Doctoral Degrees Conferred 1989–1990

The annual list of doctoral degrees in the mathematical sciences and related subjects reports 991 degrees conferred between July 1, 1989, and June 30, 1990 by 224 departments in 153 universities in the United States and Canada. 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.

ALABAMA

Auburn University (3)

ALGEBRA, COMBINATORICS AND ANALYSIS

Calahan, Rebecca, *Automorphisms of Steiner triple systems.*

FOUNDATIONS, ANALYSIS AND TOPOLOGY

Smiley, Mark D., *Metric dimensions of fractals.*

Yang, Zhan-Bo, *On homogeneity problems.*

University of Alabama, Huntsville (1)

MATHEMATICS

Grinstead, Dana Leigh, *Algorithmic templates and multiset problems in graphs.*

University of Alabama, Tuscaloosa (7)

MANAGEMENT SCIENCE AND STATISTICS

Bowen, Larry J., *Comparing estimators of exponential reliability using Pitman's measure of closeness.*

Cobb, Richard, *Development of design guidelines for carrier sense multiple-access with collision detection (CSMA/CO) local area network.*

deSa, Derek J. M. M., *Vulnerability of flow networks.*

Kim, Young Hwan, *A forecasting methodology for maintenance cost of long-life equipment.*

Margavio, Thomas, *Multivariate moving average control charts for the process mean.*

Munshi, Arpana, *Mis-classification in logistic regression.*

Pittman, Terry Obert, *X bar charts with bone tests.*

ARIZONA

Arizona State University (6)

MATHEMATICS

Al-Musallam, Fadell Abdulazeez, *An upper estimate for the distance to the essentially G_1 operators.*

Duncan, Della, *Symmetries in flat space times.*

Elkhader, Abder-Rahman, *Systems of ordinary differential equations with some monotonicity.*

Kim, Young Ik, *Bifurcation of a generalized logistic delay iterative map having one real control parameter.*

Rosenthal, Joachim, *Geometric methods for feedback stabilization of multivariable linear systems.*

Wang, Xiaochang, *Additive inverse eigenvalue problems and pole placement of linear systems.*

University of Arizona (7)

MATHEMATICS

Alawneh, Zakaria, *A numerical method for solving certain nonlinear integral equations arising in age-structured populations dynamics.*

Barrera-Mora, Fernando, *On radical extensions and radical powers.*

Fahlberg-Stojanovska, Linda, *Stochastic stability of Lozi-mappings.*

Freeman, Jonathan Dennis, *Estimation of astronomical images from the bispectrum of atmospherically distorted infrared data.*

Halpren, David, *The squeezing of red blood cells through tubes and channels of near critical dimensions.*

Powell, James, *Nonlinear fronts in a quintic amplitude equation.*

Valdez-Torres, Jose, *Multivariate discrete failure rates with some applications.*

ARKANSAS

University of Arkansas (1)

MATHEMATICAL SCIENCES

Jang, Wuufang, *Automata, transformation semigroups, and languages: Standard automata for varieties of formal languages.*

CALIFORNIA

California Institute of Technology (9)

APPLIED MATHEMATICS

Hayes, Catherine Kent, *Diffusion and stress driven flow in polymers.*

Kovacic, Gregor, *Chaos in a model of the forced and damped Sine-Gordon equation.*

McLachlan, Robert I., *Separated viscous flows via multigrid.*

Morlet, Anne Chantal Marie, *I. Numerical experiments for the computation of invariant curves in dynamical systems. II. Numerical convergence results for a one-dimensional Stefan problem.*

Shinn-Mendoza, Rachel Elizabeth, *Shocks and instabilities in traffic.*

MATHEMATICS

Ashlock, Daniel Abram, *A Theory of permutation polynomials using compositional attractors.*

Kafkoulis, George, *Homogeneous sequences of cardinals for ordinal definable partition relations.*

Magaard, Kay, *The maximal subgroups of the Chevalley groups $F_4(F)$ where F is a finite or algebraically closed field of characteristic $\neq 2, 3$.*

Uzcategui, Carlos, *Smooth sets for Borel equivalence relations and the covering property for σ-deals of compact sets.*

Claremont Graduate School (2)

MATHEMATICS

Fang, Weifu, *Identification of transistor contact resistivity.*

Huang, Wenzhang, *Stability and bifurcation for a multiple group model for dynamics of HIV/AIDS transmission.*

Stanford University (14)

ENGINEERING-ECONOMIC SYSTEMS

Bosch, Deborah Karen, *Decision analysis using hierarchical value functions.*

Cronshaw, Mark Bernard, *Strategic behavior in dynamic settings.*

Davis, Donald Boyce, *The effect of ambiguity of lottery preferences.*

Garcia-Bullé, Mauricio, *Multi-agent network equilibrium with applications to transportation systems.*

Pichler, Pegaret Schuerger, *Optimal pricing policies of a monopolistic market maker.*

Smith, James E., *Moment methods for decision analysis.*

MATHEMATICS

Dai, Jiangang, *Steady-state analysis of reflected Brownian motions: Characterization, numerical methods and queueing applications.*

Hunt, Brian Ramen, *Analysis of turbulent and ergodic problems.*

Jorgenson, Jay, *Canonical and Arakelov metrics, and Faltings delta function.*

Khuri, Hala Halim, *Determinants of Laplacians on the moduli space of Riemannian surface.*

Lundelius, Rolf Eric, *Asymptotics of the determinant of the Laplacian on hyperbolic surfaces of finite volume.*

Morris, Macdonald Scott, *Mathematical methods for molecular sequence analysis and genome map assembly.*

Ross, Martin, *Stability properties of complete 2 dimensional minimal surfaces in euclidean space.*

Tillman, Ulrike, *K-theory of topological group algebras.*

University of California, Berkeley (34)

BIOSTATISTICS

Lock, Michael Daniel, *Optimizing density estimates based on unweighted and weighted mean integrated square error.*

INDUSTRIAL ENGINEERING AND OPERATIONS RESEARCH

Ando, Toshiya, *An extension of Levengerg-Marquardt method for unconstrained optimization.*

Datta, Koushik, *Predicting risk reduction of aircraft collision avoidance systems.*

Irony, Telba Zalkind, *Modeling, information extraction and decision making: A Bayesian approach to some engineering problems.*

Kim, Jong Soo, *Short-term production planning of multi-stage processing lines.*

Lin, Woo-Tsong, *An object-oriented system for knowledge-based production scheduling.*

Min, Kyung Jo, *Pricing delivery priority and spec. level of custom semiconductor chips.*

Taleb-Ibrahimi, Mounira, *Modeling and analysis of container storage in ports.*

Yang, Hee Joong, *The influence of human errors on nuclear incidents.*

MATHEMATICS

Carbonera, Carlos Daniel, *Linearizations of ordinary differential equations.*

Carroll, Catherine Andree, *On the closing lemma for flows on the torus.*

Eggleston, Trent Alan, *A functional calculus and its applications to inner functions.*

Geller, William, *Orbit types and topological entropy.*

Ginzburg, Viktor, *On closed characteristics of 2-forms.*

Gross, Mark William, *Surfaces in the four-dimensional Grassmannian.*

Hirsch, Michael David, *Applications of topology to lower bound estimates in computer science.*

Kleiner, Bruce Alan, *Riemannian four-manifolds with nonnegative curvature and continuous symmetry.*

Laca, Marcelo Enrique, *Representations of Cuntz algebras and endomorphisms of type I factors.*

Lazarus, Andrew Joseph, *The class number and cyclotomy of simplest quartic fields.*

Lim, Chong Hai, *Endomorphism rings of Jacobian varieties of Fermat curves.*

Ling, San, *On the arithmetic of modular curves.*

Lopes-Filho, Milton da Costa, *Microlocal regularity and symbols for distributions.*

Lu, Jiang-Hua, *Multiplicative and affine Poisson structures on Lie groups.*

Oldham, Janis Marie, *Connections in super principal fiber bundles.*

Quaife, Arthur William, *Automated development of fundamental mathematical theories.*

Sanker, David Vincent, *A characterization of irrationality.*

Shearer, James William, *Global existence and compactness in L^p for systems of conservation laws.*

Smith, Gene Ward, *Generic cyclic polynomials and some applications.*

Sommer, Richard D., *Transfinite induction and hierarchies generated by transfinite recursion within Peano arithmetic.*

Tanbay, Betül, *Extensions of pure states on algebras of operators.*

Tang, Tai-Man, *On C^*-algebras related to Schrödinger type operations.*

Xu, Ping, *Morita equivalence of Poisson manifolds.*

Xuan, Xiaohua, *Nonlinear boundary value problems: Computation, convergence, and complexity.*

Zheng, Yuxi, *Concentration-cancellation phenomena for weak solutions to certain nonlinear partial differential equations.*

University of California, Davis (7)

MATHEMATICS

Baber, Farhat-Un Nisa Farhat, *Power groupoids of groupoids of order ≤ 3.*

Borges, Carlos Freitas, *Numerical methods for illumination models in realistic image synthesis.*

Dad-Del, Ali Akbar, *Covering cyclic groups by sections.*

Frezza, Ruggero, *Models of higher-order and mixed-order Gaussian reciprocal processes with application to the smoothing problem.*

Howard, Eric Jordan, *A multidimensional Perron integral and the divergence theorem.*

Wehrly, Albert C., *Uniform spaces.*

Yamaoka, Kenya, *The global determination of the glass of finite regular semigroups.*

University of California, Irvine (2)

MATHEMATICS

Melles, Garvin Norman, *Classification theory and generalized recursive functions.*

Thau, Kuo-Tong, *A numerical solution of Abel's integral equation in terms of Fresnel integrals.*

University of California, Los Angeles (8)

BIOSTATISTICS

Go, Oscar Tin, *Efficient estimation in a generalized regression model.*

Watson, George A., *Influential observations in survival models with censored data: An approach based on the influence function.*

MATHEMATICS

Cunningham, Daniel Wendell, *The real core model.*

Liu, Jian-Guo, *Homogenization and numerical methods for hyperbolic equations.*

Schusteff, Aaron, *Product formulas for relative Nielson numbers of fiber map pairs.*

Varadi, Ferenc, *Hamiltonian perturbation theory applied to planetary motions.*

Yamanouchi, Takehiko, *Duality for actions and coactions of measured groupoids on von Neumann algebras.*

Zhou, Qing, *Three-dimensional geometric cone structures.*

University of California, Riverside (1)

MATHEMATICS AND COMPUTER SCIENCE

Mehlman, Marc Harvey, *Moving average representation and prediction for multidimensional strongly harmonizable processes.*

University of California, San Diego (11)

MATHEMATICS

Altschuler, Steven Jeffrey, *Singularities of the curve shrinking flow for space curves.*

Au, Thomas Kwok-Keung, *Approximating epsilon-homotopy equivalences by homeomorphisms on 3-manifolds.*

Bergeron, Nantel, *On the hyperoctahedral group.*

Compton, Robert Christopher, *Hamilton cycles in the Cayley graph of SN and a doubly adjacent Gray code.*

Dong, Rui-Tao, *Nodal sets of eigenfunctions on Riemann surfaces.*

Hong, Ho Siao, *Generic determinantal identities and expansion theorems by diagonal elements.*

Marson, Mark Evan, *Holomorphic extension for solutions of locally integrable systems of complex vector fields.*

Slack, Michael David, *A classification theorem for homotopy commutative H-spaces with finitely generated* mod 2 *cohomology rings.*

Twainy, Fadi, *The time decay of solutions to the scalar wave equation in Schwarzschild background.*

Welfert, Bruno Denis, *A posteriori error estimates and adaptive solution of fluid flow problems.*

Wu, Lang-Fang, *The Ricci flow on 2-dimensional orbifolds with positive curvature.*

University of California, Santa Barbara (7)

MATHEMATICS

Chang, Shu-Chu, *Two-sided equivalence with respect to subgroups of the modular group.*

Eudave-Muñoz, Mario, *Band sums of knots and composite links. The cabling conjecture for strongly invertible knots.*

Moulin, Hervé Claude, *Problems in the inverse dynamics solution for flexible manipulators.*

STATISTICS AND APPLIED PROBABILITY

Boneh, Shahar, *Optimal stopping rules for sums of non-negative independent random variable.*

Butler, Steven, *The final size distribution and approximations for contact epidemic models, and for some epidemic models in random environments.*

Kafai, Mohammad, *Some nonparametric tests based on "near-matches".*

Sengupta, Debasis, *Statistical inference on discrete life-history data and some reliability problems.*

University of California, Santa Cruz (1)

MATHEMATICS

Valdes, Linda, *Cycles and spanning trees in cubic graphs.*

COLORADO

Colorado School of Mines (2)

MATHEMATICS

Anderson, Paul L., *Asymptotic results and identification for cyclostationary time series.*

Kovari, Louis D., *Global constrained null controllability of nonlinear neutral systems.*

Colorado State University (3)

STATISTICS

Haas, Timothy Cadwell, *Cognitive modeling with Bayesian belief networks.*

Ouyang, Zhao, *Investigation on some estimators and strategies in sampling, proposed by Srivastava.*

Taylor, Charles H., *Optimal measurement designs when errors are correlated.*

University of Colorado, Boulder (6)

MATHEMATICS

Bardwell, Robert A., *Asymptotic behavior of certain estimators under mild regularity conditions.*

Cole, Rodney Elias, L_p *spectral analysis with an L_∞ upper bound.*

Darby, Carl, *Countable Ramsey games and partition relations.*

Khalfan, Humaid F., *Topics in quasi-Newton methods for unconstrained optimization.*

Marshall, Kristen H., *The asymptotic distribution of the likelihood ratio statistic under nonstandard conditions.*

Thunder, Jeffrey Lin, *An asymptotic estimate for heights of algebraic subspaces.*

University of Colorado, Denver (2)

MATHEMATICS

Liu, Chaoqun, *Multilevel adaptive methods in computational fluid dynamics.*

Cai, Zhiqiang, *Theoretical foundations for the finite volume element method.*

University of Northern Colorado (3)

MATHEMATICS AND APPLIED STATISTICS

Amin, Rashad M., *Estimation of the power function for the Cochran Q test and determination of confidence intervals.*

Obrzut, Ann, *Early identification of school dropouts using modified interaction detection and two-group discriminant analysis.*

Pelkey, William L., *An investigation into the spatial randomness of crime series.*

CONNECTICUT

University of Connecticut (9)

MATHEMATICS

Hwang, Sunwook, *Aspects of commutative Banach algebras.*

Jen, Kuo-Ching, *Numerical investigation of periodic solutions for a suspension bridge model.*

Ko, Seok-Ku, *Embedding Riemann surfaces in Riemannian manifold.*

Shaker, Aihua, *Maximum principle methods for semilinear elliptic problems.*

Xu, Xingwang, *On Möbius groups of Riemannian manifolds.*

Yom, Peter Dongjun, *A characterization of a class of torsion-free Abelian groups.*

STATISTICS

Chung, Younshik, *On estimation of parameters from compound power series distributions.*

Liu, Pei-San Liao, *On estimation of parameters and reliability from generalized life models.*

Solanky, Tumulesh K. S., *Some parametric and nonparametric accelerated sequential procedures for selecting the best treatment.*

Wesleyan University (1)

MATHEMATICS

Garcia Ferreira, Salvador, *Various orderings on the space of ultrafilters.*

Yale University (13)

MATHEMATICS

Costanzo-Alvarez, Sabatino, *A new link isotopy invariant.*

Fang, Xiang, *The Cauchy integral of Calderon and analytic capacity.*

Hsieh, Chun-Chung, *Direct and inverse scattering theory for the operator* $\frac{\partial}{\partial t} - \frac{\partial^2}{\partial x^2} - \frac{\partial^2}{\partial y^2}$.

Kang, Seok-Jin, *Gradations and structure of Kac-Moody Lie algebras.*

Kim, Minhyong, *Lower bounds for lattice vectors and arithmetic intersection theory.*

Liu, Li-shi, *Kostant's formula for Kac-Moody Lie algebras.*

Nakano, Daniel Ken, *Projective modules over Lie algebras of Cartan type.*

Rudnick, Zeev, *Poincare series.*

Wu, Der-Chyi, *A* 2×2 *scattering problem and its associated nonlinear evolution equation.*

Wu, Sijue, *Nonlinear singular integrals and analytic dependence.*

Zhu, Chen-bo, *Two topics in harmonic analysis on reductive groups.*

Zhu, Yongchang, *Vertex operator algebras, modular forms and elliptic functions.*

OPERATIONS RESEARCH/MANAGEMENT SCIENCE

Caldis, Grant Henry, *Convertible bonds: Pricing, tests of market efficiency, and the intertemporal relation between market and model prices.*

DELAWARE

University of Delaware (2)

MATHEMATICAL SCIENCES

Kedzierawski, Andrzej Wladyslaw, *Inverse scattering problems for acoustic waves in an inhomogeneous medium.*

Xu, Yongzhi, *Direct and inverse scattering of acoustic waves in shallow oceans.*

DISTRICT OF COLUMBIA

American University (4)

MATHEMATICS AND STATISTICS

Boria, Vittorio, *Marin Mersenne: Educator of scientists.*

Modarres-Hakimi, Mohammad Reza, *Further aspects of the tests of the equality of correlation matrices.*

Mokatrin, Ahmad, *The interval hypothesis with applications to the problem of bioequivalence.*

Sheehan, Kate, *The relationship of gender bias and standardized tests to the mathematics competency of university men and women.*

Catholic University of America (1)

MATHEMATICS

Susilo, Frans, *A theory of Dirac integral spaces and the isomorphism between the category of these spaces and the category of Lebesgue measure spaces.*

George Washington University (5)

MATHEMATICS

Sedaghat, Hassan, *New constructions in semigroup compactification theory.*

OPERATIONS RESEARCH

Lindsay, Kenneth S., *On accelerating an iterative method to calculate the steady-state distribution for finite aperiodic irreducible Markov chains.*

Samuelson, Douglas Alan, *Controlling queuing systems used for acquisition.*

STATISTICS/COMPUTER AND INFORMATION SYSTEMS

Lindblad, Anne, *A nonparametric estimate of the optimum of a response curve.*

Verme, Dante Americo, *Effects of outliers on the cross-correlation function in transfer function models.*

FLORIDA

Florida State University (5)

MATHEMATICS

Diao, Yuanan, *On the knotting of randomly embedded n-gons in 3-space.*

Hu, Fang-Qiang, *Confined supersonic mixing layers: A computational investigation of instability and mixing enhancement.*

STATISTICS

Pesnell, Brett D., *Nonparametric methods for imperfect repair models.*

Proschan, Michael A., *Contributions to the theory of arrangement increasing functions.*

Ramakrishnan, Viswanathan, *Analysis of cross-classified data using negative binomial models.*

University of Florida (3)

MATHEMATICS

Davidson, Jennifer, *Lattice structures in the image algebra and applications to image processing.*

Vondracek, Zoran, *Special classes of excessive functions satisfying Harnack's principle.*

STATISTICS

Hoekstra, Robert Michael, *Asymptotically pointwise optimal stopping rules in multiparameter estimation.*

University of South Florida (4)

MATHEMATICS

Chen, Li-Chen, *On asymptotic of certain hypergeometric functions and* $6 - j$ *symbols.*

Li, Xin, *Topics in approximation theory.*

Shin, Ki-Yeon, *Zeros of M-accretive operators and abstract evolution equations in Banach spaces.*

Sinkala, Zachariah, *Existence of solutions to boundary value problems for nonlinear systems of ordinary differential equations at resonance.*

GEORGIA

Emory University (1)

MATHEMATICS AND COMPUTER SCIENCE

Robinson, David Guy, *Symmetric chain decompositions of the lattice of subspaces of a finite vector space.*

Georgia Institute of Technology (4)

MATHEMATICS

Jacquin, Arnaud E., *A fractal theory of iterated Markov operators with applications to digital image coding.*

James, Glenn E., *Models of intracavity frequency doubled lasers.*

Jones, Martin T., *Universal constants in optimal stopping theory.*

Smith, Dale Treece, *Exponential decay of resolvents of banded infinite matrices and asymptotics of linear difference equations.*

University of Georgia (5)

MATHEMATICS

Ding, Hongming, *Some results on the harmonic representation of $U(p, q)$.*

Elshamy, Maged A., *On a stochastic integrodifferential equation with respect to a semiartingale taking values in the dual of a countably Hilbert nuclear space.*

STATISTICS

Kim, Young Won, *Empirical Bayes estimation for autoregressive processes.*

Lee, Sungduck, *Large sample test for the multiplicative seasonal time series models.*

Lee, Sungho, *Laws of large numbers for $L^1(R)$.*

HAWAII

University of Hawaii (1)

MATHEMATICS

Wong, Chock You, *Lattice Varieties with weak distributivity.*

IDAHO

Idaho State University (2)

MATHEMATICS

Burgoyne, Janet, *Denseness of the generalized eigenvectors of a restricted C_p discrete operator in a Banach space.*

Kunicki, Catherine Mae, *Normal preserving linear transformations.*

University of Idaho (1)

MATHEMATICS AND STATISTICS

Lotspeich, Mark, *On some recent developments of the Cauchy-Davenport Theorem.*

ILLINOIS

Illinois Institute of Technology (2)

MATHEMATICS

Horwitz, Judith A., *Nonlinear stability of a viscous axisymmetric jet.*

Makrides, Gregoris, *Some numerical studies of tubes conveying fluids.*

Illinois State University (2)

MATHEMATICS

Benson, Carol L. Trinko, *Effect of computer instruction in finite mathematics on student achievement and attitude.*

Zander, Shirley J., *Applied mathematical module for use in a linear algebra service course.*

Northwestern University (4)

MATHEMATICS

Dinwoodie, Ian Hepburn, *Large deviations for censored data.*

Kraft, Roger, *Intersections of thick Cantor sets.*

Krishnamurti, Deepa, *Resource allocation mechanisms for finite sets.*

Snavely, Mark Richard, *Markov partitions for hyperbolic automorphisms of the two-dimensional torus.*

Southern Illinois University, Carbondale (1)

MATHEMATICS

Kocik, Jerzy, *Lie tensors.*

University of Chicago (18)

MATHEMATICS

Boisen, Paul Rudolph, *The representation theory of fully group-graded algebras.*

Buckley, Stephen Michael, *Harmonic analysis on weighted spaces.*

Burchard, Paul, *D-modules and singular varieties.*

Carlip, Walter, *Regular orbits of Nilpotent groups in non-coprime.*

Daskalopoulos, Georgios, *The topology of the space of stable bundles over a compact Riemann surface.*

Farkas, Peter, *Mathematical foundations for fast methods for the biharmonic equation.*

Iozzi, Alessandra, *Invariant geometric structures: a nonlinear extension of the Borel density theorem.*

Jabon, David Carl, *The supercuspidal representations of $U(2, 1)$ and GSP_4 via Hecke algebra isomorphisms.*

Kimura, Shun-ichi, *On varieties whose Chow groups have intersection products with Q-coefficients.*

Martinez-Gamba, Irene, *Asymptotic behavior at the boundary of a semiconductor device in two space dimensions.*

Merriman, Barry Lynn, *Smooth particle methods on bonded domains.*

Perkinson, David Mark, *Jet bundles and curves in Grassmannians.*

Rich, Andrew Forrester, *A Lefschetz theorem for foliated manifolds.*

Shen, Zhongwei, *Layer potentials and boundary value problems for parabolic lame systems of elasticity and a nonstationary linearized system of Navier-Stokes equations in Lipschitz cylinders.*

Wu, Jyh-Yang, *Finiteness theorems for Riemannian manifolds and Riemannian fibre bundles.*

STATISTICS

Handcock, Mark Stephen, *Inference for spatial Gaussian random fields when the objective is prediction.*

Kolassa, John Edward, *Topics in series approximation to distribution functions.*

Rizzo, Louis P., *Predictive regression estimators of the finite population mean using functions of the probability of selection.*

University of Illinois, Chicago (11)

MATHEMATICS, STATISTICS AND COMPUTER SCIENCE

Cao, Wei, *Stability of Fredholm properties and interpolation of operators.*

Cohen, Steven M., *A geometric presentation of some fundamental modules of Chevalley groups.*

Itai, Masanori, *On strong Martin conjecture.*

Kwembe, Tor Anthony, *Nonlinear diffusion problems of mathematical biology.*

Mankus, Margo Lynn, *Asymptotic analysis of a voice-data communications model.*

Meng, Fan-Chin, *Contributions to multistate reliability theory.*

Pu, Kewei, *Contributions to fractional factorial designs.*

Siadat, Mohammad Vali, *Norm inequalities for integral operators on cones.*

Srinivasan, Murali Krishna, *Optimization problems on posets and graphs.*

Zhao, Wenxun, *Optimal repeated measurements designs.*

Zhou, KeCheng, *Norm inequalities for Lacunary series.*

University of Illinois, Urbana-Champaign (12)

MATHEMATICS

Charalambous, Hara, *On lower bounds for the Betti numbers of finite length modules.*

Chen, Mei-Qin, *The updated subspaces method in optimization and in solving linear systems of equations.*

Ellers, Harald, *Blocks and virtually irreducible lattices.*

Girardi, Maria, *Dunford-Pettis operators on L_1 and the complete continuity property.*

Holsey, Mickey Charles, *Boolean valued probabilistic metric spaces.*

Keum, Byoung Joon, *Numerical variational methods in differential geometry and applications to computer science.*

Lou, Shituo, *A new upper bound in the linear sieve and its applications.*

Sheu, Tsung-Luen, *On the nilpotent injectors of the general linear groups.*

Simon, Julie Dennery, *Bounds on the cardinalities of families of neighborly and nearly neighborly polytopes.*

Streid, David, *The computational complexity of prefix classes of logical theories.*

Sun, Ye Neng, *Nonstandard theory of vector measure.*

Zivaljevic, Bosko, *Hyperfinite transversal theory.*

INDIANA

Indiana University (6)

MATHEMATICS

Basak, Gopal Krishna, *Stability and functional central limit theorems for degenerate diffusions.*

Eden, Alp Osman, *An abstract theory of L-exponents with applications to dimensions analysis.*

Horton, Clark Dean, *Stability of non-singular group orbits.*

Jin, Kyung-Hee, *On unbounded Bergman operators.*

Martin, Nicholas Anthony, *Special properties of Bishops's operator.*

Woodard, Mark Richard, *Invariants of surgered, sewn link exteriors.*

Purdue University (23)

INDUSTRIAL ENGINEERING

Chao, Ping-Yi, *Determination of manufacturability and machining parameters based on a new classification method for machinability.*

Drolet, Jocelyn, *Scheduling virtual cellular manufacturing systems.*

Dutta, Debasish, *Variable radius blends and Dupin cyclides.*

Gibson, David C., *Knowledge structures in human problem solving: Implication for human-interactive tasks.*

Irizarry-Lopez, Vilma, *A methodology for the automatic generation of process plans in an electronic assembly environment.*

Roy, Utpal, *Computer aided representation and analysis of geometric tolerances.*

Shodhan, Ronak, *COMAND: A computer consultant for the design, operations, and control of flexible manufacturing systems.*

Taghaboni, Fataneh, *Scheduling and control of manufacturing systems with critical material handling.*

Trafalis, Theodore, *Efficient faces of a polytope: Interior methods in multiobjective optimization.*

Trappey, Juifen, *Methodology for automatic fixture design in computer integrated environment.*

MATHEMATICS

Campbell-Wright, Randall K., *On the equivalence of composition operators.*

Chen, Jui-Hsin, *Estimates of the invariant metrics on complex domains in C^n.*

Choi, Sangki, *Betti numbers and the integral closure of ideals.*

Ghorpade, Sudhir Ramakant, *On the enumeration and independence of standard Young tableaux of higher width.*

Joshi, Sanjeevani Balkrishna, *Various correspondences between multitableaux and multimonomials.*

Marley, Thomas John, *Hilbert functions of ideals in Cohen-Macaulay rings.*

Noh, Sun Sook, *Multiplicities and reductions of adjacent integrally closed ideals in a 2-dimensional regular local ring.*

Thoma, Apostolos Thomas, *Complete intersections.*

Yang, Agnes, *A construction of Krein spaces of analytic functions.*

STATISTICS

El-Krunz, Sadi Mahmoud, *Bayesian optimal designs for linear regression models.*

Fan, Tsai-Hung, *Convolution of t-densities with application to Bayesian inference for a normal mean and scientific reporting.*

Lee, Chung-Bow, *Comparison of frequentist coverage probability and Bayesian posterior coverage probability, and applications.*

Oh, Man-Suk, *Statistical multiple integration via Monte Carlo importance sampling.*

University of Notre Dame (6)

MATHEMATICS

Gao, Weiqi, *The unimodular Monge-Ampere equation: the two dimensional case.*

Herzog, Ivo, *Some model theory of modules.*

Hurlburt, Kelleen, *Sufficiency conditions for theories with recursive models.*

Lahtonen, Jyrki, *Composition factors of induced modules.*

Leganza, Krystina Kay, *Representations of exceptional Lie algebras restricted to subalgebras.*

Ru, Min, *The second main theorem for moving targets.*

IOWA

Iowa State University (16)

MATHEMATICS

Amin, Wael A. Ahmad, *Compact posets and ramifiability of large cardinals.*

Anderson, Jeffrey R., *Qualitative studies of a convective porous medium equation with a nonlinear forcing at the boundary.*

Babakhani, Ali, *Theory of multidimensional Laplace transforms and boundary value problems.*

Coyle, James J., *The numerical solution of differential-algebraic systems using Runge-Kutta methods of special type.*

Fuh, Cheng-Der, *The bootstrap method for Markov chains.*

Tantawy, Abdalla Sayed, *Oscillation and nonoscillation of third-order functional differential equations.*

STATISTICS

Andrews, Douglas Martin, *Nonparametric analysis of unbalanced paired-comparison or ranked data.*

Davis, Paula Marie, *Evaluation and prediction of maize response to early-season injury from stalk borer.*

Funo, Eiichiro, *Proving admissibility using the stepwise Bayes technique: With applications to maximum likelihood estimation.*

Gotway, Carol Anne, *Inference from spatial processes.*

Grondona, Martin Oscar, *Design and estimation with correlated observations.*

Hulting, Frederick Landis, *Some Bayesian and non-Bayesian procedures for the analysis of comparative experiments and for small-area estimation: Computational aspects, frequentist properties, and relationships.*

Lin, Chiou-Hua, *Powers of two-sample rank tests under Lehmann alternatives.*

Sullivan, Gary Robert, *The use of added error to avoid disclosure in microdata releases.*

Symanowski, James Thomas, *Multivariate distributions with applications to logistic regression models for correlated categorical responses.*

Zakaria, Rahmat Syahni, *On the non-monotonicity of component importance measures for linear consecutive-K-out-of-N systems.*

University of Iowa (8)

APPLIED MATHEMATICAL SCIENCES

Wills, Randall Gordon, *Resolution of the multiplicity problem for $U(N)$ using shift operators.*

Yen, Jeng, *Numerical methods for constrained equations of motion in mechanical systems dynamics.*

MATHEMATICS

Lund, Eric, *Right orders in semisimple semigroups.*

Park, Chin-Hong, *The direct product and module-like properties of automata.*

Timm, Mathew, *The local topology of some nonisolated singularities.*

STATISTICS AND
ACTUARIAL SCIENCE

Dobler, Carolyn Pillers, *A class of rank multiple contrast tests for one-sided comparisons of treatments.*

Nandram, Balgobin, *Bayesian predictive inference for longitudinal and multivariate surveys.*

Rothmann, Mark, *Strong limiting bounds for statistics based on moving subsets of random variables.*

KANSAS

Kansas State University (3)

MATHEMATICS

Obeid, Mustafa Ali, *Pastings and centeria of orthoalgebras.*

Park, Eunsoon, *Path-connected ortho modular lattices.*

STATISTICS

Tafour, Aly, *Maximum likelihood estimators of regression parameters with randomly censored lifetime data.*

University of Kansas (1)

MATHEMATICS

Jenab, Albert, *Harmonic analysis on symmetric Hilbert manifolds and second quantization.*

KENTUCKY

University of Kentucky (5)

MATHEMATICS

Belshoff, Richard George, *On Matlis reflexive modules.*

Choe, Hi Jun, *Regularity for the minimizers of certain singular functionals.*

Goddard, Mark Arden, *Projective covers of complexes.*

Vogel, Andrew Lee, *Boundary regularity and symmetry for regions having a solution to certain over determined boundary value problems.*

STATISTICS

Truszczynska, Helena, *Robustness in Bayesian analysis.*

LOUISIANA

Louisiana State University, Baton Rouge (2)

MATHEMATICS

Palfrey, Thomas, *Density theorems for reciprocity equivalences.*

Ruge, Michael Helmuth, *L_p-regularity and extrapolation.*

Tulane University (2)

MATHEMATICS

Park, Mi Ai, *Model equations in fluid dynamics.*

Pickett, Douglas, *Scattering theory for higher order equations.*

University of Southwestern Louisiana (9)

MATHEMATICS

Clay, Ellen, *Semicontinuous groups*

Uvah, Josaphat, *Monotone iterative technique for nonlinear first order singular systems of differential equations.*

Wong, Benedict, *Singular parabolic boundary value problems.*

STATISTICS

Davis, Robert, *The mathematical theory of evolutionary size games.*

Hebert, Jaimie Layne, *Risk Antagonism in two-person noncooperative games.*

Laviolette, Michael James, *On the efficacy of fuzzy representations of uncertainty.*

Maine, Mary Keller, *Using order statistics to detect the number of components in a finite mixture having normal components.*

Nayebpour, Mohamad R., *Economic design of on-line quality control procedures for attribute characteristics.*

Saadat, Majid, *Estimation of parameters in a mixture of gamma distribution failure models when data are grouped.*

MARYLAND

Johns Hopkins University (6)

BIOSTATISTICS

Qaqish, Bahjat, *Multivariate regression models using generalized estimating equations.*

Waclawiw, Myron, *Extension of the Stein estimating procedure through the use of estimating functions.*

MATHEMATICAL SCIENCES

Chang, Yaw Oliver, *Network programming models for ecodevelopment global optima.*

Krass, Dmitry, *Contributions to the theory and applications of Markov processes.*

MATHEMATICS

Ishibashi, Makato, *Effective version of the Tschebotareff density theorem in function fields.*

Kameko, Masaki, *Products of projective spaces as Steenrod modules.*

University of Maryland, Baltimore (2)

MATHEMATICS

Pal, Nabendu, *Decision theoretic estimation of location and scale parameters in exponential families.*

Wang, Ping, *Homogenization of an inhomogeneous degenerate elastic material.*

University of Maryland, College Park (17)

MATHEMATICS

Chen, Kang, *An economic model of China.*

Chen, Senhuei E., *A discontinuous solution to a nonlinear elliptic-hyperbolic system.*

Draper, Patricia, *Pick-Nevanlinna interpolation on an annulus.*

Drumm, Todd A., *Fundamental polyhedra for Margulis space-times.*

Guo, Meihui, *Inference for nonlinear time series.*

Heil, Christopher Edward, *Wiener amalgam spaces in generalized harmonic analysis and wavelet theory.*

Johnson, Aimee Sue, *Measures on the circle invariant under a nonlacunary subsemigroup of the integers.*

Kerby, Rodney, *The correlation function and the Wiener-Wintner theorem in higher dimensions.*

Lee, Chin San, *Parameter estimation in branching processes with application to tumor growth.*

McElvany, Michelle Carter, *Guaranteed deadlines for hard real-time fault-tolerant distributed system.*

Nestor, Jean-Bernard, *Linear divisibility recurrence sequences and primality testing.*

Phillips, Mark Bryan, *Dirichlet polyhedra in complex hyperbolic space.*

Schwab, Christoph, *Dimensional reduction for elliptic boundary value problems.*

Swearingen, Daniel, *Graph continuity of the Cauchy-Riemann operator.*

Wang, Wen-Yu, *Statistical inference for aggregated Markov processes.*

Woo, Ching Wah, *Nonlinear P.D.E. and optimal control with integral constraint.*

Yang, George Keith, *Applications of Wiener-Tauberian theorem to a filtering problem and convolution equations.*

MASSACHUSETTS

Boston University (2)

MATHEMATICS

Odell, Patricia M., *Interval-censored outcomes and time-dependent covariates in accelerated failure time models.*

Winters, Robert, *Bifurcations in families of antiholomorphic functions in biquadratic maps.*

Brandeis University (2)

MATHEMATICS

Bremigan, Ralph Joseph, *Reductive groups, algebraic quotients, and real structures.*

Ding, Songqing, *Cohen-Macaulay approximations over Gorenstein local rings.*

Harvard University (29)

APPLIED SCIENCES

Fu, Michael Chung-Shu, *Optimization of queueing systems using perturbation analysis.*

Gereb-Graus, Mihaly, *Lower bounds on parallel, distributed, and automata computations.*

Graham, Paul, *The state of a program and its use.*

Hu, Jian-Qiang, *Strong consistency of infinitesimal perturbation analysis estimates.*

Mihail, Kalomira-Eleni, *Combinatorial aspects of expanders.*

Montgomery, Michael T., *Potential vorticity and diabatic processes in frontal dynamics.*

Myers, Joseph Dwan, *Streamwise vortices in laminar-turbulent transition.*

Neal, Lisa F., *The role of user models in system design.*

Reiter, Ehud R., *Generating appropriate natural language object descriptions.*

Zhang, Bin, *Performance gradient estimation for very large Markov chains.*

BIOSTATISTICS

Buyse, Marc Eric, *Issues of efficiency in cancer clinical trials.*

Hilton, Joan Frances, *Exact size and power of conditional tests for categorical data.*

Larholt, Kay Marice, *Statistical methods and heterogeneity in meta-analysis.*

Ng St. Louis, Jennifer, *Compartmental models of chronic disease.*

Pampallona, Sandro, 1: *Alcohol consumption and breast cancer;* 2: *Group sequential methods for clinical trials.*

Sleeper, Lynn A., *Regression spline methodology for covariate effects in the proportional hazards model.*

Walsh, Steven J., *Exact nonparametric methods.*

Wang, Fong, *Methods for analyzing longitudinal random effects models.*

MATHEMATICS

DiPippo, Stephen A., *Spaces of rational functions on curves over finite fields.*

Hildebrand, Martin, *Rates of convergence of some random processes on finite groups.*

Kouvidakis, Alexander, *Divisors on some moduli spaces.*

Lu, Steven Shin-Yi, *On meromorphic maps between algebraic varieties with log-general targets.*

Shi, Wan-Xiong, *Ricci deformation of the metric on complete noncompact Kähler manifolds.*

Shpiz, Edward, *Deligne's conjecture in the constant coefficient case.*

Stong, Richard A., *Nonexistence of almost handlebody structure on topological four-manifold pairs.*

Tan, Ki-seng, *Refined conjecture of the Birch and Swinnerton-Dyer type.*

Wang, Yang, *Image segmentation by variational method and elliptic boundary value problems.*

STATISTICS

Almond, Russell G., *Fusion and propagation of graphical Beliep models.*

Gelman, Andrew Eric, *Topics in image reconstruction for emmision tomography.*

Massachusetts Institute of Technology (24)

MATHEMATICS

Gonzalez-Barrios, Jose M., *On von Mises functionals with emphasis ontrace class kernels.*

Howell, Louis Hill, *Computation of conformal maps by modified Schwarz-Christoffel transformations.*

Huang, Rosa Huang, *Combinatorial methods in invariant theory.*

Loeb, Daniel E., *The iterated logarithmic algebra.*

Lu, Shirong, *Modular invariant representations and their applications.*

McDonald, Patrick, *The Laplacian for spaces with cone-like singularities.*

Newman, Mark J., *Randomness and robustness in hypercube computation.*

Prato, Elisa, *Some symplectic invariants of Hamiltonian K-actions.*

Purtill, Mark R., *André permutations, lexicographic shellability, and the cd-index of a converse polytope.*

Reiner, Victor Schorr, *Quotients of Coxeter complexes and P partitions.*

Sadofsky, Henry J., *The root invariant and v_1-periodic families.*

Shastri, Aditya, *On some extremal problems in combinatorics and graph theory.*

Souza, Regina P., *Multiplicity-free actions and the image of the moment map.*

Stenzel, Matthew B., *Kähler structures on cotangent bundles of real analytic Riemannian manifolds.*

Wagner, David Gustav, *Enumerative combinatorics of partially ordered sets, and total positivity of Hadamard products.*

Waleffe, Fabian A., *The 3-D instability of a strained vortex and its relation to turbulence.*

Wu, Siye, *Functional determinants in mathematical physics.*

Yekutieli, Amnon, *The residue complex and duality for some noncommutative rings.*

OPERATIONS RESEARCH

Caulkins, Jonathan P., *The distribution and consumption of illicit drugs: some mathematical models and their policy implications.*

Eckstein, Jonathan, *Splitting method for monotone operators with applications to parallel optimization.*

Hall, Leslie Ann, *Two topics in discrete optimization: polyhedral structure of capacitated trees and approximation algorithms for scheduling.*

Luo, Zhi-Quan, *Communication complexity of some problems in distributed computation.*

Tan, Kok-Choon, *Newton's method for parametric center problems.*

Zhang, Hongtao, *Cyclic scheduling in a stochastic environment.*

Northeastern University (3)

MATHEMATICS

Chen, Yah-Wei, *Estimation of Poisson mean under restricted parameter space.*

Lin, Hwei-Jen, *On two-dimensional isometric array grammars and applications to pattern recognition.*

Ma, Xiaoyun, *The Laplacian on complete manifolds with warped cylindrical ends and its application.*

Tufts University (2)

MATHEMATICS

Chen, Liang, *On the shadowing property for piecewise monotone maps.*

Ould-Rouis, Hamid, *Invariance principles and self-normalizations for sums trimmed according to choice of influence function.*

University of Massachusetts, Amherst (5)

MATHEMATICS AND STATISTICS

Khan, Mizan Rahman, *Computation of partial zeta values at $s = 0$ for a totally real cubic base field.*

Krone, Stephen M., *Local times for superprocesses.*

Moran, Judith F., *The role of the corona in determining global properties of homogeneous tilings in the euclidean and hyperbolic planes.*

Riedel, Thomas, *Cauchy's equations on a space of distribution functions.*

Wilce, Alexander Griffin, *The signed weight space of a tensor product.*

MICHIGAN

Michigan State University (13)

MATHEMATICS

Curtis, Frank J., *Cohen-Macauley unions of lines in P_k^n and the Cohen-Macauley type.*

Dimitric, Ivko, *Quadric representation and submanifolds of finite type.*

Nikolopoulos, Panagiotis V., *An algorithm for non-negative least error minimal norm solutions.*

Tazawa, Yoshihiko, *Differential geometry of slant surfaces.*

Yamashita, Masahiro, *Geometry of the Melnikov vector.*

Zhang-Sun, Hong, *On the Galerkin method with vector basis functions.*

STATISTICS AND PROBABILITY

Gogate, Jagadish P., *Compound estimation of parameters of right-censored exponential families.*

Gunawardena, Chitra, *Finite state k-extended set compound decision problem.*

Kinateder, John, *An invariance principle application to the bootstrap.*

Lahiri, Soumendra Nath, *Bootstrap approximations to the distributions of M-estimators.*

Perera, Priyantha Liyanage, *Behavior of a diffusion process on 2-dimensional torus with application to phase locked loops.*

Richard, Philip Henry, *Dilation of operator valued measures in Banach spaces and Harmonizable Banach spaces valued processes.*

Shi, Yingqi, *On sequential procedures based on the minimum distance estimator and robustness.*

University of Michigan, Ann Arbor (22)

BIOSTATISTICS

Ploughman, Lynn M., *Estimating the power of a proposed linkage study.*

Tan, Hsien-Jane, *A canonical approach for grouping categories in tables and other problems.*

INDUSTRIAL AND OPERATIONS ENGINEERING

Benson, Peter, *A calculus for infinite horizon optimization.*

Gan, Jacob, *Spherical algorithms for setup orientations of workpieces with sculptured surfaces.*

Houshmand, Ali, *Discriminant function analysis for autocorrelated data; Applications in cutting tool monitoring.*

Kim, David S., *Aggregation in large scale Markov chains.*

Lee, Heungsoon, *A design methodology for flexible assembly systems.*

Lifshitz, Yair, *Models of upper limp ergonomic stresses based on analysis of job attributes.*

Radson, Darrell, *Experimental design in the presence of an uncontrollable variable: model characteristics and design augmentation in a front end alignment experiment.*

MATHEMATICS

Aberbach, Ian M., *Finite phantom projective dimension and a phantom analogue of the Auslander-Buchsbaum theorem.*

Boucher, Kenneth M., *Similitudes of surface mapping class groups, and reducible outer automorphisms of free groups.*

Cochran, Webb George, *Random Blaschke products.*

Coker, Curtis Charles, *Two problems in algebraic combinatorics.*

Khodja, Mohamed, *Nonlinear stability of oscillatory traveling waves from some systems of hyperbolic conservation laws.*

Lee, Jungseob, *On the constant in the Turan-Kubilius inequality.*

Malarkey, Martin M., *Cyclotomy and block designs in cyclic neofields.*

Park, Chan-Young, *Homotopy groups of automorphism groups of some Seifert fiber spaces.*

Rickert, John H., *Simultaneous rational approximations and related diophantine equations.*

Wass, Noel C., *Algebraic independence of the values at algebraic points of a class of functions considered by Mahler.*

STATISTICS

Chang, Chienming, *Bayesian nonparametric prediction based on censored data.*

Chen, Zen-Yi, *Robust linear discriminant procedures using projection pursuit methods.*

Gunderson, Brenda Kirsten, *Estimating the dimensionality in canonical correlation analysis.*

Wayne State University (1)

MATHEMATICS

Lai, Hongyuan, *All over designs.*

Western Michigan University (3)

MATHEMATICS AND STATISTICS

Kubicka, Ewa Maria, *The chromatic sum and efficient tree algorithms.*

Kubicki, Grzegorz, *Greatest common subgraphs.*

Rao, Sudhakar, *Measures of partial association based on rank estimate.*

MINNESOTA

University of Minnesota, Minneapolis (16)

MATHEMATICS

Chen, Bin, *On singularities of a class of p-harmonic maps.*

Chen, Hwa-Nien, *On the stability of a population model with sexual reproduction on $Z^d (d \geq 2)$.*

Cooke, David Barton, *Hamiltonian systems of evolution equations.*

Finnegan, Timothy Patrick, *Siegel-Hilbert modular forms of level one over fields with narrow class number one are theta series.*

Hu, Bei, *Nonlinear problems in partial differential equations.*

Kim, DaeSan, *Galois symmetric square L-functions.*

Kim, Dongsu, *A combinatorial approach to biorthogonal polynomials.*

Norton, Douglas, *A metric approach to the Conley decomposition theorem.*

Ondich, Jeffrey Robert, *Partially invariant solutions of differential equations.*

Ouyang, Tiancheng, *On the positive solutions of semilinear equation $\Delta u + \wedge u + hu^p = 0$ on Riemannian manifold.*

Padron, Victor, *Sobolov regularization of some nonlinear ill-posed problems.*

Postol, Michael Samuel, *Realization of homotopy equivalences by homeomorphisms.*

Tabara, Tatsuhiko, *An asymptotic analysis and stokes multipliers for a second order linear differential equation with polynomial coefficients.*

Taboada, Mario, *Long-time behavior of the Kuramoto-Sivashinsky equation and related problems.*

Taylor, Stephen William, *Gevrey regularity for solutions of evolution equations and exact boundary controllability.*

Wang, Xuefeng, *On Cauchy problems for relation-diffusion equations.*

MISSISSIPPI

University of Mississippi (1)

MATHEMATICS

Mortabit, Abdes-Samad, *A periodic result for a nonlinear functional integral equation.*

MISSOURI

University of Missouri, Columbia (1)

STATISTICS

Bandyopadhyay, Dipankar, *Some univariate and multivariate problems with applications in reliability theory.*

University of Missouri, Kansas City (1)

MATHEMATICS

So, Shing Seung, *Nets and convergence spaces.*

University of Missouri, Rolla (2)

MATHEMATICS AND STATISTICS

Kuhlmann, Dietrich William, *Properties of estimators of concave regression functions.*

McKee, Rhonda L., *Semigroups of functions on nearness spaces and near completely homogeneous spaces.*

Washington University (3)

MATHEMATICS

Paulsen, William Harold, *Upper and lower bounds for the Hausdorff dimension of self-affine sets.*

Perez, Carlos, *Weighted norm inequalities for potential and maximal operators.*

Soria, Javier, *Tent spaces based on weighted Lorentz spaces. Carleson measures.*

NEBRASKA

University of Nebraska (3)

MATHEMATICS AND STATISTICS

Diaz, Gerald, *Applications of cone theory to boundary value problems.*

Goddard, Bartley Earl, *A finite Dirichlet series related to Newman polynomials.*

Peil, Timothy Scott, *Criteria for disconjugacy and disfocality for an nth-order linear difference equation.*

NEW HAMPSHIRE

Dartmouth College (1)

MATHEMATICS AND COMPUTER SCIENCE

Stellpflug-Mandych, Karen Marie, *Discrete representations of semiorders.*

NEW JERSEY

Princeton University (10)

MATHEMATICS

Demichelis, Stefano, *Group actions on four-dimensional manifolds.*

Fisher, Benji, *Distinctness of Kloosterman sums.*

Hu, Sen, *A proof of C' stability for 3-dimensional flows.*

Kenyon, Richard, *Self-similar tilings.*

Pan, Yibiao, *Estimates for oscillatory singular integral operators.*

Rognes, John, *The rank filtration in algebraic K-theory.*

Schramm, Oded, *Packing two-dimensional bodies with prescribed combinatorics and applications to the construction of conformal and quasiconformal mappings.*

Seco, Luis Angel, *Lower bounds for the ground state energy of atoms.*

Silverman, Judith Hava, *Subgroup conditions for groups acting freely on products of spheres.*

Smith, Hart Francis, *The subelliptic oblique derivative problem.*

Rutgers University, New Brunswick (19)

MATHEMATICS

Hurlbert, Glenn, *Universal cycles: On beyond DeBruijn.*

Husu, Christiano, *Extensions of the Jacobi identity for vertex operators and standard $A_1^{(1)}$-modules.*

Kang, Seong Joo, *Conormal and piecewise smooth solutions to quasilinear wave equations.*

Karwowski, Andrzej Joachim, *Asymptotic models for a long elastic cylinder.*

Ostapenko, Peter, *Gevrey completions of enveloping algebras and Whittaker maps for semisimple Lie groups.*

Petersen, Johannes Asmus, *On the hypoellipticity of the tangential Cauchy-Riemann operator.*

Prevost, Shari, *Vertex operators and integral bases of affine Lie algebras.*

Rodriguez-Carrington, Enriqueta, *Kac-Moody groups: An analytic approach.*

Rosenbaum, Zangwill, *Foundations and techniques of dimensional analysis.*

Ross, Raymond A., *K_2 of elliptic and Fermat curves.*

Tesman, Barry Allen, *T-colorings, list T-colorings, and set T-colorings of graphs.*

Wehr, Jan, *Effects of quenched randomness in statistical mechanics.*

Wysocki, Krzysztof, *Weak and strong ergodicity for solutions of ordinary differential equations.*

STATISTICS

Doll, Jeanne Marie, *Empirical Bayes estimation in contingency tables with constrained margins.*

Hsu, Yu-Sheng, *On conditional discrete density estimation.*

Messig, Michael Anthony, *Estimation in dichotomous quantal response models.*

Pickering, Evelyn Hannah, *Patterns of identity by descent in a stochastic mating system.*

Tappin, Linda Anne, *Estimation of the parameter of a selected binomial population.*

Zhang, Zhi Yi, *Recovery of interblock information in a balanced incomplete block design with interaction.*

NEW MEXICO

New Mexico State University (4)

MATHEMATICAL SCIENCES

Losta, Mansor, *Numerical methods for solving singular perturbation problems appearing in elasticity and radiative transfer.*

Merrin, Christine Rossi, *Simply presented valuated modules.*

Merrin, Stephen D., *Some constructive results in the elementary theory of Lie algebras.*

Peeples, Joanne V., *Oligopoly.*

University of New Mexico (2)

MATHEMATICS AND STATISTICS

Fahimi, Mansour, *Optimal integration of surveys and controlled selection.*

Tapia-Aguilar, Julian, *Stochastic analysis of the channeling problem.*

NEW YORK

Adelphi University (2)

MATHEMATICS AND COMPUTER SCIENCE

Glass, Richard, *Polarizability of the hydrogen atom by an electric field.*

Harding, Nicholas James, *The nerve impulse and mathematical models of neurons.*

CUNY, Graduate Center (4)

MATHEMATICS

Isaacs, Frank D., *Commutation and deficiency indices: Comparing t^*t and tt^*, where t is an ordinary differential operator with smooth coefficients.*

Jia, Xing-De, *Some results in additive number theory.*

Jiang, YunPing, *Generalized Ulam-von Neumann transformations.*

Wang, Ming, *AD-C.R. geometries in dimension 4.*

Clarkson University (3)

MATHEMATICS AND COMPUTER SCIENCE

Abu-Jaradeh, Nafiz D., *Differential equations on graphs.*

Bier, Martin, *Singularity analysis of chaotic behavior and related problems of nonlinear dynamics.*

Bradie, Brian David, *Comprehensive simulation of photolithographic processes in two and three dimensions.*

Columbia University (9)

STATISTICS

Li, Zhaohai Li, *Asymptotically optimal sequential allocation rules.*

Tang, Mingxin, *Statistical analyses for doubly-censored data.*

MATHEMATICS

Chace, Charles Everette, *The number of ways of writing an integer as a sum of three products of ℓ factors .*

Chen, Jianer, *Distributional properties of graph embeddings on topological surfaces.*

Falbel, Elisha, *Nonembeddable CR manifolds and surface singularities.*

Lockhart, Paul Thomas, *Diophantine equations and the arithmetic of hyperelliptic curves.*

Trapp, Rolland John, *Applications of crossed-homomorphisms of the mapping class group M.*

Wentworth, Richard Alan, *Asymptotics of the Arakelov-Green's function and Faltings' delta invariant.*

Xu, Peijun, *Applications of cyclic presentation of braid groups and the growth of positive braid semigroups.*

Cornell University (31)

APPLIED MATHEMATICS

Crone, Brian James, *Existence of equilibria in incomplete information games with disturbed payoffs.*

Hempel, Christian George, *A globally convergent quadratic penalty function method with fast local convergence properties.*

Hulbert, Laurie Ann, *Solving large sparse quadratic programs with simple bounds.*

Kiemel, Timothy Lee, *Three problems from the mathematics of neural oscillations.*

Plassmann, Paul Eugene, *The parallel solution of nonlinear least-squares problems.*

BIOMETRICS

Stehman, Stephen Victor, *On the variance and variance estimators of the Horvitz-Thompson estimator for variable probability systematic sampling.*

MATHEMATICS

Bianco, Steven Anthony, *A stochastic epidemic in a large population.*

Brittenham, Mark William, *Essential Laminations in Seifert-Fibered spaces.*

Fisher, Yuval, *The classification of critically preperiodic polynomials.*

Lee, Ping, *On the vector-scalar potential formulation of the three-dimensional eddy current.*

Lin, Ming, *The convergence of $U_{(1)}$ gauge theory on random lattices in three dimensions.*

Lipton, James B., *Relating Kripke models and realizability.*

McCarthy, Randolph, *Cyclic homology of an exact category.*

Neuhauser, Claudia, *Ergodic theorems for the multitype contract process.*

Noble, Christopher Francis, *Equilibrium behavior of the sexual reproduction process.*

Wijesekera, Duminda, *Constructive modal logics.*

Zhang, Yu, *A power law for connectedness of some random graphs at the critical point.*

OPERATIONS RESEARCH

Loerch, Andrew, *A new approach to production planning, scheduling, and due-date quotation in manufacturing systems.*

Sewell, Edward C., *Stability critical graphs and the stable set polytope.*

Shallcross, David Frank, *Two investigations in combinatorial optimization: approximate solution of large traveling salesman problems arising from x-ray diffraction experiments; relatively transitive subgraphs.*

Shum, Henry, *Chains of bounded length and antichains of bounded width in partially ordered sets.*

Tate, David, *Due-date based performance measures in dynamic stochastic manufacturing systems.*

Yamagami, Shin, *Generalized linear models.*

Yucesan, Enver, *Simulation graphs for design and analysis of discrete event simulation models.*

Zhu, Yixin, *Markov-modulated stochastic storage processes.*

STATISTICS

Behaxeteguy, Maika Marie-Francoise, *Two-stage selection procedures with bounded selected subset size in the first stage.*

Forbes, Andrew Benjamin, *Asymptotic properties of log odds ratio regression estimators with sparse strata and covariate measurement error.*

Goutis, Constantinos, *Improved invariant set estimation of a normal variance with generalizations.*

Greenshtein, Eitan, *On some decision theory problems in sequential analysis.*

McShane, Lisa Meier, *Statistical quality control procedures for monitoring laboratory analyses.*

Ngwengwe, Alasford Mapulanga, *Measures of association for two-way tables of continuous or binary data.*

New York University, Courant Institute (24)

MATHEMATICS

Affouf, Mahmoud, *Numerical study of dynamic phase transitions for a system of conservation laws of mixed type.*

Braga, Gastao de Almeida, *The two-dimensional lattice coulomb gas at low temperature.*

Bruno, Oscar, *The effective conductivity of an infinitely interchangeable mixture.*

Cai, Xiao-Chuan, *Some domain decomposition algorithms for non-self-adjoint elliptic and parabolic partial differential equations.*

Chang, Chih-Chung, *Nonequilibrium fluctuations for a system in hydrodynamic scaling.*

Davidow, Amy Lynne, *On Casson's invariant of branched cyclic covers over S^3.*

Furtado, Frederico, *Structural stability of nonlinear waves for conservation laws.*

Gleason, Stewart Hart, *Hessian determinants of harmonic functions.*

Grotowski, Joseph Francis, *Harmonic maps with symmetry.*

Han, Zhengchao, *On some nonlinear ordinary and differential equations.*

Kan, Pui Tak, *On the Cauchy problem of a 2×2 system of nonstrictly hyperbolic conservation laws.*

Li, Congming, *Some qualitative properties of fully nonlinear elliptic and parabolic equations.*

Maesumi, Mohsen, *Approximate scale breaking nonlinear elementary waves for two-phase incompressible flow in porous layered media.*

Mathew, Tarek, *Domain decomposition and iterative refinement methods of mixed finite element discretizations of elliptic problems.*

Nesi, Vincenzo, *Extremal microgeometries for polycrystalline composites.*

Noelle, Sebastian, *Cauchy problems for the complex Burgers Equation in one- and two-space dimensions.*

Quastel, Jeremy, *Diffusion of colour in the simple exclusion process.*

Rezakhanlou, Fraydoun, *Hydrodynamic limit for a system with finite range interactions.*

Schirmer, Pedro, *Global existence for spherically symmetric Yang-Mills fields on IR 3+1.*

Siegel, Michael, *An analytical and numerical study of singularity formation in the Rayleigh-Taylor problems.*

Sneyd, Alfred James, *Construction and analysis of a model for phototransduction in turtle coves.*

Sorets, Eugene, *Positive Lyapunov exponents for Schrödinger operators with quasi-periodic potentials.*

Tu, Cheng, *A study of stability in the computation of flows with moving emersed elastic boundaries.*

Wang, Lihe, *On the regularity theory of fully nonlinear parabolic equations.*

Rensselaer Polytechnic Institute (6)

DECISION SCIENCES AND ENGINEERING SYSTEMS

Alloway, James A., Jr., *Robust and nonparametric quality control methods with extensions to the bivariate case.*

Beam, Kevin M., *Constructive multivariate methods for data anlaysis and modeling.*

Hussain, Hidayat, *An experimental investigation of the interaction between displays and models in multiple-criteria decision support.*

Makuch, William M., *Optimizing the collection of delinquent consumer credit.*

Park, Tae Hoon, *A bivariate Pareto Distribution characterized by linear memory.*

MATHEMATICAL SCIENCES

Wagner, Barbara, *Optimum hypersonic airfoils with attached shocks.*

SUNY at Albany (3)

MATHEMATICS AND STATISTICS

Bonner, David, *Circle actions on simply connected five-manifolds.*

Fontaine, Anne, *Polyomino frames and the Heesch problem.*

Rajia, Abbess, *New class of nonparametric rate function estimates under censored and uncensored cases.*

SUNY at Binghamton (4)

MATHEMATICAL SCIENCES

Chen, Maiwei, *Contributions to estimation theory of LLPD time series.*

Holmes, M. Randall, *Systems of combinatory logic related to Quines "new foundations".*

Morse, Robert F., *Levi-properties in groups.*

Yeh, George Fangchou, *Closed subclasses of M-groups.*

SUNY at Buffalo (9)

MATHEMATICS

Ibbotson, Jeffrey James, *The range of convolution operators in spaces of generalized distributions.*

Lu, Zhu-Qi, *Gevrey regularity and growth of solutions of convolution equations.*

Rajan, Dayanand Sundara, *Differentiation and integration of the combinatorial species of Joyal.*

Shih, Chih-wen, *On a priori estimates of nonlinear stability in spherically symmetric stellar dynamics.*

Tripathi, Amitabha, *Topics in number theory.*

STATISTICS

Brunner, Lawrence Jerome, *Bayes procedures for elliptically symmetric unimodal densities.*

Oh, Changhyuck, *Estimation using discrete observations in the simple stochastic epidemic and the birth and death process.*

Park, Hyo-Ill, *Bivariate control median tests for complete and right-censored data.*

Park, Sang-gue, *Nonparametric tests for the simple tree alternatives.*

SUNY at Stony Brook (15)

APPLIED MATHEMATICS AND STATISTICS

Chlouverakis, Gregory, *Imperfect repair and maintenance of stochastically failing systems.*

Chuang, Stella RweiJu, *The bivariate normal distribution: Statistical properties of the likelihood ration test for a mixture.*

Joh, Teng-Sheng, *The performance of factor analysis on linear recursive path models.*

Rispoli, Fred Joseph, *On transportation and $(0, 1)$-polytopes: Extreme points and diameters.*

Zhu, Jianping, *On the history matching for three-dimensional multi-phase reservoir models.*

MATHEMATICS

Chen, Haiwen, *A rigidity theorem for CP^m and 4-manifolds with 2-nonnegative curvature operators.*

Ciriza, Eleanora, *The symplectic structure of submanifolds of Kähler manifolds of nonpositive curvature.*

Dai, Xianzhe, *Adiabatic limit, non-multiplicativity and Leray spectral sequence.*

Dolan, Peter C., *Spanning structures and undecidability in random graphs.*

Lima Filho, Paulo, *Homotopy groups of cycle spaces.*

Payne, Kevin Ray, *Smooth-tame Fréchet algebras and Lie groups of pseudodifferential operators.*

Polin, Lawrence, *Pseudo-differential operators on nilpotent Lie groups with dilations.*

Pontecorvo, Massimiliano, *On twistor spaces of anti-self-dual Hermitian surfaces.*

Thornber, Mark, *Vanishing theorems for quantrionic Kähler manifolds.*

Wei, Guofang, *Aspects of positively Ricci curved spaces: New examples and the fundamental group.*

Syracuse University (3)

MATHEMATICS

Anderson, Vivian, *Women in engineering programs: a qualitative study.*

Enos, Michael John, *Angular momentum optimization of rigid body trajectories.*

Tinto, Patricia Price, *Students' views on learning proof in high school geometry: An analytic-inductive approach.*

University of Rochester (6)

MATHEMATICS

Dong, Xiaoying, *Families of functions whose Julia set is C and some related results.*

Ravi, M. S., *Regularity of non-reduced ideals.*

STATISTICS

Acuna, Edgar, *Modality of mixtures of distributions.*

Choi, Sungsub, *On asymptotically optimal tests..*

Kollia, Georgia, *A study of some quantile function families: Isotones and other applications.*

Manatunga, Amita, *Inference for multivariate survival distribution generated by stable frailties.*

NORTH CAROLINA

Duke University (4)

MATHEMATICS

Grassi, Antonella, *Minimal models of elliptic threefolds.*

Landsberg, Joseph Montague, *Minimal submanifolds defined by first order systems of PDE.*

McLean, Robert Cochrane, *Deformations and moduli of calibrated submanifolds.*

Shin, Dong Kwan, *Pluricanonical maps of threefolds of general type.*

North Carolina State University, Raleigh (14)

MATHEMATICS

Chang, Yu-Hsien, *Dichotomies for abstract reaction-diffusion equations.*

Kim, Chul, *A classification of the finite rings with unity by computable means.*

Li, Hui, *Rings with infinite sums.*

Li, Zhongshan, *The embedding of rings in regular rings and π-regular rings.*

Marquardt, Vera Katharina, *Factoring the group of units of a ring.*

Yakubu, Abdul-Aziz, *Global stability, bifurcation, and chaos in discrete competitive systems.*

STATISTICS

Chang, Ming-Chun, *Testing for overdifference.*

Cook, John R., *Estimators for the errors-in-variables problem in the ordered categorical regression model.*

Gumpertz, Marcia L., *Simple estimators for the linear random coefficient regression models and the nonlinear model with variance components.*

Martinez, Stephen W., *The optimal dynamic hedging positions for grain producers before harvests: A case study.*

Udevitz, Mark S., *Change-in-ratio methods for estimating the size of closed populations.*

Wolfinger, Russell D., *Rates of convergence and asymptotic normality in semi-nonparametric regression.*

Zhang, Ji, *Bootstrap methods for tests about covariance matrices.*

Zhu, Jun, *Genetic variance components in the general mixed model.*

Lipton, James B., *Relating Kripke models and realizability.*

McCarthy, Randolph, *Cyclic homology of an exact category.*

Neuhauser, Claudia, *Ergodic theorems for the multitype contract process.*

Noble, Christopher Francis, *Equilibrium behavior of the sexual reproduction process.*

Wijesekera, Duminda, *Constructive modal logics.*

Zhang, Yu, *A power law for connectedness of some random graphs at the critical point.*

OPERATIONS RESEARCH

Loerch, Andrew, *A new approach to production planning, scheduling, and due-date quotation in manufacturing systems.*

Sewell, Edward C., *Stability critical graphs and the stable set polytope.*

Shallcross, David Frank, *Two investigations in combinatorial optimization: approximate solution of large traveling salesman problems arising from x-ray diffraction experiments; relatively transitive subgraphs.*

Shum, Henry, *Chains of bounded length and antichains of bounded width in partially ordered sets.*

Tate, David, *Due-date based performance measures in dynamic stochastic manufacturing systems.*

Yamagami, Shin, *Generalized linear models.*

Yucesan, Enver, *Simulation graphs for design and analysis of discrete event simulation models.*

Zhu, Yixin, *Markov-modulated stochastic storage processes.*

STATISTICS

Behaxeteguy, Maika Marie-Francoise, *Two-stage selection procedures with bounded selected subset size in the first stage.*

Forbes, Andrew Benjamin, *Asymptotic properties of log odds ratio regression estimators with sparse strata and covariate measurement error.*

Goutis, Constantinos, *Improved invariant set estimation of a normal variance with generalizations.*

Greenshtein, Eitan, *On some decision theory problems in sequential analysis.*

McShane, Lisa Meier, *Statistical quality control procedures for monitoring laboratory analyses.*

Ngwengwe, Alasford Mapulanga, *Measures of association for two-way tables of continuous or binary data.*

New York University, Courant Institute (24)

MATHEMATICS

Affouf, Mahmoud, *Numerical study of dynamic phase transitions for a system of conservation laws of mixed type.*

Braga, Gastao de Almeida, *The two-dimensional lattice coulomb gas at low temperature.*

Bruno, Oscar, *The effective conductivity of an infinitely interchangeable mixture.*

Cai, Xiao-Chuan, *Some domain decomposition algorithms for non-self-adjoint elliptic and parabolic partial differential equations.*

Chang, Chih-Chung, *Nonequilibrium fluctuations for a system in hydrodynamic scaling.*

Davidow, Amy Lynne, *On Casson's invariant of branched cyclic covers over S^3.*

Furtado, Frederico, *Structural stability of nonlinear waves for conservation laws.*

Gleason, Stewart Hart, *Hessian determinants of harmonic functions.*

Grotowski, Joseph Francis, *Harmonic maps with symmetry.*

Han, Zhengchao, *On some nonlinear ordinary and differential equations.*

Kan, Pui Tak, *On the Cauchy problem of a 2×2 system of nonstrictly hyperbolic conservation laws.*

Li, Congming, *Some qualitative properties of fully nonlinear elliptic and parabolic equations.*

Maesumi, Mohsen, *Approximate scale breaking nonlinear elementary waves for two-phase incompressible flow in porous layered media.*

Mathew, Tarek, *Domain decomposition and iterative refinement methods of mixed finite element discretizations of elliptic problems.*

Nesi, Vincenzo, *Extremal microgeometries for polycrystalline composites.*

Noelle, Sebastian, *Cauchy problems for the complex Burgers Equation in one- and two-space dimensions.*

Quastel, Jeremy, *Diffusion of colour in the simple exclusion process.*

Rezakhanlou, Fraydoun, *Hydrodynamic limit for a system with finite range interactions.*

Schirmer, Pedro, *Global existence for spherically symmetric Yang-Mills fields on IR 3+1.*

Siegel, Michael, *An analytical and numerical study of singularity formation in the Rayleigh-Taylor problems.*

Sneyd, Alfred James, *Construction and analysis of a model for phototransduction in turtle coves.*

Sorets, Eugene, *Positive Lyapunov exponents for Schrödinger operators with quasi-periodic potentials.*

Tu, Cheng, *A study of stability in the computation of flows with moving emersed elastic boundaries.*

Wang, Lihe, *On the regularity theory of fully nonlinear parabolic equations.*

Rensselaer Polytechnic Institute (6)

DECISION SCIENCES AND ENGINEERING SYSTEMS

Alloway, James A., Jr., *Robust and non-parametric quality control methods with extensions to the bivariate case.*

Beam, Kevin M., *Constructive multivariate methods for data anlaysis and modeling.*

Hussain, Hidayat, *An experimental investigation of the interaction between displays and models in multiple-criteria decision support.*

Makuch, William M., *Optimizing the collection of delinquent consumer credit.*

Park, Tae Hoon, *A bivariate Pareto Distribution characterized by linear memory.*

MATHEMATICAL SCIENCES

Wagner, Barbara, *Optimum hypersonic airfoils with attached shocks.*

SUNY at Albany (3)

MATHEMATICS AND STATISTICS

Bonner, David, *Circle actions on simply connected five-manifolds.*

Fontaine, Anne, *Polyomino frames and the Heesch problem.*

Rajia, Abbess, *New class of nonparametric rate function estimates under censored and uncensored cases.*

SUNY at Binghamton (4)

MATHEMATICAL SCIENCES

Chen, Maiwei, *Contributions to estimation theory of LLPD time series.*

Holmes, M. Randall, *Systems of combinatory logic related to Quines "new foundations".*

University of North Carolina, Chapel Hill (19)

BIOSTATISTICS

Barakat, Ali Said, *A nonparametric multivariate test for homogeneity based on all nearest neighbors.*

Carr, Gregory John, *Dose-response models in quantal response teratology.*

Cheng, Yue Mei, *A modified score test for highly stratified survival data in randomized clinical trials.*

De Leon-Wong, Emelita, *An empirical assessment of two compensation strategies for nonresponse in a panel survey.*

Flyer, Paul Alan, *Finite population correction for replication estimates of variance.*

Malott, Carolin M., *Maximum likelihood methods for nonlinear regression models with compound-symmetric error covariance.*

McMahon, Robert Patrick, *Analysis of nonfatal outcomes in clinical trials in which mortality is present.*

Murray, Sharon Cornell, *Linear models with generalized AR (1) covariance structure for irregularly-timed data.*

Potter, Francis J., *Methods for extreme weights in sample surveys.*

Williams, Paige Leigh, *Analytic expressions for maximum likelihood estimators in a nonparametric model of tumor incidence and death.*

MATHEMATICS

Peterson, Gregory, *Total cohomology classes of the local bicomplex.*

OPERATIONS RESEARCH

Curet, Norman David, *Solving large linearly constrained optimization.*

STATISTICS

Benhenni, Karim, *Sampling designs for estimating integrals of stochastic processes.*

Chu, Chih-Kang, *Some results on nonparametric regression.*

Crowell, John Irving, *On sequential estimation of the renewal function, optimal block replacement policies, and fixed-width confidence bands.*

Murphy, Susan, *Time-dependent coefficients in a Cox-type regression model.*

Nakamura, Miguel, *Transformations to symmetry in the transform-both-sides regression model.*

Roginsky, Allen Leonid, *On the central limit theorems for the renewal and cumulative processes.*

Stromberg, Arnold, *Robust efficient estimation of nonlinear regression parameters.*

NORTH DAKOTA

North Dakota State University (1)

MATHEMATICS

Obert, David G., *On the exact estimates of exponential dichotomy roughness.*

OHIO

Air Force Institute of Technology (1)

MATHEMATICS AND STATISTICS

Sultan, Ahmed, *Applications of nonparametric density estimation.*

Bowling Green State University (5)

MATHEMATICS AND STATISTICS

Amey, Alphonse K. A., *Robustness study of certain multivariate test criteria when sampling from a contaminated normal model.*

Chao, Chi-Chin, *Inference about covariance matrices under repeated measurements model.*

Fernando, Thotage S. A., *Special topics in univalent and multivalent functions.*

Maroli, John A., *Tree permutation groups.*

Ofori-Nyarko, Samuel, *Improved estimation of the covariance matrix, the precision matrix and the generalized variance.*

Case Western Reserve University (2)

OPERATIONS RESEARCH

Hung, Rudy Ka Yiu, *Hierarchical workforce scheduling.*

Rabinowitz, Gad, *Quality control of multistage production systems.*

Kent State University (1)

MATHEMATICAL SCIENCES

Marouf, Mousa Said, *Summability matrices that preserve various types of sequential equivalence.*

Ohio University (5)

MATHEMATICS

Coutant, Basil W., *Cardinal function dualities between a space X and its continuous real-valued functions.*

Gunawardena, Ananda D., *Nonnegative matrices and applications to linear systems.*

Miller, Edward Stephen, *Isocompactness properties characterized by maximal open ideals.*

Wu, Daxin, *Some results for the two-dimensional Korteweg-deVries equations.*

Yaacob, Yusof Bin, *Periodic solutions of some functional differential equations with state-dependent delays.*

Ohio State University (23)

MATHEMATICS

Andaloro, Paul, *On simplicity of certain infinite-dimensional Lie algebras.*

Bajnok, Bela, *Construction of spherical t-designs.*

Banaszak, Gryzegorz, *Algebraic K-theory of number fields and rings of integers and the Stickelberger ideal.*

Bolinger, Karen, *Pointwise closure models for slender nonNewtonian.*

Chen, Hua, *The localization theorems of S^3-equivalent cohomologies.*

Chilakamarri, Kiran Babu, *Unit-distance graphs in Euclidean spaces.*

Gajda, Wojciech, *On epicyclic sets.*

Kwok, Wing Man, *Character tables of association schemes of affine type.*

Lee, Doobum, *Contributions to rational homotopy theory of S^1 spaces.*

Lovric, Miroslav, Ln+2/2-curvature pinching.

Oporowski, Bogdan Stanislaw, *On Seymour's self-minor conjecture for infinite graphs.*

Peric, Goran, *The eta invariant on foliated manifolds.*

Schram, Erin, *T-designs on vector spaces over finite fields.*

Song, Yongjin, *Hermitian algebraic K-theory and dihedral homology.*

Wu, Fang Bing, *The index theorem for manifolds with cylindrical and elliptic value problems.*

STATISTICS

Bunge, John, *Distribution theory for record statistics from random record models.*

Chang, Yueh-Jane, *Optimal block designs with nested rows and columns.*

Chen, Yuh-Ing, *Nonparametric procedures for structured effects in analysis of variance.*

Hshieh, Paul B., *Estimation of the survival function for type II censoring.*

Park, Dong-Kwon, *Construction and efficiencies of multi-dimensional designs.*

Peng, Nanfu, *Birth and death processes with disastus.*

Soong, Wen-Chang, *On multiple comparisons for complex experimental designs.*

Wei, FeiFei, *Optimal intergenotypic competition designs and optimal weighing designs.*

University of Cincinnati (5)

MATHEMATICAL SCIENCES

Fan, Guangwei, *Existence and stabilities of positive solutions of degenerate and periodic reaction-diffusion systems.*

Moena, Ricardo, *Bifurcation of periodic points in a lattice of coupled logistic maps.*

Roth, Constance, *An integral solution approach for the inverse heat conduction problem.*

QUANTITATIVE ANALYSIS
AND INFORMATION SYSTEMS

Hsu, Chyi-Hung, *A study of heteroscedastic anova models and a multivariate test for heteroscedasticity.*

Pratsini, Eleni, *The capacity constrained lot sizing problem with process and set up learning.*

OKLAHOMA

Oklahoma State University (4)

MATHEMATICS

Capehart, Steven Russell, *Techniques for accelerating interative methods for the solution of mathematical problems.*

STATISTICS

Faries, Douglas Evan, *A new sequential approximation method.*

Fei, Wuchen, *A new method for the Robbins-Monro stochastic approximation procedure.*

Mohd Nor, Abu Hassan Shaar, *The effect of initial classification on outlier testing in a linear model of constant intraclass correlation.*

University of Oklahoma (4)

BIOSTATISTICS AND EPIDEMIOLOGY

Davis, Alan Berry, *Subset selection of high rate counties.*

Torres, Carl G., *Epidemiology of nosocomial infections in ten Oklahoma hospitals: A four year study.*

MATHEMATICS

Davis, Bradford Dion, *The effect of equivalent models on specification searches in covariant structure modeling.*

Millsbaugh, Richard Paul, *Dimension and mappings.*

OREGON

Oregon State University (9)

MATHEMATICS

Andersen, Robert Nels, *Homotopy construction techniques applied to the cell-like dimension raising problem and to higher-dimensional dunce hats.*

Bodvarsson, Gudrun Marianne, *Solutions to some linear evolutionary systems of equations: A study of the double porosity model of fluid in fractured rock and its applications.*

Shea, Edward Carl, *Minimal simultaneous embeddings of central simple algebras.*

STATISTICS

Bedier, Mostafa, *Post-stratified estimation using a kown auxiliary variable.*

Bolouri, Maryam, *Network models with generalized upper bound side constraints.*

Ganio, Lisa Maria, *Diagnostic tools for overdispersion in generalized linear models.*

Hall, Katherine B., *Economically optimal control charts for two stage sampling.*

Sauter, Roger Mark, *A method for estimation of generalized linear models when explanatory variables contain measurement error.*

Viroonsri, Boonchai, *Estimation of totals for skewed populations in repeated agricultural surveys.*

University of Oregon (5)

MATHEMATICS

Asiry, Mansour, *On optimal monosplines with a maximal number of zeros.*

Holte, Sarah Elizabeth, *Some characterizations of Peano continua as images of dendrites.*

Mooney, Lesley Jones, *Massey products, lower central series and Fox derivatives.*

Randolph, Timothy W., *Spectral theory in Banach algebras related by a continuous homomorphism.*

Volpert, Klaus Ernest, *On the cohomology of transitive Lie algebras.*

PENNSYLVANIA

Carnegie-Mellon University (11)

MATHEMATICS

Haidar, Salim Mohammad, *The Lavrentiev phenomenon in nonlinear elasticity.*

Harche, Farid, *Studies on set covering, set partitioning and vehicle routing problems.*

Hou, Lisheng, *Analysis and finite element approximation of some optimal control problems associated with the Navier-Stokes equations.*

Meir, Amnon J., *Existence, uniqueness and finite element approximations of solutions of the equations of stationary, incompressible MHD.*

Messaoudi, Salim, *On local existence and formation of singularities in nonlinear thermoelasticity.*

Samelson, Sandra L., *Tchebychev nets on two dimensional Riemannian manifolds.*

Xu, Gan-Lin, *A duality approach to a Stochastic consumption/portfolio decision problem in a continuous time market with short-selling prohibition.*

STATISTICS

Epstein, Leonardo David, *Bayesian estimation in multidimensional contingency tables.*

Kim, Chul Eung, *Stochastic modeling of incarceration processes.*

Kim, Sung-Ho, *Construction of and interpretation from decision-support trees.*

Rossman, Allan Joseph, *A Bayesian approach to tournament design.*

Drexel University (3)

MATHEMATICS AND
COMPUTER SCIENCE

Clavner, Hannah, *The acoustic profile reconstruction of a Lossy one-dimensional medium.*

McLeod, Douglas Scott, *A new interior point algorithm for fractional linear programs.*

Ringel, Emanuel, *A stochastic analysis of state transitions in an air space management system.*

Pennsylvania State University (13)

MATHEMATICS

Chou, Wun-Seng, *Permutation polynomials on finite fields and their combinatorial applications.*

Chun, Seon Ae, *On the theory of blocks with modules.*

Hansen, Carsten Bo, *The Jacobson radical of certain group rings.*

Harnchoowong, Ajchara, *On the L-sylow subgroups of the ideal class groups module F.*

Lee, Hee-Jung, *Maximal orders in nonassociative quantention algebras.*

Weiss, Tomasz, *Martin's Axiom for σ-centered partial orders and some properties of special subsets of the set of real numbers.*

Yan, Pei-Yuan, *Lower bound techniques in parallel computation.*

STATISTICS

Furman, William, *A moment matrix approach to the inferential problems of normal mixtures.*

Grego, John, *Some extensions of the random effects Rasch model.*

Johnson, Keith L., *Higher order antedependence models.*

Kissinger, Terry, *Using distribution-function metrics to measure the rate of convergence of the transient distribution to the steady-state distribution in an M/M queue.*

Kundu, Debasis, *Some results in estimating the parameters of exponential signals in noise.*

Naranjo, Joshua, *Bounded-influence regression: A modified Wilcoxon.*

Temple University (3)

STATISTICS

Chan, Wai-sum, *Some robust methods for time series modeling.*

Lee, Jong-Hyup, *Outlier analysis in time series.*

Vakil, Ahmad Farough, *Non-adaptive group-testing procedure for the hypergeometric problem.*

University of Pennsylvania (5)

MATHEMATICS

Cao, Jianguo, *Applications of singular differential equations to Riemannian geometry.*

Coll, Vincent E., Jr., *Universal deformation formulae.*

Jin, Zhiren, *Three problems concerning the elliptic equations and systems.*

Talvacchia, Janet C., *Prescribing the curvature of a principal bundle connection.*

Zito, Jennifer Snyder, *$\{\alpha, c\}$-critical graphs.*

University of Pittsburgh (9)

BIOSTATISTICS

Bush, James R., *A nonparametric method for evaluating a diagnostic test using a minimax criterion.*

Fu, John Lieo-hu, *Nonparametric regression with right-censored lifetime data by Buckley-James least squares method—improvements and statistical inference.*

Zhou, Yujing, *Investigation of robustness of dose-response relationship in occupational health studies.*

MATHEMATICS AND STATISTICS

Chen, Chih-Sheng, *On the age and block replacement policies with or without discounting.*

Fioravanti, Mario A., *Yang-Mills fields and hypersurface twistors.*

Gale, Sherry Louise, *Measure-compact spaces.*

Gao, Ji, *The geometry and the normal structure in Banach spaces.*

Wu, Yuehua, *Asymptotic theory of minimum L_1-norm estimates and M-estimates in linear models.*

Zhang, Hong, *Symmetries in graphs.*

RHODE ISLAND

Brown University (11)

APPLIED MATHEMATICS

Cai, Wei, *Non-oscillatory spectral methods for shock computation.*

Desai, Mihir, *Computation in optimal control of steady state Navier-Stokes equations.*

Jiang, Xinming, *Augmented Lagrangian method for impedance computed tomography.*

Leader, Jeffery James, *The generalized theodorus iteration.*

Manbeck, Kevin Monroe, *Bayesian statistical methods applied to emission tomography with physical phantom and patient data.*

Martins, Luiz Felipe S., *Limit theorems for networks of queues in heavy traffic: Routing control and average cost per unit time.*

Mikami, Toshio, *Small random perturbations of dynamical systems and Markov processes from marginal distributions.*

Shin, Hyundoo, *Chaotic sedimentation of nonspherical particles in a cellular flow field.*

MATHEMATICS

Hironaka, Eriko, *Abelian coverings of CP^2 branched along configurations of real lines.*

Johnson, Ockle E., III, *Chain level Whitney duality theorems for simplicial manifolds.*

Park, Hwasin, *Idempotent relations and the conjecture of Birch and Swinnerton Dyer.*

University of Rhode Island (1)

MATHEMATICS

Kuruklis, Spiridon, *Oscillatory and asymptotic behavior of certain difference equations.*

SOUTH CAROLINA

Clemson University (4)

MATHEMATICAL SCIENCES

Barrett, Bruce Edward, *Variable selection and influence diagnostics in multivariate regression.*

Bowers, Melissa Cauthen, *A hierarchical model for production planning.*

Narayanan, Chandrasekharan, *Fase Parallel algorithms and enumeration techniques for partial K-trees.*

Ramsier, Steven Wayne, *Graphical representations of multivariate data.*

University of South Carolina (5)

MATHEMATICS

Hu, Yingkang, *Geometric modelling of densely distributed data.*

Wu, Ming-Shen, *Spanning trees and other problems.*

Yeh, Roger K. C., *Labeling graphs with a condition at distance two.*

STATISTICS

Hsi, Hsiu-Li, *Techniques and results for the analysis of mixture problems.*

Yang, Miinshen, *On limit theorems of the fuzzy C-means clustering procedure.*

TENNESSEE

Memphis State University (2)

MATHEMATICAL SCIENCES

Chu, Yu-Chao, *Generating asymptotically independent uniform random vectors.*

Gibi, Debra Jane, *Sufficient neighborhood conditions for a class of D-chromatic subgraphs.*

University of Tennessee (3)

MATHEMATICS

Anderson, Terry G., *A theory of relative boundedness and relative compactness for ordinary differential operators.*

Emert, John Wesley, *"Twisted" lens spaces.*

McKinney, William R., *Optimal error estimates for high order Runge-Kutta methods applied to evolutionary equations.*

Vanderbilt University (4)

MATHEMATICS

Hall, Gary C., *An age-size cell model with asymptotic exponential periodicity in the asymmetric case.*

Lukacs, Erzsebet, *Related structures of groups.*

Wiener, Howard William, *On an exterior Laplace equation problem with Robin boundary condition.*

Yu, Xingxing, *Contractible edge covers in 3-connected graphs.*

TEXAS

Rice University (6)

MATHEMATICAL SCIENCES

Dobson, David Clark, *Stability and regularity of an inverse elliptic boundary value problem.*

Williamson, Karen Anne, *A robust trust region algorithm for nonlinear programming.*

MATHEMATICS

Chang, Sheun-Cheng, *Critical Riemannian metrics.*

Jones, Kerry Nelson, *Cone manifolds in 3-dimensional topology: Applications to branched covers.*

Lu, Ning, *Surface mapping classes and Heegaard decomposition of 3-manifolds.*

Mou, Libin H., *Some existence and uniqueness results of harmonic maps.*

Southern Methodist University (5)

COMPUTER SCIENCE AND ENGINEERING

Allen, David, *The design and implementation of the improved link II simulation model.*

Wang, Zhiming, *Shortest augmenting path algorithms for network problems.*

MATHEMATICS

Bogacki, Przemyslaw, *Efficient Runge-Kutta pairs and their interpolants.*

Paprzycki, Marcin, *Parallelization of boundary value problems software.*

STATISTICAL SCIENCE

Carrillo-Gamboa, Olivia, *Measurement error model collinearities.*

Texas A & M University (7)

MATHEMATICS

Arias, Alvaro, *Topics in Banach space theory.*

Kim, Young Sook, *Finite element methods for boundary value problems of mixed type.*

Lai, Ming-Jun, *On construction of bivariate and trivariate vertex splines on arbitrary mixed grid partitions.*

Watret, John Robert, *On dynamic transient anti-plane shear crack propagation in a general viscoelastic layer.*

STATISTICS

Ensor, Joe Edward, *A two-compartment, irreversible flow model with clustering.*

Kim, Jong-Duk, *Construction of restricted D-optimal designs for simple polynomial regression models.*

Muehsam, Mitchell J., *Comparison of correspondence analysis to classical statistical methodology.*

Texas Tech University (7)

MATHEMATICS

Ayoubi, Isam S., *An inverse scattering problem for hyperbolic systems of first order in semi-infinite media.*

Chen, Dafeng, *Some nonparametric methods in estimating the hazard rate function.*

Esparza, Sergio O., *Discrete multistate coherent systems and the three modules theorem.*

McConn, Kelly, *Accelerated life testing with several type II censored samples.*

Obeyesekere, Mandri N., *A porous media problem arising in the study of water transport in soil and roots.*

Wang, Hsing Yong, *On zeros of partial sums of a mapping of the unit disk onto a sector.*

Xie, Shishen (Sam), *Observability of Laplace's equation on the cylindrical domain.*

University of Houston (2)

MATHEMATICS

Cook, Michael William, *Periodic points for mapping of the circle and other locally connected continua.*

Insall, Eugene Madison, Jr., *Nonstandard methods and finiteness conditions in algebra.*

University of North Texas (3)

MATHEMATICS

Hipp, James William, Jr., *The maximum size of combinatorial geometries excluding wheels and whirls as minors.*

Park, Hong Goo, *Polynomial isomorphisms of Cayley objects over a finite field.*

Spear, Donald W., *Hausdorff packing capacity dimensions.*

University of Texas, Arlington (4)

MATHEMATICS

Kelly, Theresa Diane, *Partical modelling of an elastic arch in three dimensions.*

Mahmoudi, Mohse, *Partical modelling of fluid phenomena in three dimensions.*

Sivapragasam, Sathananthan, *Some problems in impulsive integro-differential equations.*

Zouyousetain, Mohammad, *Difference equations of Volterra type.*

University of Texas, Austin (14)

MATHEMATICS

Blankenbaker, John R., *Fourier analysis on the Sierpinski gasket.*

Brahm, Matthew, *The Repovs conjecture.*

Burger, Edward B., *Diophantine approximation in S-integers.*

Chang, Yang Chun, *Chance constrained programming and Chebychev systems with applications.*

Hong, Chan Yong, *On some questions concerning weak identities, invariants, and integrality.*

Joubert, Wayne David, *Generalized conjugate gradient and Lanczos methods for the solution of nonsymmetric systems of linear equations.*

Kang, Joonsook Lee, *The condition number and the singularity of a certain interpolation matrix.*

Miyazaki, Katura, *Non-simple ribbon fibered knots.*

Oppe, Thomas Charles, *The iterative solution of large sparse linear systems using vector computers.*

Rong, Yongwu, *Degree one maps between geometric three-manifolds.*

Schumacher, Carol Smith, *Sequential domination in Banach spaces and the geometry of JH^*.*

Shi, Sheng Guang, *Accurate and efficient double-bootstrap methods.*

Struppeck, Thomas, *Inequalities for heights of algebraic subspaces with applications to construction of auxiliary polynomials.*

Sundheim, Paul, *The Reidemeister and Markov theorems via diagrams for links in 3-manifolds.*

University of Texas, Dallas (2)

MATHEMATICAL SCIENCES

Igwe, Jerome Okwuchukwu, *Some matrix identities and orderings applicable to combining multivariate estimates.*

Richardson, Paul Alton, *Construction of central, spin-orbit, and L-dependent potentials.*

UTAH

University of Utah (4)

MATHEMATICS

DeYoung, Gary Wayne, *The mathematical basis for phase response curves.*

Hernandez, Luis, *Maximal representations of surface groups in the group of isometries of a bounded symmetric domain.*

Jimenez-Reyes, Jesus, *The contraction problem for rational curves on complex varieties.*

Li, Ya, *The asymptotic behavior of solutions of nonlinear parabolic differential equations.*

Utah State University (1)

MATHEMATICS AND STATISTICS

Loveland, Susan Marie, *Spectral analysis of the Legendre equations.*

VIRGINIA

University of Virginia (3)

APPLIED MATHEMATICS

Cleary, Andrew James, *Algorithms for solving narrowly banded linear systems on parallel computers using direct methods.*

Harrar, David Lawrence, II, *Conjugate gradient methods for red/black systems on vector computers.*

MATHEMATICS

Thompson, Gary Lynn, *Subgroup rigidity in group rings.*

Virginia Polytechnic Institute and State University (9)

MATHEMATICS

Carpenter, Lonnie Eugene, *Cascade analysis and synthesis of transfer functions of infinite-dimensional linear systems.*

Hill, David Dean, *Finite dimensional approximations of distributed parameter control systems.*

Hymo, John Alexander, *Problems involving relative integral bases for quartic fields.*

Kang, Sungkwon, *A control problem for Burgers' equation.*

Liu, Zhuangyi, *Approximation and control of a thermoviscoelastic system.*

Rakowski, Marek, *Zero-pole interpolation of nonregular rational matrix functions.*

STATISTICS

Huang, Won-Chin, *Applications of the Chinese Remainder Theorem to the construction and analysis of confounding systems and randomized fractional replicates for mixed factorial experiments.*

Mercante, Donald, *Analysis of multi-species microcosm experiments.*

Ramsey, Philip J., *Estimation of group delay in the presence of short data records.*

WASHINGTON

University of Washington (13)

BIOSTATISTICS

Cologne, John B., *Nonparametric regression analysis of Ames mutagenicity assay.*

Drake, Christiana, *Inferring treatment effect from observational studies: Adjustment by prognostic variables vs. the propensity score.*

LeBlanc, Michael Leo, *Recursive partitioning for censored survival data.*

Murtaugh, Paul, *Simultaneous analysis of efficacy and toxicity in dose-ranging trials with new drugs.*

Sasieni, Peter, *Beyond the Cox model: Extensions of the model and alternative estimators.*

Sharples, Katrina, *Regression analysis of correlated binary data.*

Whitney, Coralyn, *Misclassification of covariates in logistic regression: An application for latent class analysis.*

MATHEMATICS

Bryan, Kurt Matthew, *On an inverse problem for certain discontinuous conductivities.*

Nelson, Gary S., *Congruences between periods of modular forms.*

Nielsen, Mark J., *Tilings of topological vector spaces.*

Richter, William G., *Attaching maps for the disk bundles of some Morse-Bott decompositions.*

STATISTICS

Geyer, Charles James, III, *Likelihood and exponential families.*

Michalak, John Charles, *Visualization of tree-based models.*

WISCONSIN

University of Wisconsin, Madison (30)

INDUSTRIAL ENGINEERING

Lai, Wenje, *A statistics-based information and expert system approach for activated sludge wastewater treatment process control.*

Leung, Ying Tat, *Single-run optimization of discrete-event simulations.*

MATHEMATICS

Felmer, Patricio Luis, *Applications of variational methods to Hamiltonian systems.*

Fischer, Ismor, *Discrete orthogonal polynomials.*

Huan, Zhongdan, *Generalized porous medium equations with force term.*

Kang, Hyeonbae, *Tangential Cauchy-Riemann equations on certain unbounded weakly pseudoconvex domains.*

Katzenberger, Gary Shon, *Solutions of a stochastic differential equation forced onto a manifold by a large drift.*

Kavanagh, James P., *Splittings of M-matrices.*

Mc Dougal, Kevin F., *Some combinatorial properties of $(0, 1)$-matrices.*

Shader, Bryan L., *Biclique decompositions and tournaments.*

Welsh, Charles C., *Some results in crossed products and Lie algebra smash products.*

Zhang, Bingyu, *Some results for nonlinear dispersive wave equations with applications to control.*

STATISTICS

Carriere, Jacques, *Customer-focused decision making.*

Chen, Shun-Yi, *Tolerance limits for complex population.*

Chen, Zehua, *Interaction spline models.*

Chough, Keumhee Danielle, *Statistical issues in the repeated measures data in the presence of treatment effects.*

Gilardoni, Gustavo, *Combining prior opinions.*

Gu, Chong, *Computing smoothing spline models.*

Hau, Man Cheung, *Constrained experimental designs.*

Ho, Shu-Yen, *Sparse matrix methods for the unbalanced multifactor ANCOVA.*

Hsu, Shih-Jian John, *Bayesian inference and marginalization.*

Huang, Min-Ching, *Piecewise linear tree-structured regression.*

Kim, Choongrak, *A study on influential sets in regression.*

Kim, Honggie, *Contributions to correspondence analysis and contingency tables.*

Kramer, Timothy Talbot, *Process control from an economic point of view.*

Lee, Jooho, *On asymptotics for the NPMLE of the probability of discovering a new species and an adaptive rule for sequential searches.*

Ramirez, Jose Gregorio, *Sequential methods in statistical process monitoring.*

Robinson, James M., *Modeling inference and forecasting techiques for the analysis of non-life insurance claim reserves.*

Wang, Jung-Chao, *Orthogonal arrays and nearly orthogonal arrays with mixed levels: Construction and applications.*

Wei, Greg Cheng-Gang, *Posterial computations with applications for censored regression data.*

University of Wisconsin, Milwaukee (3)

MATHEMATICAL SCIENCES

King, Brian S., *Some properties of Cartesian squares of linearly-ordered continuous sets.*

Pattanaik, Lalit M., *Large sample properties of density estimators based on randomly right sensored data.*

Sivanesen, Sivalingam, *Iterates of maps on the interval.*

WYOMING

University of Wyoming (2)

STATISTICS

Evans, Marc A., *Topics in the estimation of population size from capture-recapture data using log-linear models.*

Morsi, Morsi Ali Fawzi, *Multivariate sampling models.*

CANADA

Dalhousie University (1)

MATHEMATICS, STATISTICS AND COMPUTING SCIENCE

Clack, Rolf, *Some Minkowski geometry and the isoperimetric problem.*

McGill University (6)

MATHEMATICS AND STATISTICS

Blanchet-Sadri, Francine, *Some logical characterizations of the dot-depth heirarchy and applications.*

Guo, Kanghui, *On the spectral synthesis property and its application to partial differential equations.*

Joseph, Lawrence, *The multi-path change-point.*

Nahum, Carole, *Second order sensitivity analysis in mathematical programming.*

Sawyer, Patrice, *The heat equation on the symmetric space associated to* $\mathrm{SL}(n, R)$.

Zielinski, Jan Miroslaw, *Clustering procedures for sample paths from Poisson processes.*

Queen's University (1)

MATHEMATICS AND STATISTICS

Mansourati, Zouheir Georges, *Non-classical diffusion equations related to a class of birth-death processes with two boundaries.*

Ottawa-Carleton Institute (2)

MATHEMATICS AND STATISTICS

Grover, Parnesh, *Orderings on division rings and normal subgroup structure of a unitary group.*

Jodayree, Aliasghar, *Higher-order eigenvalue asymptotics for Sturm-Liouville problems with one simple turning-point.*

Simon Fraser University (5)

MATHEMATICS AND STATISTICS

Ahmad, Seema, *Some results on the structure of the* $\sum_2$ *enumeration degrees.*

Cowan, David Francis, *Wreath products and varieties of inverse semigroups.*

MacGillivray, Gary, *The complexity of generalized colourings.*

Oral, Haluk, *Self-dual codes and graphs.*

Zhu, Ruopeng, *Distance regular graphs and eigenvalues multiplicities.*

Université de Montréal (9)

MATHÉMATIQUES ET STATISTIQUE

Boutin, Pierre, *La super-associativité des polynômes dans les bi-demi-groupes polynomialement distributifs.*

Frih, El Mostapha, *Approximation holomorphe sur certains non-bornés en plusieurs variables complexes.*

Ghemires, Touria, *Optimisation de forme et application à des problèmes thermiques.*

Goupil, Alain, *Produits de classes de conjugaison du groupe symétrique.*

Ladouceur, Stéphane, *Trois problèmes d'approximation qualitative.*

Leblond, Yves, *Contributions à la théorie d'estimation des sous-populations.*

Maurer, Serge, *Sur les graphes munis d'une connexité régulière.*

Perron, Daniel, *Hypothèses de détermination et hiérarchies.*

Zawadowski, Marek, *Un théorème de la descente pour les prétopos.*

Université de Sherbrooke (1)

MATHEMATICS/INFORMATION

Ferland, René, *Équations de Boltzmann scalaires: Convergence vers l'équilibre, fluctuations et propagation du chaos trajectorielle.*

University of Alberta (2)

MATHEMATICS

Ganta, Lakshma Reddy, *Some oscillation results for differential systems.*

Sivakumar, Natarajan, *Studies in box splines.*

University of British Columbia (1)

STATISTICS

Leroux, Brian Gilbert, *Maximum likelihood estimation for mixture distributions and hidden Markov models.*

University of Saskatchewan (2)

MATHEMATICS

Eum, Kyung Lyun, *Convolution operator norms.*

Tuncali, Hüseyin Murat, *Some generalizations of the Hahn-Mazurkiewicz theorem.*

University of Toronto (10)

MATHEMATICS

Bradley, Robert Emmett, *Induced operators and alternating sequences.*

Jarosz, Jerzy, *J-unitary dilation of a continuous semigroup of operators.*

Kalajdzievski, Saso, *Centralizers of finite subgroups of the automorphism groups of a free group.*

Kirkland, Stephen James, *Spectral regions for Leslie matrices.*

MacDonald, Gordon Wilson, *Invariant subspaces for weighted translation operators.*

Shank, Robert James, *Polynomial algebras over the Steenrod algebra, summands of $H^*(B(Z/sZ)^s)$ and Lannes' division functors.*

Yildirim, Cem Yalcin, *Zeta function theory: Pair correlation and value distribution.*

Zou, Jian, *Division in spaces of holomorphic and C^∞-functions.*

STATISTICS

Ferguson, Heather Gail, *Asymptotic properties of a conditional maximum likelihood estimator.*

Lee, Hyun Suk, *A conditional approximation to the observed levels of significance for a real parameter.*

University of Waterloo (15)

APPLIED MATHEMATICS

Hewitt, Conrad Glyn, *Asymptotic states of G_2 cosmologies.*

Vinette, Francine, *Symbolic computation in quantum mechanics: Determination of lower bounds using the inner projection technique and some related problems.*

COMBINATORICS AND OPTIMIZATION

Furino, Steven Charles, *a-resolvable structures.*

Gamble, Albert Bruce, *Polyhedral extensions of matching theory.*

Hadley, Scott, *Continuous optimization approaches for the quadratic assignment problem.*

Holman, Glen Stuart, *A curvilinear algorithm for unconstrained optimization using directions of negative curvature.*

Seyffarth, Karen, *Cycle and path covers of graphs.*

Shepherd, Bruce, *Near-perfection and stable set polyhedra.*

Visentin, Terry I., *A character theoretic approach to the study of properties of maps in orientable surfaces.*

PURE MATHEMATICS

Casperson, David C., *Free products of commuting Lie algebras and strictly imaginary roots.*

Dicks, Dwayne Harold, *Approximately multiplicative functions.*

STATISTICS AND ACTUARIAL SCIENCE

Darlington, Gerarda A., *Extensions of logistic regression with applications to genetic epidemiology and longitudinal data analysis.*

Lesperance, Mary Louise, *Mixture model as models involving many incidental parameters.*

O'Hara-Hines, R. J., *Some methods for the analysis of toxicological mortality data grouped over time.*

Sitter, Randy R., *Resampling procedures for complex survey data.*

University of Western Ontario (3)

APPLIED MATHEMATICS

Meredith, David, *Boundary approximation methods for some free and moving boundary problems.*

Pettigrew, Michel, *On compact finite difference schemes with applications to moving boundary problems.*

Sowmya Narayanan, Kumbakonam S., *A jet calculus approach including coherence effects and the associated problem of moment inversion.*

Doctoral Degrees Conferred 1988–1989
Supplementary List

The following list supplements the list of thesis titles published in the November 1989 *Notices*, pages 1169–1188, and the May/June 1990 *Notices*, page 558.

LOUISIANA

Louisiana State University, Baton Rouge (1)

MATHEMATICS

Carpenter, Jenna, *Finiteness theorems for forms over number fields.*

MICHIGAN

Michigan State University (1)

MATHEMATICS

Lu, Ke-ning, *Invariant manifolds for flows in Banach spaces.*

NEW MEXICO

University of New Mexico (1)

MATHEMATICS AND STATISTICS

Taijeron, Henry John, *Aplinwa on hyperspheres.*

NEW YORK

Rensselaer Polytechnic Institute (4)

OPERATIONS RESEARCH AND STATISTICS

Bhaskaran, Krishnakumar, *Modeling and analytical foundations of the stochastic multiple objective optimization problem for integrated warehouse operations.*

Jain, Sanjay, *Decision framework for interruption handling in flexible manufacturing systems.*

Lath, Sukriti, *The multidimensional facility layout problem: A hierarchical model and solution method.*

Vasquez, Alberto, *Concurrent resource scheduling for flexible manufacturing systems.*

OHIO

Ohio State University (1)

MATHEMATICS

Wierdl, Mate, *Almost everywhere convergence and recurrence along subsequences in ergodic theory.*

CANADA

McGill University (1)

MATHEMATICS AND STATISTICS

Gago-Couso, Felipe, *Internal weak opens, internal stability and Morse theory for synthetic germs.*

[34] *A Guide to NSF Science/Engineering Resources Data.* National Science Foundation, Washington, DC, 1987.

[35] Christine M. Matthews, Congressional Research Service Issue Brief, *Science, Engineering and Mathematics Precollege and College Education.* Library of Congress, Washington, DC, 1991.

[36] *Recruitment, Retention and Utilization of Federal Scientists and Engineers.* A report to the Carnegie Commission on Science, Technology & Governnment. National Academy Press, Washington, DC, 1990.

[37] National Research Council. *Moving Beyond Myths: Revitalizing Undergraduate Mathematics.* National Academy Press, Washington, DC, 1991.

[38] Richard C. Atkinson, *Supply and Demand for Scientists and Engineers: A National Crisis in the Making,* Science, April 27, 1990, 425–432.

[39] Robert Pool, *Who will do Science in the 1990s?*, Science, April 27, 1990, 433–435.

[40] *Survey of Mathematics and Statistics Departments at Higher Education Institutions.* Higher Education Surveys Report, Survey Number 5, December 1990. Sponsored by the National Science Foundation.

[41] Board on Mathematical Sciences. *Action for Renewing U.S. Mathematical Sciences Departments.* Washington, DC, National Research Council, 1990.

[42] Board on Mathematical Sciences. *Chairing the Mathematical Sciences Departments of the 1990s.* Proceedings of a Colloquium, October 27–28, 1989. Washington, DC, National Academy Press, 1990.

Doctoral Degrees Conferred 1989–1990

Supplementary List

The following list supplements the list of thesis titles published in the November 1990 issue of *Notices.* 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 granted by the department.

CALIFORNIA

University of Southern California (5)

MATHEMATICS

Bauer, Maximilian, *Example of pseudo-Anosov homeomorphisms.*

Jaekel, Tauno, *Stochastic flow with a singular vortex.*

Morris, Pricilla Jean, *On a class of homogeneous stochastic flows.*

Neubauer, Michael G., *On solvable monodromy groups of fixed genus.*

Spieler, Gisela, *Parameter estimation by system theoretic methods.*

COLORADO

University of Denver (1)

MATHEMATICS AND
COMPUTER SCIENCE

Marrannes-Marbeau, Jocelyne Helene, *Analysis of a discrete quantum probability model.*

KANSAS

Kansas State University (1)

STATISTICS

Crabb, Jeffrey, *A SAS program to correct the analysis of unbalanced two-way split-plot designs.*

MINNESOTA

University of Minnesota, Minneapolis (4)

STATISTICS

Adams, John, *Evaluating regression strategies.*

Bian, Guorui, *Bayesian statistical analysis with independent bivariate priors for the normal location and scale parameters.*

Kang, Chang Wook, *Generalization of the diagnostic methods of recursive residuals.*

Wong, Weng Kee, *Heteroscedastic optimal design.*

MONTANA

Montana State University (2)

MATHEMATICAL SCIENCES

Doyle, Randall Ross, *Extensions to the development of the sine-Galerkin method for parabolic problems.*

Lewis, David Lamar, *A fully Galerkin method for parabolic problems.*

NEW YORK

Polytechnic University (4)

MATHEMATICS

Bershatsky, Eugene, *The development of confidence bounds for a sales forecast.*

Chau, Jack-Kang, *Normal lattices and measures.*

Hertzlinger, Joseph, *Normality and similar properties in lattices.*

Schutz, Robert W., *On regular lattice measures.*

CANADA

University of Calgary (1)

MATHEMATICS AND STATISTICS

Ye, Qiang, *Symmetric matrix pencils.*

Errata

The thesis title for Mark R. Purtill (Mathematics, Massachusetts Institute of Technology) was incorrect in the November 1990 *Notices.* The correct title is "André permutations, lexicographic shellability, and the cd-index of a convex polytope."

The name of David Halpern (Mathematics, University of Arizona) was spelled incorrectly in the November 1990 *Notices.*