
Doctoral Degrees Conferred

2009–2010

ALABAMA

Auburn University (8)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Allagan, Julian, Choice numbers, Ohba numbers and Hall numbers of some complete k -partite graphs

Delgado Ortiz, Abel, Intersection problem for the class of quaternary Reed-Muller codes

Fuller, Chris, Constructive aspects of the generalized orthogonal group

Greiwe, Regina, Properties of nonmetric hereditarily indecomposable subcontinua of finite products of lexicographic arcs

Prier, David, The inverse domination number problem, DI-pathological graphs and fractional analogues

Secor-Hutchinson, Jennifer, Thin-type dense sets and related properties

Spadaro, Santi, Discrete sets, free sequences and cardinal properties of topological spaces

Tiemeyer, Michael, C_4 -factorizations with two associate classes

University of Alabama-Birmingham (4)

DEPARTMENT OF BIostatistics

Gao, Hong-Jiang, Hypothesis testing based on pool screening with unequal pool sizes

Hamilton, Kiya, Extension of the predictive power method with multiple endpoints

Sun, Yanhui, Methods for estimating mediation effects in survival analysis: Does weight loss mediate the undernutrition-mortality relationship in the older adults?

DEPARTMENT OF MATHEMATICS

Curry, Clinton, Topological models of Julia sets

University of Alabama-Huntsville (1)

DEPARTMENT OF MATHEMATICAL SCIENCES

Igor, Savin, Numerical methods for singularly perturbed boundary value problems and singularly perturbed equations

University of Alabama-Tuscaloosa (8)

DEPARTMENT OF INFORMATION, SYSTEMS STATISTICS, AND MANAGEMENT SCIENCE

Michaelson, Gregory, On the identification of statistically significant network topology

DEPARTMENT OF MATHEMATICS

Kidane, Berhanu, The corona theorem for the multiplier algebras on weighted Dirichlet spaces

Ryle, Julie, A corona theorem for certain subalgebras of $H^\infty(D)$

Taylor, Patrick, A graph theoretical model for the analysis of the game of football and a discussion of applications thereof

Thagunna, Karan, Three assets model for portfolio selection under a constrained consumption rate process

Upton, Julia, The hidden subgroup problem for generalized quaternions

Yu, Chunhui, Managing risk with short term futures contracts

Zheng, Xiaohua, Volatility analysis for high frequency financial data

ALASKA

University of Alaska Fairbanks (2)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Bulanova, Anna, Control theoretic approach to sampling and approximation problems

Mikhailov, Victor, Control and inverse problems for one dimensional systems

ARIZONA

Arizona State University (4)

MATHEMATICAL, COMPUTATIONAL AND MODELING SCIENCES CENTER

Flores, Kevin, Multiscale modeling of cancer

Ortiz Nieves, Angela, Modeling the transmission of Vancomycin-resistant Enterococcus in hospitals: A case study

Rios-Doria, Daniel, Modeling transient and sustained epidemic dynamics: Cholera, influenza and rubella as case studies

Torre, Carlos A., Deterministic and stochastic metapopulation models for Dengue fever

University of Arizona (12)

DEPARTMENT OF MATHEMATICS

Chesler, Joshua, Interactions with algebra across the disciplinary fields of mathematics, education, and mathematics education

Dyhr, Benjamin, The chordal Loewner equation driven by Brownian motion with a linear drift

Hystad, Grethe, Periodic Ising correlations

Kennedy, Bridget, Modelling pulse propagation in loss-compensated materials that exhibit the negative refractive index property

Kerl, John, Critical behavior for the model of random spatial permutations

LaGatta, Thomas, Geodesics of random Riemannian metrics

Lamb, McKenzie, Ginzburg-Weinstein isomorphisms for pseudo-unitary Lie groups

Occhipinti, Thomas, Mordell-Weil groups of large rank in towers

The above list contains the names and thesis titles of recipients of doctoral degrees in the mathematical sciences (July 1, 2009, to June 30, 2010) reported in the 2010 Annual Survey of the Mathematical Sciences by 266 departments in 177 universities in the United States. Each entry

contains the name of the recipient and the thesis title. The number in parentheses following the name of the university is the number of degrees listed for that university.

Wasielak, Aramian, Various limiting criteria for multidimensional diffusion processes

PROGRAM IN APPLIED MATHEMATICS

Graff, Christian, Parameter estimation in magnetic resonance imaging

McMahon, Joseph, Geometry and mechanics of growing, nonlinearly elastic plates and membranes

Sun, Zhiying, Pattern formation and evolution on plants

ARKANSAS

University of Arkansas at Fayetteville (1)

DEPARTMENT OF MATHEMATICAL SCIENCES

Rea, Garrett, A Harnack inequality for solutions to second order divergence form operators over Hörmander vector fields

CALIFORNIA

California Institute of Technology (10)

DEPARTMENT OF APPLIED AND COMPUTATIONAL MATHEMATICS

Buzi, Gentian, Control theoretic analysis of autocatalytic networks in biology with applications to glycolysis

Chu, Chia-Chieh, Multiscale methods for elliptic partial differential equations and related application

Du Toit, Philip, Transport and separatrices in time-dependent flows

Maynard Gayme, Dennice, A robust control approach to understanding nonlinear mechanisms in shear flow turbulence

DEPARTMENT OF MATHEMATICS

Cheon, Wan Keng, Gromov-Witten invariants: Crepant resolutions and simple flops

Gadre, Vaibhav, Dynamics of non-classical interval exchanges

Kozhan, Rostyslav, Asymptotics for orthogonal polynomials, exponentially small perturbations, and meromorphic continuations of Herglotz functions

Maltsev, Anna, Universality limits of a reproducing kernel for a half-line Schrödinger operator and clock behavior of eigenvalues

Schroeder, Brian, On elliptic semiplanes, an algebraic problem in matrix theory, and weight enumeration of certain binary cyclic codes

Torres-Ruiz, Rafael, Geography and botany of irreducible symplectic 4-manifolds with abelian fundamental group

Claremont Graduate University (12)

SCHOOL OF MATHEMATICAL SCIENCES

Angly, Florent, A computational workflow for the estimation of environmental viral diversity in metagenomes

Aven, John, Stochastic dynamics in coupled bistable systems with applications to sensor devices

Bergmann, Frank, An integrative approach to modeling in systems biology

Coburn, Todd, Optimization: Nurbs and the quasi-Newton method

Isayan, Vigen, t -copula based credit risk modeling in a network economy

Marhadi, Kum, Investigation of progressive failure robustness and alternative load paths for damage tolerant structures

Nam, Hai Ah, Ab initio nuclear shell model calculations of some light nuclei with a three-nucleon force

Negreiros, Rodrigo, Numerical study of the properties of compact stars

Nolan, Kieran, Meta-scheduling of level-set methods in a grid computing environment

Rodriguez-Brito, Beltran, A metagenomic examination of a solar saltern in Southern California

Rojas Ulacio, Otilio, Modelling of rupture propagation under different friction laws using high-order mimetic operators

Zhou, Ming, A mathematical analysis of vesicle shapes

Stanford University (18)

DEPARTMENT OF MATHEMATICS

Kloke, Jennifer Novak, Methods and applications of topological data analysis

Koytcheff, Robin Michael John, A homotopy-theoretic view of Bott-Taubes integrals and knot spaces

Lo, Chieh-Cheng, Moduli spaces of PT-stable objects

Mathews, Daniel, Chord diagrams, contact-topological quantum field theory, and contact categories

Rabinoff, Joseph, Higher-level canonical subgroups for p -divisible groups

Schoenfeld, Eric, Higher symplectic field theory invariants for cotangent bundles of surfaces

Tzeng, Yu-jong, A proof of the Göttsche-Yau-Zaslow formula

Wickelgren, Kirsten, Lower central series obstructions to homotopy sections of curves over number fields

Zhang, Ziyu, On singular moduli spaces of sheaves on K3 surfaces

DEPARTMENT OF STATISTICS

Allen, Genevera, Transposable regularized covariance models with applications to high-dimensional data

Emerson, Sarah, Small sample performance and calibration of the empirical likelihood method

Jin, Yuxue, Regression modelling of competing risks with applications to bone marrow transplantation studies and mortgage prepayment and default analysis

Ma, Zongming, Contributions to high dimensional principal component analysis

McMahon, Donal, Research synthesis for multiway tables of varying shapes and size

Nowak, Gen, Some methods for analyzing high-dimensional genomic data

Perry, Patrick, Cross-validation for unsupervised learning

Shen, Bo, Probability forecast: Evaluation and early warning

Zhou, Baiyu, A method for the analysis of multi-factorial time course microarray data with applications to a clinical burn study

University of California, Berkeley (29)

DEPARTMENT OF MATHEMATICS

Andrews, Uri, Amalgamation construction and recursive model theory

Chen, Li-Chung, Skew linked partitions and a representation-theoretic model for K -Schur

Curran, Stephen, Quantum symmetries in free probability

Dan-Cohen, Ishaï, Moduli of nondegenerate unipotent representations

Datchev, Kiril, Distribution of resonances on manifolds with hyperbolic ends

Erman, Daniel, Application and extensions of Boij-Söderberg theory

Fink, Alexander, Matroid polytope subdivisions and valuations

Hynd, Ryan, Partial differential equations with gradient constraints arising in the optimal control of singular stochastic processes

LaVictoire, Patrick, Pointwise ergodic theorems for nonconventional L^1 averages

Matic, Ivan, Homogenization and large deviations

Reyes, Manuel, One-sided prime ideals in noncommutative algebra

Satriano, Matthew, Stacky resolutions of singular schemes

Sharma, Arun, The structure of 3-free permutations

Shiu, Anne, Algebraic methods for biochemical reaction network theory

Sun, Shenghao, On l -adic cohomology of Artin stacks: L -functions, weights, and the decomposition theorem

Viray, Bianca, The algebraic Brauer-Manin obstruction on Chatelet surfaces, degree 4 del Pezzo surfaces and Enriques surfaces

Wand, Andrew, Diffeomorphisms of compact surfaces with boundary

Yu, Jia, A local construction of the Smith normal form of a matrix polynomial and time periodic gravity driven water waves

DEPARTMENT OF STATISTICS

Coehlo, Nathan, Detection methods for astronomical time series

Dey, Partha, Contributions to Stein's method and some limit theorems in probability

Lei, Jing, Non-linear filtering for state space models: High dimensional applications and theoretical results

Sen, Arnab, Spectra of random trees, coalescing non-Brownian particles and geometric influences of Boolean functions

Taub, Margaret, Analysis of high throughput biological data: Some statistical problems in RNA-seq and mouse genotyping

Tong, Frances, Statistical methods for dose response assays

GROUP IN BIostatISTICS

Bullard, James, Statistical methods and software for high-throughput gene expression experiments

Hansen, Kasper, Analyses of high-throughput gene expression data

Polley, Eric, Super learner

Wang, Nancy, Statistical problems in DNA microarray data analysis

Wang, Xin Victoria, Microarray data analysis

University of California, Davis (12)

DEPARTMENT OF MATHEMATICS

Blackwood, Julie, Management-based models in ecology

Herman, Matthew, Perturbations and radar in compressed sensing

Kim, Edward, Geometric combinatorics of transportation polytopes and the behavior of the simplex method

Rathbun, Matthew, Tunnel number one, fibered links and high distance knots

Rumanov, Igor, Integrable equations for random matrix spectral gap probabilities

Sivakoff, David, Random site subgraphs of the Hamming torus

Wang, Qiang, Promotion operators in representation theory and algebraic combinatorics

DEPARTMENT OF STATISTICS

Jiang, Ci-Ren, Covariate adjusted functional principal component analysis

Taylor, Sandra, Composite interval mapping for point mass mixtures

Wang, Ying-Fang, Topics on multivariate two-stage current-status data and missing covariates in survival analysis

Wu, Shuang, Two topics in functional data analysis: Linear regression for longitudinal data and functional modeling of recurrent events

Zhang, Yanhua, Fence methods in model and moment condition selection in generalized method of moments

University of California, Irvine (12)

DEPARTMENT OF MATHEMATICS

Carlo, Chan, Scaffold facilitated multisite phosphorylation can induce biostability

Chetty, Sunil, Local constants of polarized abelian varieties in dihedral extensions

Gao, Hao, Numerical methods for forward and inverse problems in optical imaging

Haney, Seth, A mathematical approach to signaling, specificity, and growth in yeast cell mating

Katouli, Allen, Mathematical modeling of drug cross-resistance in cancer

Khong, Mitchell, Negative feedback, non-receptors, and morphogen gradient robustness for a 1D model of a fruit fly wing

Korniotis, Michail, A multi-factor quadratic stochastic volatility model with applications in finance and insurance

Mueller, Graham, Association and dependence with applications to the parabolic Anderson model

Nash, Daniel, Homotopy 4-spheres and surgery on 2-tori

Ograin, Christopher, Analysis of a geometric evolution equation for modeling the morphology of anisotropic thin films

Sohn, Jinsun, Modeling and simulation of bio-membranes

Tran, My An Thi, Analysis and geometry on a bounded strictly pseudoconvex domain and its boundary

University of California, Los Angeles (40)

DEPARTMENT OF BIostatISTICS, SCHOOL OF PUBLIC HEALTH

Altstein, Lily, Accelerated failure time models to estimate treatment efficacy among unobserved subgroups of a randomized clinical trial

Zhou, Ying, Nonparametric and semiparametric inference for treatment efficacy in randomized clinical trials with a time-to-event outcome and non-compliance

Zigler, Corwin, Bayesian strategies for posttreatment variable adjustment using principal stratification: Application to treatment noncompliance and principal surrogate endpoints

DEPARTMENT OF MATHEMATICS

Asher, Jason, Some indecomposability results for free probability spaces

Austin, Timothy, Multiple recurrence and the structure of probability-preserving systems

Baek, Sanghoon, Invariants of central simple algebras

Brown, Ethan, Optimization methods for non-convex problems with applications to image segmentation

Bunn, Paul, Throughput-optimal routing in adversarial networks

Cherveny, Luke, An explicit genus-zero mirror principle with marked points

Conley, William, Inertial types and automorphic representations with prescribed ramification

Dobrosotskaya, Julia, Wavelet analogue of Ginsburg-Landau energy, its Γ -convergence and applications

Eller, Timothy, Chiral vector bundles

Esser, John, Primal dual algorithms for convex models and applications to image restoration, registration and nonlocal inpainting

Getreuer, Pascal, Contour stencils and variational image processing

Goldstein, Thomas, Algorithms and applications for l_1 minimization

Hemenway, Brett, Losing information

Jones, Paul, Statistical models of criminal behavior: The effects of law enforcement actions

Jung, Mi Youn, Variational image segmentation and restoration using Sobolev gradients, nonlocal and iterative regularization methods

Lai, Rongjie, Computational differential geometry and intrinsic surface processing

Le, Thai Hoang, Topics in arithmetic combinatorics in function fields

Lei, Guo-Ying, Critical percolation, universality, and SLE₆

Li, Yingying, Effective algorithms of L1 optimization and its applications

Lie, Victor Daniel, Relational time-frequency analysis

Lin, Tungyou, Numerical minimization algorithms for nonlinear elasticity based registration in medical imaging

Malikiosis, Romanos, Discrete and other analogues of Minkowski's theorems on successive minima

Mao, Yu, Applications of variational models and partial differential equations in signal recovery and image restoration

Newdelman, Brady, Harmonic measure on subsets of a Lipschitz graph and the corona theorem

Salazar, Ricardo, Determination of time-dependent coefficients for a hyperbolic inverse problem

Shargel, Benjamin, Transient and asymptotic fluctuation theorems for time-inhomogeneous processes

Steinhauer, Dustin, Aspects of thermoacoustic tomography

Tyson, Jon, Estimates in quantum detection and in the theory of quantum recovery channels

Viola, Joseph, Semiclassical analysis for non-selfadjoint operators with double characteristics

Wang, Yang, Pricing and hedging of American-style options: Theory and practice

Ye, Jian, Applications of variational models in geometric problems

DEPARTMENT OF STATISTICS

Chen, Gong, Modeling and analysis of multiple alignments, ChIP-seq, and gene expression data for finding transcription factor binding sites

Diez, David, Extensions of distance and prototype methods for point patterns

Ferrari, Denise, Multi-fidelity data fusion for aerodynamic metamodel design

Mason, Michael, Machine learning: Approaches to understanding gene regulation in mouse embryonic stem cells

Nesbitt, Tess, Cost-sensitive tree-stacking: Learning with variable prediction error costs

Rojas, Randall, Explaining human causal retrieval using semantic data with small texts

University of California, Riverside (5)

DEPARTMENT OF MATHEMATICS

Burke-Loftus, Jennifer, Gaussian bonds of an equation derived from the Navier-Stokes equations

Hoffnung, Alex, Foundations of categorized representation theory

Kuang, Shilong, Analysis of conjugate heat equation on complete non-compact Riemannian manifolds under Ricci flow

Lee, Hwa Young, The flat Hilbert scheme of points of nodal curves and the punctual Hilbert scheme of points of the cusp curve

Sarhad, Jonathan, Spectral geometries on the Sierpinski gasket and a Newton embedding procedure for the nonlinear Poisson problem

University of California, San Diego (8)

DEPARTMENT OF MATHEMATICS

Budreau, Daniel J., Curve enumeration on the quintic threefold using tropical methods

Cooper, Benjamin, 3-dimensional topological field theory and Harrison homology

D'Adderio, Michele, Isoperimetric profile of algebras

Lust, Jaime, Verifying depth-zero supercuspidal L-packets for inner forms of $\mathrm{GSp}(4)$

McGown, Kevin, Norm-Euclidean Galois fields

Shopples, John, An interface-fitted finite element based level set method: Algorithm, implementation, analysis and applications

Sligend, Nicholas, NC ball maps and changes of variables

Tressler, Eric, Integral and Euclidean Ramsey theory

University of California, Santa Barbara (14)

DEPARTMENT OF MATHEMATICS

Beil, Charlie, The geometry of noncommutative singularity resolutions

Benoy, Benjamin, A projective version of Poincaré's polyhedron theorem

Blair, Ryan, Bridge number and Conway products

Case, Jeffrey, Conformally warped manifolds and quasi-Einstein metrics

Cruz-Cota, Aldo-Hilario, Hex structures on singular Euclidean surfaces with conical singularities

Erickson, Brittany, Complexity in the nonlinear Dietrich-Ruina friction law

Huang, Xiaoling, Ray-Singer conjecture on manifolds with isolated conical singularity

Johnson, Garrett, Cremmer-Gervais r -matrices and the Cherednik algebras

Liptrap, Jesse, From hypergroups to anyonic twines

Nahas, Joules, A decay property of solutions to the mKdV equation

Ottman, Ryan, Coxeter groups with hyperbolic signature

Ramirez-Rosas, Teresita, Quadriseccants and the ropelength of knots

DEPARTMENT OF STATISTICS AND APPLIED PROBABILITY

Jiang, Yihua, Markov chain Monte Carlo stochastic approximation algorithms smoothing spline ANOVA frailty models and applications

Montoya, Eduardo, Constrained functional data models with environmental applications

University of California, Santa Cruz (2)

DEPARTMENT OF APPLIED MATHEMATICS AND STATISTICS

Graham, Rishi, Information-driven cooperative sampling strategies for spatial estimation by robotic sensor networks

Pignotti, Angela, Validation of lateral boundary conditions for regional climate models

University of Southern California (7)

DEPARTMENT OF MATHEMATICS

Golovko, Roman, The sutured embedded contact homology of $S^1 \times D^2$

Knape, Mathias, A general equilibrium model for exchange rates and asset prices in an economy subject to jump-diffusion uncertainty

Maisch, Melissa, Optimal debt maturity structure

Pehlivan, Lerna, On top to random shuffles, no feedback card guessing and fixed points of permutations

Polunchenko, Aleksey, Quickset change detection with applications to distributed multi-sensor systems

Ritz, Sandra, A categorification of the Burau representation via contact geometry

Ross, Nathan, Exchangeable pairs in Stein's method of distributional approximation

COLORADO

Colorado School of Mines (3)

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

Munson, Ashlyn, Efficient sampling methods for case-control studies

Poole, Loren, Symbolic computation of conservation laws of nonlinear partial differential equations using homotopy operators

Yang, Xinhua, Extensions to alliances: Collision resolution MAC protocols for wireless networks

Colorado State University (13)

DEPARTMENT OF MATHEMATICS

Butler, Troy, Computational measure theoretic approach to inverse sensitivity analysis: Methods and analysis

Buzby, Megan, Short time analysis of deterministic ODE solutions and the expected value of a corresponding birth-death process

Dumitrescu, Olivia, Techniques in interpolation problems

Hampson, Christian, Characteristics of certain families of random graphs

Holt, Eric, A ratio ergodic theorem on Borel actions of \mathbb{Z}^d and \mathbb{R}^d

James, Rodney, Linear systems and Riemann-Roch theory on graphs

Lynn, Rebecca, Multiplicities and equivariant cohomology

Rutherford, Blake, Lagrangian mixing and transport in hurricanes

Von Herrmann, Alan, Properties of the reconstruction algorithm and associated scattering transform for admittivities in the plane

DEPARTMENT OF STATISTICS

Erdenebaatar, Chadraa, Statistical modeling with COGARCH (p, q) processes

French, Joshua, Confidence regions for level curves and a limit theorem for the maxima of Gaussian random fields

Sonderegger, Derek, Nonparametric function smoothing: Fiducial inference of free knot splines and ecological applications

Wandler, Damian, A fiducial approach to extremes and multiple comparisons

University of Colorado, Boulder (10)

DEPARTMENT OF APPLIED MATHEMATICS

Adler, James, Nested irrigation and first-order systems least squares for incompressible resistive magnetohydrodynamics

Jamroz, Benjamin, Reducing modeling of the magnetorotational instability

Ketelsen, Christian, Least-squares finite element methods for quantum electrodynamics

Levy, Michael, A high-order element-based Galerkin method for the global shallow water equations

Liu, Si, Parallel fully coupled domain decomposition algorithm for some inverse problems

Norgard, Gregory, Shock regularization of conservation laws through use of spatial averaging in nonlinear terms

DEPARTMENT OF MATHEMATICS

Angel, Eitan, A geometric construction of cyclic cocycles on twisted convolution algebras

Newhall, Joseph, On the density of the Henig efficient points of asymptotically compact sets in locally convex vector spaces

Tasset, Tiffany, Lagrange multipliers for set-valued functions when ordering cones have empty interior

Wittenborn, Erika, On special values of hyperelliptic division polynomials and a formula of Eisenstein

University of Colorado, Denver (7)

DEPARTMENT OF BIOSTATISTICS AND INFORMATICS

Siewert, Elizabeth, Prediction of transcription factor binding sites using information from multiple species

Yin, Xiang, Monitoring clinical trials with multiple dose groups

Zhang, Weiming, Testing gene-environment interactions on family-based association studies using non-randomly ascertained samples

DEPARTMENT OF MATHEMATICS AND STATISTICAL SCIENCES

Harder, Christopher, Residual local projection methods for the Darcy problem

Labovitz, Mark, Using return level as a dependence function in a statistical model for the joint distribution of the extreme values of equities

Sousedik, Bedrich, Adaptive-multilevel BDDC

Tennenhouse, Craig, Some extensions of graph saturation to edge colored, oriented, and subdivided graphs

University of Denver (2)

DEPARTMENT OF MATHEMATICS

Locke, Annette, Banach spaces on infinitely branching trees

Werner, Brett, Strong orbit equivalence and residuality

University of Northern Colorado (4)

SCHOOL OF MATHEMATICAL SCIENCES

Andrew, Lane, The relationship between mathematical induction, proposition functions, and implication functions

Champion, Joseph, The mathematics self-efficacy and calibration of students in a secondary mathematics teacher preparation program

Deon, Rhoda, The nature of pedagogical content knowledge about combinatorics representations among pre- and in-service K-8 teachers

Wheeler, Ann, Traditional and nontraditional preservice elementary teachers' perceptions about mathematics and mathematics teaching

CONNECTICUT

University of Connecticut, Storrs (16)

DEPARTMENT OF MATHEMATICS

Axtell, Jonathan, Vector operator algebras for type G affine Lie algebras

Ge, Lin, Relationship between combinatorial measurements and Orlicz norms

Huynh, Tho, Parabolic Harnack inequality and Caccioppoli inequality for stable-like processes

Karli, Deniz, Probabilistic Littlewood-Paley theory

Lombardo, Philip, Constant terms of Eisenstein series on affine Kac-Moody groups over function fields over finite fields

Miller, Craig, The existence and uniqueness of solutions to a moving boundary problem

Miller, Lance, On the structure of Witt-Burnside rings

Molnar, David, Metrical Diophantine approximation for continued fraction-like maps of the interval

Prasad, Upendra, Nonnegative matrix factorization: Analysis, algorithm and applications

Steinhurst, Benjamin, Diffusion and Laplacians on Laakso, Barlow-Evans, and other fractals

Turlington, Amy, Computability of Heyting algebras and distributive lattices

DEPARTMENT OF STATISTICS

Gaioni, Elijah, Semiparametric functional estimation and extreme estimation and extreme value modeling using mixture distributions and limited quantile information

Joyce, Patrick, A multivariate spatial point process model: Theory, simulation and application

Raman, Balaji, On Gaussian HJM framework for eurodollar futures

Wang, Xia, Generalized link functions for binary response data

Zou, Jian, Volatility estimation and option pricing

Wesleyan University (1)

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

Khorami, Mehdi, Twisted K-theory

Yale University (4)

BIOSTATISTICS DIVISION

Wu, Zhenyang, Model selection methods for high-dimensional data and their applications to genome-wide association studies

DEPARTMENT OF MATHEMATICS

Lu, Dan, Howe duality correspondence of $(O(p, q)\text{osp}(2, 2))$

Previdi, Luigi Claudio, Generalized Tate spaces

DEPARTMENT OF STATISTICS

Hu, Xing (James), False discovery rate control with groups

DELAWARE

Delaware State University (1)

DEPARTMENT OF MATHEMATICAL SCIENCES

Green, Patrice, Adiabatic dynamics and integrability of optical solitons

University of Delaware (3)

DEPARTMENT OF MATHEMATICAL SCIENCE

Culbert, Craig, Spreads of three-dimensional and five-dimensional finite projective space

Kosick, Pamela, Commutative semifields of odd order and planar Dembowski-Ostrom polynomials

Vasilic, Ana, Homogenizing acoustic properties of cancellous bone

DISTRICT OF COLUMBIA

George Washington University (8)

DEPARTMENT OF MATHEMATICS

Chubb, Jennifer, Ordered structures and computability

Sazzdanovic, Radmila, Categorification of knot and graph polynomials and the polynomial ring

DEPARTMENT OF STATISTICS

- Liu, Zhenyu*, Triangle test and triangle data depth in nonparametric multivariate analysis
- Markitsis, Anastasios*, The proportion of true null hypotheses in microarray gene expression data
- Qin, Min*, Some contributions to the theory of unbiased statistical prediction
- She, Dewei*, Genetic association study using complex survey data
- Tripputi, Mark*, Use of mediation in designing clinical trials with two primary end points
- Warren, Susan*, Evaluating the value of adding diagnostic symptoms using posterior probability and sensitivity/specificity procedures

Howard University (1)

DEPARTMENT OF MATHEMATICS

- McNeal, George D.*, Spectral analysis for rank-one perturbations of diagonal operators in non-Archimedean Hilbert space

FLORIDA

Florida Atlantic University (8)

DEPARTMENT OF MATHEMATICAL SCIENCES

- Buckley, Winston*, Asymmetric information in fads models in Levy markets
- Caliskan, Cafer*, On projective planes
- Chiorescu, Marcela*, Minimal zero-dimensional extensions
- Gonzalez, Madeline*, Cryptography in the presence of key-dependent messages
- Marshall, Mario*, Polynomials that are integer-valued on the image of an integer-valued polynomial
- Moore, Audrey*, Auslander-Reiten theory for systems of submodule embeddings
- Perera, Sandun*, Stochastic optimal impulse control of jump diffusions with application to exchange rates
- Villanyi, Viktoria*, Signature schemes in single and multi-user settings

Florida Institute of Technology (3)

DEPARTMENT OF MATHEMATICAL SCIENCES

- Ke, Hao-Jan*, Layers of stochastic games
- Miller-Kermani, Donn*, Women-owned small businesses in the US: Overcoming hurdles in federal procurement
- Robinson, Randy*, Fluctuation analysis of financial markets

Florida State University (15)

DEPARTMENT OF MATHEMATICS

- Bayazit, Dervis*, Sensitivity analysis of options under Levy processes via Malliavin calculus

Goncu, Ahmet, Monte Carlo and quasi-Monte Carlo methods in pricing financial derivatives

Gutierrez, Juan B., Mathematical analysis of the use of Trojan sex chromosomes as means of eradication of invasive species

Hua, Fei, Modeling, analysis and simulation of the Stokes-Darcy system with Beavers-Joseph interface condition

Jimenez, Edwin, Uncertainty quantification of nonlinear stochastic phenomena

Jung, Yong, A computational study of ion conductance in the *KcsA* K^+ channel using a Nerst-Planck model with explicit resident ions

Levy, Giles, Solutions of second order recurrence relations

Parshad, Rana, Asymptotic behavior of convection in porous media

Simakhina, Svetlana, Level set and conservative level set methods on dynamic quadrilateral grids

Striegel, Deborah, Modeling the folding pattern of the cerebral cortex

DEPARTMENT OF STATISTICS

Chalise, Prabhakar, Time scales in epidemiological analysis

Fan, Li, Estimating the probability of cardiovascular disease: A comparison of methods

Gui, Wenhao, Adaptive series estimators for copula densities

Ncube, Moeti, Stochastic models and inferences for commodity futures pricing

Thompson, Warren, Variable selection of correlated predictors in logistic regression: Investigating the diet-heart hypothesis

University of Central Florida (2)

DEPARTMENT OF MATHEMATICS

Shi, Qiling, Weighted L^p -stability for localized infinite matrices

Sweet, Erick, Analytical and numerical solutions to differential equations arising in fluid flow and heat transfer problems

University of Florida (14)

DEPARTMENT OF MATHEMATICS

Arslan, Ogul, Some algebraic problems from coding theory

Bonner, Timothy, The characters and commutators of finite groups

Debhaumik, Anales, The hidden subgroup problem

Dung, Phan, Topics in global optimization: Ellipsoidal bisection, graph partitioning and sparse reconstruction

Fisher, Andrew, Hyperkähler manifolds

Luo, Jiangtao, Functional mapping of dynamic systems

Morofushi, Yuri, p -adic theory of exponential sums on the affine line

Oh, Minah, Efficient solution techniques for axisymmetric problems

Tan, Shuguang, Iterative solvers for hybridized finite element methods

Yang, Yong, Orbits of the actions of finite solvable groups

DEPARTMENT OF STATISTICS

Li, Qin, Statistical models for haplotyping complex inherited diseases in humans

Li, Yao, Statistical designs and algorithms for modeling the genetic architecture of cancer susceptibility

Liu, Ruitao, On some new contributions towards objective priors

Tan, Aixin, Convergence rates and regeneration of the block Gibbs sampler for Bayesian random effects models

University of Miami (3)

DEPARTMENT OF MATHEMATICS

Harper, Eric, Casson-Lin type invariants for links

Katri, Patricia, Modeling the transmission dynamics of the dengue virus

Zabalo, Joaquin, A mathematical model describing the early development of multiple myeloma

University of South Florida (6)

DEPARTMENT OF MATHEMATICS

Angeleska, Angela, Combinatorial models for DNA rearrangements in ciliates

Findley, Elliott M., Fine asymptotics of Christoffel functions and universality for Szegő weights in the complex plane

Lynch, O'Neil L., Mixture distributions with application to microarray data analysis

Manandhar Shrestha, Nabin K., Statistical learning and Behrens-Fisher distribution methods for heteroscedastic data in microarray analysis

Wagner, Kevin P., A generalized acceptance urn model

Wu, Ling, Stochastic modeling and statistical analysis

GEORGIA

Emory University (11)

DEPARTMENT OF BIostatISTICS

Chen, Jian, Multiple roots in logistic regression with errors in covariates

Gao, Jingjing, Assessing observer agreement for categorical observations

Qian, Jing, Analysis of outcomes subject to induced dependent censoring: Medical cost and successive durations

Yuemei, Wang, Statistical performance of spatial systems

DEPARTMENT OF MATHEMATICS AND
COMPUTER SCIENCE

Gehrke, Silke, Hamiltonicity and pancyclicity of 4-connected, claw- and net-free graphs

Graf, Tobias, On the near-field reflector problem and optimal transport

Helenius, Fred, Freudenthal triple systems via root system methods

Martin, Daniel, Locally nearly perfect packings

Nguyen, Ha, Polynomials nonnegative on noncompact subsets of the plane

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SCHOOL OF MATHEMATICS

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Willis, Paulette, C^* -algebras of labeled graphs and $*$ -commuting endomorphisms
Xu, Da, Classical groups, integrals, and Virasoro constraints

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ACTUARIAL SCIENCE

- Li, Jie*, Spatial multivariate design in the plane and on stream networks
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KANSAS

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- Anderson, Michael*, Bayesian classification of DNA barcodes
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STATISTICS

- Clarkson, Elizabeth*, Equivalence testing for mean vectors of multivariate normal populations
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- Ho, Phuoc*, Upper bounds on the splitting of the eigenvalues
Kilty, Joel, L^p boundary value problems on Lipschitz domains
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Zhang, Ping, Iterative methods for computing eigenvalues and exponentials of large matrices

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Barton, William, Comparison of two samples by a non-parametric likelihood-ratio test

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PROGRAM OF MATHEMATICS AND
STATISTICS

Feng, Wu, On calculating residuated approximations and the structure of finite lattices of small width

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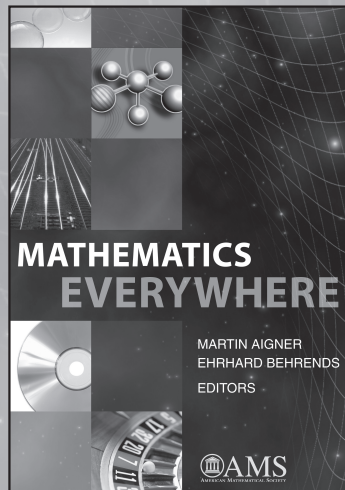
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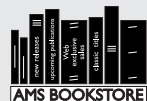
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