
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 L_1 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

Shemmer, Benjamin, On graphs with a given endomorphism monoid

Wendykier, Piotr, High performance Java software for image processing

Georgia Institute of Technology (9)

SCHOOL OF MATHEMATICS

Bishop, Shannon, Gabor and wavelet analysis with applications to Schatten class integral operators

Borenstein, Evan, New results in arithmetic combinatorics

Deng, Hao, Mathematical approach to digital color image denoising

Grigo, Alexander, Billiards and statistical mechanics

Keller, Mitchel, Some results on linear discrepancy for partially ordered sets

Kim, Hwa Kil, Hamiltonian systems and the calculus of differential forms on the Wasserstein space

Yildirim-Yolcu, Selma, Eigenvalue inequalities for relativistic Hamiltonians and fractional Laplacian

Yolcu, Turkay, Parabolic systems and an underlying Lagrangian

Zhao, Kun, Initial-boundary value problems in fluid dynamics modeling

University of Georgia (10)

DEPARTMENT OF MATHEMATICS

Ettinger, Bree, Bivariate splines for ozone concentration predictions

Shin, DongHoon, Regime switching models and applications in optimal selling rules and options

Yu, Jie, Regime-switching models with mean reversion and applications in option pricing

Yu, Lirong, Asset allocation and optimal selling rule with regime switching and partial observation

DEPARTMENT OF STATISTICS

Kao, Ming-Hung, Optimal experimental designs for event-related functional magnetic resonance imaging

Kim, Jaejik, Dissimilarity measures for histogram-valued data and divisive clustering of symbolic objects

Neustifter, Benjamin, Random effects in point processes: Adding flexibility to ecological momentary assessment analysis

Thayasivam, Umashanger, L_2 estimation for finite mixture models with applications

Vaughan, Amy, Statistical inferences and visualization based on a scale-space approach

Xu, Jing, Semiparametric zero-inflated regression models: Estimation and inference

IDAHO

Idaho State University (1)

DEPARTMENT OF MATHEMATICS

Cox, Paul, Responses of a synchronized cell population to continuous irradiation revealed through mathematical modeling and stochastic optimization

University of Idaho (2)

DEPARTMENT OF MATHEMATICS

Li, Zhongxiao, Asynchronous discourse in a web-assisted mathematics education course

Zhong, Xue, Spatial structure, mating pair formation and estimation of plasmid transfer rates

ILLINOIS

Illinois State University (2)

DEPARTMENT OF MATHEMATICS

Flores, Edna Horton, The utilization of graphing calculators in algebra I instruction for low-SES students

McCool, Jenni, Measurement learning trajectories: A tool for professional development

Northern Illinois University (3)

DEPARTMENT OF MATHEMATICAL SCIENCES

Campbell, Kristen, Sequential closures of l_1 limit periodic continued fractions and certain q -continued fractions

Gunsul, Paul, A class of small functions on the unit disc

Thapa, Mohan, A new hybrid method for finding eigenpairs of a symmetric quadratic eigenvalue problem in an interval

Northwestern University (13)

DEPARTMENT OF MATHEMATICS

Dunlap, Thomas, Combinatorial representation theory of affine SL_2 via polytope calculus

Fang, Bohan, Mirror symmetry, constructible sheaves and toric varieties

Gao, Shu, Global solutions to the Navier-Stokes-Poisson equations for self-gravitating gaseous stars

Hua, Yongxia, Continuity of topological entropy of time-one maps of Anosov diffeomorphisms

Ma, Shihan, Asymptotics of implied volatility in local volatility model near expiry

Potts, Amanda, Multiple ergodic averages for flows and an application

Thomas, Justin, Kontsevich's swiss cheese conjecture

DEPARTMENT OF STATISTICS

Liu, Lingyun, On gatekeeping and weighted Hochberg procedures

Shi, Kunyang, Power and sample size determination for dose finding and multiple endpoints

DEPARTMENT OF ENGINEERING SCIENCES AND APPLIED MATHEMATICS

Anderson, Anthony M., On the dynamics, instability, and freezing of metallic foams

Bieri, Joanna, Stabilization and dynamics of edge flames in narrow channels

Stanton, Liam, Modeling in pattern formation with applications to electrochemical phenomena

Swaminathan, Sumanth, Mathematical modeling of alignment dynamics in active motor-filament systems

Southern Illinois University, Carbondale (2)

DEPARTMENT OF MATHEMATICS

Johnson, Darin, Topics in probabilistic combinatorics

Khurram, Alia, Reconstruction of a univariate discrete function from the magnitude of its Fourier transform

University of Chicago (14)

DEPARTMENT OF MATHEMATICS

Barton, Ariel, Elliptic partial differential equations with complex coefficients

Bou-Rabee, Khalid, Quantifying residual finiteness

Cârstea, Cătălin, A construction of blow-up solutions for co-rotational wave maps

Epstein, Rachel, The structure and applications of the computably enumerable sets

Johnson, Niles, Morita theory and invertibility in bicategories

Kaletha, Tasho, Endoscopic character identities for depth-zero supercuspidal L -packets

Noel, Justin, Some applications of the theory of formal groups to algebraic topology

Shulman, Megan, Equivariant local coefficients and the $RO(G)$ -graded cohomology of classifying spaces

Zamojski, Thomas, Counting rational matrices of a fixed irreducible polynomial

Zoque Lopez, Eliana, On the variety of almost commuting nilpotent matrices

DEPARTMENT OF STATISTICS

- Lynch, Phillip*, Locally mean reverting processes
Wang, Dan, Displaced lognormal and displaced Heston volatility skewness: Analysis and applications to stochastic volatility simulations
Wang, Zuoheng Anita, Statistical methods for genetic association mapping of complex traits with related individuals
Zhou, Zhou, Simultaneous inference of linear models with time varying coefficients

University of Illinois at Chicago (19)

PUBLIC HEALTH - EPIDEMIOLOGY AND BIOSTATISTICS DIVISION

- Boodram, Basmattee*, Hepatitis C infection among young injection drug users: Prevalence, chronicity and viral load fluctuation
Broz, Dita, Transitions to injection and risk of HIV, HBV and HCV among young non-injecting heroin users in Chicago
Chapple, Theresa, Effects of interpregnancy intervals immediately following a fetal death on maternal and perinatal health
Gawel, Susan, The immunological and virologic evolution of human immunodeficiency and hepatitis C viruses among women
Ivy, Wade, HIV risk perceptions, drug use and sexual practices among sex partners in low-income Chicago neighborhoods
Li, Xue, A 3-level mixed-effects location scale model with an application in ecological momentary assessment data
Roberts, Daniel, Investigations of the long anterior zonule trait: A potential risk factor for glaucoma

DEPARTMENT OF MATHEMATICS, STATISTICS AND COMPUTER SCIENCE

- Atkinson, Christopher*, Volume estimates for hyperbolic Coxeter polyhedra
Darke, Kelly, An examination of the questioning interactions of prospective teachers during mathematical discussions
Docampo Alvarez, Roi, Arcs on determinantal varieties
Du, Rong, Moduli space of bounded complete Reinhardt domains and complex Plateau problem
Lynch, Sean, Drift-diffusion past circles and ellipses
Manolov, Petar, Brauer trees in finite special linear groups
Shkop, Ahuva, On pseudoexponential fields and Schanuel's conjecture
Sohn, Eunju, Storage allocation under processor sharing and infinite server models
Tang, Yuqing, A comparison model for measuring individual agreement

- Tao, Jing*, Linearly bounded conjugator property for mapping class groups
Zang, Weitian, Complete topological classification of complete intersection weakly elliptic singularities
Zhang, Zhilong, Enumeration of general t -ary trees and universal types

University of Illinois, Urbana-Champaign (22)

DEPARTMENT OF MATHEMATICS

- Carlisle, Sylvia*, Model theory of real trees and their isometries
Chasman, Laura, An isoperimetric inequality for the fundamental tone of the free plate
Dewar, Michael, Congruences in modular, Jacobi, Siegel, and mock modular forms with applications
Eckhardt, Caleb, Local structure of nuclear C^* -algebras
Goldbring, Isaac, Nonstandard methods in Lie theory
Harper, Marc, Climbing Mount Probable
Kim, Byung Chan, Arithmetic of partition functions and q -combinatorics
Kim, Sun, Bijective proofs of partition identities and covering systems
Koukoulopoulos, Dimitrios, Generalized and restricted multiplication tables of integers
Lee, Christopher, Folded symplectic toric four-manifolds
McCullough, Jason, The strong direct summand conjecture
Peterson, Valerie, State complexes and special cube complexes
Prugsapitak, Supawadee, The Tarry-Escott problem over quadratic fields
Samotij, Wojciech, Extremal problems in pseudo-random graphs and asymptotic enumeration
Sneed, Jason, Prime and quasi-prime number races
Tellez, Hernando, Contributions to model theory of metric structures
Tsai, Chia-Yen, Minimal pseudo-Anosov translation lengths on the Teichmüller space
Walker, Barry, Multiplicative orientations of K -theory and p -adic analysis
Zaki, Mohammad, Analytic continuation and natural boundaries of a family of Dirichlet series

DEPARTMENT OF STATISTICS

- Feng, Xingdong*, Dimensionality of data matrices with applications to gene expression profiles
Hong, Feng, Contributions to statistical problems related to microarray data
Lin, Guixian, Quantile regression with censored data

INDIANA

Indiana University, Bloomington (9)

DEPARTMENT OF MATHEMATICS

- Contreras, Andrés*, Gamma convergence and the first critical field for Ginzburg-Landau on thin shells and manifolds
Holmes, William, A 3-D model of the cochlea with numerical simulation and asymptotics
Jhwueng, Dwueng-Chwuan, Some problems in phylogenetics comparative methods
Liu, Lihuei, On the smoothness of horocycle foliation on smooth compact surfaces without focal points
Shen, Chun-Yen, Explorations of sum-product phenomena in fields
Shonia, Giorgi, A cross section from dinovariant in h -spaces to inner function in higher dimensions
Su, Zhixu, Rational homotopy type of manifolds
Swanson, Rebecca, Relationships between shellability, vertex decomposability, and h -vectors of simplicial complexes
Yazinski, Jonathan, Construction of small exotic smooth 4-manifolds

Indiana University-Purdue University Indianapolis (4)

DEPARTMENT OF MATHEMATICAL SCIENCES

- Bieth, Bruno*, Developing fast and accurate parallel solver for multi-scales biochemical reacting systems
Hemphill, Rachel, Robust equilibria: Normal-form, extensive-form, and repeated games
Hong, Liang, Limiting performance of a one-unit system under various repair models
Niles, David, The Riemann-Hilbert-Birkhoff inverse monodromy problem and connection formulae for the third Painlevé transcendents

Purdue University (26)

DEPARTMENT OF MATHEMATICS

- Berkesch, Christine*, Euler-Koszul homology in algebra and geometry
Bryant, Lance, Filtered numerical semigroups and applications to one-dimensional rings
Bryant, Sarah, Path and spectral properties of certain Levy processes
Gerberry, David, Mathematical models of tuberculosis and childhood diseases: Very different approaches for very different diseases
Jang, Bogume, Transfer from $GSO(4)$ to $GO(4)$ and L -functions

Kim, Ha Young, Lyapunov exponents for stochastic Anderson models with non-Gaussian noise; portfolio optimization in discrete time with proportional transaction costs under stochastic volatility
Lee, Hyun Ho, Some examples in the non-stable K -theory of C^* -algebras
Li, Jia, On numerical properties of data assimilation methods
Masaqutov, Vakhid, Infinitely generated analytic sheaves
Sandeep Varma, Vadakkumkoor, Descent and the generic packet conjecture
Shen, Yihuang, Monomial curves, Gorenstein ideals and Stanley decompositions
Wang, Yusun, Variant reflected BSDE with application to finance
Xie, Yu, Formulas for the multiplicity of graded algebras
Yang, Shan, Credit risk modeling under incomplete information
Zhang, Shun, Recovery based a posteriori error estimators for finite element methods

DEPARTMENT OF STATISTICS

Chronopoulou, Alexandra, Variations and Hurst index estimation for self-similar processes
Daggy, Joanne, Joint modeling of highly skewed data with excess zeros using copulas
He, Yunxiao, Improving the EM algorithm for maximum likelihood inference
Hua, Lanqing, Statistical inference of protein structure using small-angle x-ray scattering data
Kidwell, Paul, Methods for analyzing rankings and network intrusion detection
Lipka, Alexander, Associating single nucleotide polymorphisms (SNPs) with binary traits
Martin, Ryan, Fast nonparametric estimation of a mixing distribution with application to high-dimensional inference
Ochsenfeld, Cherie, Mixed models in quantitative trait loci and association mapping with bootstrap thresholds
Paul, Sudeshna, Estimation of interatomic distance distribution of protein molecules from small angle scattering (SAS) images
Shen, Gang, A Theil-type estimate in multiple linear regression and developing a new BIC for detecting change-points
Zhao, Yang, Local likelihood modeling of the concept drift phenomenon

University of Notre Dame (10)

DEPARTMENT OF MATHEMATICS

Axon, Logan, Algorithmically random closed sets and probability
Cole, Joshua, On the elementary theories of the Muchnik and Medvedev lattices of Π_1^0 classes

Edgar, Thomas, Dominance and regularity in Coxeter groups
Juhlin, Prema, Fine structure of dependence in superstable theories of finite rank
Khomrutai, Sujin, Regularity of singular solutions to σ_k -Yamabe problems
Kohlhaas, Angela, The core of an ideal and its relationship to the coefficient and adjoint ideals
Lyapina, Oleksandra, The variety of Lagrangian subalgebras of real semisimple Lie algebras
Smith, Bonnie, Cores of monomial ideals
Wallbaum, John, Computability of algebraic structures
Zhu, Jianfeng, Application of discontinuous Galerkin finite element methods for vertebrate limb pattern formation

IOWA

Iowa State University (19)

DEPARTMENT OF MATHEMATICS

Alturk, Ahmet, Boundary functions for wavelets and their properties
Guo, Xiaofang, Generic two-phase coexistence in the quadratic contact process
Hawk, Cory, A mathematical model for IL6-induced differentiation of neural progenitor cells on a micropatterned polymer substrate
Kurth, Christopher, Modular forms and modular symbols for noncongruence groups
Ming, Ju, Optimal control of stochastic flow
Wells, Andrew, Zorn vector matrices over commutative rings and the loops arising from their construction

DEPARTMENT OF STATISTICS

Bancroft, Timothy, Estimating the number of true null hypotheses and the false discovery rate from multiple discrete non-uniform permutation P -values
Chapin, Patrick, Analysis of experiments to validate computer models with binary outputs
Demirkale, Cumhur, Classical and Bayesian mixed model analysis of microarray data for detecting gene expression and DNA differences
Gao, Chunwang, Statistical method and simulation on detecting cracks in vibrothermography inspection
Hong, Yili, Reliability prediction based on complicated data and dynamic data
Huang, Ling, Probabilistic studies of different investment strategies
Li, Wen, Memory indicators and their incorporation into dynamic models
Man-Yu, Yum, Statistical methods to estimate the relative contribution of individual effective dose and stochastic models in toxicology

Melnykov, Volodymyr, Some theoretical contributions to the evaluation and assessment of finite mixture models with applications
Page, Garritt, Bayesian mixture modeling and outliers in inter-laboratory studies
Paik, Minhui, Fractional imputation
Qin, Yingli, Statistical inference for high-dimensional data
Zuo, Jianying, Analysis of window-observation recurrence data

University of Iowa (23)

DEPARTMENT OF APPLIED MATHEMATICS AND COMPUTATIONAL SCIENCE

Besse, Ian, Modeling caveolar sodium contributions to cardiac electrophysiology and arrhythmogenesis
Gui, Le, Use of operator theory and sub-band filters in the analysis and encoding of signals and images
Kim, Soojeong, A 4-string tangle analysis of DNA-protein complexes based on difference topology
Murphy, Kevin, The structure of gluons in parton form quantum chromodynamics
Wei, Fengrong, High-dimensional regression with grouped variables

DEPARTMENT OF BIostatISTICS

Breheeny, Patrick, Regularized methods for high-dimensional and bi-level variable selection
Hua, Lei, Spline-based sieve semiparametric generalized estimating equation for panel count data
Sparks, JonDavid, Model selection criteria in the presence of missing data based on the Kullback-Leibler discrepancy

DEPARTMENT OF MATHEMATICS

Boerner, Jeffrey, Khovanov homology in thickened surfaces
Graber, John, Cellularity and the Jones basic construction
Huerter, Kimberly, Nonuniform thickness and global radius of curvature of smooth curves
Kintzinger, John, Commutative rings
Mollé, Heather, The growth of the quantum hyperbolic invariants of the figure eight knot
Preisser, Jonathan, Factorization in integral domains without identity
Rao, Arvind, Weak solutions to a Monge-Ampère type equation on Kähler surfaces
Reinkoester, Jeremiah, Relative primeness
Russell, Heather, Springer varieties from a topological perspective
Schmidt, Samuel, Endomorphisms, composition operators and Cuntz families
Willis, Paulette, C^* -algebras of labeled graphs and $*$ -commuting endomorphisms
Xu, Da, Classical groups, integrals, and Virasoro constraints

DEPARTMENT OF STATISTICS AND
ACTUARIAL SCIENCE

- Li, Jie*, Spatial multivariate design in the plane and on stream networks
Liang, Dong, Issues in Bayesian Gaussian Markov random field models with application to inter-sensor calibration
Liu, Hai, Semiparametric regression analysis of zero-inflated data

KANSAS

Kansas State University (7)

DEPARTMENT OF MATHEMATICS

- Alnaser, Ala'*, Waring's problem in algebraic number fields
Cipra, James, Waring's number in a finite field
Hakami, Ali, Small zeros of quadratic congruences to a prime power modulus
Mohamed Ismail, Mohamed Ishak, Lower bounds for heights in cyclotomic extensions and related problems

DEPARTMENT OF STATISTICS

- Anderson, Michael*, Bayesian classification of DNA barcodes
Ling, Yan, Inference for the intrinsic separation among distributions which may differ in location and scale
Munasinghe, Wijith, Cluster based lack of fit tests for nonlinear regression

University of Kansas (2)

DEPARTMENT OF MATHEMATICS

- Hariharan, Ananthnarayan*, Approximating Artinian rings by Gorenstein rings and 3-standardness of the maximal ideal
Song, Jian, Some topics on the fractional Brownian motion and stochastic partial differential equations

Wichita State University (3)

DEPARTMENT OF MATHEMATICS AND
STATISTICS

- Clarkson, Elizabeth*, Equivalence testing for mean vectors of multivariate normal populations
Malla, Ganesh, Order restricted inferences about lifetimes under censoring
Myers, Joseph, Inverse doping profile analysis for semiconductor quality control

KENTUCKY

University of Kentucky (11)

DEPARTMENT OF MATHEMATICS

- Ho, Phuoc*, Upper bounds on the splitting of the eigenvalues
Kilty, Joel, L^p boundary value problems on Lipschitz domains
Miker, Julie, Eigenvalue inequalities for a family of spherically symmetric Riemannian manifolds

Militzer, Erin, L^p -bounded point evaluations for polynomials and uniform rational approximation

Nie, Zhongyi, Estimates for a class of multi-linear forms

Roberts, Joshua, Low dimensional group homology—algorithms for upper bounds and generators

Wells, Matthew, Aspects of the geometry of metrical connections

Zhang, Ping, Iterative methods for computing eigenvalues and exponentials of large matrices

DEPARTMENT OF STATISTICS

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

Hall, Benjamin, Nonparametric estimation of derivatives with applications

Liu, Chunxu, A nonparametric version of Wilk's lambda—asymptotic results and small simple approximations

LOUISIANA

Louisiana State University, Baton Rouge (18)

DEPARTMENT OF MATHEMATICS

Aikin, Jeremy, The structure of 4-separations in 4-connected matroids

Cai, Wei, Impulsive control systems

Caranica, Constantin, Algorithms related to subgroups of the modular group

Christensen, Jens, Function spaces, wavelets and representation theory

Chun, Carolyn, Unavoidable minors in graphs and matroids

Egedy, Charles, The extended picture group, with applications to line arrangement complements

Esunge, Julius, White noise methods for anticipating stochastic differential equations

Fang, Liqun, Stochastic Navier-Stokes equations with fractional Brownian motions

Fortes, Santiago, Power series expansions for waves in high-contrast plasmonic crystals

Guevara, Alvaro, A regularization technique in dynamic optimization

Hawwa, Fareed, Koszul duality for multi-graded algebras

Lowrance, Adam, Homological width and Turaev genus

Maciak, Piotr, Primes of the form X^2+nY^2 in function fields

Morgan, Evan, Some results on cubic graphs

Ptitsyna, Natalia, A discrete model of guided modes and anomalous scattering in periodic structures

Vindas, Jasson, Local behavior of distributions and applications

Wiboonton, Keng, The Segal-Bargmann transform on inductive limits of compact symmetric spaces

Zito, Kevin, Convolution semigroups

Louisiana Tech University (2)

PROGRAM OF MATHEMATICS AND
STATISTICS

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

Zhao, Di, Accurate and stable numerical methods for solving micro heat transfer models in an N -carrier system in spherical coordinates

Tulane University (3)

DEPARTMENT OF BIostatISTICS

Hsueh, Ya-Hui, Extensions of flowgraph models with covariates: An application for kidney retransplantation

DEPARTMENT OF MATHEMATICS

Boettner, Stefan, Mixed transcendental and algebraic extensions for the Risch-Norman algorithm

Boindala, Priya Shilpa, New minimal representations of self-propelled swimmers in low Reynolds number regime using regularized fundamental solutions with applications to collective flow

University of Louisiana at Lafayette (7)

DEPARTMENT OF MATHEMATICS

Boonklurb, Ratinan, Blow-up, beyond quenching, and multidimensional quenching due to local and nonlocal sources

Chiquet, Ross, Discrete juvenile-adult models with application to amphibians
Cleveland, John, Evolutionary game theory on measure spaces

Lee, Meesook, Fiducial inference for some discrete distributions

Lin, Yin, Generalized inference for Weibull distribution

Mallick, Avishek, Analysis of data in presence of censored observation

Roy, Julie, Singularities in deterministic global optimization

MARYLAND

Johns Hopkins University (18)

DEPARTMENT OF APPLIED MATHEMATICS
AND STATISTICS

Alvie, Hussein, Hydrodynamic and magnetohydrodynamic turbulence: Invariants, cascades, and locality

Byrnes, Kevin, Theory and algorithms for set-function optimization

Liu, Lu, Repeated game-theoretic models in competitive electricity markets: Formulations and algorithms

Nakama, Takehiko, Analysis of execution costs for QuickSelect

Reilly, Elizabeth, Random threshold graphs and related topics

Rukhin, Andrey, Asymptotic analysis of various statistics for random graph inference

Zhong, Xiaogang, Some statistics problems in bioinformatics

DEPARTMENT OF BIOSTATISTICS

Chang, Howard, Statistical methods for estimating the health effects of coarse particulate matter

Cheng, Yong, Pseudolikelihood methods: Theory and its application in genetic epidemiology

McCall, Matthew, Preprocessing and barcoding of data from a single microarray

Myers, Jessica, Statistical methods for research in healthcare quality and safety from observational data

Reich, Nicholas, Statistical methods for incomplete data from infectious disease outbreaks

Wang, Chi, Exponential tilt models in the presence of censoring

Wu, Hao, Three novel statistical applications in genomics: Redefining CpG island, peak detection from multiple ChIP-chip experiments, and data pre-processing for ABI/SOLiD second generation sequencing technology

Zhu, Hong, Statistics methods for bivariate survival data with interval sampling and applications to biomedical studies

DEPARTMENT OF MATHEMATICS

Banerjee, Romie, Real Johnson-Wilson theories and non-immersions of projective spaces

Dahl, Jonathan, Existence and structure of solutions of Steiner problems in optimal transport

Kleene, Stephen, Singular behavior of minimal surfaces and mean curvature flow

University of Maryland, Baltimore County (5)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Klein, Martin, Statistical analysis based on physiologically-based pharmacokinetic models

Moldovan, Melania M., A Gershgorin type theorem, spectral inequalities, and simultaneous stability in Euclidean Jordan algebras

Petra, Cosmin, Homogenization of monotone linear complementarity problems

Vancea, Adrian, Infeasible interior point methods for sufficient linear complementarity

Wu, Yukun, Bayes-type tests for constancy of parameters in logistic regression models

University of Maryland, College Park (28)

DEPARTMENT OF APPLIED MATHEMATICS AND STATISTICS, AND SCIENTIFIC COMPUTING

Afsari, Bijan, Means and averaging on Riemannian manifolds

Athavale, Prashant, Novel integro-differential schemes for multiscale image representation

Athreya, Dijavanti, Metastability in nearly-Hamiltonian systems

Blakely, Christopher, Meshless methods for elliptic boundary valued problems and the rotational shallow water equations on the sphere

Halper, Russell, On the routing and location of mobile facilities

Hoffman, Matthew, Ensemble data assimilation and breeding in the global ocean, Chesapeake Bay, and Mars

Kaipa, Krishna, Multi-scale modeling and computations

Lotze, Thomas, Anomaly detection in time series: Theoretical and practical improvements for disease outbreak detection

Nagem, Mohammed, Diagnostics for nonlinear mixed effects models

Quah, John, A macroscale perspective of near-equilibrium relaxation of stepped crystal surfaces

Wang, Wen-Chyi, Regularized variable selection in proportional hazards model using area under receiver operating characteristic criterion

White, James, Novel methods for metagenomic analysis

Xue, Fei, Numerical solutions of eigenvalue problems with spectral transformations

Zhang, Linbao, Multi-scale modeling and computations

Zhang, Shu, Mining of business data

DEPARTMENT OF MATHEMATICS

Adrian, Moshe, A new realization of the tame local Langlands correspondence for $GL(n, F)$, n a prime

Agathocleous, Eleni, Class numbers of real cyclotomic fields of conductor pq

Chen, I-Kun, Spherical averaged endpoint Strichartz estimates for the two-dimensional Schrödinger equations with inverse square potential

De Simoi, Jacopo, Abundance of escaping orbits in a family of anti-integrable limits of the standard map

Halbert, James, A modified Zwanzig-Mori formalism

Hirn, Matthew, Enumeration of harmonic frames and frame based dimension reduction

Janicki, Ryan, Statistical inference based on estimating functions in exact and misspecified models

King, Emily, Wavelet and frame theory: Frame bound gaps, generalized shearlets, Grassmannian fusion frames, p -adic wavelets

Li, Qiaoluan, Optimal approximation spaces for solving problems with rough coefficients

Moore, Terrence, A theory of Cramer-Rao bounds for constrained parametric models

Ozdemir, Enver, Curves and their applications to factoring polynomials

Wang, Jun, Multivariate variance gamma processes and its applications in multi-asset option pricing

Wilson, Kevin, A Tannakian description for parahoric Bruhat-Tits group schemes

MASSACHUSETTS

Boston University (7)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Allen, Benjamin, Studies in the mathematics of evolution and biodiversity

Barendse, Peter, Improved necessary and sufficient conditions for the existence of a subtle cardinal

Farrington, Eleanor, Aspects of Klein's quartic curve

Holzer, Matthew, Renormalization group methods for singularly perturbed systems, normal forms and stability of traveling waves in a reaction-diffusion-mechanics system

Huang, Yifei, A principled statistical analysis of discrete context-dependent neural coding

Kostadinov, Kalin, Constructing an explicit modular symbol

Malerba, Paola, Excitation dominated or inhibition dominated: Different mechanisms behind rhythmic interaction in a hippocampal model

Boston University School of Public Health (8)

DEPARTMENT OF BIOSTATISTICS

Blood, Emily, Performance of mixed effects models in the analysis of mediated longitudinal data generated from a structural equation model

Du, Yangchun, Measuring effects of risk factors on cumulative incidence and remaining lifetime risk in the presence of competing risks

Lyass, Asya, Assessing if randomized treatment group should be included in the imputation model when imputing mission outcome data in randomized superiority clinical trials

Menon, Sandeep, Performance evaluation and operating characteristics of commonly used two stage adaptive designs and extension of the sample size calculation method to a Poisson endpoint

Rong, Jian, On weighted regression of time series for surveillance of influenza mortality

Yang, Mei, A Bayesian approach to bias correction in effect estimates due to disease misclassification: Applications in arthritis research

Young, Robin, Properties of hypothesis tests using generalized additive models with smoothers of geographic location in spatial statistics

Zhu, Yanyan, Stratified proportional odds models for multilevel ordinal data with application to a knee pain severity study

Brandeis University (3)

DEPARTMENT OF MATHEMATICS

Huq, Aminul, Generalized Chung-Feller theorems for lattice paths

Margolis, Max, Length functions of right-angled Artin groups

Radosevich, Mark, Concave symplectic fillings of spin contact 3-manifolds

Harvard University (33)

DEPARTMENT OF BIostatISTICS

Betts, Keith, Robust methodology for predicting and evaluating prognosis in right censored time to event data

Dicker, Lee, Regularized regression methods for variable selection and estimation

Jeffery, Caroline, Disease mapping and statistical issues in public health surveillance

Lutz, Sharon, Modern approaches in association mapping

Olives, Casey, Improving LQAS for monitoring and evaluation of health programs in resource poor settings

Philip, Loni, Multilevel models for zero-inflated count data in environmental health and health disparities research

DEPARTMENT OF MATHEMATICS

Dittmer, Andrew, Filament geometry

Geraghty, David, Modularity lifting theorems for ordinary Galois representations

Le, Anh Vinh, Some combinatorial problems in vector spaces over finite fields

Lee, Ji Oon, Lower bound for ground state energy of dilute Bose gas

Subotic, Aleksandar, A monoidal structure for the Fukaya category

van der Wyck, Frederick, Moduli of singular curves and crimping

Woo, Jeechul, Arithmetic of elliptic curves and surface: Descents and quadratic sections

Zaytman, Yevgeny, K3 surfaces of high Picard number and arithmetic applications

DEPARTMENT OF STATISTICS

Baines, Paul, Statistics, science and statistical science: Modeling, inference and computation with applications to the physical sciences

Chretien, Yves, Three applications of statistics to medical research

Li, Chenxin, Estimation of overflow probabilities for models with heavy tails and complex dependencies

Thomas, Andrew, Hierarchical models for relational data: An example from political science

SCHOOL OF ENGINEERING AND APPLIED SCIENCE

Arkus, Natalie, Theoretical approaches to self-assembly and biology

Bird, James, Capillary dynamics of drops and bubbles: Splashing, wetting, electrocoalescence, inverse coarsening, and thin films

Bor-rong, Chen, Systems challenges for medical sensor networks

Challen, Geoffrey, Data fidelity and resource management for data-rich sensor networks

Colwell, Lucy, A statistical mechanics approach to topics in cell biology

Diez-Canas, Guillermo, Asymptotically optimal simplicial approximation of vector fields

Janapa Reddi, Vijay, Software-assisted hardware reliability: Enabling aggressive timing speculation using run-time feedback from hardware and software

Kamar, Ece, Reasoning effectively under uncertainty for human-computer teamwork

Kopacz, Monika, Carbon monoxide source estimates: Multiple satellite datasets and high resolution adjoint inverse model

Lieberman, Erez, Evolution and the emergence of structure

Lorincz, Konrad, Resource aware programming in sensor networks

Muniswamy-Reddy, Kiran-Kumar, Foundations for provenance-aware systems

Presser, Aviv, Epigenetics and evolution of developmental regulation in mammals

Romero, Fabiano, Efficient reflectance models for vision and graphics

Yu, Chih-Han, Biologically-inspired control for self-adaptive multiagent systems

Massachusetts Institute of Technology (18)

DEPARTMENT OF MATHEMATICS

Evans, Lawrence, A strong maximum principle for reaction-diffusion systems and a weak convergence scheme for reflected stochastic differential equations

Frankland, Martin, Quillen cohomology of Pi-algebras and application to their realization

French, Jennifer, Derived mapping spaces as models for localizations

Gelvin, Matthew, Fusion action systems

He, Zhenqi, Odd dimensional symplectic manifolds

Hua, Xia, Testing regression models with residuals as data

Kottke, Christopher N., Index theorems and magnetic monopoles on asymptotically conic manifolds

Lehmann, Brian, Numerical properties of pseudo-effective divisors

Lin, Qian, Modules over affine Lie algebras at critical level and quantum groups

Liu, Ricky, Specht modules and Schubert varieties for general diagrams

Lopes, William, The Seiberg-Witten equations on a surface times a circle

McNamara, Peter, Whittaker functions on metaplectic groups

Meszaros, Karola, Root polytopes, triangulations, and subdivision algebras

Osorno, Angelica, An infinite loop space structure for K-theory of bimonoidal categories

Pires, Ana Rita, Origami manifolds

Redlich, Amanda, Unbalanced allocations

Wang, Fang, Radiation field for Einstein vacuum equations

Xue, Ting, Nilpotent orbits in bad characteristic and the Springer correspondence

Northeastern University (5)

DEPARTMENT OF MATHEMATICS

Banerjee, Anandam, Tensor structure on smooth motives

Fries, Marcus, Standard bases for coordinate rings of cotangent varieties

Gonzalez, John, Unbounded solutions of the modified Korteweg-de Vries equations

Tran, Thao, Quantum F-polynomials in the theory of cluster algebras

Yang, Shih Wei, Cluster algebras of finite type via semisimple groups and generalized minors

Tufts University (2)

DEPARTMENT OF MATHEMATICS

Burr, Meredith N., Continuous time random walks, their scaling limits and connections with stochastic integration

Wolf, Jamison Belfint, Random fractals and Levy processes

University of Massachusetts, Amherst (5)

DEPARTMENT OF MATHEMATICS

D'Ambrose, Jennie, Generalized FMP and nonlinear Schrödinger type reformulations of some scalar field cosmological models

Law, Kody, Existence, stability and dynamics of solitary waves in nonlinear Schrödinger models with periodic potentials

McDaniel, Christopher, Geometric and combinatorial aspects of 1-skeleta

Ridgill, Penny, On the frequency of finitely anomalous elliptic curves

Shapiro, George, On the discrete differential geometry of surfaces in the four-sphere

Worcester Polytechnic Institute (2)

DEPARTMENT OF MATHEMATICAL SCIENCES

Ni, Peng, Anderson acceleration of fixed point iteration with applications to electronic structure computations

Toto, Ma Criselda Santos, Bayesian predictive inference and multivariate benchmarking for small area means

MICHIGAN

Central Michigan University (3)

DEPARTMENT OF MATHEMATICS

Ampadu, Clement, Random walks and partial differential equations

Goold, Eric, On the packing of cylinders upon a cylinder: A simulation algorithm and a closed-form model

Webster, Jordan, Hadamard difference sets in groups with high exponents

Michigan State University (9)

DEPARTMENT OF MATHEMATICS

Ay, Ahmet, Deciphering cis-regulatory transcriptional grammar in drosophila melanogaster by mathematical models

Coskun, Emre, The fine moduli space of representations of Clifford algebras

Jia, Zhiyuan, Kinesin-microtubule interactions: Transport and spindle formation

Karakurt, Cagri, Some applications of the Giroux correspondence in low-dimensional topology

Speaker, Paul, Mathematical models of the manufacturing learning curve

Sun, Yuanchang, Mathematical modeling and computation of the optical response from nanostructures

DEPARTMENT OF STATISTICS AND PROBABILITY

Chakraborty, Paramita, Particle tracking using SDE driven by pure jump Levy processes

Du, Juan, Asymptotic and computational methods in spatial statistics

Liu, Rong, Non- and semiparametric modeling of financial and macro-economic time series

Michigan Technological University (2)

DEPARTMENT OF MATHEMATICS AND SCIENCE

Cui, Xiaoqi, Identifying gene-gene interactions and transcription regulators via dimension reduction methods

Westlund, Erik, Hamiltonian decompositions of 6-regular Cayley graphs on Abelian groups

Oakland University (2)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Sanjeeva, Rakinawasan, Automorphism groups of cyclic curves

Toma, Susan, Facet-inducing inequalities of the convex hull of integer solutions satisfying the comb structure of the multiple-all-different predicate

University of Michigan (47)

DEPARTMENT OF BIostatISTICS

Andridge, Rebecca, Methods for missing data in complex sample surveys

Chen, Qixuan, Robust Bayesian predictive inference for three topics in survey sampling

Ding, Ying, Some new insights about the accelerated failure time model

Li, Yun, In silico haplotyping, genotyping and analysis of resequencing data using Markov models

Liang, Liming, Efficient methods for analysis of genome scale data

Poisson, Laila, Integrative statistical methods for the analysis of transcriptomic and metabolomic data

Xiao, Rui, Statistical methods for genetic association studies

Zheng, Jin, Models and methods for genetic linkage and association analyses

DEPARTMENT OF MATHEMATICS

Ananyan, Tigran, Topics in tight closure theory

Baskaran, Arvind, Modeling and simulation of hetero-epitaxial growth

Bober, Jonathan, Integer ratios of factorials, hypergeometric series, and related step functions

Bodova, Katarina, Topics in applied stochastic dynamics

Chen, Elizabeth, A picturebook of tetrahedra packings

Constantine, David, Hyperbolic rank-rigidity and compact forms of homogeneous spaces

Eischen, Ellen, p -adic differential operators on automorphic forms and applications

Fernandez, Oscar, The Hamiltonization of nonholonomic systems and its applications

Goldmakher, Leo, Multiplicative mimicry and improvements of Polya-Vinogradov theorem

Golman, Russell, Essays on population learning dynamics and boundedly rational behavior

Graves, Hester, On Euclidean ideal classes

Hammond, Christopher, Invariants of transformation groups acting on real hypersurfaces of complex spaces

Hofmann, Kyle, Triangulation of locally semi-algebraic spaces

Jow, Shin-Yao, Mori dream spaces and Okounkov bodies

Kim, Wansu, Galois deformation theory for norm fields and its arithmetic applications

Kinser, Ryan, Rank functors and representation of rings of quivers

Kutluhan, Cagatay, Floer homology and symplectic forms on $S^1 \times M^3$

Lieberman, Michael, Topological and category-theoretic aspects of abstract elementary classes

Magid, Aaron, Deformation spaces of Kleinian surface groups are not locally connected

Maleh, Ray, Fast sparse approximation algorithms for medical imaging

Metcalfe-Burton, Jessica, Information rates for secret sharing over various access structures

Shretha, Surya, Modeling transmission and evolutionary dynamics of infectious diseases

Snipes, Marie, Flat forms in Banach spaces

Stapledon, Alan, The geometry and combinatorics of Ehrhart δ -vectors

Tucker, Kevin, Jumping numbers and multiplier ideals on algebraic surfaces

Vasques, Richard, Anisotropic diffusion of neural particles in stochastic media

Vivas, Liz, Fatou Bieberbach domains and automorphisms tangent to the identity

Weiss, Michael, Mathematical sense, mathematical sensibility: The role of the secondary geometry course in teaching students to be like mathematicians

Williams, Marshall, Metric current and differentiable structures

Xing, Hao, Analysis of the option prices in jump diffusion models

DEPARTMENT OF STATISTICS

Chakraborty, Bibhas, A study of non-regularity in dynamic treatment regimes and some design considerations for multicomponent interventions

Choi, Nam Hee, Investigation of smooth and non-smooth penalties for regularized model selection in regression

Gunter, Lacey, Variable selection for decision making

Katenka, Natallia, Statistical problems in wireless sensor networks

Kleyman, Yevgeniya, Testing for covariate balance in comparative studies

McGowan, Herle, Experimentation methodologies for educational research with an emphasis on the teaching of statistics

Rothman, Adam, Sparse estimation of high-dimensional covariance matrices
Zhang, Aijun, Statistical methods in credit risk modeling
Zhou, Nengfeng, Sparse model identification for high dimensional data

Wayne State University (3)

DEPARTMENT OF MATHEMATICS

Nguyen, Son, Calculations towards the complex connective K -theory of QS^0
Shkemb, Armira, The cohomology of $A(1)$ and motivic connective K -theories
Zhu, Huiqing, Discontinuous Galerkin methods for singularly perturbed problems

MINNESOTA

University of Minnesota-Twin Cities (24)

SCHOOL OF MATHEMATICS

Aschenbeck, Michael, A learning approach to detecting lung nodules in CT images
Berget, Andrew, Symmetries of tensors
Boavida, Joao Pedro, Compact periods of Eisenstein series of orthogonal groups of rank one
Chabaud, Brandon, Analysis and numerics of the mechanics of gels
Chen, Guangliang, Spectral curvature clustering for hybrid linear modeling
Choffrut, Antoine, On the local structure of the set of steady-state solutions to the 2D Euler equations
Dobson, Matthew, Mathematical foundations of the quasicontinuum multiscale method
Dorfmeister, Josef, Relative methods in symplectic topology
Foldes, Juraj, Asymptotic properties of positive solutions of parabolic equations and cooperative systems with Dirichlet boundary data
Hanhart, Alexander, Combinatorial topological field theory
Hu, Jifeng, Mathematical modeling and analysis of in vitro actin filament dynamics and cell blebbing
Ichikawa, Ryhei, Adjoint recovery of superconvergent linear functionals from Galerkin approximations
Kenny, Joseph, Evolution of differential invariant signatures and applications to shape recognition
Liu, Chin-Yueh, A kinetic theory approach to capturing interneuronal correlation in feed-forward networks
Merev, Ivan, A posteriori error estimates for time-dependent Hamilton-Jacobi equations
Nielsen, Michelle, Stable convergence and Markov processes
Post, Sarah, Models of second-order superintegrable systems

Su, Linlin, On some indefinite semilinear partial differential equations in mathematical biology
Swenson, Daniel, The Steinberg complex of an arbitrary finite group in arbitrary positive characteristic
Tuzel, Vasfiye Hande, A level set method for an inverse problem arising in photolithography
Whitehouse, Jonathan, Generalized sines, multiway curvatures, and the multiscale geometry of d -regular measures
Xu, Guoyi, Harmonic mean curvature flow in Riemannian manifolds and Ricci flow on noncompact manifolds

SCHOOL OF STATISTICS

Johnson, Alicia, Markov chain Monte Carlo for Bayesian hierarchical models
Zhang, Bo, Model selection in linear mixed-effects models

MISSISSIPPI

Mississippi State University (1)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Balasubramanian, Suman, On the Erdős-Sos conjecture and the Cayley isomorphism problem

University of Mississippi (1)

DEPARTMENT OF MATHEMATICS

Gao, Cuilan, Ranking on graph data using kernelized spatial depth

MISSOURI

Missouri University of Science and Technology (1)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Wintz, Nicholas, The Kalman filter on time scales

St. Louis University (2)

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

Huling, Philip, Flat conformal deformation theory of hyperbolic 3-orbifolds
Moses, Ashley, Linear independence of wavelet systems and translations of functions in $L^p(\mathbb{R}^2)$

University of Missouri-Columbia (7)

DEPARTMENT OF MATHEMATICS

Annoni, Marco, Almost everywhere convergence for modified Bochner-Riesz means at the critical index for $p \geq 2$

Barb, Simona, Topics in geometric analysis with applications to partial differential equations
Benson, James, Mathematical problems from cryobiology
Chapman, Jeremy, Finite point configurations and projection theorems in vector spaces over finite fields
Heitzman, Michael, A free boundary gas dynamic model as a two-body field theory problem
Lee, Jae Won, Seiberg-Witten invariants on three dimensional manifolds with orientation-reversing involutions
Redmond, Daniel, Existence and construction of real-valued equiangular tight frames

University of Missouri-St. Louis (1)

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

Zhu, Weiwei, The multilevel structures of NURBs and NURBlets

Washington University in St. Louis (8)

DEPARTMENT OF ELECTRICAL AND SYSTEM ENGINEERING

Elvitigala, Thanura, Modeling and identification of differentially regulated genes using transcriptomics and proteomics data
Wang, Shuli, Electrocardiographic consequences of electrical and anatomical remodeling in diabetic and obese humans

DEPARTMENT OF MATHEMATICS

Deutsch, Michael, Equivariant deformation of horospherical surfaces
Hamm, Michael, Filling essential laminations
Henry, Michael, Connections between Floer-type invariants and Morse-type invariants of Legendrian knots
Houska, Robert, On the nonexistence of shearlet scaling functions and characterizations of reproducing systems for shift invariant spaces
Sedlock, Nicholas, Properties of truncated Toeplitz operators
Xi, Ruibin, Statistical aggregation

MONTANA

Montana State University (6)

DEPARTMENT OF MATHEMATICAL SCIENCES

Campanelli, Mark, Multicellular mathematical models of somitogenesis
Cummins, Breschne, Determining the biomechanical response of a filiform hair array: A low Reynolds number fluid-structure model

Harker, Shaun, Classical mechanics with dissipative constraints

Jensen, Taylor, A study of the relationship between introductory calculus students' understanding of function and their understanding of limit

Patterson, Kathryn, Gene regulation in the lac operon

Trouba, Jerome, The design, implementation, and evaluation of a teacher training workshop for mathematics graduate teaching assistants

University of Montana - Missoula (3)

DEPARTMENT OF MATHEMATICAL SCIENCES

Chandler-Pepelnjak, John, Modeling conversions in online advertising

Goldes, John, Regularization parameter selection methods for ill-posed Poisson imaging problems

Hart, John, Simple two-sided rational vector spaces of rank 2

NEBRASKA

University of Nebraska-Lincoln (15)

DEPARTMENT OF MATHEMATICS

Au, Suanne, Fan cohomology and its application to equivariant K -theory of toric varieties

Dahal, Rajendra, Dynamic equations on time scales

DeLegge, Anthony, Mathematical modeling of optimal seasonal reproduction strategies of plant populations and a comparison of long-term viabilities of annuals and perennials

Dreher, Deanna, Pseudocodewords of graph covers and computation trees

Henriques, Ines, Quasi-complete intersection ideals with applications to free resolutions over Artinian rings

Huang, Mu-wan, Fan cohomology and equivariant Chow rings of toric varieties

Lubben, Joan, Modeling and analysis of biological populations

Parrott, Amy, A computational study of the effects of temperature variation on turtle egg development, sex determination, and population dynamics

Rahmati, Hamid, Properties of local rings and resolutions of modules

DEPARTMENT OF STATISTICS

Fang, Xiang, Sequence comparison and stochastic model based on multi-order Markov models

Jiao, Shuo, Detecting differentially expressed genes while controlling the false discovery rate for microarray data

Kerby, April, Spatial clustering using the likelihood function

Koh, Woon Yuen, Some methods and applications of super-saturated split-plot designs

Tu, Chunhao, Using nonlinear non-monotonic hormetic models and designs for detecting and estimating hormesis

Zhou, Meijian, Fully exponential Laplace approximation EM algorithm for nonlinear mixed effect models

NEW HAMPSHIRE

Dartmouth College (5)

DEPARTMENT OF MATHEMATICS

Genovese, Giulio, On the importance of phase in improving detection of shared genomic segments

Kinlaw, Paul, Refocusing of null-geodesics in Lorentz manifolds

Kobayashi, Mitsuo, On the density of abundant numbers

Scoville, Nick, A metric for homotopy types

Wright, Sarah, Aperiodicity in topological k -graphs

University of New Hampshire (8)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Abel, Todd, The impact of a mathematics research experience on teachers' conceptions of student learning

Eroshkin, Oleg, Invariant Frechet algebras on bounded symmetric domains

Greenough, Justin, Bimodule categories and monoidal 2-structure

Johnson, Jeremiah, Admissible orders on quotients of the free associative algebra

Li, Qihui, MF algebras and a Bishop-Stone-Weierstrass theorem result

Liu, Juan, Wavelet regression with long memory infinite moving average errors

Liu, Zhe, von Neumann algebras, affiliated operators and representations of the Heisenberg relation

Rojas-Arenaza, Miriam, Mathematics of double-walled nanotube model: Asymptotic spectral and stability analysis

NEW JERSEY

New Jersey Institute of Technology (5)

DEPARTMENT OF MATHEMATICAL SCIENCES

Kaur, Manmeet, Perturbed spherical objects in acoustic and fluid flow fields

Li, Jing, Modeling with bivariate geometric distributions

Ren, Bo, Modeling and quasi-Monte Carlo simulation of risk in credit portfolios

Wang, Qiming, Nonlinear evolution of annular layers and liquid threads in electric fields

Yang, Ye, Reduced order models for fluid-structure interaction systems by mixed finite element formulation

Princeton University (14)

DEPARTMENT OF MATHEMATICS

Bakker, Benjamin, Hodge polynomials of moduli spaces of stable pairs on $K3$ surfaces

Bhatt, Bhargav, Derived direct summands

Fox, Jacob, Ramsey numbers

Jorza, Andrei, Crystalline representations for $GL(2)$ over quadratic imaginary fields

Loh, Po-Shen, Results in extremal and probabilistic combinatorics

Luli, Garving, $C^{m,\omega}$ extension by bounded-depth linear operators

Marshall, Simon, On the cohomology and quantum chaos of the generalized linear group in two variables

Wu, Zhongtao, Floer homology and Dehn surgery

Yu, Pin, On the rigidity of charged black holes

Yung, Po Lam, Gagliardo-Nirenberg-Sobolev inequalities and finite type

PROGRAM IN APPLIED COMPUTATIONAL MATHEMATICS

Lu, Jianfeng, Density functional theory: Analysis and algorithms

Sadeghi, Kolia, Progress on deciphering the retinal code

Sekora, Michael, Algorithms for hyperbolic balance laws with multiscale behavior: Application in radiation hydrodynamics

Zhou, Xiang, Study of noise-induced transition pathways in non-gradient systems using adaptive minimum action method

Rutgers University (22)

DEPARTMENT OF MATHEMATICS

Blight, Sara, Refinements of Selberg's sieve

Cobbs, Ila, Lattice subgroups of Kac-Moody groups

Djankovic, Goran, On large families of automorphic L -functions on GL_2

Ellis, Paul, The classification problem for finite rank dimension groups

Ilinca, Liviu, Asymptotic enumeration of 2- and 3-SAT functions

Koo, Jawon, Singular perturbation methods in credit derivative modeling

Nguyen, Hoi, Some applications of Freiman's inverse theorem

Pegden, Wesley, Games, graphs and geometry

Raff, Paul, Automated proof and discovery in three combinatorial problems

Rezazadegan, Reza, Pseudoholomorphic quilts of Khovanov homology

Robinson, Thomas, Formal calculus, umbral calculus and basic axiomatics of vertex algebras

Schneider, Scott, Borel superrigidity for actions of low rank lattices

Shi, Ming, Local intensity and its dynamics in multi-name credit derivatives modeling

Staley, Daniel, Behavior of geodesic rays in spaces with geometric group actions

Yin, Biao, Gradient estimates for the conductivity problems and the systems of elasticity

Zhang, Yuan, Invariant theory in Cauchy-Riemann geometry and applications to the study of holomorphic mappings

DEPARTMENT OF STATISTICS AND
BIOSTATISTICS

Cheng, Jerry Q., Bayesian methods in non-standard missing data problems

Jiang, Wenhua, Topics in high-dimensional inference

Lou, Jianxiong, Gambling theory and stock option models

Luo, Zhaoyu, Statistical methods for gene selection using differential gene expression and building gene co-expression networks

Xu, Lu, Small sample inference for collections of Bernoulli trials

Ye, Fei, Imputation of automatic control algorithms and estimation in high-dimensional linear regression

Rutgers University-Newark (1)

DEPARTMENT OF MATHEMATICS AND
COMPUTER SCIENCE

Rubanovich, Dmitry, Endoscopic codes for unitary groups over the real

NEW MEXICO

New Mexico State University, Las Cruces (7)

DEPARTMENT OF MATHEMATICAL
SCIENCES

Biyogmam, Guy Roger, On the Leibniz (co)homology of the Lie algebra of the Euclidean group

Galayda, Suzanne, Effect of the diffusion coefficient on noise expression in the logistic equations and single microbe model of the chemostat

Lucero-Bryan, Joel, Modal logics of some subspaces of the real numbers: Diamond as derivative

Pham, Uyen, Contributions to statistical analysis of financial risks

Salas, Marc, Parabolic problems arising in financial mathematics and semiconductor physics

Sanders, John, Studying periodic knots using braids and the Vogel algorithm

Yang, Qin, Regular completions of lattices

NEW YORK

Binghamton University, State University of New York (6)

DEPARTMENT OF MATHEMATICS AND
SCIENCE

Bowlin, Garry, Maximum frustration of bipartite signed graphs

Jones, Keith, Controlled connectivity for cocompact isometric actions on simplicial trees

Rusnak, Lucas, Oriented hypergraphs

Snopce, Ilir, Lie methods on pro- p groups

Wang, Jiaping, The generalized MLE with the censored and masked competing risks data

Wilcox, Elizabeth, Complete finite groups and wreath products

Clarkson University (3)

DEPARTMENT OF MATHEMATICS AND
COMPUTER SCIENCE

Chen, Ye, Efficient and robust solvers for Monge-Ampère equations

Sun, Jie, Networked networks: Uncovering the scale of your network dynamics

Yamoah, Godfred, Conservative temporal and spatial adaptive methods for groundwater flow

Columbia University (18)

DEPARTMENT OF BIOSTATISTICS

Wu, Xi, Stepwise procedures for dose finding in an adaptive clinical trial of early rehabilitation after acute stroke

DEPARTMENT OF MATHEMATICS

Branson, Mark, Action-Maslov homomorphism for monotone symplectic manifolds

Fink, Evan, On the twisted Floer homology of mapping tori of periodic diffeomorphisms

Fournie, David, Functional Itô calculus and applications

Kaupilla, Helena, Convex duality in singular control: Optional consumption choice with intertemporal substitution and optimal investment in complete markets

Krasner, Daniel, Computations and structures in $\mathfrak{sl}(n)$ -link homology

Levine, Adam, Applications of Heegaard Floer homology to knot and link concordance

Li, Chenxu, Managing volatility risk: Innovation of financial derivatives, stochastic models and their analytical implementation

Lin, Chen-Yun, On Hamilton's Ricci flow and Bartnik's construction of metrics of prescribed scalar curvature

Medos, Ivana, On the mean curvature flow of graphs of symplectomorphisms of Kähler-Einstein manifolds; application to complex projective spaces

Peters, Thomas, Computations of Heegaard Floer homology: Torus bundles, L -spaces, and correction terms

Shen, Mingmin, Rational curves on Fano threefolds of Picard number one

Zakharov, Dmitry, The discrete Dirac operator and the discrete generalized Weierstrass representation in pseudo-Euclidean spaces

DEPARTMENT OF STATISTICS

Li, Xiaodong, Change-point distribution estimation in animal learning experiments

Novotny, Petr, Optimal portfolio execution and high frequency financial data

Robinson, Lucy, Functional clustering and change limit estimation in multi-subject fMRI data

Schutt, Rachel, Topics in model-based population inference

Song, Li, Inference for nonstandard MA and noncausal VAR models

Cornell University (18)

CENTER FOR APPLIED MATHEMATICS

Brisbin, Abra, Tracking the elusive gene: Linkage analysis for categorical traits and ancestry assignment in admixed individuals

Childs, Lauren, Microphages, oscillators and fish: Using dynamical systems to examine biological problems

Kuehn, Christian, Multiple time scale dynamics with two fast variables and one slow variable

DEPARTMENT OF MATHEMATICS

Bowman, Joshua, Flat structures and complex structures in Teichmüller theory

Dimitrov, Nikolay, Rapid evolution of complex limit cycles

Eshmatov, Alimjon, Group-valued implosion and conjugation spaces

Lipa, Christopher, Monodromy and Hénon mappings

Needleman, Jonathan, On branching laws of representations of $GL_4(F)$ to $SP_4(F)$

O'Connor, Michael, Using tree automata to investigate intuitionistic logic

Pulemotov, Artem, Geometric flows on manifolds with boundary

Wang, Biao, Foliations for quasi-Fuchsian 3-manifolds

Worthington, James, Automata, representations, and proofs

Zhao, Zhigen, The empirical Bayes approach for shrinkage confidence intervals

DEPARTMENT OF STATISTICS

Hanlon, Bret, High-dimensional data analysis

Kormaksson, Matthias, Dynamic path analysis and model based clustering of microarray data

Schifano, Elizabeth, Topics in penalized estimation

Shaby, Benjamin, Tools for hard Bayesian computations
Zipunnikov, Vadim, Topics in generalized linear mixed models

Graduate Center, City University of New York (5)

PHD PROGRAM IN MATHEMATICS

Bhatnagar, Anupam, Points of canonical height zero on projective varieties

Drummond-Cole, Gabriel C., Homotopy Batalin-Vilkovisky algebras, trivializing circle actions, and moduli space

Farmatris, Ioannis, Cohomological aspects of complete reducibility of representations

Flek, Ross D., On the dynamics of quasi-self matings of generalized starlike complex quadratics and the structure of the mated Julia sets

Friedman, Shoshana, Aspects of super-compactness, HOD and set theoretic geology

New York University, Courant Institute (19)

COURANT INSTITUTE OF MATHEMATICAL SCIENCES

Arsenio, Diogo, On the Boltzmann equation: Hydrodynamic limit with long-range interactions and mild solutions

Chen, Xi (Roger), Two problems from mathematical finance

Chumakova, Lyubov, Simple waves: Shear instability and eigenvalue crossings

Damron, Michael, 2D invasion percolation and a rill erosion model

Galehouse, Benjamin, Topologically accurate meshing using domain subdivision techniques

Gun, Onur, Universality of transient dynamics and aging for spin glasses

Khatri, Shilpa, A numerical method for two phase flows with insoluble and soluble surfactants

Kim, Sungwook, A Baernstein problem of p -harmonic measures and an invariance of p -harmonic functions under boundary perturbations: Using tug-of-war with noise

Krahmer, Felix, Novel schemes for Sigma-Delta modulation: From improved exponential accuracy to low-complexity design

Lee, Junggho, A hybrid domain decomposition method and its applications to contact problems

Lee, Sangmin, Analysis of path sampling methods for Itô SDEs

Lee, Wonjung, Resonance quartets in dispersive wave turbulence

Lim, Sukbin, Noise-induced transitions in slow wave neuronal dynamics

Louidor, Oren, Topics in percolation, polymers and Potts dynamics

Park, Jungwoon, The nonlinear Schrödinger equation with a delta potential and even initial data

Shmidheiser, Hans, Lattice Faddeev model
Soloviev, Fedor, Universal symplectic forms in the soliton theory

Vishe, Pankaj, Dynamical methods for rapid computations of L -functions

Wong, Tak-Kwong, On the well-posedness of boundary layer equations

Polytechnic Institute of New York University (2)

DEPARTMENT OF MATHEMATICS

Ivan, Mirela, The finance and price of water

Tsang, Andy, Valuation on L^p -spaces

Rensselaer Polytechnic Institute (7)

DEPARTMENT OF MATHEMATICAL SCIENCES

Bergeron, Charles, Scalable customized machine learning models motivated by pharmaceutical chemistry applications

Gatewood, James, Mathematical model of spatial communication network flows

Mazzone, Eric, Applications of 3-convexity

Pearson, Yanthe, Discrete and continuous stochastic models for neuromorphological data

Ramsden, Daryn, Optimization approaches to sensor placement problems

Szabo, Csilla, Marker models for actin polymer dynamics and cell membrane protrusion

Zhang, Ning, 2D log-elastographic methods for tissue shear stiffness reconstruction using a 2D plane strain elastic system

State University of New York at Buffalo (12)

DEPARTMENT OF BIOSTATISTICS

Asubonteng, Kobby Owusu, Data transformations in statistics

Filiaci, Virginia, Evaluation of binary intermediate endpoints for their departure from perfect surrogacy

Mashtare Jr., Terry, Extensions in the use of epsilon-skew-normal distribution for statistical modeling

DEPARTMENT OF MATHEMATICS

Atena, Agegnehu, Mathematical modeling of driven dewetting and self-assembly of pulsed laser-irradiated metallic films

Ciungu, Lavinia, Cryptographic Boolean functions: Thue-Morse sequences, weight and nonlinearity

George, Prasanth, Fixed points in the evolution of the predominance of a locally favored allele

Guo, Xiao, Two classes of virtually fibered Montesinos links of type \widetilde{SL}_2

Hwang, Guenbo, Boundary value problems for linear and nonlinear wave equations

LaFountain, Douglas, On the uniform thickness property and contact geometric knot theory

Palaparthi, Sreekrishna, Two problems on closed geodesics in hyperbolic 3-manifolds

Vu, Phu, Grid based and meshless methods for the computation of the curvatures and related local geometric quantities of a 3D surface

Zhang, Yu, Lifted Heegaard surfaces and virtually Haken manifolds

State University of New York at Stony Brook (20)

DEPARTMENT OF APPLIED MATHEMATICS AND STATISTICS

Baez-Revueltas, Fabiola Berenice, Studies of paired samples vs. independent samples analyses

Bo, Wuirigen, Applications of 3D front tracking to multi phase fluid

Cai, Rong, Tomographic analysis and simulation of reactive flow in column experiments

Cook, Samuel, A power study assuming a single exponential distribution with long term survivors and a mixture of two exponential distributions

Cru, David, Dynamic hedge fund asset allocation under multiple regimes

Fei, Jun, On variances of continuous-time Markov decision processes

Ji, Xiaomei, 2D Riemann problem on front tracking method

Khan, Mahsiul, Simulation-based sequential Bayesian filtering with Rao-Blackwellization applied to nonlinear dynamic state space models

Leng, Ling, Compound and constrained regression analyses

Lim, Hyunkyung, Numerical modeling in turbulent mixing flows

Pradhan, Kith, Partial correlation analysis in functional brain imaging studies

Roberson, Andrea, A comparison of hidden Markov model based programs for detection of copy number variation in array comparative genomic hybridization data

Sharpe, Kathryn, Structural equation modeling for mixed designs

Shin, Soyoun, Linkage analysis of a quantitative trait: Suggested methods for sibling pairs with at least one member having an extreme trait value

Sholokhova, Yelena, Network flow modeling via Lattice-Boltzmann based channel conductance. Prediction of relative permeability in primary drainage

Zhang, Tianyi, Structural equation modeling with time series data

DEPARTMENT OF MATHEMATICS

Bulawa, Andrew, Maximal foliations in spacetime with translational symmetry
Chance, Michael C., Degenerate maxima in Hamiltonian systems

Cheraghi, Davoud, Dynamics of complex unicritical polynomials
Ostrovsky, Stanislav, Weighted- L^2 interpolation on non-uniformly separated sequences

Syracuse University (3)

DEPARTMENT OF MATHEMATICS

Lu, Yao, Fast multiscale integral equation methods for image restoration
Song, Guohui, Approximation of kernel matrices and its applications
Zhang, Haizhang, Sampling with reproducing kernels

The University of Albany, SUNY (3)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Dow, Keiko, Extreme and non-extreme points of compact and convex integral family of analytic functions
Kronholm, James Brandt, On congruence properties of $p(n, m)$
Tsakiri, Katerina, The effect of noise in principal component analysis and an application to ozone pollution study

University of Rochester (6)

DEPARTMENT OF BIostatISTICS AND COMPUTATIONAL BIOLOGY

Stokes-Riner, Abbie, Residual diagnostic methods for Bayesian structural equation models
Su, Haiyan, Empirical likelihood-based inference for multiple regression and treatment comparison
Yu, Qin, Distribution-free models for longitudinal count data

DEPARTMENT OF MATHEMATICS

Lopez, Jonathan, On Lie algebras and cohomology associated to congruence subgroups
Sookdeo, Vijay, Arithmetic properties of orbits of rational functions
Sukiennik, Justin, Equidistribution and variation of height functions

NORTH CAROLINA

Duke University (8)

DEPARTMENT OF MATHEMATICS

Jauregui, Jeffrey, Mass estimates, conformal techniques, and singularities in general relativity
Thomas, Rachel, Time-scaled stochastic input to biochemical reaction networks

DEPARTMENT OF STATISTICAL SCIENCE

Gray, Simone, Spatial modeling of measurement error in exposure to air pollution
Ji, Chunlin, Advances in Bayesian modelling and computation: Spatio-temporal processes, model assessment and adaptive MCMC

Lunagomez, Simon, A geometric approach for inference on graphical models

Mao, Kai, Nonparametric Bayesian models for supervised dimension reduction and regression

Wang, Hao, Bayesian multi- and matrix-variate modelling: Graphical models and time series

Wilson, Melanie, Bayesian model uncertainty and prior choice with applications to genetic associate studies

North Carolina State University (32)

DEPARTMENT OF MATHEMATICS

Absher, John, On the isomorphy classes of involutions over $SO(2n, k)$

Alston, April, Heart rate regulation: Modeling and analysis

Fan, Xiang, Adaptive control of hysteretic smart material systems

Heller, Martin, Robust minimum density estimators and stochastic resonance for classification algorithms

Iwancio, Kathleen, Use of integral signature and Hausdorff distance in planar curve matching

Lin, Min Hsuing, Inverse problems of matrix data reconstruction

May, Lindsay, Shear-driven particle size segregation: Models, analysis, numerical solutions, and experiments

Rehman, Rizwana, Numerical computation of the characteristic polynomial of a complex matrix

Taylor, Monique, Dafermos regularization of a modified KdV-Burgers equation

Thompson, Kyle, Commuting involutions of $SL(n, k)$

Wang, Qiang, Classification of KF -orbits of unipotent elements in symmetric F -varieties of $SL(n, F)$

Watson, Robert, Lifting automorphisms from root systems to Lie algebras

Wilson, Heather, Model development of nanotube infused polyimides

Xie, Hui, Finite element methods for interface problems with locally modified triangulations

Zhang, Qin, Control of finite dimensional bilinear systems: Applications to quantum control systems

DEPARTMENT OF STATISTICS

Cao, Weihua, Improving efficiency and robustness of doubly robust estimators in the presence of coarsened data

Chen, Chia-Cheng, Assessing agreement with intraclass correlation coefficient and concordance correlation coefficient

DiCasoli, Carl, Bayesian regression methods for crossing survival curves

Dickson, Samuel, Improving discovery of causal variants in genetic association studies

Elliott, Laine, Adjusting for measurement error

Gong, Xiaohua, Mapping quantitative trait loci in outbred half-sib populations

Hwang, Wook Yeon, Boosting methods for variable selection in high dimensional sparse models

Krachey, Elizabeth, Variations on the accelerated failure time model: Mixture distributions, cure rates, and different censoring scenarios

Miao, Huiping, Model selection and estimation in additive regression models

Miclaus, Kelci, Addressing sources of bias in genetic association studies

Mishra, Kaushal, Phase contrast neutron imaging using single and multiple pinhole apertures

Ouyang, Haojun, Bayesian approach for nonlinear dynamic system and genome-wide association study

Shows, Justin, Sparse estimation and inference for censored median regression

Sliva, Luciano, Multiple trait interval mapping of quantitative trait loci from inbred line crosses

Stanislav, Stephen, Developments and applications of a closed capture-recapture robust design model to avian point count data

Wang, Chun-Ju, Risk measures and capital allocation

Zhu, Ying, Modeling dependence in the design of crop insurance contracts

University of North Carolina at Chapel Hill (29)

DEPARTMENT OF BIostatISTICS

Chen, Li, Model checking and prediction with censored data

Chien, Lung Chang, Multi-city time series analysis of air pollution and mortality data using generalized ge additive mixed models

Cho, Hyunsoon, Bayesian influence diagnostic methods for parametric regression models

Enck, Steven, Latent class linear mixed models: A general approach implemented via SAS macro with a tutorial for clinical researchers

Garcia, Ramon, Variable selection for models with missing data

Ghosh, Arpita, Conditional likelihood for risk estimation in genome scans and coefficient shrinkage

Ho, Lindsey, Novel statistical methods for the study design and analysis of genome-wide association studies

Kim, Eunhee, Nonparametric and semi-parametric methods in medical diagnostics

Li, Yimei, Statistical analysis of complex neuroimaging data

Perin, Jamie, Improved generalized estimating equations for incomplete longitudinal binary data, covariance estimation in small samples, and ordinal data

Sotres-Alvarez, Daniela, Latent transition mixture models for dietary pattern analysis

Zhao, Yufan, Reinforcement learning design for cancer clinical trials

DEPARTMENT OF MATHEMATICS

Clemons, Joshua, Dynamical properties of Weierstrass elliptic functions on square lattices

Lin, Joyce, An experimental and mathematical study on the prolonged residence time of sphere falling through stratified fluids at low Reynold's number

Pennington, Nathan, The Lagrangian averaged Navier-Stokes equations with rough initial data

Rao, Indrani, Stability of noncharacteristic boundary-layers for the compressible nonisotropic Navier-Stokes equations

Strychalski, Wanda, Simulation methods for spatio temporal models of biochemical signaling networks

Tiron, Roxana, Strongly nonlinear internal waves in near two-layer stratifications: Generation, propagation and self-induced shear instabilities

Xu, Ke, Mathematics of microrheology with applications to pulmonary liquids

DEPARTMENT OF STATISTICS AND OPERATION RESEARCH

Aydin, Burcu, Principal component analyses for tree structured objects

Baek, Changryong, Second order properties of distribution tails and estimation of tail exponents in random difference equations

Bolia, Nomesh, Scheduling in wireless data networks

Evangelou, Evangelos, Bayesian and frequentist methods for approximate inference in generalized linear mixed models

He, Xuanyao, Statistical inferences for correlated data prediction, estimation and design

Lee, Mihee, Deconvolution estimation of a mixture distribution with boundary effects motivated by mutation distribution

Liu, Nan, Appointment scheduling in health care

Lu, Ying, Advance in statistical theory and methods for social sciences

Pak, SeoYoung, Flexible margin-based classification techniques

Tural, Mustafa K, Topics in basic reduction and integer programming

University of North Carolina at Charlotte (4)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Hinson, Kenneth, Braid indices in a class of closed braids

Hong, Won-Tak, A meshless method with enriched basis functions for singularity problems

Wang, Yunfei, Essays on predictive regression models for asset returns

Zhou, Jun, Several statistical results under multinomial distribution with infinite categories

NORTH DAKOTA

North Dakota State University, Fargo (2)

DEPARTMENT OF MATHEMATICS

Hashbarger, Carl, Ramification and integral extensions of Dedekind domains

Spicer, Christopher, On Cohen-Kaplansky domains

OHIO

Bowling Green State University (1)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Li, Hong, Simultaneous inference for populations with unequal variances

Case Western Reserve University (14)

DEPARTMENT OF MATHEMATICS

Ochipinti, Rossanna, In silico testing of hypothesis for brain energy metabolism with new computational models within a statistical framework

Ye, Deping, Topics on convex geometry and phenomena in high dimensions

DEPARTMENT OF STATISTICS

Fridline, Mark, Almost sure confidence intervals for the correlation coefficient

Shi, Peipei, Estimation and approximation of tempered stable distributions

DEPARTMENT OF EPIDEMIOLOGY AND BIostatistics

Howe, Evan, Health care utilization by the homeless services population

Kim, Sulgi, Genetic association test for binary traits with an applicant

Li, Yali, Association of common and rare variants with complex diseases

Morris, Nathan, Multivariate and structural equation modes in family data

Mupere, Ezekiel, Body wasting among tuberculosis patients in urban Uganda, Kampala

Ou, Juchi, Evaluation of exposure/treatment effect via spatial propensity score in observational studies

Rose, Johnnie, Simulating the impact of mass vaccination with live attenuated human retrovirus vaccine in a developing country

Stulberg, Jonah, Variation in adherence to surgical process measures and clinical outcomes

Styron, Joseph, Pre-operative predictors of patients returning to work following primary total knee arthroplasty

Szczotka-Flynn, Loretta, The longitudinal analysis of silicone hydrogel (LASH) contact lens study

Kent State University (6)

DEPARTMENT OF MATHEMATICAL SCIENCES

Beil, Joel, Geometric properties of orbits of integral operators

Fontes, Ramiro, Applications of Allouba's differentiation theory and semi-SPDEs

Hanchin, Terence, On Sylvester's theorem

Richards, Gregory, Macroscopic modeling of the smectic-CG phase formed by bent-core liquid crystals

Sbeih, Reema, Non-linear maps between subsets of Banach spaces

Shyshkov, Andriy, Numerical solution of ill-posed problems

Ohio State University, Columbus (32)

DEPARTMENT OF MATHEMATICS

Altomare, Christian, Degree sequences, forcibly chordal graphs and combinatorial proof systems

Bezuglyy, Andriy, Reaction-diffusion-advection models for single and multiple species

Joshi, Badal, A doubly stochastic Poisson process model for wake-sleep cycling

Kadyrov, Shirali, Entropy and escape of mass in non-compact homogeneous spaces

Khare, Niraj, Hypergraphs with restricted valency and matching number

Kilanowski, Philip, On the Kratky-Porod model for semi-flexible polymers in an external force field

Kurt, Oguz, On the edge-coloring of graphs

Kwa, Kiam Heong, Laser-driven charged particles as a dynamical system

Luo, Guo, Singularities in the complex spatial plane of a vortex sheet with blob regularization

Mance, William, Normal numbers with respect to the Cantor series expansion

Mehta, Nishali, Graph games

Puliyambalath, Naushad Pasha, Lambda designs for lambda less than 60

Qiu, Zhi, Study of ionization of quantum systems with delta potentials in damped and undamped time periodic fields

Wang, Xueying, Mechanisms of simple perceptual decision making processes
Werner, Nicholas, Integer-valued polynomials over quaternion rings

Xie, Chao, Singularities in the unphysical complex plane for deep water waves

Ye, Ji, Global existence for bubbles in a Hele-Shaw cell with arbitrary nonzero surface tension

Yu, Yang, A numerical approach for interfacial motion and its application to viscous effects in the Benjamin-Feir instability

Zeytuncu, Yunus, L^p and Sobolev regularity of weighted Bergman projections

DEPARTMENT OF STATISTICS

Draguljic, Danel, Screening in physical and computer experiments

Gemayel, Nader, Bayesian nonparametric models for ranked set sampling

Jung, Yoonsuh, Regularization of case specific parameters: A new approach for improving robustness and/or efficiency

Kang, Lei, Reduced-dimension hierarchical statistical models for spatial and spatio-temporal data

Kim, Namhee, A semiparametric statistical approach to functional MRI data

Lee, Ju Hee, Robust statistical modeling through nonparametric Bayesian methods

Liu, Yi, Testing for efficacy for primary and secondary endpoints by partitioning decision paths

Modur, Sharada, Missing data methods for clustered longitudinal data

Moon, Hyejung, Design and analysis of computer experiments for screening input variables

Rao, Youlan, Statistical analysis of microarray experiments in pharmacogenomics

Schuetter, Jared, Cairn detection in southern Arabia using a supervised automatic detection algorithm and multiple sample data

Yang, Jingyuan, Likelihood approach for detecting imprinting and maternal effects in family-based association studies

Yu, Li, Tau-path test: A nonparametric test for testing unspecified subpopulation monotone association

Ohio University, Athens (3)

DEPARTMENT OF MATHEMATICS

Dolph-Bosley, Laura, Applications of elementary submodels in topology

Parra Avila, Benigno, On rational and periodic power series and on sequential and polycyclic error-correcting codes

Szabo, Steve, Convolutional codes with additional structure and block codes over Galois rings

University of Cincinnati (7)

DEPARTMENT OF MATHEMATICAL SCIENCES

Ding, Lili, Bayesian frailty models for correlated interval-censored survival data

Freeman, David, Bilipschitz homogeneity and Jordan curves

Hein, Misty, Occupational cohort studies and the nested case-control study design

Kramer, Eugene, Nonhomogeneous boundary value problems for the Korteweg-de Vries equation on a bounded domain

Osorio, Mauricio, Error estimates for a meshfree method with diffuse derivatives and penalty stabilization

Shen, Rui, A Bayesian modeling of monotonic ordinal responses with application to maturation

Wang, Hongjun, On the estimation of lower-end quantiles from a right-tailed distribution

University of Cincinnati, Medical College (2)

DIVISION OF EPIDEMIOLOGY AND BIostatISTICS

Nguyen, Trang, Long-term outcomes of lumbar fusion among workers' compensation subjects: A historical cohort study

Sucharew, Heidi, Item response theory and transition models applied to allergen skin prick testing

University of Toledo (1)

DEPARTMENT OF MATHEMATICS

Gajewski, David, Analysis of groups generated by quantum gates

OKLAHOMA

Oklahoma State University (6)

DEPARTMENT OF MATHEMATICS

Khanal, Netra, A study on the solutions of Kawahara, and complex-valued Burgers and KdV-Burgers equations

Kighuradze, David, Removable sets for harmonic functions in Besov spaces

Liu, Zhenyi, Triangulations and Heegaard splittings

Wang, Yu, The application of stochastic control theory to hedge ratio optimization in risk management

Xing, Mei, A weak convergence for approximation of American option prices

DEPARTMENT OF STATISTICS

Guo, Qiang, Dimension reduction methods in the study of the genetics of gene expression

University of Oklahoma (3)

DEPARTMENT OF MATHEMATICS

Shaqlaih, Ali, Model selection using an information theory approach

Talley, Jana, Calculus instructors' responses to prior knowledge errors

Thapa, Narayan, Parameter estimation for damped sine-Gordon equation with Neumann boundary condition

OREGON

Oregon State University (5)

DEPARTMENT OF MATHEMATICS

Cook, Samuel, Killing spinors and affine symmetry tensors in Godel's universe

Hass, Ryan, Pi-line reconstruction formulas in computed tomography

Phon-On, Aniruth, A thin codimension-one decomposition of the Hilbert cube

Wills, Dean, Connections between combinations of permutations and algorithms and geometry

DEPARTMENT OF STATISTICS

Wang, Xianlong, Effect classification for longitudinal data

Portland State University (2)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Roderick, Oleg, Model reduction for simulation, optimization and control

Xu, Maochao, Stochastic orders in heterogeneous samples with applications

University of Oregon (9)

DEPARTMENT OF MATHEMATICS

Black, Samson, Representations of Hecke algebras and the Alexander polynomial

Buck, Julian, Crossed product C^* -algebras of certain non-simple C^* -algebras and the tracial quasi-Rokhlin property

Burman, Jennifer, Horrocks' conjecture and operations on Ext and Tor modules

Comes, Jonathan, Blocks in Deligne's category $\text{Rep}(S_t)$

Giusti, Chad, Plumber's knots and unstable Vasilliev theory

Heuser, Aaron, Generalized self-intersection local time for a superprocess over a stochastic flow

Liang, Hutian, The crossed product of $C(X)$ by free and minimal actions of R

Nash, David, Graded representation theory of Hecke algebras

Sun, Wei, Crossed product C^* -algebras of minimal dynamical systems on the product of the Cantor set and the torus

PENNSYLVANIA

Bryn Mawr College (3)

DEPARTMENT OF MATHEMATICS

Fury, Matthew, Continuous dependence on modeling for ill-posed evolution problems

Swann, Jonah, Relative Khovanov-Jacobsen classes for spanning surfaces

Wisniewski, Daniel, Bounding the number of solutions to tetranomial Thue equations

Carnegie Mellon University (8)

DEPARTMENT OF MATHEMATICAL SCIENCE

Sequin, Brian, Frame-free continuum thermomechanics

Wallace, Christopher, Mixed integer programming heuristics

DEPARTMENT OF STATISTICS

Ayers, Elizabeth, Predicting performance and scaling up estimates of student skill knowledge

Friedenberg, David, Adaptive cluster detection

Gross, Justin, Cues and heuristics on Capitol Hill: Relational decision-making in the U.S. Senate

Huang, Erich, System-oriented characterization of the human visual system

Liebner, Jeffrey, Markov models for neuronal spike trains

Yang, Xiting (Cindy), Elicitation of expert knowledge of phylogenies in the form of rooted trees

Drexel University (1)

DEPARTMENT OF MATHEMATICS

Kose-Can, Emek, Catadioptric sensors

Lehigh University (3)

DEPARTMENT OF MATHEMATICS

Buehrle, Charles, The Hecke algebra of the symmetric group and the quantum immanant space

Godbout, Christopher, On the behavior of Chern-Simons classes under the Ricci flow

Hook, Jonelle, The classification of critical graphs and star-critical Ramsey numbers

Pennsylvania State University (22)

DEPARTMENT OF MATHEMATICS

Gogolyev, Andriy, Smooth conjugacy in hyperbolic dynamics

Grutzmann, Melchior, Courant algebroids: Cohomology and matched pairs

Higley, Michael, Stochastic and deterministic processes in fragmentation and sedimentation

Ho, Wing Kai, On geodesics of compact Riemannian surfaces

Kang, Ming-Hsuan, Zeta functions and applications of group based complexes

Li, Manlin, Analysis of deterministic and stochastic implicit interface interaction models of fluid-interface interactions

Li, Tianjiang, Abstract principal component analysis and applications to model reduction

Lu, Min, Low-density parity-check codes: Asymptotic behavior and zeta functions

Orshankiy, Sergey, A PL-manifold of nonnegative curvature homeomorphic to $S^2 \times S^2$ is a direct metric product

Scheglov, Dmitry, Absence of mixing for smooth flows on the genus two surface

Signori, Daniele, Poisson sigma models, reduction and nonlinear gauge theories

Willett, Rufus, Band-dominated operators and the stable Higson corona

DEPARTMENT OF STATISTICS

Hiriote, Sasiprapa, Multivariate concordance correlation coefficient

Huang, Mian, Nonparametric techniques in finite mixture of regression models

Kai, Bo, Robust nonparametric and semi-parametric modeling

Kim, Min Kyung, On dimension folding of matrix or array valued statistical objects

Lee, Juyoun, Sampling contingency tables given sets of marginals and/or conditionals in the context of statistical disclosure limitation

Liao, Shu-Min, Heteroscedastic unbalanced nested designs and fully nonparametric analysis of covariance

Liu, Rong, Multiple imputation for missing items in multiple section questionnaires

Ma-Jiang, Yuejiao (Heather), Estimation and forecasting methodologies for nonparametric regression models via dynamic linear models

Romer, Megan, The statistical analysis of monotone incomplete multivariate normal data

Zhang, Lu, Bayesian analysis of multivariate regime switching covariance model

Temple University (5)

DEPARTMENT OF MATHEMATICS

Fritzsche, David, Overlapping and non-overlapping orderings for preconditioning

Mawi, Henok, The refractor problem with loss of energy and Monge-Ampère type equations

Osborne, Charles, Some aspects of the theory of the adelic zeta function associated to the space of binary cubic forms

DEPARTMENT OF STATISTICS

Cao, Jun, A random linear-extension test based on classic nonparametric procedures

Iyer, Vishwanath, An adaptive single-step FDR controlling procedure

University of Pennsylvania (17)

DEPARTMENT OF MATHEMATICS

Der, Ricky, A theory of generalized population processes

Diemer, Colin, The birational geometry of tropical compactifications

Dyckerhoff, Tobias, Isolated hypersurface singularities as noncommutative spaces

He, Chenxu, Non-negatively curved cohomogeneity one manifolds

Liang, Tian, An overview of the geometry and combinatorics of the Macdonald polynomial and q, t -Catalan number

Lugo, Michael, Profiles of large combinatorial structures

Olsen, John, Three dimensional manifolds all of whose geodesics are closed

Rupinski, Andrew, Factorizations in the irreducible representations of compact semisimple Lie groups

DEPARTMENT OF STATISTICS

Braunstein, Alexander, Bayesian statistical models for HIV evolution

Fu, Xin, Confidence bands in nonparametric regression

Han, Xu, Topics in shrinkage estimation and causal inference

Lin, Dongyu, Three topics in variable selection

Lysen, Shaun, Permuted inclusion criterion: A variable selection technique

McShane, Blakeley, Machine learning methods with time series dependence

Pang, Osbert, On the implementation and extension of BART

Yoon, Frank, New methods for the design and analysis of observational studies

Zhang, Mingyuan, Causal inference in discretely observed continuous time processes

University of Pittsburgh (18)

DEPARTMENT OF BIostatISTICS

Chuong, Ya-Hsiu, A comparative study of inferential procedures for air pollution health effects research

Jakobsdottir, Johanna, Genetics of age-related maculopathy and score statistics for x -linked quantitative tests

Kong, Yuan, Prediction of accrual closure date in multi-center clinical trials with Poisson process models

Kuo, Chia-Ling, Topics in statistical methods for human gene mapping

Lotz, Meredith, Modeling missing covariate data and time-dependent covariates in tree-structured survival analysis

Lu, Shu-ya, Issues in meta-analysis of cancer microarray studies: Data depositary in R and a meta-analysis method for multi-class biomarker detection

Miyahara, Sachiko, Statistical inferences for two-stage treatment regimes for time-to-event and longitudinal data

Oh, Sunghye, Effects of missing value imputation on down-stream analyses in microarray data

Rohay, Jeffrey, Statistical assessment of medication adherence data: A technique to analyze the *J*-shaped curve

Sattar, Abdus, Analysis of non-ignorable missing and left-censored longitudinal biomarkers data

Tudorascu, Dana, Partial least squares on data with missing covariates: A comparison approach

Yuan, Xing, A meta-analysis framework for combining incomparable Cox proportional hazard models caused by omitting important covariates

DEPARTMENT OF MATHEMATICS

Dahma, Alfred, Scales of function and matrix spaces

Ganis, Benjamin, Multiscale methods for stochastic collocation of mixed finite elements for flow in porous media

Obi, Onyeka, Results of approximation and measure on mutational spaces

Radelet, Dan, Hardy-type sequence spaces and Cesaro frames

DEPARTMENT OF STATISTICS

Abebe, Kaleab, A study of treatment-by-site interaction in multisite clinical trials

Zhang, Wei, Optimal design and adaptive design in stereology

RHODE ISLAND

Brown University (16)

CENTER FOR STATISTICAL SCIENCE

Sui, Yunxia, Robust gene expression measure using databases of microarrays

DEPARTMENT OF MATHEMATICS

Lee, Chong Gyu, Height estimates for rational maps

Salikhov, Konstantin, Multiple points of immersions

DIVISION OF APPLIED MATHEMATICS

Baek, Hyongsu, A spectral element method for fluid-structure interaction: New algorithm and applications to intracranial aneurysms

Bengal, Nitsan, Grow up solutions and heteroclinics to infinity for scalar parabolic PDE's

Chang, Lo-Bin, Conditional modeling and conditional inference

Fedosov, Dmitry, Multiscale modeling of blood flow and soft matter

Hadzic, Mahir, Stability and instability in the Stefan problem with surface tension

Kloekner, Andreas, High-performance high-order simulation of wave and plasma phenomena

Kushnarev, Sergey, The geometry of the space of 2-D shapes and the Weil-Petersson metric

Lamar, Michael, Unsupervised linguistic inference

Pan, Wenxiao, Single particle DPD: Algorithms and applications

Papanicolaou, Andrew, Topics in nonlinear filtering

Roy, Ishani, High order WENO scheme for computational cosmology

Ruggieri, Eric, Inference in discrete high dimensional space: An exploration of the earth's ice sheets through change point and variable selection techniques

Walsh, Samuel, Stratified and steady periodic water waves

University of Rhode Island (2)

DEPARTMENT OF MATHEMATICS

Brett, Ann, Global behavior of some difference equations and discrete dynamical systems

Kudlak, Zachary, Problems in generalized edge colorings

SOUTH CAROLINA

Clemson University (13)

DEPARTMENT OF MATHEMATICAL SCIENCES

Case, Michael, Improved accuracy for fluid flow problems via enhanced physics

Cui, Yunwei, Integer-valued time series and renewal processes

Drake, Nathan, Decoding of multipoint algebraic geometry codes via lists

Faulkenberg, Stacey, Quality representation in multiobjective programming

Fisher, Thomas, On the testing and estimation of high-dimensional covariance matrices

Flowers, Tim, Asymptotics of families of polynomials and sums of Hurwitz class numbers

Gardenghi, Melissa, Multiobjective optimization for complex systems

Guan, Genhua, Factoring polynomials and Gröbner bases

Jacob, Bonnie, Source optimization in abstract function spaces for maximizing distinguishability: Applications to the optical tomography inverse problem

Jacob, Jobby, Variations on graph products and vertex partitions

Park, Jang-Woo, Discrete dynamics over finite fields

Robbins, Michael, Change-point detection: Limit theory and applications

Woody, Jonathan, Some new problems in changepoint analysis

Medical University of South Carolina (4)

DEPARTMENT OF BIostatistics AND EPIDEMIOLOGY

Elm, Jordan, Statistical approaches for adding or switching hypotheses in multi-armed clinical trials

Swearingen, Christopher, Beta regression: Modeling extremely skewed distributions within a generalized linear framework

Wolf, Bethany, Discovering and measuring importance of logical combinations of binary biomarkers

Yang, Chengwu, Development and application of logistic regression with factor scores method in differential item functioning detection for dichotomized variables

University of South Carolina (10)

DEPARTMENT OF EPIDEMIOLOGY AND BIostatistics

Zhou, Li, Quantile regression with ordinal and discrete data

DEPARTMENT OF MATHEMATICS

Baczkowski, Daniel, Diophantine equations involving factorials and lattice points close to smooth curves

Banerjee, Pradipto, On a conjecture of Pal Turan and investigations into Galois groups of generalized Laguerre polynomials

Savu, Daniel, Sparse approximation in Banach spaces

Scott, Kathryn, On inherently nonfinitely based varieties

Tian, Li, Error estimates for finite element/volume approximations of dissipative partial differential equations on surfaces

Walters, Mark, Iterated point-line configurations in projective planes

DEPARTMENT OF STATISTICS

Das, Lalita, Functional ANOVA models with application to corporate bonds

Gao, Jinxin, Cluster analysis using shrinkage and stochastic methods

Shuang, Li, On the failure of complex load-sharing systems

SOUTH DAKOTA

South Dakota State University (2)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Brandenburger, Thomas, A Markov multinomial regression model for predicting consumer credit risk

Furth, Alfred, A combination survival and time series model for predicting time to default

TENNESSEE

University of Memphis (4)

DEPARTMENT OF MATHEMATICAL SCIENCES

Ciesielski, Maciej, Geometric properties of Lorentz spaces and applications to approximation theory

Hulgan, Jonathan Darren, Graph coloring problems with constraints

Liu, Zhengfeng, State space modeling on viral dynamics of HIV-1 infection in an antiretroviral therapy

Xu, Lijing, Literature based Bayesian analysis of gene expression data

University of Tennessee, Knoxville (8)

DEPARTMENT OF MATHEMATICS

Chacon, Gerardo, Carleson-type inequalities in harmonically weighted Dirichlet spaces

Irick, Brian, On the irreducibility of the Cauchy-Mirimanoff polynomials

Kobayashi, Masato, Schubert numbers

Lindsay, James, A combinatorial unification of binomial-like arrays

Miller, Neilan, Rachael, Optimal control applied to population and disease model

Orick, Gerald, Computational circle packing: Geometry and discrete analytic function theory

Sinclair, Jennifer, Small and large limits of multifractal stochastic processes with applications

Smith, Harold, Fractions of numerical semigroups

TEXAS

Baylor University (7)

DEPARTMENT OF MATHEMATICS

Cornelius, Alex N., Inverse limits of set-valued functions

Pruett, William, Diagrams and reduced decompositions for cominiscule flag varieties and affine Grassmannians

Tuncer, Davut, The left-definite spectral analysis of the Legendre type differential equation

DEPARTMENT OF STATISTICAL SCIENCES

Beavers, Daniel, Bayesian approaches to parameter estimation and variable selection for misclassified binary data

Pruszyński, Jessica, Bayesian models for discrete censored sampling and dose finding

Seaman, John, III, Topics in Bayesian inference: Proof loading for combination drugs, induced priors, and distribution of archaeological assemblages

Young, Phil, Topics in dimension reduction and missing data in statistical discrimination

Rice University (22)

DEPARTMENT OF COMPUTATIONAL AND APPLIED MATHEMATICS

Cesmelioglu, Aycil, Complex flow and transport phenomena in porous media

Hardesty, Sean, Optimization of shell structure acoustics

Issa, Leila, Source localization in cluttered acoustic waveguides

Kellems, Anthony, Model reduction of large spiking neurons

Nong, Hung (Ryan), Numerical solutions of matrix equations arising in model reduction of large scale linear-time invariant systems

Sifuentes, Josef, Preconditioned iterative methods for inhomogeneous acoustic scattering applications

Wang, Yimin, Enhanced compressed sensing using iterative support detection

DEPARTMENT OF MATHEMATICS

Chaika, Jon, Interval exchange transformations: Topological mixing, Hausdorff dimensions for ergodic measures and disjointness

Elliot, Andrew, State cycles, quasipositive modification, and constructing H -thick knots in Khovanov homology

Krueger, Helge, Positive Lyapunov exponent for ergodic Schrödinger operators

Pershell Null, Karoline, Some conditions for recognizing a 3-manifold group

DEPARTMENT OF STATISTICS

Cruz, Alejandro, Estimating the term structure with a semiparametric Bayesian population model: An application to corporate bonds

Foy, Millennia, Lung carcinogenesis modeling: Resampling and simulation approach to model fitting, validation and prediction

Gershman, Darrin, Modeling prize dynamics in electronic stock exchanges with applications in developing automated trading strategies

Goldwasser, Deborah, Parameter estimation in mathematical models of lung cancer

Kenney, Colleen, On the separation of T Tauri star spectra using non-negative matrix factorization and Bayesian positive source separation

Leon Novelo, Luis, Bayesian semiparametric and flexible models for analyzing biomedical data

Nguyen, Tuan, Dimension reduction methods with applications to high dimensional data with a censored response

Savitsky, Terrance, Generalized Gaussian process models with Bayesian variable selection

Thomas, Sarah, Model-based clustering for multivariate time series of counts

Wu, Xiaowei, Branching processes with biological application

Zhang, Nan, Regression survival analysis with dependent censoring and a change-point for the hazard rate: With application to the impact of the Gramm-Leach-Bliley Act to insurance companies' survival

Southern Methodist University (8)

DEPARTMENT OF MATHEMATICS

Dekany, Christina, Adaptive finite element methods for reaction-diffusion equations in two space dimensions

Klontzman, Jill, Explosion in thin films

Mitchell, Jonathan, Synchronous and asynchronous oscillations in a model for antigenically varying malaria, including the effects of constant and state-dependent delay

Nagasinghe, Ivanga, Computing principal eigenvectors of large web graphs: Algorithms and accelerations related to pagerank and hits

Stowell, David, Computing eigensolutions of singular Sturm-Liouville problems in photonics

DEPARTMENT OF STATISTICAL SCIENCE

Hardin, Andrew, Semi-parametric simulation of AffyMetrix microarrays to obtain realistic output

McClellan, Elizabeth, Improving statistical methods in biological pathway analysis

O'Hair, Joel, Multidimensional signal detection in the presence of correlated noise with application to brain imaging

Texas A&M University (20)

DEPARTMENT OF MATHEMATICS

Cameron, Jan, Normalizers of finite von Neumann algebras

Dosev, Detelin, Commutators on Banach spaces

Freeman, Daniel, Upper estimates for Banach spaces

Ibrahim, Ashraf, Ultrametric fewnomial theory

Kim, Seungil, Analysis of a PML method applied to acoustic scattering problems in R^2 and computation of resonances in open systems

Ko, Youngdeug, Dimensions of bivariate spline spaces and algebraic geometry

Li, Yan, Some upscaling methods for flow and transport in heterogeneous reservoirs

Mukherjee, Kunal, Masa and bimodule decompositions of II-1 factors

Savchuk, Dmytro, Asymptotic, algorithmic and geometric aspects of groups generated by automata

Schumacher, Paul, Parking functions and generalized Catalan numbers

Smith, Lidia, On non-orbit-transitive operators

Trenev, Dimitar, Space scaling techniques for the numerical approximation of problems on unbounded domains. Applications to the time-harmonic elastic wave and eddy-current problems

DEPARTMENT OF STATISTICS

Ghosh, Souparno, Copula based hierarchical Bayesian models

Hering, Amanda, Space-time forecasting and evaluation of wind speed with statistical tests for comparing accuracy of spatial predictions

Joshi, Adarsh, Bayesian model selection for high-dimensional high-throughput data

Lindsey, Charles, Sliced mean variance-covariance inverse regression dimensionality test

Litton, Nathaniel, Deconvolution in random effects models via normal mixtures

Savchuk, Olga, Choosing a kernel for cross-validation

Wagaman, John, Model-based pre-processing in protein mass spectrometry

Zhong, Ming, Extended homozygosity score tests to detect positive selection in genome-wide scans

Texas Tech University (4)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Cakmak, Adem, Analysis of nonlinear Darcy-Forchheimer flows in porous media

Ekanayake, Amy, Stochastic metapopulation models and watershed estimates for playas on the Southern High Plains

Ekanayake, Dinesh, Robust control of saturating, non-monotone hysteretic systems with nonlinear frequency-dependent power losses

Mallawaarachchi, Don Kumudu, Stability and permanence in gender- and stage-structured discrete time models for the boreal toad in single and multiple habitats and a stochastic model for the hydroperiod of playas on the Southern High Plains

University of Houston (9)

DEPARTMENT OF MATHEMATICS

Antil, Harbir, Optimization and model reduction of time dependent PDE-constrained optimization problems: Applications to surface acoustic wave driven microfluidic biochips

Barlas, Nofil, Predictability and information loss in complex systems

Jain, Saurabh, Isotropic multiresolution analysis of rotational invariance and image analysis

Kim, Tae-Beom, Mathematical issues in blood flow problems

Li, Huifang, Adaptive finite element approximation of the Black-Scholes equation based on residual-type a posteriori error estimates

Nimsaila, Kawin, Markov chain and time-delay reduced modeling of nonlinear systems

Sharma, Sonia, One-sided M -structure of operator spaces and operator algebras

Singh, Pretti, Applications of finite groups to Parseval frames

Xhabli, Blevina, Universal operator system structures on ordered spaces and their applications

University of North Texas (4)

DEPARTMENT OF MATHEMATICS

Bajracharya, Neeraj, Level curves of the angle function of a positive definite symmetric matrix

Kaown, Dougsoo, A new algorithm for finding minimum distance between two convex hulls

Kieftenbeld, Vincent, Three topics in descriptive set theory

Schulle, Polly, The isomorphic structure of spaces of operators

University of Texas at Arlington (11)

DEPARTMENT OF MATHEMATICS

Akinlar, Mehmet, A new method for nonrigid registration of 3D images

Dawkins, Paul, Non-traditional socio-mathematical norms in undergraduate real analysis

Dong, Nathan, Logistic regression with misclassified covariates using auxiliary data

Ferim, Richard, Adaptive nonparametric distribution-free procedures in factorial data analysis

Hughes, Meri, The uniqueness of minimal acyclic complexes

Oprisan, Adina, Large deviation principle for functional limit theorems

Pantong, Natee, A globally convergent numerical method for coefficient inverse problems

Perez Gonzales, Humberto, Analysis and simulation in neuron and fibrosis models

Riley, Fransell, Testing the equality of regression coefficients and a pooling methodology from multiple samples when the data is multicollinear

Salako, Stephen, Optical control approach to image registration

Zhang, Jianchun, Conditional confidence intervals of process capability indices following rejection of preliminary tests

University of Texas at Austin (22)

DEPARTMENT OF MATHEMATICS

Adduci, Silvia, On real and p -adic Beuzotians

Fili, Paul, Orthogonal decompositions of the space of algebraic numbers modulo torsion

Hopkins, Kimberly, Periods of modular forms and central values of L -functions

Jensen, David, Birational geometry of the moduli spaces of curves with one marked point

Kalaturka, William, Rotational cohomology and total pattern equivariant cohomology of tiling spaces acted on by infinite groups

Katerman, Eric, On some residual and locally virtual properties of groups

Leger, Nicholas, A fragmentation model for sprays and L_2 stability estimates for shocks solutions of scalar conservation laws using the relative entropy method

Lowrey, Parker, Autoequivalences, stability conditions, and N -gons: An example of how stability conditions illuminate the action of autoequivalences associated to derived categories

Mautner, Carl, Sheaf theoretic methods in modular representation theory

Mereb, Martin, On the E -polynomials of a family of character varieties

Meth, John, Rational embeddings of the Severi-Brauer variety

Mireles-James, Jason, Reliable computation of invariant dynamics for conservative discrete dynamical systems

Patterson, Cody, Fixed-point-free actions of Coxeter groups on three-dimensional $CAT(0)$ spaces

Rodriguez, Miguel, The distribution of roots of certain polynomials

Stover, Matthew, Cusps of Hermitian locally symmetric spaces

Teixeira, Ricardo, On S^1 -strictly singular operators

Williams, Jonathan, Broken Lefschetz fibrations on smooth four-manifolds

INSTITUTE FOR COMPUTATIONAL ENGINEERING AND SCIENCES

Jhurani, Chetan, Multiscale modeling using goal-oriented adaptivity and numerical homogenization

Li, Jun, A computational model for the diffusion coefficients of DNA with applications

Shestopalov, Nikolay, Controlled self-assembly of charged particles

Thomas, Sunil, On some problems in the simulation of flow and transport through porous media

Wang, Wenhao, An algorithm of a fully conservative volume corrected characteristics-mixed method for transport problems

University of Texas at Dallas (6)

DEPARTMENT OF MATHEMATICAL SCIENCES

Chen, Xuan, Change-point analysis of survival data with application in clinical trials

Kanlapuli Chandrasekaran, Keerthi, Optimal control of piecewise smooth systems

Khan, Noureen, Invariants of links preserved by 4-move

Ramachandar, Shahla, Pre-processing methods and stepwise variable selection for binary classification in high-dimensional data

Sauter, Alan, The generalized Gödel solution

Villa Carrillo, Jorge, Topological overlap measure of similarity

University of Texas-School of Public Health (1)

DEPARTMENT OF BIOSTATISTICS

Liu, Mei, Assessing the improved discriminatory power of a new biomarker in prognostic models

UTAH

Brigham Young University (2)

DEPARTMENT OF MATHEMATICS

Chen, Sijin, Asian spread option pricing models and computation

Yan, Duokui, Four body problem

University of Utah (14)

DEPARTMENT OF MATHEMATICS

Algom-Kfir, Yael, The Lipschitz metric on outer space

Dinh, Trung, Associated primes and primary decompositions of Frobenius powers

Khader, Karim, Laplace's equation, the nonlinear Poisson equation and the effects of Gaussian white noise on the boundary

Kilpatrick, Zachary, Spatially structured waves and oscillations in neuronal networks with synaptic depression and adaptation

Kitchen, Sarah, Localization of cohomologically induced modules to partial flag varieties

Lynch, Frank, Mathematical modeling of the gastric mucus gel

Malone, William, Topics in geometric group theory

Newby, Jay, Molecular motor-based models of random intermittent search in dendrites

Purcell, Michael, Techniques in manifold learning: Intrinsic dimension and principal surface estimation

Richins, Russell, Some applications of minimizing variational principles for the complex Helmholtz equation

Shiu, Shang-Yuan, Probability on discrete structure

Smith, Amber, Mathematical models of influenza A virus and streptococcus pneumoniae infections

Tania, Nussy, Mathematical models of calcium regulation in cardiac cells

Thompson, Joshua, Real Schottky complex projective structures

Utah State University (3)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Gabrys, Robertas, Testing the stability of the functional autoregressive process

Morphet, William, Simulation, kriging, and visualization of circular-spatial data

Strazzulo, Francesco, Darboux integrable hyperbolic PDE's in the plane of generic type: A classification by means of Cartan tensor and the C.A.S. Maple II

VERMONT

University of Vermont (3)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Brown, Melanie, Surface embeddings of families of combinatorial designs

Ginsberg, Hy, Minimal Heilbronn characters of finite groups

Stor, Kirsten, Drawing graphs as super-thracks

VIRGINIA

College of William & Mary (2)

DEPARTMENT OF MATHEMATICS

Kaczynski, William, Computational aspects of stochastic operations research

Nasserase, Shahla, The logarithmic method and the solution to the TP₂-completion problem

George Mason University (3)

DEPARTMENT OF MATHEMATICAL SCIENCES

Siddique, Javed, Newtonian and non-Newtonian fluid flow into deformable porous materials

DEPARTMENT OF STATISTICS

Khan, Diba, Direction-of-arrival estimation performance of space linear arrays

Manukyan, Zorayr, Sequential designs for estimating toxicity and efficacy in a dose-response setting

Old Dominion University (2)

DEPARTMENT OF MATHEMATICS AND STATISTICS

Touron, Charles, An adaptive method for calculating blow-up solutions

Zhao, Yueqin, Rao's quadratic entropy and some new applications

University of Virginia (9)

DEPARTMENT OF MATHEMATICS

Finster, Eric, Stabilization of homotopy limits

Guberovic, Rafaela, Avoiding singularity formation in the 3D Navier-Stokes flows

Quertermous, Katie, Fixed-point composition C*-algebras

Wan, Jinkui, Representations of affine Hecke algebras and related algebras

Zhao, Lei, Modular representations of Lie superalgebras

DEPARTMENT OF STATISTICS

Duan, Liang Liang, Heterogeneity in response-adaptive randomization

Liu, Yan, Statistical methodology in endocrinology: Asymptotics for difference and integral equation-based methods

Wages, Nolan, Dose-finding designs for multi-drug combinations

Zhu, Hongjian, Implementing response-adaptive randomized clinical trials: Interior analysis and optimality

Virginia Commonwealth University, Medical Center (3)

DEPARTMENT OF BIOSTATISTICS

Dahman, Bassam, Nonlinear models in multivariate population bioequivalence testing

Ellis, Rhonda, Deriving optimal composite scores: Relating observational/longitudinal data with a primary endpoint

Marshall, Scott, An empirical approach to evaluating sufficient similarity in dose-response in complex chemical mixtures: Utilization of Euclidean distance as a similarity measure

Virginia Polytechnic Institute and State University (11)

DEPARTMENT OF MATHEMATICS

Boquet, Grant, Geometric properties of over-determined systems of linear partial difference equations

Botelho, Fabio, Variational convex analysis

Niese, Elizabeth, Combinatorial properties of the Hilbert series of Macdonald polynomials

Rautenberg, Carlos, A distributed parameter approach to optimal filtering and estimation with mobile sensor networks

Roinestad, Kristine, Geometry of fractal squares

Zhang, Jingwei, Numerical methods for the chemical master equation

DEPARTMENT OF STATISTICS

Abdel-Salam, Abdel-Salam, Profile monitoring with fixed and random effects using nonparametric and semiparametric methods

Freeman, Laura, Statistical methods for reliability data from designed experiments

Gan, Linmin, Adaptive threshold method for monitoring rates in public health surveillance

Marshall, Jennifer, Prospective spatio-temporal surveillance methods for the detection of disease clusters

Oheanu, Denisa, Cumulative sum control charts for non-normal censored data

WASHINGTON

University of Washington (38)

DEPARTMENT OF APPLIED MATHEMATICS

Fagnan, Kirsten, High-resolution finite volume methods for extracorporeal shock wave therapy

Kim, Minsun, A mathematical framework for spatiotemporal optimality in radiation therapy

Machorro, Eric, Discontinuous Galerkin methods for 1-D spherical transport problems

Uchida, Junya, Dynamical systems of marine stratocumulus-topped boundary layer

DEPARTMENT OF BIOSTATISTICS

Berry, Kristin, Estimating lifetime medical costs under a semi-parametric gamma frailty copula model

Everson-Stewart, Siobhan, Non-inferiority clinical trials: Bio-creep and a flexible margin approach for addressing non-constancy

Fong, Youyi, Algorithms and inference for mixture models with application to protein sequence analysis

Hu, Nan, Regression methods of time-dependent ROC curve for evaluating the prognosis capacity of biomarkers

Jin, Yuying, Percentile value standardization for event time outcomes data

Koopmeiners, Joseph, Methods for group sequential diagnostic biomarker studies

Odem-Davis, Katherine, Current issues in non-inferiority trials

Wolfson, Julian, Statistical methods for identifying correlates of risk and surrogate endpoints in vaccine trials

DEPARTMENT OF MATHEMATICS

Bradshaw, Robert, Provable computation of motivic L -functions

Card, Ryan, Brownian motion with boundary diffusion

Cross, Jonathan, Spectral abscissa optimization using polynomial stability conditions

Dundon, Ariana, Families of log canonically polarized varieties

Eaton, Julia, Variational properties of polynomial root functions and spectral functions

Finkel, Daniel, On the number of Fourier-Mukai partners of a K3 surface

Goff, Michael, Bounds on quantities related to simplicial complexes

Gutzwiler, Luke, Affine Schubert-like varieties in type A_n

Holman, Sean, Generic uniqueness in polarization tomography

Kantor, Joshua, Eleven dimensional supergravity on edge manifolds

Kirson, Antonio, Wild automorphisms and abelian varieties

Klee, Steven, Lower bound theorems for simplicial and cubical complexes

Kopp, Travis, Kodaira-Iitaka dimension on subvarieties

Lin, Qiuying, Sparsity and nonconvex nonsmooth optimization

Luoto, Kurt, Quasisymmetric functions and their applications

Rosoff, David, Toward mapping spaces of A -infinity categories

Winfree, Troy, Continuous homotopy fixed point spectra: Finiteness properties and computations

Xu, Liang, Merging trust-region and limited memory technologies for large-scale optimization

Zhang, Jun, Some developments in Artin-Schelter algebras

DEPARTMENT OF STATISTICS

Admiraal, Ryan, Models for heterogeneity in heterosexual partnership networks

Carnegie, Nicole, A comparison of alternative methodologies for estimating HIV incidence

Jiang, Yindeng, Factor model Monte Carlo methods for general fund-of-funds portfolio management

Krivitsky, Pavel, Statistical models for social network data and processes

Lenkoski, Alex, Bayesian model averaging and multivariate conditional independence structures

Ranjan, Roopesh, Combining and evaluating probabilistic forecasts

Seregin, Arseni, Convex analysis methods in shape constrained estimation

Washington State University (5)

DEPARTMENT OF MATHEMATICS

Eubanks, Sherod, Topics in nonnegative matrix theory

Kouznetsov, Andrei, Complex averages of particle quantities and equations of balance

Liu, Pengyu, Maximum likelihood estimation of an unknown change-point in the parameters of a multivariate Gaussian series with applications to environmental monitoring

Moyer, Nathan, Knapsack-type cryptographic system using algebraic number rings

Sun, Yannan, External dependence of multivariate distributions and its applications

WEST VIRGINIA

West Virginia University (3)

DEPARTMENT OF MATHEMATICS

Wang, Xiaofeng, Graph coloring and flows

Yan, Huiya, Hamiltonian line graphs and claw-free graphs

Zeng, Suxing, Numerical solutions of boundary inverse problems for some elliptic partial differential equations

WISCONSIN

Marquette University (1)

DEPARTMENT OF MATHEMATICS, STATISTICS AND COMPUTER SCIENCE

Sheng, Ru, Bayesian approach to hypothesis testing problems with skewed alternatives

University of Wisconsin, Madison (32)

DEPARTMENT OF MATHEMATICS

Bae, Myoungjean, Potential flow and transonic shocks

Berliner, Adam, Determinants, permanents, and the enumeration of forest partitions

Daugherty, Zajj, Degenerate two-boundary centralizer algebras

Davis, Matt, Representations of rank two affine Hecke algebras at roots of unity

Deatt, Louis, The positive semi-definite minimum rank of a triangle-free graph

Ellison, Benjamin, Boolean indexed models and Wheeler's conjecture

Huang, Hongnian, Calabi flow on toric variety

Hubler, Shane, Mathematical analysis of mass spectrometry data

Joseph, Mathew, Some problems in random walks in random environment

Kazalicki, Matija, Some topics in the theory of modular forms and Drinfeld modular forms

Kim, Hanjun, On generations of mirror pairs of Calabi-Yau varieties

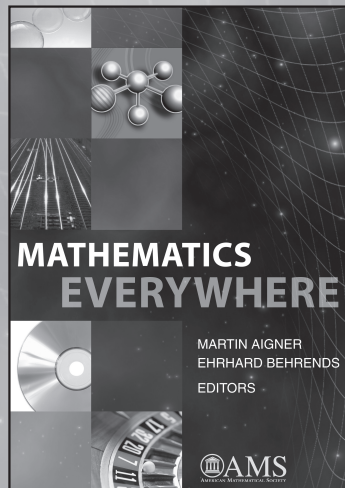
Kumar, Rohini, Current fluctuations for independent random walks

Li, Qian, Large scale computing for complementarity and variational inequalities

Rommel, Mark, New models for rotating shallow water Boussinesq equations by subsets of mode interactions

Turetsky, Daniel, Effective algebra and effective dimension

Turkelli, Seyfi, Hurwitz schemes and density of discriminants



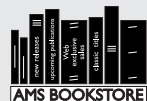
Mathematics Everywhere

Martin Aigner and
Ehrhard Behrends,
Freie Universität Berlin,
Germany, Editors

Translated by Philip G. Spain

This series of lectures from renowned mathematicians demonstrates the prominent role of mathematics in our daily life, through science, technology and culture. The common theme throughout is mathematics' unique position as both the art of pure thought and universally applicable science. The book also includes a leisurely treatment of recent hot topics, including the solution of the Poincaré conjecture.

2010; 330 pages; Softcover;
ISBN: 978-0-8218-4349-9;
List US\$49; AMS members US\$39.20;
Order code MBK/72



For many more
publications of interest,
visit the AMS Bookstore

www.ams.org/bookstore

WYOMING

University of Wyoming (2)

DEPARTMENT OF MATHEMATICS

May, Daniel, Mutually unbiased bases

DEPARTMENT OF STATISTICS

Chatterjee, Arunendu, Detection of change points using wavelet analysis

Yip, Martha, Combinatorics of Macdonald polynomials

Zhu, Keya, Global regularity of Schrödinger maps into the hyperbolic plane H^2 in dimensions d greater than or equal to 3

DEPARTMENT OF STATISTICS

Burgette, Lane, Essays on three Bayesian prior distributions

Choi, Younjeong, Statistical methods for gene set correlation analysis

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

Jiang, Deyuan, Semiparametric likelihood methods for longitudinal data with nonignorable nonresponse

Kuan, Pei-Fen, Statistical methods for the analysis of genomic data from tiling arrays and next generation sequencing technologies

Ma, Xiwen, Penalized likelihood regression with randomized covariate data

Neely, William, Statistical theory for respondent driven sampling

Shim, Heejung, Bayes CAT: Bayesian co-estimation of alignment and tree

Shinki, Kazuhiko, Topics in asymptotic theory for GARCH-type models

Tang, Rui, Sparse moving maxima models for extreme dependence in multivariate financial time series

Wang, Ping, Statistical methods for microarrays and eQTL mapping

Yu, Tao, Local tests for detecting human brain isotropy-anisotropy areas on DT-MRI

Zhang, Yulin, Joint modeling of longitudinal biomarkers and panel counts data

Zheng, Wei, Quantile regression trees, statistical applications of CUDA programming and identification of active effects without sparsity assumption

University of Wisconsin, Milwaukee (5)

DEPARTMENT OF MATHEMATICAL SCIENCES

Bae, Ju Youn, Estimation of the additive genetic covariance function

Dornheim, Harald, Robust-efficient fitting of mixed linear models: Theory, simulations, actuarial extensions, and examples

Janssen, Britta, An efficient exponential time differencing method for nonlinear reaction diffusion problems

Kleefeld, Andreas, Direct and inverse acoustic scattering for three-dimensional surfaces

Zarrouk, Mazen, Analysis of truncated incomplete Hessian Newton minimization method and application in biomolecular simulations

Doctoral Degrees Conferred 2009-2010

Supplementary List

The following list supplements the list of thesis titles published in the August 2011 *Notices*, pages 980-1004.

ARIZONA

Arizona State University (12)

SCHOOL OF MATHEMATICAL & STATISTICAL SCIENCES

Awtrey, Chad, Dodecic local fields.

Boshes, Jennifer E., Change point detection in cyber-attack data.

Broatch, Jennifer E., Multivariate models for assessing educational effectiveness with continuous and categorical responses.

Chau, Phong Q., Hamiltonian square cycles in Ore-type graphs.

Chen, Tsui-Ling, Some topics in spectral density estimator.

Hester, Benjamin, Variations, generalizations, and structural analysis of Graph Pebbling.

Hews, Sarah, Models of Hepatitis B Virus infection: a study on Hepatocyte proliferation rates.

Jenney, Brenda C., Hierarchical experiments: design for fixed effects and variance components.

King, David B., Canonical correlation analysis for functional data.

Lalonde, Trent L., Components of overdispersion in hierarchical generalized linear models.

Puthayathu Kurian, Mini, Mathematical models of motoneuron after spinal cord injury.

Matar, Ahmed, Selmer groups and the Fontaine-Mazur conjecture.