXTREMELY PROLIFIC CAREER AT TORINO UNIVERSITY VARIATIONAL METHODS ARE VERY POWERFUL TECHNIQUES IN NONLINEAR ANALYSIS AND ARE EXTENSIVELY USED IN MANY DISCIPLINES OF PURE AND APPLIED MATHEMATICS INCLUDING ORDINARY AND PARTIAL DIFFERENTIAL EQUATIONS MATHEMATICAL PHYSICS GAUGE THEORY AND GEOMETRICAL ANALYSIS IN OUR FIRST CHAPTER WE GATHER THE BASIC NOTIONS AND FUNDAMENTAL THEOREMS THAT WILL BE APPLIED THROUGHOUT THE CHAPTERS WHILE MANY OF THESE ITEMS ARE EASILY AVAILABLE IN THE LITERATURE WE GATHER THEM HERE BOTH FOR THE CONVENIENCE OF THE READER AND FOR THE PURPOSE OF MAKING THIS VOLUME SOMEWHAT SELF CONTAINED SUBSEQUENT CHAPTERS DEAL WITH HOW VARIATIONAL METHODS CAN BE USED IN FOURTH ORDER PROBLEMS KIRCHHOFF PROBLEMS NONLINEAR FIELD PROBLEMS GRADIENT SYSTEMS AND VARIABLE EXPONENT PROBLEMS A VERY EXTENSIVE BIBLIOGRAPHY IS ALSO INCLUDED CONTENTS PREFACESOME NOTATIONS AND CONVENTIONSPRELIMINARIES AND VARIATIONAL PRINCIPLESQUASILINEAR FOURTH ORDER PROBLEMSKIRCHHOFF PROBLEMSNONLINEAR FIELD PROBLEMSGRADIENT SYSTEMSVARIABLE EXPONENT PROBLEMS READERSHIP GRADUATE STUDENTS AND RESEARCHERS INTERESTED IN VARIATIONAL METHODS BESIDES THEIR INTRINSIC MATHEMATICAL INTEREST GEOMETRIC PARTIAL DIFFERENTIAL EQUATIONS PDES ARE UBIQUITOUS IN MANY SCIENTIFIC ENGINEERING AND INDUSTRIAL APPLICATIONS THEY REPRESENT AN INTELLECTUAL CHALLENGE AND HAVE RECEIVED A GREAT DEAL OF ATTENTION RECENTLY THE PURPOSE OF THIS VOLUME IS TO PROVIDE A MISSING REFERENCE CONSISTING OF SELF CONTAINED AND COMPREHENSIVE PRESENTATIONS IT INCLUDES BASIC IDEAS ANALYSIS AND APPLICATIONS OF STATE OF THE ART FUNDAMENTAL ALGORITHMS FOR THE APPROXIMATION OF GEOMETRIC PDES TOGETHER WITH THEIR IMPACTS IN A VARIETY OF FIELDS WITHIN MATHEMATICS SCIENCE AND ENGINEERING ABOUT EVERY ASPECT OF COMPUTATIONAL GEOMETRIC PDES IS DISCUSSED IN THIS AND A COMPANION VOLUME TOPICS IN THIS VOLUME INCLUDE STATIONARY AND TIME DEPENDENT SURFACE PDES FOR GEOMETRIC FLOWS LARGE DEFORMATIONS OF NONLINEARLY GEOMETRIC PLATES AND RODS LEVEL SET AND PHASE FIELD METHODS AND APPLICATIONS FREE BOUNDARY PROBLEMS DISCRETE RIEMANNIAN CALCULUS AND MORPHING FULLY NONLINEAR PDES INCLUDING MONGE AMPERE EQUATIONS AND PDE CONSTRAINED OPTIMIZATION EACH CHAPTER IS A COMPLETE ESSAY AT THE RESEARCH LEVEL BUT ACCESSIBLE TO JUNIOR RESEARCHERS AND STUDENTS THE INTENT IS TO PROVIDE A COMPREHENSIVE DESCRIPTION OF ALGORITHMS AND THEIR ANALYSIS FOR A SPECIFIC GEOMETRIC PDE CLASS STARTING FROM BASIC CONCEPTS AND CONCLUDING WITH INTERESTING APPLICATIONS EACH CHAPTER IS THUS USEFUL AS AN INTRODUCTION TO A RESEARCH AREA AS WELL AS A TEACHING RESOURCE AND PROVIDES NUMEROUS POINTERS TO THE LITERATURE FOR FURTHER READING THE AUTHORS OF EACH CHAPTER ARE WORLD LEADERS IN THEIR FIELD OF EXPERTISE AND SKILLFUL WRITERS THIS BOOK IS THUS MEANT TO PROVIDE AN INVALUABLE READABLE AND ENJOYABLE ACCOUNT OF COMPUTATIONAL GEOMETRIC PDES THIS VOLUME COLLECTS CONTRIBUTIONS FROM THE SPEAKERS AT AN INDAM INTENSIVE PERIOD HELD AT THE UNIVERSITY OF BARI IN 2017 THE CONTRIBUTIONS COVER SEVERAL ASPECTS OF PARTIAL DIFFERENTIAL EQUATIONS WHOSE DEVELOPMENT IN RECENT YEARS HAS EXPERIENCED MAJOR BREAKTHROUGHS IN TERMS OF BOTH THEORY AND APPLICATIONS THE TOPICS COVERED INCLUDE NONLOCAL EQUATIONS ELLIPTIC EQUATIONS AND SYSTEMS FULLY NONLINEAR EQUATIONS NONLINEAR PARABOLIC EQUATIONS OVERDETERMINED BOUNDARY VALUE PROBLEMS MAXIMUM PRINCIPLES GEOMETRIC ANALYSIS CONTROL THEORY MEAN FIELD GAMES AND BIO MATHEMATICS THE AUTHORS ARE TRAILBLAZERS IN THESE TOPICS AND PRESENT THEIR WORK IN A WAY THAT IS EXHAUSTIVE AND CLEARLY ACCESSIBLE TO PHD STUDENTS AND EARLY CAREER RESEARCHER AS SUCH THE BOOK OFFERS AN EXCELLENT INTRODUCTION TO A VARIETY OF FUNDAMENTAL TOPICS OF CONTEMPORARY INVESTIGATION AND INSPIRES NOVEL AND HIGH QUALITY RESEARCH THE STUDY OF RANDOM GROWTH MODELS BEGAN IN PROBABILITY THEORY ABOUT 50 YEARS AGO AND TODAY THIS AREA OCCUPIES A CENTRAL PLACE IN THE SUBJECT THE CONSIDERABLE CHALLENGES POSED BY THESE MODELS HAVE SPURRED THE DEVELOPMENT OF INNOVATIVE PROBABILITY THEORY AND OPENED UP CONNECTIONS WITH SEVERAL OTHER PARTS OF MATHEMATICS SUCH AS PARTIAL DIFFERENTIAL EQUATIONS INTEGRABLE SYSTEMS AND COMBINATORICS THESE MODELS ALSO HAVE APPLICATIONS TO FIELDS SUCH AS COMPUTER SCIENCE BIOLOGY AND PHYSICS THIS VOLUME IS BASED ON LECTURES DELIVERED AT THE 2017 AMS SHORT COURSE RANDOM GROWTH MODELS HELD JANUARY 2 3 2017 IN ATLANTA GA THE ARTICLES IN THIS BOOK GIVE AN INTRODUCTION TO THE MOST STUDIED MODELS NAMELY FIRST AND LAST PASSAGE PERCOLATION THE EDEN MODEL OF CELL GROWTH AND PARTICLE SYSTEMS FOCUSING ON THE MAIN RESEARCH QUESTIONS AND LEADING UP TO THE CELEBRATED KARDAR PARISI ZHANG

EQUATION TOPICS COVERED INCLUDE ASYMPTOTIC PROPERTIES OF INFECTION TIMES LIMITING SHAPE RESULTS FLUCTUATION BOUNDS AND GEOMETRICAL PROPERTIES OF GEODESICS WHICH ARE OPTIMAL PATHS FOR GROWTH

Resources in Education

1978

THIS BOOK PROVIDES RELEVANT THEORETICAL FRAMEWORKS AND THE LATEST EMPIRICAL RESEARCH FINDINGS ON GAME BASED LEARNING TO HELP READERS WHO WANT TO IMPROVE THEIR UNDERSTANDING OF THE IMPORTANT ROLES AND APPLICATIONS OF EDUCATIONAL GAMES IN TERMS OF TEACHING STRATEGIES INSTRUCTIONAL DESIGN EDUCATIONAL PSYCHOLOGY AND GAME DESIGN PROVIDED BY PUBLISHER

Resources in education

1994

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Handbook of Research on Improving Learning and Motivation through Educational Games: Multidisciplinary Approaches

2011-04-30

BOUNDARY VALUE PROBLEMS ON BOUNDED OR UNBOUNDED INTERVALS INVOLVING TWO OR MORE COUPLED SYSTEMS OF NONLINEAR DIFFERENTIAL AND INTEGRAL EQUATIONS WITH FULL NONLINEARITIES ARE SCARCE IN THE LITERATURE THE PRESENT WORK BY THE AUTHORS DESIRES TO FILL THIS GAP THE SYSTEMS COVERED HERE INCLUDE DIFFERENTIAL AND INTEGRAL EQUATIONS OF HAMMERSTEIN TYPE WITH BOUNDARY CONSTRAINTS ON BOUNDED OR UNBOUNDED INTERVALS THESE ARE PRESENTED IN SEVERAL FORMS AND CONDITIONS THREE POINTS MIXED WITH FUNCTIONAL DEPENDENCE HOMOCLINIC AND HETEROCLINIC AMONGST OTHERS THIS WOULD BE THE FIRST TIME THAT DIFFERENTIAL AND INTEGRAL COUPLED SYSTEMS ARE STUDIED SYSTEMATICALLY THE EXISTENCE AND IN SOME CASES THE LOCALIZATION OF THE SOLUTIONS ARE CARRIED OUT IN BANACH SPACE FOLLOWING SEVERAL TYPES OF ARGUMENTS AND APPROACHES SUCH AS SCHAUDER S FIXED POINT THEOREM OR GUO KRASNOSEL SKI FIXED POINT THEOREM IN CONES ALLIED TO GREEN S FUNCTION OR ITS ESTIMATES LOWER AND UPPER SOLUTIONS CONVENIENT TRUNCATURES THE NAGUMO CONDITION PRESENTED IN DIFFERENT FORMS THE CONCEPT OF EQUICONVERGENCE CARATH⍰ODORY FUNCTIONS AND SEQUENCES MOREOVER THE FINAL PART IN THE VOLUME FEATURES SOME TECHNIQUES ON HOW TO RELATE DIFFERENTIAL COUPLED SYSTEMS TO INTEGRAL ONES WHICH REQUIRE LESS REGULARITY PARALLEL TO THE THEORETICAL EXPLANATION OF THIS WORK THERE IS A RANGE OF PRACTICAL EXAMPLES AND APPLICATIONS INVOLVING REAL PHENOMENA FOCUSING ON PHYSICS MECHANICS BIOLOGY FORESTRY AND DYNAMICAL SYSTEMS WHICH RESEARCHERS AND STUDENTS WILL FIND USEFUL

Research in Education

1968

THIS BOOK CONTAINS SELECT PAPERS PRESENTED AT THE INTERNATIONAL CONFERENCE ON APPLIED MATHEMATICS AND COMPUTATIONAL INTELLIGENCE ICAMCI 2020 HELD AT THE NATIONAL INSTITUTE OF TECHNOLOGY AGARTALA TRIPURA INDIA FROM 19 20 MARCH 2020 IT DISCUSSES THE MOST RECENT BREAKTHROUGHS IN INTELLIGENT TECHNIQUES SUCH AS FUZZY LOGIC NEURAL NETWORKS OPTIMIZATION ALGORITHMS AND THEIR APPLICATION IN THE DEVELOPMENT OF INTELLIGENT INFORMATION SYSTEMS BY USING APPLIED MATHEMATICS THE BOOK ALSO EXPLAINS HOW THESE SYSTEMS WILL BE USED IN DOMAINS SUCH AS INTELLIGENT CONTROL AND ROBOTICS PATTERN

RECOGNITION MEDICAL DIAGNOSIS TIME SERIES PREDICTION AND COMPLICATED PROBLEMS IN OPTIMIZATION THE BOOK PUBLISHES NEW DEVELOPMENTS AND ADVANCES IN VARIOUS AREAS OF TYPE 3 FUZZY INTUITIONISTIC FUZZY COMPUTATIONAL MATHEMATICS BLOCK CHAIN CREAK ANALYSIS SUPPLY CHAIN SOFT COMPUTING FUZZY SYSTEMS HYBRID INTELLIGENT SYSTEMS THERMOS ELASTICITY ETC THE BOOK IS TARGETED TO RESEARCHERS SCIENTISTS PROFESSORS AND STUDENTS OF MATHEMATICS COMPUTER SCIENCE APPLIED SCIENCE AND ENGINEERING INTERESTED IN THE THEORY AND APPLICATIONS OF INTELLIGENT SYSTEMS IN REAL WORLD APPLICATIONS IT PROVIDES YOUNG RESEARCHERS AND STUDENTS WITH NEW DIRECTIONS FOR THEIR FUTURE STUDY BY EXCHANGING FRESH THOUGHTS AND FINDING NEW PROBLEMS

American Book Publishing Record

1968

THIS BOOK CONCENTRATES ON FIRST BOUNDARY VALUE PROBLEMS FOR FULLY NONLINEAR SECOND ORDER UNIFORMLY ELLIPTIC AND PARABOLIC EQUATIONS WITH DISCONTINUOUS COEFFICIENTS WE LOOK FOR SOLUTIONS IN SOBOLEV CLASSES LOCAL OR GLOBAL OR FOR VISCOSITY SOLUTIONS MOST OF THE AUXILIARY RESULTS SUCH AS ALEKSANDROV S ELLIPTIC AND PARABOLIC ESTIMATES THE KRYLOV SAFONOV AND THE EVANS KRYLOV THEOREMS ARE TAKEN FROM OLD SOURCES AND THE MAIN RESULTS WERE OBTAINED IN THE LAST FEW YEARS PRESENTATION OF THESE RESULTS IS BASED ON A GENERALIZATION OF THE FEFFERMAN STEIN THEOREM ON FANG HUA LIN S LIKE ESTIMATES AND ON THE SO CALLED ERSATZ EXISTENCE THEOREMS SAYING THAT ONE CAN SLIGHTLY MODIFY ANY EQUATION AND GET A CUT OFF EQUATION THAT HAS SOLUTIONS WITH BOUNDED DERIVATIVES THESE THEOREMS ALLOW US TO PROVE THE SOLVABILITY IN SOBOLEV CLASSES FOR EQUATIONS THAT ARE QUITE FAR FROM THE ONES WHICH ARE CONVEX OR CONCAVE WITH RESPECT TO THE HESSIANS OF THE UNKNOWN FUNCTIONS IN STUDYING VISCOSITY SOLUTIONS THESE THEOREMS ALSO ALLOW US TO DEAL WITH CLASSICAL APPROXIMATING SOLUTIONS THUS AVOIDING SOMETIMES HEAVY CONSTRUCTIONS FROM THE USUAL THEORY OF VISCOSITY SOLUTIONS

Highway Safety Literature

1975

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Fractal Geometry and Dynamical Systems in Pure and Applied Mathematics II

2013-10-24

THIS VOLUME CONTAINS CONTRIBUTIONS FROM SPEAKERS AT THE 2015 2018 JOINT JOHNS HOPKINS UNIVERSITY AND UNIVERSITY OF MARYLAND COMPLEX GEOMETRY SEMINAR IT BEGINS WITH A SURVEY ARTICLE ON RECENT DEVELOPMENTS IN PLURIPOTENTIAL THEORY AND ITS APPLICATIONS TO KÄHLER EINSTEIN METRICS AND CONTINUES WITH ARTICLES DEVOTED TO VARIOUS ASPECTS OF THE THEORY OF COMPLEX MANIFOLDS AND FUNCTIONS ON SUCH MANIFOLDS

Nonlinear Higher Order Differential And Integral Coupled Systems: Impulsive And Integral Equations On Bounded And Unbounded Domains

2022-04-11

THE MAIN THEME OF THIS BOOK IS RECENT PROGRESS IN STRUCTURE PRESERVING ALGORITHMS FOR SOLVING INITIAL VALUE PROBLEMS OF OSCILLATORY DIFFERENTIAL EQUATIONS ARISING IN A VARIETY OF RESEARCH AREAS SUCH AS

ASTRONOMY THEORETICAL PHYSICS ELECTRONICS QUANTUM MECHANICS AND ENGINEERING IT SYSTEMATICALLY DESCRIBES THE LATEST ADVANCES IN THE DEVELOPMENT OF STRUCTURE PRESERVING INTEGRATORS FOR OSCILLATORY DIFFERENTIAL EQUATIONS SUCH AS STRUCTURE PRESERVING EXPONENTIAL INTEGRATORS FUNCTIONALLY FITTED ENERGY PRESERVING INTEGRATORS EXPONENTIAL FOURIER COLLOCATION METHODS TRIGONOMETRIC COLLOCATION METHODS AND SYMMETRIC AND ARBITRARILY HIGH ORDER TIME STEPPING METHODS MOST OF THE MATERIAL PRESENTED HERE IS DRAWN FROM THE RECENT LITERATURE THEORETICAL ANALYSIS OF THE NEWLY DEVELOPED SCHEMES SHOWS THEIR ADVANTAGES IN THE CONTEXT OF STRUCTURE PRESERVATION ALL THE NEW METHODS INTRODUCED IN THIS BOOK ARE PROVEN TO BE HIGHLY EFFECTIVE COMPARED WITH THE WELL KNOWN CODES IN THE SCIENTIFIC LITERATURE THIS BOOK ALSO ADDRESSES CHALLENGING PROBLEMS AT THE FOREFRONT OF MODERN NUMERICAL ANALYSIS AND PRESENTS A WIDE RANGE OF MODERN TOOLS AND TECHNIQUES

Research in Education

1968

THIS BOOK CONSTITUTES THE REFEREED PROCEEDINGS OF THE 21ST INTERNATIONAL CONFERENCE ON INTEGER PROGRAMMING AND COMBINATORIAL OPTIMIZATION IPCO 2020 HELD IN LONDON UK IN JUNE 2020 THE 33 FULL VERSIONS OF EXTENDED ABSTRACTS PRESENTED WERE CAREFULLY REVIEWED AND SELECTED FROM 126 SUBMISSIONS THE CONFERENCE IS A FORUM FOR RESEARCHERS AND PRACTITIONERS WORKING ON VARIOUS ASPECTS OF INTEGER PROGRAMMING AND COMBINATORIAL OPTIMIZATION THE AIM IS TO PRESENT RECENT DEVELOPMENTS IN THEORY COMPUTATION AND APPLICATIONS IN THESE AREAS

Winter Annual Meeting

1961

AN ESSENTIAL COMPANION TO M VISHIK S GROUNDBREAKING WORK IN FLUID MECHANICS THE INCOMPRESSIBLE EULER EQUATIONS ARE A SYSTEM OF PARTIAL DIFFERENTIAL EQUATIONS INTRODUCED BY LEONHARD EULER MORE THAN 250 YEARS AGO TO DESCRIBE THE MOTION OF AN INVISCID INCOMPRESSIBLE FLUID THESE EQUATIONS CAN BE DERIVED FROM THE CLASSICAL CONSERVATIONS LAWS OF MASS AND MOMENTUM UNDER SOME VERY IDEALIZED ASSUMPTIONS WHILE THEY LOOK SIMPLE COMPARED TO MANY OTHER EQUATIONS OF MATHEMATICAL PHYSICS SEVERAL FUNDAMENTAL MATHEMATICAL QUESTIONS ABOUT THEM ARE STILL UNANSWERED ONE IS UNDER WHICH ASSUMPTIONS IT CAN BE RIGOROUSLY PROVED THAT THEY DETERMINE THE EVOLUTION OF THE FLUID ONCE WE KNOW ITS INITIAL STATE AND THE FORCES ACTING ON IT THIS BOOK ADDRESSES A WELL KNOWN CASE OF THIS QUESTION IN TWO SPACE DIMENSIONS FOLLOWING THE PIONEERING IDEAS OF M VISHIK THE AUTHORS EXPLAIN IN DETAIL THE OPTIMALITY OF A CELEBRATED THEOREM OF V YUDOVICH IN THE SIXTIES WHICH STATES THAT IN THE VORTICITY FORMULATION THE SOLUTION IS UNIQUE IF THE INITIAL VORTICITY AND THE ACTING FORCE ARE BOUNDED IN PARTICULAR THE AUTHORS SHOW THAT YUDOVICH S THEOREM CANNOT BE GENERALIZED TO THE L P SETTING

Air Force Scientific Research Bibliography: 1950-56

2023-05-23

THIS BOOK PROVIDES INTERNATIONAL PERSPECTIVES ON THE USE OF DIGITAL TECHNOLOGIES IN PRIMARY LOWER SECONDARY AND UPPER SECONDARY SCHOOL MATHEMATICS IT GATHERS CONTRIBUTIONS BY THE MEMBERS OF THREE TOPIC STUDY GROUPS FROM THE 13TH INTERNATIONAL CONGRESS ON MATHEMATICAL EDUCATION AND COVERS A RANGE OF THEMES THAT WILL APPEAL TO RESEARCHERS AND PRACTITIONERS ALIKE THE CHAPTERS INCLUDE STUDIES ON TECHNOLOGIES SUCH AS VIRTUAL MANIPULATIVES APPS CUSTOM BUILT ASSESSMENT TOOLS DYNAMIC GEOMETRY COMPUTER ALGEBRA SYSTEMS AND COMMUNICATION TOOLS CHIEFLY FOCUSING ON TEACHING AND LEARNING MATHEMATICS THE BOOK ALSO INCLUDES TWO CHAPTERS THAT ADDRESS THE EVIDENCE FOR TECHNOLOGIES EFFECTS ON SCHOOL MATHEMATICS THE DIVERSE TECHNOLOGIES CONSIDERED PROVIDE A BROAD OVERVIEW OF THE POTENTIAL THAT DIGITAL SOLUTIONS HOLD IN CONNECTION WITH TEACHING AND LEARNING THE CHAPTERS PROVIDE BOTH A SNAPSHOT OF THE STATUS QUO OF TECHNOLOGIES IN SCHOOL MATHEMATICS AND OUTLINE HOW THEY MIGHT IMPACT SCHOOL MATHEMATICS TEN TO TWENTY YEARS FROM NOW

Applied Mathematics and Computational Intelligence

2018-09-07

THE PRESENT VOLUME GATHERS CONTRIBUTIONS TO THE CONFERENCE MICROLOCAL AND TIME FREQUENCY ANALYSIS 2018 MLTFA18 WHICH WAS HELD AT TORINO UNIVERSITY FROM THE 2ND TO THE 6TH OF JULY 2018 THE EVENT WAS ORGANIZED IN HONOR OF PROFESSOR LUIGI RODINO ON THE OCCASION OF HIS 70TH BIRTHDAY THE CONFERENCE S FOCUS AND THE CONTENTS OF THE PAPERS REFLECT LUIGI S VARIOUS RESEARCH INTERESTS IN THE COURSE OF HIS LONG AND EXTREMELY PROLIFIC CAREER AT TORINO UNIVERSITY

Sobolev and Viscosity Solutions for Fully Nonlinear Elliptic and Parabolic Equations

2023-01-09

VARIATIONAL METHODS ARE VERY POWERFUL TECHNIQUES IN NONLINEAR ANALYSIS AND ARE EXTENSIVELY USED IN MANY DISCIPLINES OF PURE AND APPLIED MATHEMATICS INCLUDING ORDINARY AND PARTIAL DIFFERENTIAL EQUATIONS MATHEMATICAL PHYSICS GAUGE THEORY AND GEOMETRICAL ANALYSIS IN OUR FIRST CHAPTER WE GATHER THE BASIC NOTIONS AND FUNDAMENTAL THEOREMS THAT WILL BE APPLIED THROUGHOUT THE CHAPTERS WHILE MANY OF THESE ITEMS ARE EASILY AVAILABLE IN THE LITERATURE WE GATHER THEM HERE BOTH FOR THE CONVENIENCE OF THE READER AND FOR THE PURPOSE OF MAKING THIS VOLUME SOMEWHAT SELF CONTAINED SUBSEQUENT CHAPTERS DEAL WITH HOW VARIATIONAL METHODS CAN BE USED IN FOURTH ORDER PROBLEMS KIRCHHOFF PROBLEMS NONLINEAR FIELD PROBLEMS GRADIENT SYSTEMS AND VARIABLE EXPONENT PROBLEMS A VERY EXTENSIVE BIBLIOGRAPHY IS ALSO INCLUDED CONTENTS PREFACESOME NOTATIONS AND CONVENTIONSPRELIMINARIES AND VARIATIONAL PRINCIPLESQUASILINEAR FOURTH ORDER PROBLEMSKIRCHHOFF PROBLEMSNONLINEAR FIELD PROBLEMSGRADIENT SYSTEMSVARIABLE EXPONENT PROBLEMS READERSHIP GRADUATE STUDENTS AND RESEARCHERS INTERESTED IN VARIATIONAL METHODS

Geometric and Functional Inequalities and Recent Topics in Nonlinear PDEs

1973

BESIDES THEIR INTRINSIC MATHEMATICAL INTEREST GEOMETRIC PARTIAL DIFFERENTIAL EQUATIONS PDES ARE UBIQUITOUS IN MANY SCIENTIFIC ENGINEERING AND INDUSTRIAL APPLICATIONS THEY REPRESENT AN INTELLECTUAL CHALLENGE AND HAVE RECEIVED A GREAT DEAL OF ATTENTION RECENTLY THE PURPOSE OF THIS VOLUME IS TO PROVIDE A MISSING REFERENCE CONSISTING OF SELF CONTAINED AND COMPREHENSIVE PRESENTATIONS IT INCLUDES BASIC IDEAS ANALYSIS AND APPLICATIONS OF STATE OF THE ART FUNDAMENTAL ALGORITHMS FOR THE APPROXIMATION OF GEOMETRIC PDES TOGETHER WITH THEIR IMPACTS IN A VARIETY OF FIELDS WITHIN MATHEMATICS SCIENCE AND ENGINEERING ABOUT EVERY ASPECT OF COMPUTATIONAL GEOMETRIC PDES IS DISCUSSED IN THIS AND A COMPANION VOLUME TOPICS IN THIS VOLUME INCLUDE STATIONARY AND TIME DEPENDENT SURFACE PDES FOR GEOMETRIC FLOWS LARGE DEFORMATIONS OF NONLINEARLY GEOMETRIC PLATES AND RODS LEVEL SET AND PHASE FIELD METHODS AND APPLICATIONS FREE BOUNDARY PROBLEMS DISCRETE RIEMANNIAN CALCULUS AND MORPHING FULLY NONLINEAR PDES INCLUDING MONGE AMPERE EQUATIONS AND PDE CONSTRAINED OPTIMIZATION EACH CHAPTER IS A COMPLETE ESSAY AT THE RESEARCH LEVEL BUT ACCESSIBLE TO JUNIOR RESEARCHERS AND STUDENTS THE INTENT IS TO PROVIDE A COMPREHENSIVE DESCRIPTION OF ALGORITHMS AND THEIR ANALYSIS FOR A SPECIFIC GEOMETRIC PDE CLASS STARTING FROM BASIC CONCEPTS AND CONCLUDING WITH INTERESTING APPLICATIONS EACH CHAPTER IS THUS USEFUL AS AN INTRODUCTION TO A RESEARCH AREA AS WELL AS A TEACHING RESOURCE AND PROVIDES NUMEROUS POINTERS TO THE LITERATURE FOR FURTHER READING THE AUTHORS OF EACH CHAPTER ARE WORLD LEADERS IN THEIR FIELD OF EXPERTISE AND SKILLFUL WRITERS THIS BOOK IS THUS MEANT TO PROVIDE AN INVALUABLE READABLE AND ENJOYABLE ACCOUNT OF COMPUTATIONAL GEOMETRIC PDES

Current Topics in Education

2019-08-26

THIS VOLUME COLLECTS CONTRIBUTIONS FROM THE SPEAKERS AT AN INDAM INTENSIVE PERIOD HELD AT THE UNIVERSITY OF BARI IN 2017 THE CONTRIBUTIONS COVER SEVERAL ASPECTS OF PARTIAL DIFFERENTIAL EQUATIONS WHOSE DEVELOPMENT IN RECENT YEARS HAS EXPERIENCED MAJOR BREAKTHROUGHS IN TERMS OF BOTH THEORY AND APPLICATIONS THE TOPICS COVERED INCLUDE NONLOCAL EQUATIONS ELLIPTIC EQUATIONS AND SYSTEMS FULLY NONLINEAR EQUATIONS NONLINEAR PARABOLIC EQUATIONS OVERDETERMINED BOUNDARY VALUE PROBLEMS MAXIMUM PRINCIPLES GEOMETRIC ANALYSIS CONTROL THEORY MEAN FIELD GAMES AND BIO MATHEMATICS THE AUTHORS ARE TRAILBLAZERS IN THESE TOPICS AND PRESENT THEIR WORK IN A WAY THAT IS EXHAUSTIVE AND CLEARLY ACCESSIBLE TO PHD STUDENTS AND EARLY CAREER RESEARCHER AS SUCH THE BOOK OFFERS AN EXCELLENT INTRODUCTION TO A VARIETY OF FUNDAMENTAL TOPICS OF CONTEMPORARY INVESTIGATION AND INSPIRES NOVEL AND HIGH QUALITY RESEARCH

Advances in Complex Geometry

2018-04-19

THE STUDY OF RANDOM GROWTH MODELS BEGAN IN PROBABILITY THEORY ABOUT 50 YEARS AGO AND TODAY THIS AREA OCCUPIES A CENTRAL PLACE IN THE SUBJECT THE CONSIDERABLE CHALLENGES POSED BY THESE MODELS HAVE SPURRED THE DEVELOPMENT OF INNOVATIVE PROBABILITY THEORY AND OPENED UP CONNECTIONS WITH SEVERAL OTHER PARTS OF MATHEMATICS SUCH AS PARTIAL DIFFERENTIAL EQUATIONS INTEGRABLE SYSTEMS AND COMBINATORICS THESE MODELS ALSO HAVE APPLICATIONS TO FIELDS SUCH AS COMPUTER SCIENCE BIOLOGY AND PHYSICS THIS VOLUME IS BASED ON LECTURES DELIVERED AT THE 2017 AMS SHORT COURSE RANDOM GROWTH MODELS HELD JANUARY 2 3 2017 IN ATLANTA GA THE ARTICLES IN THIS BOOK GIVE AN INTRODUCTION TO THE MOST STUDIED MODELS NAMELY FIRST AND LAST PASSAGE PERCOLATION THE EDEN MODEL OF CELL GROWTH AND PARTICLE SYSTEMS FOCUSING ON THE MAIN RESEARCH QUESTIONS AND LEADING UP TO THE CELEBRATED KARDAR PARISI ZHANG EQUATION TOPICS COVERED INCLUDE ASYMPTOTIC PROPERTIES OF INFECTION TIMES LIMITING SHAPE RESULTS FLUCTUATION BOUNDS AND GEOMETRICAL PROPERTIES OF GEODESICS WHICH ARE OPTIMAL PATHS FOR GROWTH

Recent Developments in Structure-Preserving Algorithms for Oscillatory Differential Equations

2020-04-13

Integer Programming and Combinatorial Optimization

1981

A Descriptive Multimethod Study of Teacher Judgment During the Marking Process

2024-02-13

Instability and Non-uniqueness for the 2D Euler Equations, After M. Vishik

1995-04

Current Index to Journals in Education

1994

Books in Print

2018-05-14

Uses of Technology in Primary and Secondary Mathematics Education

2020-03-03

Handbook of Digital Resources in Mathematics Education

1948

Advances in Microlocal and Time-Frequency Analysis

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Bulletin of the University of Miami

1975

Solutions of Nonlinear Differential Equations

2020-01-14

Announcement of Highway Safety Literature

1997

Geometric Partial Differential Equations - Part I

2019-07-12

SIAM Journal on Control and Optimization

2009

Contemporary Research in Elliptic PDEs and Related Topics

2018-09-27

Undergraduate Catalog

1986

Random Growth Models

1987

Ulrich's International Periodicals Directory

1957

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1973

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2008

ABSTRACTS OF INSTRUCTIONAL MATERIALS IN VOCATIONAL AND TECHNICAL EDUCATION

2021-12-03

BULLETIN OF THE INSTITUTE OF MATHEMATICS, ACADEMIA SINICA

1979

MATHEMATICAL TREATMENT OF NANOMATERIALS AND NEURAL NETWORKS

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