Doctoral Degrees Conferred 1984–1985

THE ANNUAL AMS list of doctoral degrees in the mathematical sciences and related subjects reports 769 degrees conferred between July 1, 1984, and June 30, 1985 by 193 departments in 135 universities in the United States and Canada. Each entry contains the name of the recipient and the thesis title. The numbers in parentheses following the names of universities have the following meanings: the first number is the number of degrees listed for that university; the next seven numbers are the number of degrees in the categories of 1. Pure mathematics (i.e., algebra, number theory, analysis, functional analysis, geometry, topology, logic, or probability); 2. Statistics; 3. Computer science; 4. Operations research; 5. Applied mathematics; 6. Mathematics education; 7. Other.

ALABAMA

Auburn University
(2;2,0,0,0,0,0,0)

MATHEMATICS

Glover, James Ervin, *On the construction of almost resolvable Mendelsohn triple systems having prescribed intersections.*

Smith, Cheryl Mays, *Complex stable laws and their domains of attraction.*

ARIZONA

Arizona State University
(2;1,0,0,0,1,0,0)

MATHEMATICS

Charris, Jairo, *Sieved Pollaczek and random walk polynomials.*

Clarkson, Eric Wayne, *Clifford algebras in relativistic quantum mechanics and in the gauge theory.*

University of Arizona
(2;0,0,0,0,1,0,1)

APPLIED MATHEMATICS

West, Karen Frances, *An extension to the analysis of the shift-and-add method: Theory and simulation.*

MATHEMATICS

Gossett, Eric James, *Partitioning strongly regular graphs.*

ARKANSAS

University of Arkansas
(1;1,0,0,0,0,0,0)

MATHEMATICAL SCIENCES

Li, Lide, *Order-theoretic and ring-theoretic approaches to inverse semigroups.*

CALIFORNIA

California Institute of Technology
(8;2,0,0,0,5,0,1)

APPLIED MATHEMATICS

Fier, Jeffrey Michael, *Part I: Fold continuation and the flow between rotating coaxial disks; Part II: Equilibrium chaos; Part III: A mesh selection algorithm for two-point boundary value problems.*

Henderson, Michael Edward, *Complex bifurcation.*

Henshaw, William Douglas, *Part I: The numerical solution of hyperbolic systems of conservation laws. Part II: Composite overlapping grid techniques.*

Molloy, Charles Thomas, *Contributions to the kinetic theory of traffic flow with queuing.*

Stanley, Elizabeth Ann, *Diffusion in glassy polymers.*

MATHEMATICS

Blaum, Mario, *Error correcting codes for computer memories.*

Klemes, Ivo, I. *Idempotent multipliers of H^1 on the circle;* II. *A mean oscillation inequality for rearrangements.*

Lewy, Michael Robert, *The indecomposables of rank 3 permutation modules.*

Stanford University
(25;4,7,1,6,2,0,5)

ENGINEERING-ECONOMIC SYSTEMS

Brandeau, Margaret L., *Exploiting convexity and separability properties of location problems.*

Freeman, Darrell, *Incentives in electric utility rate regulation.*

Holtzman, Samuel, *Intelligent decision systems.*

Ikhwan, Muhammad-Ali, *Comparison of alternative development paths, the example of oil economies.*

Logan, Douglas, *The value of probability assessment.*

Lounamaa, Pertti, *Models of multi-agent behavior: A simulation and expert environment approach.*

Salinas-Ortiz, José A., *Technology, accumulation and distribution in the north-south relations; a unified theoretical analysis.*

MATHEMATICS

Flaminio, Livio, *Ridgidity properties of horospherical foliations.*

Hitt, John Daniel, *Hardy spaces on an annulus.*

Johnson, Stewart, *Continuous measures and strange attractors in one dimension.*

Liao, Ming, *Riesz representation and duality.*

Tam, Luen-Fai, *The behavior of capillary surfaces as gravity tends to zero.*

Velling, John Arthur, *Spherical geometry and the Schwartzian differential equation.*

OPERATIONS RESEARCH

Chadee, Floyd Fitz-Hubert, *Sparse quasi-Newton methods and the continuation problem.*

Perkins, Mark Mathiesen, *On maximizing the expected lifetime of replaceable systems.*

Scott, Dan Martin, *A dynamic programming approach to time-staged convex programs.*

So, Kut-cheung Rick, *Optimal maintenance policies for single-server queueing systems subject to breakdowns.*

Svoronos, Alexander Nikolaos, *Duality theory and finite horizon approximations for discrete time infinite horizon economic models.*

STATISTICS

Burr-Doss, Deborah, *On errors-in-variables in binary regression-Berkson case.*

Dehnad, Khosrow, *Boundary detection smoothers for classification of spatial data.*

Emoto, Sherrie Emiko, *The preferred choice between the maximum likelihood estimator and the Kaplan-Meier estimator.*

Hastie, Trevor John, *Principal curves and surfaces.*

Marhoul, Joseph Charles, *A model for large sparse contingency tables.*

Stein, Michael Leonard, *Estimation of spatial variability.*

Tibshirani, Robert John, *Local likelihood estimation.*

University of California, Berkeley
(54;31,7,1,3,7,0,5)

BIOSTATISTICS

Fang, Ji-Qian, *Multistate survival analysis with time-dependent covariates and censoring.*

Kampert, James B., *The modified score estimator of logistic regression coefficients in epidemiologic case-control studies.*

INDUSTRIAL ENGINEERING AND OPERATIONS RESEARCH

Agah, Mahmoud, *A seasonal forecasting model.*

Dincerler, Abdurrezak, *Project scheduling in project-oriented production systems.*

Lin, Cher-Sern Brian, *Design of a decision support system for a multi-single machine production system.*

Park, Jin Woo, *Design of a demand forecasting system for planning production of consumer products.*

Subramanian, G. S., *Bayesian approaches to evaluate system reliability.*

Tsao, Hsiao-Shen Logy, *An extension to the dynamic linear model.*

MATHEMATICS

Allen, David Lawrence, *Strong rates of convergence for differences between the sample distribution function and the quantile process.*

Andrews, Darry, *Sample path continuity of Wick polynomials in the free Markov field.*

Blicher, Albert Peter, *Edge detection and geometric methods in computer vision.*

Buffo, Alberto, *Inverse problem of potential scattering in three dimensions.*

Chen, Ten-Ging, *On Henkin's solution of the $\bar{\partial}$-problem on strictly convex domains in $\mathbf{C}^n$.*

Coonen, Jerome Toby, *Contributions to a proposed standard for binary floating-point arithmetic.*

Csizmazia, Anthony Paul, *Invariants under congruence for infinite dimensional operators.*

Dougherty, Randall Lee, *Narrow coverings of ω-product spaces.*

Doyle, John Comstock, *Matrix interpolation theory and optimal control.*

Embid-Droz, Pedro Fermin, *Well-posedness of the nonlinear equations for zero Mach number combustion.*

Exel, Ruy Filho, *Rotation numbers for automorphism of C^*-algebras.*

Fortune, Barry Alan, *A symplectic fixed point theorem for complex projective spaces.*

Greengard, Claude A., *Three dimensional vortex methods.*

Heumos, Michael Justin, *Produced representations of Lie Algebras.*

Howard, Mark Gilbeau, *Vaught's conjecture and the closed unbounded filter.*

Hymowech, Marvin, *Complete regular local rings of mixed characteristic.*

Kostlan, Eric James, *Statistical complexity of numerical linear algebra.*

Li, Ke-Zheng, *Classification of supersingular abelian varieties.*

Lipshutz, Robert Jay, *Stable rank 2 vector bundles on $\mathbf{P}^4$.*

Megory-Cohen, Igal, *Properties of hyperbolic crossed-product algebras.*

Ng, Kan Ching, *Relation algebras with transitive closure.*

O'Hara, Kathleen Marie, *Structure and complexity of the involution principle for partitions.*

Onsiper, Hursit Mustafa, *Rational maps and Albanese schemes.*

Paul, Deirdre Wynne, *Topics in bounded cohomology of groups.*

Perline, Ronald Keith, *Some aspects of the theory of time and band limited operators associated with Lamé's equations.*

Phillips, Norman Christopher, *K-theoretic freeness of actions of finite groups on C^*-algebras.*

Putnam, Ian Fraser, *The C^*-algebras associated with Denjoy homemorphisms.*

Rimlinger, Francis Stewart, *The structure of pregroups.*

Shaio, Jack, *Approximate equivalence for representations of C^*-algebras and C^*-dynamical systems.*

Shapiro, Jacob, *Finite algebras with abelian properties.*

Sheu, Albert Jeu-Liang, *The cancellation property for modules over the group C^*-algebras of certain nilpotent Lie groups.*

Spielberg, John Samuel, *Extensions of subalgebras of AF algebras.*

Sterling, Ivan Charles, *New examples of imbedded spherical soap bubbles in $S^{n(1)}$ and a generalization of Delaunay's theorem.*

Stern, Alan Spector, *The lattice of local interpretability of theories.*

Strouse, Elizabeth Jane, *Embedding the algebra of formal power series in several variables into a Banach algebra.*

Wongkew, Richard Alexander, *The complexity of finding zeroes.*

Woodin, W. Hugh, *Discontinuous homomorphisms of $C(\Omega)$ and set theory.*

Zierau, Roger Craig, *Geometric construction of unitary highest weight representation.*

Zizza, Frank, *K_2 and automorphisms of hyperbolic dynamical systems.*

STATISTICS

Chen, Hung, *Optimal rates of convergence for locating the global maximum of a regression function.*

Chiu, Shean-Tsong, *Statistical estimation of the parameters of a moving source from array data.*

Jelihovschi, Enio Galinkin, *Estimation of Poisson parameters, subject to constraints.*

Jhun, Myoungshic, *Bootstrap methods for density estimates and k-means clustering.*

Morita, June Gloria, *Nonparametric methods for matched observations from life distributions.*

Permutt, Thomas Joshua, *Preliminary testing for serial correlation in time-series regression.*

Weintraub, Marisa Yadlin, *Development of a model for probabilistic discrete decisions.*

University of California, Davis

(3;0,1,1,0,1,0,0)

MATHEMATICS

DeSanti, Albert James, *Boundary and interior layer behavior of solutions of the singularly perturbed semilinear elliptic boundary value problem.*

Wang, Richard Li-Chih, *Least squares piecewise polynomial approximation for volterra integral equations of the first kind.*

STATISTICS

Whitaker, Lyn, *Contributions to nonparametric estimation in reliability.*

University of California, Irvine

(1;1,0,0,0,0,0,0)

MATHEMATICS

White, Donald Brian, *Limit theorems for sums arising from sampling without replacement from finite multivariate populations.*

University of California, Los Angeles

(18;11,2,1,0,4,0,0)

BIOSTATISTICS

Perdue, Sondra, *Timing and interaction of major risk factors in renal regrafts in humans.*

MATHEMATICS

Banuelos, Rodrigo, *Martingale transforms related singular integrals and A_p-weights.*

Brio, Moysey, *Upwind schemes for the MHD equations.*

Clark, Charles R., *Asymptotic properties of some multidimensional diffusions.*

Dutt, Pravir Kumar, *Stable boundary conditions and difference schemes for Navier-Stokes type equations.*

Gartenberg, Philip Alan, *Fast rectangular matrix multiplication.*

Harabetian, Eduard, *A Cauchy-Kovalevsky theorem for strictly hyperbolic systems of conservation laws with piecewise inital data.*

Hoang, Bao Ngoc, *Classical and generalized Lefschetz numbers.*

Hong, Chia Jon, *On characterizations of some distributions.*

Khabazian, Hossain Esfahani, *Mojahed rings.*

Kim, Young-wook, *On the group of isometries of Riemannian metrics on compact differentiable manifolds.*

Kranjc, Marko, *Imbedding complexes of dimension two in the 4-dimensional Eculidean space.*

Melolidakis, Constantine, *On stochastic games with lack of information on one side.*

Nguyen, Bao Gia, *Certain critical exponent inequalities for percolation processes.*

Pipher, Jill Catherine, *Double index square functions and bounded mean oscillation on the bidisc.*

Poon, Yiu-Tung, *A K-theoretic invariant for dynamical systems.*

Schubert, David Crawford, Jr., *Compactifications of moduli spaces for curves.*

Schumacher, Scott, *Diffusions with random coefficients.*

University of California, Riverside

(3;0,3,0,0,0,0,0)

STATISTICS

Gallavan, Rosemary, *An experiment in collective strategic assessment.*

Gomez-Aguilar, Roberto, *Study on interpenetrating subsampling ratio and regression estimation with or without jackknifing.*

Soofi, Ehsanolah, *Information theoretic approach to regression.*

University of California, San Diego

(5;3,1,0,0,0,0,1)

MATHEMATICS

Behr, Erazm Jerzy, *Aspects of affine algebras.*

Berg, Michael Christian, *Modular forms and Dirichlet series for congruence subgroups and aspects of group representation theory.*

Mummy, Mark Stephen, *Representable matroids and matroid algorithms.*

Schwartz, David Frederick, *Optimization over families of bounded analytic functions.*

Staniswalis, Joan Georgette, *Local bandwidth selection for kernel estimates.*

University of California, Santa Barbara
(6;4,1,1,0,0,0,0)

MATHEMATICS

Mustafa, Ibrahim, *On Darboux semi-continuous functions.*

Russo, David Allen, *Structural properties of complexity classes.*

Schulte, Thomas Robert, *Minimal surfaces, Gauss map, second variation and applications to topology.*

Taylor, Kevin B., *Darboux-like properties and monotonicity for generalized derivatives.*

Womack, James Michael, *Stationary pairwise independent stochastic processes.*

Wu, Hsiu-fen, *Sequential likelihood procedure for selecting a subset of size s containing the t best population ($s \geq t$).*

University of California, Santa Cruz
(1;1,0,0,0,0,0,0)

MATHEMATICS

Metzen, Gerhard, *Semilinear boundary value problems in unbounded domains.*

University of Southern California
(2;2,0,0,0,0,0,0)

MATHEMATICS

Chi, Ta-min, *Automorphisms of PI-algebras.*

Poffald, Esteban Ivan, *Second order differential equations associated with accretive operators in Banach space.*

COLORADO

Colorado State University
(2;0,2,0,0,0,0,0)

STATISTICS

Abdulal, Khaled I., *On density estimation.*

Wang, Antonia Chien-Chun, *Distribution of quadratic forms in Gaussian processes.*

University of Colorado
(1;1,0,0,0,0,0,0)

MATHEMATICS

Eberly, David, *Two problems of the type $\Delta u + \lambda f(u) = 0$ where $f(u)$ grows exponentially.*

University of Denver
(1;0,0,1,0,0,0,0)

MATHEMATICS AND COMPUTER SCIENCE

Blumer, Janet Andrea, *Algorithms for the* DAWG *and related structures.*

University of Northern Colorado
(2;0,2,0,0,0,0,0)

MATHEMATICS AND APPLIED STATISTICS

Hodges, DeWayne Lee, *The relationship between sample size and statistical significance in published studies.*

Moore, Alan D., *A comparison of multiple linear regression and structural equation models in the analysis of selected school achievement-related variables.*

CONNECTICUT

University of Connecticut
(1;0,1,0,0,0,0,0)

STATISTICS

Davis, Marsha Jane, *An estimation of Stein-type estimation: Estimators that shrink toward multiple subspaces.*

Yale University
(10;8,2,0,0,0,0,0)

MATHEMATICS

Bar Yaacov, Daniel, *Analytic properties of scattering and inverse scattering for first order systems.*

Bélair, Luc, *Topics in the model theory of p-adic fields and spectra.*

Mayer, Laura L., *Vaught's conjecture for O-minimal theories.*

Nesin, Hüseyin Ali, *Groups of finite Morley rank.*

Sahi, Siddhartha, *Spherical unitary representations of general linear groups over local fields.*

Scaramuzzi, Roberto G., *Unitary representations of small rank of general linear groups.*

Torop, Robert, *The homology of lattices generated by complex reflections.*

Wickerhauser, Mladen Victor, *Nonlinear evolutions of the heat operator.*

STATISTICS

Au, Siu-tong, *Estimation of a change-point.*

Carlstein, Edward G., *Asymptotic normality and variance estimation for a general statistic from a stationary process.*

DELAWARE

University of Delaware
(2;0,1,0,1,0,0,0)

MATHEMATICAL SCIENCES

Meier, Kathleen Susan, *A statistical procedure for fitting Markov-modulated Poisson processes.*

Saccucci, Michael Stephen, *The effect of variance-inflated outliers on least squares and ridge regression.*

DISTRICT OF COLUMBIA

American University
(2;0,0,0,0,1,1,0)

MATHEMATICS, STATISTICS AND COMPUTER SCIENCE

Bath, Barbara Blake, *The effect of the computational ability of children with acute lymphocytic leukemia due to prophylactic treatment of the central nervous system.*

Booker, T. Hoy, *Singular value decomposition using a Jacobi algorithm with an unbound angle of rotation.*

George Washington University
(5;0,5,0,0,0,0,0)

STATISTICS/COMPUTER AND INFORMATION SYSTEMS

Belcher, Gary Paul, *Development of* MSE *estimates and confidence intervals when large proportions of the population are sampled.*

Cowan, Charles Douglas, *Effects of misclassification on estimates from capture-recapture studies.*

Johnson, Ayah Evelyne, *Two-stage procedures for selecting the best of k systems when the total number of tests is fixed and small.*

Johnson, Wayne Ellett, *Combining dependent tests with incomplete repeated measurements.*

Mohadjer, Leyla, *The efficiency of the normal discriminant analysis compared to the logistic regression for the prediction criterion.*

Howard University
(1;0,0,0,0,1,0,0)

MATHEMATICS

Zekeria, Abdulkeni, *Singularly perturbed second order differential equations with a discontinuous coefficient in a Hilbert space.*

FLORIDA

Florida State University
(4;0,3,0,0,1,0,0)

MATHEMATICS AND COMPUTER SCIENCE

Lee, Sang Myung (David), *A numberical and analytical study of drag on a sphere in Oseen's approximation.*

STATISTICS

Chan, Wai Tat, *Partial orderings, with applications to reliability.*

Guess, Frank Mitchell, *Testing whether mean residual life changes trend.*

Schell, Michael Joseph, *An increasing failure rate approach to conservative low dose extrapolation.*

University of Florida
(9;1,7,0,0,1,0,0)

MATHEMATICS

Chang, Sung Kag, *Riccati equations for nonsymmetric and nondissipative hyperbolic systems with L^2-boundary controls.*

Kurihara, Eiji, *Essential families, mappings in dimension theory and hereditarily infinite-dimensional spaces.*

STATISTICS

Bumrungsup, Chinnaphong, *Parameter-free design and confidence regions for nonlinear models.*

Daley, Richard, *Nonparametric comparison of slopes of regression lines.*

Lai, Pan-Yu, *Some new results on two simple time series model-prediction coverage for* AR(1) *and model building for jittery cosine waves.*

Mullenix, Paul, *Testing uniformity on the hypersphere.*

Perkins, Laura Lynn, *Bivariate symmetry tests with censored data.*

Piepel, Gregory Frank, *Models and designs for mixture experiments when the response depends on the total amount.*

Wijesinha, Manel, *Design of experiments for multiresponse models.*

University of Miami
(2;2,0,0,0,0,0,0)

MATHEMATICS AND COMPUTER SCIENCE

Cuervo, Maria Teresa, *Properties of atriodic hereditarily unicoherent continua.*

Peyrovian, M. Reza, *Maximal compact subgroups in locally compact groups.*

University of South Florida
(4;4,0,0,0,0,0,0)

MATHEMATICS

Abbas, Yousef Hasan, *On fundamental sets over a finite field.*

Chattopadhyay, Rita, *On some problems in the theory on non-homogeneous Markov chains.*

Craig, Jessica, *Functional evolution equations involving T-accretive and T-Lipschitz operators in banach lattices.*

Dannon, Victor C., *The generation of an evolution operator in a Banach lattice.*

GEORGIA

Georgia Institute of Technology
(2;0,0,0,0,2,0,0)

MATHEMATICS

Ervin, Vincent J., *Group analysis of the pellet fusion process.*

Herndon, John A., *Limit periodicity of sequences defined by certain recurrence relations and Julia sets.*

University of Georgia
(3;1,2,0,0,0,0,0)

MATHEMATICS

Abubucker, C. P., *Stopping times in Von Neumann algebra with applications to Martingales and Amarts.*

STATISTICS

Mithongtae, Jirawan Sirichote, *Selection of the best exponential population.*

Mithongtae, Uechai, *Interval estimation of requirements in input-output analysis.*

HAWAII

University of Hawaii
(6;2,1,0,0,0,0,3)

MATHEMATICS

Arakaki, Gary K., *Complexity of sorting and related problems.*

Harrison, Thomas A., *If P is a nontrivial modular variety of lattices and V is a nonmodular variety of lattices such that $V \circ P$ is a variety, then V is the variety of all lattices.*

Pickering, Douglas A., *Minimal non-Arguesian lattices.*

Sheung, Kwok Hay Julian, *On the preduals of certain operator algebras.*

PUBLIC HEALTH SCIENCES

Islam, M. Ataharul, *A new method of constructing increment-decrement life table with application to analysis of nuptiality and fertility.*

Suleman, Mahammad, *Epidemiological and parasitological studies to evaluate the effectiveness of malarial control in small villages of Punjab, Pakistan.*

IDAHO

Idaho State University
(3;1,0,0,0,0,0,2)

MATHEMATICS

Lauder, Donnald Hall, *Estimation of parameters of a linear model with auto correlation.*

Mesri, Bahman, *Orthogonality in normed linear spaces.*

Odegard, Barbara Jean, *The evaluation of the bivariate normal distribution integral.*

ILLINOIS

Illinois State University
(1;0,0,0,0,0,1,0)

MATHEMATICS

Bogacz, Margaret M., *An intuitive approach to understanding calculus concepts in business applications using probability theory.*

Northwestern University
(8;6,0,0,0,2,0,0)

MATHEMATICS

Cohen, Sara, *A free boundary problem in lubrication theory.*

de Rezende, Ketty, *Smale flows on the three-sphere.*

Frank, George Nelson, *Templates, branched one-manifolds, and laminations.*

Hinson, Edward Kuell, *On unimodular vectors over commutative rings.*

Kulich, James, *Homotopy models for desuspensions.*

Laubenbacher, Reinhard, *Generalized Mayer-Vietoris sequences and the algebraic K-theory of Dedekind-like rings.*

Shick, Paul L., *Periodic phenomena in the classical Adams spectral sequence.*

Trembinska, Antoinette, *Variations on Carlson's theorem.*

University of Chicago
(6;4,1,0,0,1,0,0)

MATHEMATICS

Albert, John Paul, *On the stability of solitary waves and the decay of small-amplitude waves in non-linear dispersive systems.*

Costenoble, Steven R., *Equivariant cobordism and K-theory.*

Parish, James Lindsey, *Maximal isotropy divisors on abelian varieties.*

Rusin, David John, *The cohomology of groups generated by involutions.*

Witte, David Slocumb, *Measurable isomorphisms of unipotent translations on homogeneous spaces.*

STATISTICS

Karrison, Theodore, *Restricted mean life with adjustment for covariates.*

University of Illinois, Chicago
(5;3,0,0,0,1,1,0)

MATHEMATICS, STATISTICS AND COMPUTER SCIENCE

Ahlbrandt, Gisela E., *Totally categorical structures of modular type.*

Barer, Steven Mitchell, *Bifurcation analysis of neuron models.*

Chan, Joseph Oh-Piu, *Second derivatives of secondary characteristic classes.*

Meehan, James Michael, *The instructional use of computer simulation of random variables.*

Winker, Steven Karl, *Quandles, knot invariants, and the N-fold branched cover.*

University of Illinois, Urbana-Champaign
(18;10,1,0,0,7,0,0)

MATHEMATICS

Challener, David Carroll, *Convergence properties of the eigen function expansion of the biharmonic equation on rectangular and semi-infinite strips.*

Chang, Li Fung, *An information-theoretic study of ratio-threshold antijam techniques.*

Crabtree, James Claude, *First exit time through curvilinear boundaries for stochastic sequences.*

Currier, Robert John, *Isometric immersions and embeddings of nonnegatively curved hypersurfaces in hyperbolic space.*

Filaseta, Michael Anthony, *Topics in combinatorial number theory.*

Gary, James Daniel, *On the supremum of the counting function for the A values of meromorphic functions.*

Hashimi, Jamil Rasool, *On certain maximal operators on H^p classes, 0 p 1.*

Juhlin, Kenton Duane, *Sequential and non-sequential confidence intervals with guaranteed coverage probability and beta-protection.*

Kan, Ittai, *Strange attractors of uniform flows.*

Lindsay, Peter Alexander, *Alternative and omega-type tutoring acceptors.*

O'Neil, Kevin Anthony, *Stationary configurations of point vortices.*

Somer, Lawrence Eric, *The divisibility and modular properties of kth-order linear recurrences over the ring of integers of an algebraic number field with respect to prime ideals.*

Uno, Katsuhiro, *Generalized Clifford theory.*

Wu, Jinn-Wen, *Exponential decay for the Saints-Venant principle.*

THEORETICAL AND APPLIED MECHANICS

Chien, Chi-Hui, *Further research on wire rope.*

Chim, Edwin Siu-Man, *Tensile fatigue damage and degradation of random short-fiber SMC composites.*

Hoger, Anne G., *On residual stress in an elastic body.*

Stango, Robert James, *Process-induced viscoelastic stress and deformation in composite laminates.*

INDIANA

Indiana University
(6;4,0,0,0,2,0,0)

MATHEMATICS

Frohman, Charles D., *One-sided incompressible surfaces in Seifert fiber spaces.*

Herrmann, Joseph Michael, *An asymptotic analysis of an interface crack within finite elasticity.*

McGuire, Paul Joseph, *Essentially normal subnormal operators and related topics.*

Namazi, Javad, *On a singular integral.*

Rammaha, Mohammad Ahmad, *On non-linear Cauchy problems.*

Russo, Paula A., *Boundary behavior of holomorphic functions in the unit ball of* $\mathbf{C}^n$.

Purdue University
(17;3,4,0,3,0,1,6)

INDUSTRIAL ENGINEERING

Chu, Chi-Chung, *An adaptive decision making methodology for material handling equipment in a computer integrated manufacturing system.*

Fisher, Edward Lynn, *Knowledge-based facilities design.*

Hwang, Sheue-Ling, *Human supervisory performance in flexible manufacturing systems.*

Kincaid, Rex Kevin, *The location of central structures in graphs.*

Leemis, Lawrence Mark, *Stochastic lifetimes: A general model.*

Thuruthickara, John Chandy, *Studies in Multicriteria scheduling problems.*

Venugopal, Raghunath, *Thermal effects on the accuracy of numerically controlled machine tools.*

Wu, Herng-Liang, *Computer-aided configuration of flexible manufacturing systems.*

MATHEMATICS

Bagga, Kunwarjit Singh, *Some structural properties of bipartite tournaments.*

Bautista, Maurino, *A nonlinear approach to inverse scattering by an acoustically soft obstacle.*

Carlson, James Wayne, *Weighted composition operators on* ℓ^2

Hu, Shaing, *Representations and embeddings on weakly inverse semi-groups.*

Özaydin, Murad, *An integer invariant of a group action.*

STATISTICS

Liang, TaChen, *Some contributions to empirical Bayes, sequential and locally optimal subset selection rules.*

Shyr, Jing-Yun, *Comparative precisions in linear structural relationships.*

Whittinghill, Dexter C., III, *Block designs: General optimality results with applications to situations where balanced designs do not exist.*

Woods, Anthony Keith, *Two locus haploid populations with unequal recombination rates.*

University of Notre Dame
(3;3,0,0,0,0,0,0)

MATHEMATICS

Kreuzman, Mary Joan, *Local properties and covering spaces of parabolic manifolds.*

Mazur, Mark Steven, *The 2-adic Schur index using modular and integral representation theory.*

Treanor, Mary T., *Isomorphisms of orthogonal groups in characteristic 2.*

IOWA

Iowa State University
(19;2,15,0,0,2,0,0)

MATHEMATICS

DeAlba, Luz Maria, *A characterization of semi-crossed products of finite-dimensional* C^**-algebras.*

Hoeflin, David Arthur, *Oscillations of nonlinear feedback systems which contain tightly coupled subsystems in cascade.*

Johnson, Jean Thomas, *Ergodic properties of nonhomogenous, continuous-time Markov chains.*

Krenz, Gary Steven, *On the stability in oscillations in a class of nonlinear feedback systems containing numerator dynamics.*

STATISTICS

Arnold, Robert James, *Optimal stochastic paths.*

Chang, Stephen Fu-Chung, *Error-free computations in solution of linear systems and linear programming problems.*

de Pareja, Gilda Piaggio, *Fitting a logistic curve to population size data.*

Guerrero, Margarita F., *Optimal confidence bounds.*

Jobe, John Marcus, *Error rates for Poisson process discrimination.*

Kim, Byung Chun, *A conjugate gradient algorithm for analysis of variance computations.*

Lee, Moun-Shen (Carl), *Constrained optimal designs.*

Martin, Cindy Lynn, *Applications of the distance measures between the prior and posterior distributions.*

Mazloum, Reda Ibrahim, *Admissibility in choosing between experiments with applications.*

McGovern, Paul Gerard, *Two statistical analysis procedures applied to multivariate smoking cessation data.*

Miazaki, Edina Shisue, *Estimation for time series subject to the error of rotation sampling.*

Ostrouchov, George, *Large sparse least squares computations.*

Park, Byung Sul, *N-person simple games and n-component reliability structures.*

van Schaik, Jan William, *Bradley-Terry models for paired comparisons incorporating judge variability.*

Wilson, Jeffrey Rupert, *Statistical methods for frequency data from complex sampling schemes.*

University of Iowa
(2;2,0,0,0,0,0,0)

MATHEMATICS

Boyle, Jeffrey Allan, *Knotted surfaces in the four-sphere.*

Lien, Magnhild, *Construction of high dimensional knot groups from classical knot groups.*

KANSAS

Kansas State University
(2;0,1,0,0,0,1,0)

MATHEMATICS

Ewing, David Eugene, *A study of student cognitive processes with respect to selected albegra I word problems.*

STATISTICS

Johnston, Denise Farha, *Likelihood ratio and optimal rank test procedures for populations with linearly related parameters.*

KENTUCKY

University of Kentucky
(2;1,1,0,0,0,0,0)

MATHEMATICS

Pervine, Robert Howard, $I_c(R)$ *and other ideals related to the analytic extensions of a commutative ring.*

STATISTICS

Tong, Lee-Ing, *Inference in the simple linear regression model with one-fold nested-error structure.*

LOUISIANA

Louisiana State University, Baton Rouge
(3;3,0,0,0,0,0,0)

MATHEMATICS

Foreman, David Litton, *Some results about value sets of quadratic forms over fields.*

Hettling, Karl, *On* K_2 *of rings of integers of totally real number fields.*

Sullivan, Fred, *Ordered models for the lambda calculus.*

Tulane University
(1;0,0,0,0,1,0,0)

MATHEMATICS

Verosky, John, *Applications of the formal variational calculus to the equations of fluid dynamics.*

University of Southwestern Louisiana
(4;0,4,0,0,0,0,0)

MATHEMATICS AND STATISTICS

Ayeni, Babatunde J., *The empirical characteristic function estimation approach in a mixture of two normal distributions.*

Cascio, Grace C., *Comparisons of estimators of the fraction defective in the normal distribution.*

Neube, Matoteng, *Some new quality control procedures.*

Tuprah, Kwami, *Dispersion quality control procedures.*

MARYLAND

Johns Hopkins University
(11;5,2,0,3,0,0,1)

BIOSTATISTICS

Huster, William J., *A model of multivariate survival data.*

MATHEMATICAL SCIENCES

Bennett, Bart Emil, *Modeling and analysis of a two-level production scheduling problem.*

Cheung, Albert K. T., *Network optimization in ecosystem development analysis.*

Choudhury, Japobrata, *Sequential fixed-width confidence intervals based on generalized order statistics, and a study of generalized Hodges-Lehmann location estimators.*

Hong, Yoo Pyo, *Consimilarity: Theory and applications.*

Won, Eun Sang, *Algorithms for ordinal two-person games.*

MATHEMATICS

Menn, Stephen Philip, *Total foliations on 3-manifolds and the geometry of spaces of coframefields.*

Nakos, George, *On the Brown-Peterson homology of certain classifying spaces.*

Nelan, Cornelius Patrick, Jr., *Unstable BP-operations and immersions of real projective spaces.*

Svirsky, Janet Burstein, *On the class numbers of imaginary quadratic fields.*

Svirsky, Roman, *Potentials producing maximally sharp resonances.*

University of Maryland, Baltimore
(1;0,0,0,0,1,0,0)

MATHEMATICS AND COMPUTER SCIENCE

Becker, Arthur H., Jr., *Optimal adaptive control for Markov chains and auto regressive moving average processes.*

University of Maryland, College Park
(14;4,0,0,0,9,0,1)

MATHEMATICS

Banerjee, Uday, *Approximation of eigenvalues of differential equations with rough coefficients.*

Chen, Ming-san, *Hopf bifurcation of Beck's problem.*

Colonna, Flavia, *Block and normal functions.*

Gui, Wenzhuang, *The h-p version of finite element method for one-dimensional problems.*

Guo, Benqi, *The h-p version of the finite element in two-dimensions–mathematical theory and computational experience.*

Kinsey, Laura Christine, *Pseudoisotopics and submersions of a compact manifold to the circle.*

Lee, Sungyun Lee, *Product formulas for volumes of tubes and Chern's kinematic formulas.*

Li, Chun Wah, *Almost sure stability, optimal control and scheduling of stochastic systems with point process coefficients.*

Moorish, Kathleen, *A model of flow in the renal proximal tubule.*

Nestor, John Jay, III, *Uniform asymptotic approximations of solutions of second order linear differential equations with a simple turning point and a simple pole.*

O'Connor, Regina Kesler, *An iterative method for determining periodic solutions to dynamical systems possessing a first integral.*

Pearn, Wen Lea, *Capacitated Chinese postman problem.*

Toll, Charles Hansen, *A multiplicative asymptotic for the prime geodesic theorem.*

Xu, Weixuan, *Quadratic minimal spanning tree problem and related topics.*

MASSACHUSETTS

Boston University
(2;0,2,0,0,0,0,0)

MATHEMATICS

Beiser, Alexa, *Moment tests of normality applied to first order autoregressive processes.*

Kezim, Boualen, *On changes in the mean of a sequence of auto correlated random variables.*

Brandeis University
(7;7,0,0,0,0,0,0)

MATHEMATICS

Ascenzi, Maria-Grazia, *The restricted tangent bundle.*

Cutkosky, Steven, *Numerically effective divisors on algebraic varieties.*

Lejarraga, Pablo, *The moduli of rational elliptic surfaces.*

Luo, Zhaohua, *Kodaira dimension of algebraic function fields.*

McDaniel, Andrew, *Lie algebras representation and Toda lattices.*

Serrano-Garcia, Fernando, *Surfaces having a hyperplane section with a special pencil.*

Smolinsky, Lawrence, *Double disk knots and link invariants.*

Harvard University
(10;10,0,0,0,0,0,0)

MATHEMATICS

Cheung, Wing-Sum, *On higher order of conservation laws.*

Cho, Koji, *Postitivity of the curvature of the Weil-Petersson metric on the moduli space of stable vector bundles.*

Forman, Robin, *Functional determinants and applications to geometry.*

Kuhn, Robert, *On the canonical closure of the universal elliptic curve over $X_1(n)$.*

Laks, Mitchell, *On the characters of the representations of division algebras over a weak field .*

McMullen, Curt, *Families of rational maps and iterative root-finding algorithms.*

Mirollo, Renato, *Rank conditions on subvarieties of Grassmannians.*

Pantazis, Stefanos, *Prym varieties and the geodesic flow on $\mathrm{SO}(n)$.*

Reider, Igor, *Bounds on irregularity of surfaces of general type.*

Spivakovsky, Mark, *Sandwiched singularities and the Nash resolution for surfaces.*

Massachusetts Institute of Technology
(27;15,2,4,1,1,0,4)

MATHEMATICS

Arnold, Friedemann, *Automorphisms of fields of algebraic functions in one variable.*

Arsenis, Spyros Panagis, *Towards a statistical analysis of genetic sequences data with particular reference to protein sequences.*

Berman, Piotr, *The expressive power of deterministic context-free dynamic logic.*

Boyack, Stephen Wayne, *The robustness of combinatorial measures of Boolean matrix complexity.*

Bretherton, Christopher Stephen, *An analytic theory of moist convection.*

Clemens, Laura Elizabeth, *An application of the Malliavin calculus to infinite dimensional diffusions.*

Coley, Raymond Alan, *Projective dimension of $\mathrm{BP}*\mathrm{BG}$ for finite groups.*

Devinatz, Ethan Sander, *A nilpotence theorem in stable homotopy theory.*

Franzblau, Deborah Sharon, *Geometric covering and partitioning.*

Fu, Joseph Howland Guthrie, *Tubular neighborhoods of planar sets.*

Grant, David Ross, *Theta functions and division points on abelian varieties of dimension two.*

Haiman, Mark David, *The theory of linear lattices.*

Hammond, Janice H., *Solving asymmetric variational inequality problems and systems of equations with generalized nonlinear programming algorithms.*

Hefez, Abramo, *Duality for projective varieties.*

Intissar, Ahmed, *On the distribution of the scattering poles for the Schrödinger equation in even dimensional spaces $\mathbf{R}^n$.*

Kim, Don Yoon, *A robust estimator of location using an adaptive spline model.*

Lander, Julian Charles, *Area-minimizing integral currents with boundaries invariant under polar actions.*

Nemchenok, Jacob Mark, *Fourier coefficients of modular forms and Gaussian sums.*

O'Connor, Mary Geraldine, *Randomness within a computationally restricted environment.*

Orloff, Jeremy Michael, *Limit formulas and Riesz potentials for orbital integrals on symmetric spaces.*

Scrimshaw, Nevin Baker, *Fine structures and the power set axiom.*

Simanca Perez, Santiago Ramon, *Mixed elliptic boundary value problems.*

Stembridge, John Reese, *Combinatorial decompositions of characters of $\mathrm{SL}(n, \mathbf{C})$.*

Vatan, Pirooz, *Max-infinitely divisible and max-stable laws on infinite dimensional spaces.*

Vayl, Vladimir, *Systems of postulates of Gentzen style for set theory.*

Worley, Dale Raymond, *A theory of shifted Young tableaux.*

Wu, Eleanor, *The α-degrees of unsolvability: Global results.*

Northeastern University
(3;2,0,0,1,0,0,0)

MATHEMATICS

Miri, Abderrahim, *Artin modules having extremal Hilbert series: Compressed modules.*

Pavlicek, Glenn H., *The deviations of local rings.*

Wang, Ding-I, *The channel assignment problem and closed neighborhood containment graphs.*

MICHIGAN

Michigan State University
(3;0,3,0,0,0,0,0)

STATISTICS AND PROBABILITY

Chari, Ravi T., *Weak covergence of distribution-valued semimartingales and associated* SDE*'s.*

Godbole, Anant P., *Strong laws of large numbers and laws of the iterated logarithm in Banach spaces.*

Merkle, Milan J., *Infinitely divisible measures on multi-Hilbertien spaces and a Levy-Ito decomposition.*

University of Michigan, Ann Arbor
(25;8,10,0,5,0,0,2)

BIOSTATISTICS

Belle, Steven H., *Analysis of dependent right-censored data.*

Gimotty, Phyllis Ann, *Goodness-of-fit chi-square tests using imputed data.*

Perry, Barbara Holland, *Case-control sampling for the Cox regression model.*

Schooley, Gordon Leroy, *Evaluation of statistical procedures for analyzing ordered response categorical data with small sample sizes.*

Steiner, Richard Paul, *A counting process approach to the Cox proportional hazards regression model with covariate errors.*

INDUSTRIAL AND OPERATIONS ENGINEERING

Al-Yahya, Yahya, *Matching and covering algorithms.*

Brown, Donald, *A justification for cross-entropy minimization with applications to reliability and risk assessment.*

Chung, Min K., *Development of a statistical methodology for improved analysis of workplace injuries.*

Goldberg, Jeffrey Bruce, *The modular design problem with linear separable side constraints: Heuristics and applications.*

Higle, Julia Lynne, *Deterministic equivalence in stochastic infinite horizon problems.*

Partovi, Mohammad, *A study of degeneracy in the simplex algorithm for linear programming and network flow problems.*

MATHEMATICS

Aksoy, Asuman Güven, *Approximation schemes, related s-numbers and applications.*

Clark, Curtis, *An approach to graph achievement games: Ultimately economical graphs.*

Cochrane, Todd Eugene, *Small solutions of congruences.*

Dunn, Gerald Joseph, *Uniqueness of n-fold delooping machines.*

Herron, David Alan, *Conformally invariant metrics and the geometry of uniform domains.*

Khajeh-Khalili, Parviz, *Non-linear dissipative wave equation.*

Meerschaert, Mark Marvin, *Multivariable domains of attraction and regular variation.*

Ortland, David Arthur, *Moduli of finite point sets in projective space.*

Slaminka, Edward Eugene, *A Brouwer translation theorem for free homeomorphisms.*

Westwood, Derek John, *On the structure of the predual of various operator algebras.*

STATISTICS

Bednarz, David, *Open ended tests of invariant hypothesis.*

Coffey, Mary Patricia, *A categorical model with random effects and its estimation by integrated maximum likelihood.*

Kim, Jai Young, *Simultaneous estimation of multiple Poisson parameters under weighted squared error loss.*

Lenk, Peter, *Bayesian nonparametric predictive distributions.*

Wayne State University
(2;0,2,0,0,0,0,0)

MATHEMATICS

Alyass, Kussiy K., *Asymptotic distribution of the quadratic norms of the deviation of orthogonal series type density estimates.*

Ho, Hwai-Chung, *Limit theorems for non-linear functions of a stationary Gaussian process.*

Western Michigan University
(1;0,0,0,0,0,0,1)

MATHEMATICS

Rahn, Joan Marie, *On the genus of a block design.*

MINNESOTA

University of Minnesota, Minneapolis
(12;3,2,0,0,1,0,6)

BIOMETRY

Church, Timothy Robert, *Biometric design and analysis in trials of mass screening for chronic disease.*

Glaser, John, *An investigation of the relationship between the introduction of a computer system and coordination in health care organizations.*

Neaton, James Dennis, *The use of the logistic model in the design of intervention studies.*

Smith, Judy, *Sample size determination in studies of etiologic fraction.*

MATHEMATICS

Baeten, Josephus Cornelius Maria, *Filters and ultrafilters over definable subsets of admissible ordinals.*

Chihara, Laura Mariko, *Applications of the Askey-Wilson polynomials to association schemes.*

McLeod, Kevin Bryce, *Uniqueness of positive radial solutions of semi-linear elliptic equations in n-space.*

Ricou, Manuel Paul DeOliveira, *Energy, entropy and the laws of thermodynamics.*

Shelton, Chrispian Ellis, *Regular modules for subgroups of solvable groups.*

Shemesh, Meir, *Clustering and weak convergence of a sequence of stochastic processes.*

STATISTICS

Bedrick, Edward John, *Analysis of categorical data from clustered samples.*

Ho, Siu Chuen, *Small sample inference for the Bingham distribution.*

MISSOURI

St. Louis University
(1;1,0,0,0,0,0,0)

MATHEMATICS AND COMPUTER SCIENCE

Azarian, Mohammad Khan, *Near Frattini subgroups of ammalgamated free products of groups.*

University of Missouri, Columbia
(3;1,2,0,0,0,0,0)

MATHEMATICS

Allison, Dean Edwin, *Lorentzian warped products and static space-times.*

STATISTICS

Beji, Mohammad Ali, *Evidental approach to hypothesis testing.*

Boyle, James P., *Constrained optimization in Hilbert space with applications to restricted cubic splines.*

Washington University
(5;1,0,0,0,0,0,4)

MATHEMATICS

Han, Yongsheng, *Certain Hardy-type spaces that can be characterized by maximal functions and variations of the square functions.*

SYSTEMS SCIENCE AND MATHEMATICS

Chen, Yi-Long, *Nonlinear feedback and computer control of robot arms.*

Huang, Peiqing, *Emergency control in blanket viability crisis.*

Lu, Keh-Wen, *A textured model and its uses in reactive power management and control.*

Zhou, Zheng, *Feedback synthesis of singular systems-A geometric approach.*

NEW HAMPSHIRE

Dartmouth College
(2;2,0,0,0,0,0,0)

MATHEMATICS AND COMPUTER SCIENCE

Beaudoin, Robert Emile, *On uncountable trees and linear orders.*

Henrion, Claudia Andrea, *Subtle ideas on subtle ideals.*

NEW JERSEY

Princeton University
(10;6,2,0,0,0,0,2)

MATHEMATICS

Buss, Samuel, *Bounded arithmetic.*

Feit, Paul, *On the poles and the analyticity of Eisenstein series.*

Goroff, Daniel, *A variational study of twist maps.*

Levy, Silvio Vieira, *Critically finite rational maps.*

Pati, Vishwambhar, *L^2-cohomology of algebraic varieties.*

Saper, Leslie, *L^2-cohomology and intersection homology of certain algebraic varieties with isolated singularities.*

Sogge, Christopher, *Oscillatory integrals and spherical harmonics.*

Stenonses, Berit, *Envelopes of holomorphy.*

STATISTICS

Amaratunga, Dhammika Jayanath, *Pushing back regression coefficients and evaluating performance via orthogonal samples.*

Mendozo, Carlos E., *Smoothing directional data.*

Rutgers University, New Brunswick
(9;6,2,0,0,0,0,1)

MATHEMATICS

Cheng, Yungchen, *Hopf algebras with antipodes of finite orders.*

Greenbaum, Nicholas Neil, *Three-dimensional models of the Belousov-Zhabotinskii chemical reaction.*

Hutson, Holmes Leroy, *On zero-dimensional rings of quotients and the geometry of minimal primes.*

Martin, Gary Alan, *Two classification problems: Rank one structures which coordinatize aleph-zero categorical aleph-zero stable structures; reducts of algebraically closed fields.*

Nash, John C. M., *Results on bases in additive number theory.*

Pfister, Richard J., *Spin representations of $A_1^{(1)}$.*

Raychaudhuri, Arundhati, *Intersection assignments, T coloring, and powers of graphs.*

STATISTICS

Miceli, Robert John, *Minimax estimation of location parameters for distribution of random vectors with independent components.*

Proskin, Howard, *An admissibility theorem with applications to the estimation of the variance of the normal distribution.*

NEW MEXICO

New Mexico State University
(1;1,0,0,0,0,0,0)

MATHEMATICAL SCIENCES

Parsons, John Daniel, *Rearranged maximal operators.*

University of New Mexico
(4;0,2,0,0,2,0,0)

MATHEMATICS AND STATISTICS

Fountain, Robert Lewis, *Systematic sampling in the presence of polynomial trends.*

Jones, Rondall Eugene, *Solving linear systems arising in the solution of integral equations of the first kind.*

Jorge del Carmen, Maria, *Perturbation solution of a non-linear boundary value problem arising in connection with the earth's gravitational field.*

Pichardo-Maya, Agustin, *Brownian motion in random environments.*

NEW YORK

Adelphi University
(2;1,0,0,0,1,0,0)

MATHEMATICS AND COMPUTER SCIENCE

Eswarathasan, Arulappah, *Densities of some sequences in algebraic number fields.*

Zand, Manoucher, *Some notes on conservation laws.*

CUNY, Graduate Center
(3;3,0,0,0,0,0,0)

MATHEMATICS

Rywkin, Richard J. F., *Applications of the stationary phase to solution of the Helmholtz equation in exterior domains.*

Sarkisian, Richard G., *Weil numbers and forms for varieties over finite fields.*

Weld, Kathryn, *Computability of homotopy groups of nilpotent complexes.*

Clarkson University
(2;0,0,1,0,1,0,0)

MATHEMATICS AND COMPUTER SCIENCE

Al-Jaber, Ahmad, *Combinatorial properties of heapsort.*

Osman, El-sayed M., *The motion of damped Sine-Gordon kinks in the presence of thermal fluctuations.*

Columbia University
(8;7,1,0,0,0,0,0)

STATISTICS

Baldursson, Fridrik Mar, *Topics in singular stochastic control and optimal stopping.*

Cox, Ross Mitchell, *Stationary and discounted control of diffusion processes.*

Zhang, Cunhui, *Random walk and renewal theory.*

Zheng, Zukang, *Regression analysis with censored data.*

MATHEMATICS

Arapura, Donu Verghese Biswajit, *Threefolds with semipositive tangent bundles.*

Katz, Mikhail, *Jung's theorem in complex projective geometry.*

Scattone, Francesco, *Compactifications of moduli spaces for $K3$ surfaces.*

Zweibel, John, *Transformations of some first order linear systems of* PDE*'s.*

Cornell University
(8;2,2,0,0,4,0,0)

APPLIED MATHEMATICS

Castro, José Mildred, *Equilibrium and stability of bioeconomic models of renewable resources under diverse harvesting regimes.*

Chang, Chih, *Solution concepts for n-person cooperative games.*

Shi, An-Jen, *Optimum penetration levels of wind farms.*

Zhang, Zhen, *Optimum diversity source coding.*

BIOMETRICS

Kremers, Walter Karl, *The statistical analysis of sum-quota sampling.*

Skalski, John Raymond, *Use of capture data to quantify change and test for effects on the abundance of wild populations.*

MATHEMATICS

Brady, Sheryl Silibovsky, *Recursive topology in Euclidean space.*

Yang, Wei-Shih, *The Simon-Lieb inequality for the ϕ^4-theory in two dimensions.*

New York University, Courant Institute
(12;8,0,0,0,4,0,0)

MATHEMATICS

Anjilvel, Satish, *Isometric Volterra operators.*

Chou, Mo-Hong, *A numerical method for 2-D inviscid incompressible flow past an inclined plate.*

Datti, Pampanna, *Long-time existence of classical solutions to non-linear wave equations in exterior domains.*

David, Florin, *Reflections of singularities at a boundary for nonlinear equations.*

Davidoff, Giuliana, *Statistical properties of certain exponential sums.*

Golden, Kenneth, *Bounds for effective parameters of multicomponent media by analytic continuation.*

Guo, Maozheng, *Limit theorems for interacting particle systems.*

Kress, Michael Edward, *Optimal iterative techniques for simulation of plasma reconnection.*

Mio, Washington, *Non-linearly equivalent representations of quaternionic 2-groups.*

Moll, Victor H., *Stability in the large for solitary wave solutions to McKean's nerve conduction caricature.*

Riedel, Kurt, *The spectrum of resistive viscous magnetohydrodynamics.*

Schochet, Steven H., *Initial-boundary-value problems for quasilinear symmetric hyperbolic systems, existence of solutions to the compressible Euler equations, and their incompressible limit.*

Rensselaer Polytechnic Institute
(5;0,0,0,1,4,0,0)

MATHEMATICAL SCIENCES

Bilazarian, Peter, *Sensitivity of underwater sound transmissions to sound-speed profile selection.*

Bosworth, Kenneth W., *A general method for the computation of best uniform norm approximations.*

Ech-Cherif, Ahmed, *Rank-two and variable bounds ellipsoid algorithms for convex programming.*

Rogers, Edwin, *Feedback stabilization of Volterra integral equations.*

Rousseau, Thomas Harrison, *Mathematical analysis of oceanic fronts and sloping bottoms on underwater sound transmissions.*

SUNY at Albany
(5;2,3,0,0,0,0,0)

MATHEMATICS AND STATISTICS

Ali, Mirza, *Test of equality of expected values of positive definite quadratic forms.*
Hurley, Susan, *Tame and Galois Hopf objects with normal bases.*
Jiang, Jyh-Ming, *Distributional properties of linear forms in a Dirichlet vector and applications.*
Kabbaj, Saad, *Identification of a sine wave perturbed by weakly stationary noise.*
Tesser, Steven Barry, *On certain representations of a generalized Clifford algebra.*

SUNY at Binghamton
(4;2,1,1,0,0,0,0)

MATHEMATICAL SCIENCES

Johnson, Robert A., *Uniform inverse set convergence and inverse limits.*
Kelly, Michael R., *Minimizing the number of fixed points for self-maps of compact surfaces.*
Miller, Russ, *Pyramid computer algorithms.*
Wender, Abraham, *Types of equilibria for non-deterministic economies.*

SUNY at Buffalo
(5;3,1,0,0,1,0,0)

MATHEMATICS

Nassar, Mostafa A., *Ergodic measures and recurrent points in the Stone-Čech compactification of amenable semigroups.*
Talebi, Nourollah, *Aspects of the model theory of logics with an infinitary quantifier.*
Tang, Yun, *Nonlinear stability of vortex patches.*

STATISTICS

Chakraborti, Subhabrata, *A generalization of the control median test.*
Chao, Chern-Ching, *On the number of excesses and last exit over a boundary.*

SUNY at Stony Brook
(13;5,2,0,1,5,0,0)

APPLIED MATHEMATICS AND STATISTICS

Al-Towaiq, Mohammed, *On a two-term based on incomplete factorization of large sparse systems.*
Chen, Bee-Lian, *Nonparametric regression.*
Chen, Yih-Ren, *Stochastic scheduling.*
Driscoll, Michael A., *Numerical methods for the solution of integral equations of mathematical physics.*
Garcia, Maria, *On the numerical solution of nonlinear equations by homotopy methods.*
Kim, Chul, *Continuum structure functions: modules, bounds, axiomatization and reliability importance.*
Tang, Yong-Nian, *Application of* GPST *algorithm to history matching.*
Wang, Shyue-Liang, *Numerical determination of the shape and size of exterior and interior boundaries for the Helmholtz equation.*

MATHEMATICS

Carr, Rodney, *Manifolds of positive scalar curvature, Yang-Mills fields, the Kalusa-Klein model.*
Dar, Aparna, *Intersection R-torsion and analytic torsion for pseduomanifolds.*
Gao, Zhiyong, *Applications of minimal surfaces theory to topology and Riemannian geometry contructions of negatively Ricci curved manifolds.*
Heltai, Blaise, *Involutions and torsion subgoups of Fuchsian groups.*
Sengupta, Dipendra, *On the cohomology of Kleinian groups.*

Syracuse University
(1;0,0,0,0,0,1,0)

MATHEMATICS

Vatanavigkit, Surapon, *A personalized system of instruction in a mathematics course for Thai college students.*

University of Rochester
(3;3,0,0,0,0,0,0)

MATHEMATICS

Coffey, John Joseph, *Uniformly distributed D-sequences in ergodic theory.*
Dominijanni, Roberto, *A resolvent estimate approach to a problem of scattering theory in* $\ell^2(\mathbf{Z})$.
Miller, Michael J., *On Ilieff's conjecture and the geometry of polynomials.*

NORTH CAROLINA

Duke University
(2;1,0,0,0,1,0,0)

MATHEMATICS

Hartz, David G., *The fine structure of hyperarithmetic inductive definitions.*
Pitman, Eric Bruce, *The flow of granular material in converging hoppers.*

North Carolina State University, Raleigh
(8;1,3,0,3,0,0,1)

OPERATIONS RESEARCH

Gaytan-Iniestra, Juan, *Two-phase algorithm for minimizing maximum functions.*
Pulat, Pakize Simin, *Maximum flow problem for generalized networks.*
Sichona, Francis Joseph, *A multi-stage birth and death process in a random enivronment.*

STATISTICS

Alwi, Nong, *Peanut groups and their symbiotic relationship with rhizobium strains.*
Lee, Kay-O, *Comparison of some successive occasions sampling schemes from spatially correlated processes.*
McCutchan-Hise, Barbara, *Design efficiencies with planned and unplanned unbalance for the estimation of heritability in forestry.*
Richardson, Gary, *Consistent estimators in non-linear regression for a non-compact parameter space.*
Smith, Luther Aubrey, *The effects of acid deposition on fresh water algae and cyanobacteria: A simulation analysis for Falls Lake, NC using CE-QUAL-R1 model.*

University of North Carolina, Chapel Hill
(18;5,0,0,1,0,0,12)

BIOSTATISTICS

Brittain, Erica H., *Determination of P-values for a K-sample extension of the Kolmogorov-Smirnov procedure.*
Brooks, Gary, *Incorporating historical control information in bioassay testing accounting for survival differences.*
Buck, Raymond Douglas, *Product hazard models in carcinogenic risk assessment.*
Clemmer, Anne Fakler, *Estimating intracluster homogeneity in multistage samples.*
Fairclough, Diane L., *Mixed effects model analyses of incomplete longitudinal pulmonary function measurements in children.*
Folsom, Ralph, *Probability sample U-statistics: Theory and applications for complex sample designs.*
Kammerman, Lisa, *Selected optimal values for* Π_y *in the unrelated question randomized response model,* Π_y *known.*
Kasica, Violette Anne, *An analysis of cancer mortality in North Carolina using generalized Poisson modeling methods for the classification of rare events.*
Rochon, James, *Inference from the incomplete longitudinal design under a arma covariance structure.*
Wilson, Steve, *The estimation of recent levels of adult sibling mortality.*
Yoshizawa, Carl Nobuo, *Some tests of symmetry.*
Yuan, Yang Chyuan, *Some aspects of estimation and hypothesis testing for generalized multivariate linear models.*

MATHEMATICS

Bourdon, Paul Stephen, *Invariant subspaces for the shift operator on some Hilbert spaces of analytic functions.*
Masri, Mahmud Ilayyan, *Compact composition operators on the Nevanlinna and Smirnov classes.*
Monn, David Robert, *Regularity of the complex Monge-Ampère equation for radially symmetric functions of the unit ball.*
Wilson, John Herman, *Coding for a* T*-user binary adder channel.*

OPERATIONS RESEARCH AND SYSTEMS ANALYSIS

Nickel, Ronald Harlan, *A sequential quadratic programming algorithm for solving large, sparse, nonlinear programs.*

STATISTICS

Hsing, Tailen, *Point processes associated with extreme value theory.*

OHIO

Bowling Green State University
(1;1,0,0,0,0,0,0)

MATHEMATICS AND STATISTICS

Diny, Debra Ann, *Bound graphs resulting from certain digraphs and partially ordered sets.*

Case Western Reserve University
(3;0,0,0,3,0,0,0)

OPERATIONS RESEARCH

Ho, Chin-Chih, *Optimal inventory and replacement policy with production dependent equipment deterioration.*

Lee, Chin-Kyooh, *Improving and expanding the role of D-optimality in experimental designs with emphasis on response surfaces.*

Liang, Lung-Kuang, *Some generalizations and applications of thinning of point processes-covariance analysis.*

Kent State University
(2;2,0,0,0,0,0,0)

MATHEMATICAL SCIENCES

Barton, Thomas J., *Bounded Reinhardt domains in complex Banach spaces.*

Chu, Larry Kah Bai, *Summability methods based on the Riemann zeta function.*

Ohio State University
(13;9,3,0,0,0,0,1)

MATHEMATICS

Bauldry, William Charles, *Orthogonal polynomials associated with exponential weights.*

Brackebusch, Ruth Elaine, *James space on general trees.*

Brink, James Robert, *The class field tower for imaginary quadratic number fields of type* $(3,3)$.

Frangos, Nicholas E., *On convergence and regularity of vector-valued processes indexed by directed sets.*

Hong, Yiming, *On the existence of perfect e-codes and tight 2e-designs in Hamming schemes.*

Ku, Jong-Min, *Irreducible subquotients of Verma modules over Kac-Moody Lie algebras.*

Narang, Kamal, *The group of automorphisms of non-associative commutative algebras associated with* $\mathrm{PSL}(m,q)m \geq 3$.

Singer, Phyllis E., *Kac-Moody algebras with nonsymmetrical Cartan matrices.*

Woldar, Andrew J., *On the maximal subgroups of Lyon's group and existence of a 3-dimensional faithful LyS-module over a field of characteristic* 5.

STATISTICS

Chan, Wen Yaw, *Optimal policies directed at reducing pest damage for a pest predator.*

Harry, Diane Sue, *A Markov model for Drugy response in patients with osteoarthritis.*

Qadri, Syed S., *Classification of objects, given their classification by a number of classifiers.*

Sen, Pali, *A stochastic model for coupled enzyme system and parameter estimation for the compartmental model.*

University of Cincinnati
(3;1,0,1,1,0,0,0)

MATHEMATICAL SCIENCES

Kim, Yoobong, *Some contributions to the theory of fuzzy measures and integrals.*

QUANTITATIVE ANALYSIS AND INFORMATION SYSTEMS

Feinauer, Richard A., *A mechanism for natural language access to data base.*

Hall, Richard A., *The clustered traveling salesman problem.*

OKLAHOMA

Oklahoma State University
(7;0,7,0,0,0,0,0)

STATISTICS

Abdullatif, Dalal Abdulrazzak, *An analysis for grouped survival data with split plot variance component models.*

Al-Mousawi, Jaffar Selman, *Fixed-size confidence regions for the mean vector of a multinormal distribution.*

Ekwo, Maurice Ene, *Sequential estimation for parameters of Pareto distributions.*

Hilton, George F., III, *Sequential and two-stage point estimation problems for negative exponential distributions.*

Shaarawy, Samir Moustafa, *A Bayesian analysis of moving average processes.*

Vik, Gaute, *Asymptotic results for stopping times based on U-statistics.*

Woldie, Mammo, *Inverse Gaussian regression models.*

University of Oklahoma
(1;0,1,0,0,0,0,0)

BIOSTATISTICS AND EPIDEMIOLOGY

Cucchiara, Andrew Joseph, *Linear regression of the multiple additive exponential model.*

OREGON

Oregon State University
(4;2,1,0,0,1,0,0)

MATHEMATICS

Keinert, Fritz, *The divergent k-plane transform.*

Kharab, Abdelwahab, *A nonlinear free boundary value problem.*

O'Regan, Daniel J., *Initial and boundary value problems via topological methods.*

STATISTICS

Limam, Mohammed, *Simultaneous tolerance intervals in the linear regression model.*

University of Oregon
(5;5,0,0,0,0,0,0)

MATHEMATICS

Ettlich, Sheryl Anne, *Successor groups.*

Harper, James Dale, *Analysis on hypergroups.*

Judson, Thomas, *Complete filtered Lie algebras and the Spencer cohomology.*

Valente, Kenneth, *The p-primes of a commutative ring.*

Willis, Linden, *Invariance theory of Riemannian geometry and the asymptotics of the heat equation.*

PENNSYLVANIA

Carnegie-Mellon University
(5;1,4,0,0,0,0,0)

STATISTICS

Dalzell, Catherine Jane, *A statistical analysis of atom probe data.*

Gavasakar, Umesh K., *A study of education procedures by modelling the errors in responses.*

Lee, Tzao-Lin, *Modelling random convex sets.*

Lim, Youngho, *Performance analysis of integrated voice data networks.*

Sahlroot, Jon Todd, *Performance evaluations of multiaccess network protocols.*

Drexel University
(1;1,0,0,0,0,0,0)

MATHEMATICS AND COMPUTER SCIENCE

Fratini, Stephen Sylvester, *Algorithms for a dynamic priority queue with two types of customers.*

Lehigh University
(2;1,0,0,1,0,0,0)

MATHEMATICS

Hakawati, Abdallah A., *Interpolation problems and Hilbert spaces of sequences.*

Muganda, Godfrey Chamba, *Optimality conditions for mixed constraint problems.*

Pennsylvania State University
(15;10,3,1,0,1,0,0)

MATHEMATICS

Aladro, Gerardo José, *Some consequences of the boundary behavior of the Carathéodory and Kobayashi metrics and applications to normal holomorphic functions.*

Bou Nader, Elham, *Best approximation in spaces of continuously differentiable functions.*

Brackin, Stephen H., *On Ramsey-type theorems and their provability in weak formal systems.*

Chen, Jiin-Chu, *On a conjecture of Lovasz and some results of chromatic graph theory.*

Dutko, Michael, *Limit theorems for infinite urn models in probability theory.*

Gass, Michael David, *Wreath product coverings involving syntactic transformation monoids.*

Golshan, Bahram, *Higher order cohomology operations and desuspension of involutions.*

Kolitsch, Louis Worthy, *Some analytic and arithmetic properties of generalized Frobenius partitions.*

Legrand, Mark Stephen, *Coanalytic sets in the absence of analytic determinacy.*

Takche, Jean Halim, *On the complexity of bilinear computations.*

Udomkavanich, Patanee, *Codes and inverse semigroups.*

Weerakoon, Sunethra, *An initial value control problem for the burgers equation.*

STATISTICS

Gabbara, Sami, *Nested and crossed repeated measures models.*

Hlynka, Myron, *Optimality for a class of perishable inventory policies under stochastic demand.*

Tableman, Mara, *Two-sample procedures based on one-sample linear signed rank statistics.*

Temple University
(3;0,3,0,0,0,0,0)

STATISTICS

Heyse, Joseph Frederick, *Partial lag autocorrelation and partial process autocorrelation for vector time series with applications.*

Pigeon, Joseph George, *Residual effect designs for comparing treatments with a control.*

Weideman, Carol A., *Non-adaptive hypergeometric group testing designs for at most two defectives.*

University of Pennsylvania
(1;1,0,0,0,0,0,0)

MATHEMATICS

Yetter, David Nelson, *Aspects of synthetic differential geometry.*

University of Pittsburgh
(6;3,0,0,0,1,0,2)

BIOSTATISTICS

Abdel-Aty, Fatma A., *A multivariate statistical analysis of the risk of infection in surgical wounds.*

Caplan, Richard J., *A sequential Cusum monitoring procedure to detect sudden departures from expected morbidity.*

MATHEMATICS AND STATISTICS

Chou, So-Hsiang, *A network-model for two-fluid flow and its numerical solution.*

Kwak, Do Young, *Norm estimates of holomorphic functions in the ball of C^n, in terms of their Taylor coefficients.*

Shakhs, Adnan Abdulredha, *Conditions under which a $\Sigma^{\#}$-space is a σ-space.*

Wagner, Kathleen A., *θ-refinability and strict p-spaces.*

RHODE ISLAND

Brown University
(16;5,0,0,0,11,0,0)

APPLIED MATHEMATICS

Anderson, Joyce Ellen, *Estimating projected images from a maximum likelihood and a Bayesian point of view.*

Blazquez, Camilo Miguel, *Homoclinic orbits in parabolic differential equations.*

Boldrini, José Luiz, *Is elasticity the proper asymptotic theory for materials with viscosity and capillarity?*

Dupuis, Paul Gilbert, *Large deviations theorems for non-Markovian systems with applications to stochastic systems theory.*

Fiagbedzi, Yawvi Aklasu, *Stabilization of a class of autonomous differential-delay systems.*

Fusco, Giorgio, *On mechanical systems with non-holonomic constraints.*

Lin, Xiao-Biao, *Symbolic dynamics and transversal homoclinic orbits in functional differential equations.*

McIntire, Roland Scott, *A new technique for discussing the development of singularities in quasilinear hyperbolic PDE's with applications to a model problem in nonlinear thermoelasticity.*

Nadler, Edmond Josef, *Piecewise linear approximation on triangulations of a planar region.*

Rocha, Carlos V., *Generic properties and bifurcation diagrams of scalar parabolic equations.*

Shannon, Kathleen Marie, *Convex sets, support functions, Lemoine points, and Steiner points with generalizations.*

Sternberg, Natalja, *Bound states of a nonlinear hyperbolic wave equation.*

Tzavaras, Athanassios E., *Shear band formation for materials exhibiting thermal softening, strain hardening and strain rate sensitivity.*

Zia, Lee Lynn, *Parameter estimation techniques for two-dimensional transport equations with application to models of insect dispersal.*

MATHEMATICS

Shepard, Allen D., *A cellular description of the derived category of a stratified space.*

Zimmermann, Karl F., *Subgroups of generic formal groups.*

SOUTH CAROLINA

Clemson University
(5;1,3,0,0,1,0,0)

MATHEMATICAL SCIENCES

Abernathy, Roger Ward, *Multivariate tests for goodness-of-fit.*

Domangue, Rickie James, *On some balancing algorithms for the implementation of robust sampling designs.*

Forney, Glenn Peter, *Computing the Fourier transform of functions with compact support.*

Patch, Steven Curtis, *Tests of goodness-of-fit based on the empirical characteristic function.*

Schnibben, George Ernest, Jr., *Polynomials and polynomial functions on infinite algebraic extensions of finite fields and their related matrix algebras.*

University of South Carolina
(1;1,0,0,0,0,0,0)

MATHEMATICS AND STATISTICS

Inoue, Hiroshi, *Optimal nonparametric function estimation and stochastic convergence for weighted sums of random variables and random sets.*

TENNESSEE

Memphis State University
(2;0,2,0,0,0,0,0)

MATHEMATICAL SCIENCES

Gastardo, Maria Teresa, *A stochastic model for carcinogenesis with special applications to the initiation and promotion phenomena.*

Tabatabai, Mohammad A., *Robust procedures for comparing several means and testing for parallelism for several straight lines under heteroscedasticity and non-normality.*

University of Tennessee
(1;0,0,0,1,0,0,0)

MANAGEMENT SCIENCE

Hooker, John N., Jr., *Nonlinear network location models.*

Vanderbilt University
(1;0,0,0,0,1,0,0)

MATHEMATICS

Barr, Thomas Harold, *Spline approximation for a problem in age-dependent population dynamics.*

TEXAS

North Texas State University
(2;2,0,0,0,0,0,0)

MATHEMATICS

Leavelle, Tommy L., *The reciprocal Dunford-Pettis and Radon-Nikodým properties in Banach spaces.*

Richardson, Walter Brown, Jr., *Nonlinear boundary conditions in Sobolev spaces.*

Rice University
(6;0,1,0,0,5,0,0)

MATHEMATICAL SCIENCES

Bunch, David Samuel, *Parameter estimation of probablistic choice models.*

Celis, Maria Rosa, *A trust region strategy for nonlinear equality constrained optimization.*

Dean, Edward Jerome, *A model trust region modification of inexact Newton's method for nonlinear two point boundary value problems.*

Jee, James Rodney, *A study of projection pursuit methods.*

Parks, Teresa Anne, *Nonlinear programming problems with variables that separate.*

Woods, Daniel John, *An interactive approach for solving multi-objective optimization problems.*

Southern Methodist University
(11;0,4,0,5,2,0,0)

MATHEMATICS

Attili, Basem, *Computation of high order singular points and multiple shooting.*

Sun, Ren-ji, *Caustics for dispersive waves: Asymptotics of nonlinear Schrödinger equation and its Riemann-Hilbert problems.*

OPERATIONS RESEARCH

Allen, Ellen Parker, *Using two sequences of pure network problems to solve the multicommodity network flow problem.*

Chen, Berhord David, *Forward network programming.*

Farhangian, Keyvan, *Networks with side constraints: An LU factorization update for the working basis inverse.*

Patty, Bruce Willard, *The basis suppression method for linear programs with special structure excluded by an objective side column.*

Shetty, Bala, *The equal flow problem.*

STATISTICS

Alassaf, Mohammad, *A comparison of four variance component estimators in regular group divisible partially balanced incomplete Bloch designs.*

Bonnego, Salvador, *The economic geometric moving average X-bar charts.*

Lakshminarayanan, Mani Y., *Estimation in simple linear regression models when both variables are subject to error.*

Shyu, Jyh-Cherng, *Tolerance intervals for the double exponential distribution.*

Texas A & M University
(4;0,4,0,0,0,0,0)

STATISTICS

Baker, Joshua S., *Conditional least squares estimation and design for continuous-time stochastic processes.*

Green, John William, *Variance components estimates and diagnostics.*

Olson, David Ray, *Residence time moments of stochastic compartmental models with age-dependent and time-dependent rates.*

Saito, Tokuji, *An application of stochastic compartmental theory to modeling plant growth and plant yield.*

University of Texas, Arlington
(2;0,0,1,0,0,0,1)

MATHEMATICS

Cleveland, Frederick Hart, *Finite difference solutions of Maxwell's equations in three dimensions.*

Pandian, Maharaja C., *Numerical studies of nonlinear systems and quasilinear boundary value problems with application to gas lubricating films.*

University of Texas, Austin
(4;3,1,0,0,0,0,0)

MATHEMATICS

Czitrom, Anne Veronica, *D-optimal experimental designs and alternative models for quadratic blending with process variables.*

Neidinger, Richard Dean, *Properties of Tauberian operators on Banach spaces.*

Shirley, Frank Theodore, *Regular and strongly π regular rings.*

Skora, Richard Kevin, *Maps between surfaces.*

UTAH

University of Utah
(2;0,0,0,0,1,0,1)

MATHEMATICS

Faltenbacher, Wolfgang, *A numerical integral solution of a scattering problem in a halfspace.*

Rescorla, Kim L., *Multivariate interpolations.*

VIRGINIA

Old Dominion University
(3;0,2,0,0,1,0,0)

MATHEMATICS

McKeon, James, *Statistial calibration theory.*

Melrose, Gordon, *Triple trigonometric series and their application to mixed boundary problems.*

Mittal, Mukul, *Estimating the parameters of truncated distributions.*

University of Virginia
(3;0,0,0,0,2,0,1)

APPLIED MATHEMATICS AND COMPUTER SCIENCE

Flinn, Kelton Francis, *Preconditioned conjugate gradient for the nonlinear shell equations.*

Weidman, Scott Thomas, *Mathematical analysis of correlation in homogeneous nucleation theory.*

MATHEMATICS

Yin, Zhong, *Quantum lattice systems and Markov semigroups on spin lattice systems.*

Virginia Commonwealth University
(4;0,4,0,0,0,0,0)

BIOSTATISTICS

Dornseif, Bruce Edwin, *Modelling asymmetric quantal dose-response curves.*

Elswick, Ronald K., *The missing data problem as applied to the extended version of the GMANOVA model.*

Finman, Jeffrey S., *Interval estimation for an odds ratio.*

Gregg, Mary Hall, *The use of multiple correlation coefficients in the partially weighted GMANOVA.*

Virginia Polytechnic Institute and State University
(10;1,8,0,0,1,0,0)

MATHEMATICS

Ntantu, Ibula, *The compact-open topology on C(X).*

Tarnawski, Maciej, *Asymptotic phase diagrams for lattice spin systems.*

STATISTICS

Kim, Kang-Kyun, *Nonparametric multivariate two-sample tests based on empirical probability measures.*

O'Gorman, Mary Ann, *Outliers and robust response surface designs.*

Park, Changsoon, *Nonparametric procedures for process control when the control value is not specified.*

Rashed, Dhafir, *Designs for multiple comparisons of control versus test treatments.*

Shing, Chen-Chi, *Structures and properties of repeated measurement designs.*

Thattil, Raphel O., *Design and analysis of intercropping experiments.*

Walker, Esteban, *Influence, colinearity, and robust estimation in regression.*

Wardrop, Daniel M., *Optimality criteria applied to certain response surface designs.*

WASHINGTON

University of Washington
(6;5,0,0,0,0,0,1)

MATHEMATICS

Bone, Terrence M., *Qualitative stability properties of matrices.*

Forstnerič, Franc, *Proper holomorphic mappings in several complex variables.*

Nievergelt, Yves, *Radon transforms of closed positive currents.*

Ostaszewski, Krzysztof Maciej James, *Henstock integration on the plane.*

Ray, Gary Alan, *Relations between Mahler's measure and values of L-series.*

STATISTICS

Ossiander, Mina Egbert, *Weak convergence and a law of the iterated logarithm for processes indexed by points in a metric space.*

Washington State University
(3;1,1,0,1,0,0,0)

MATHEMATICS

Al-Saket, Amal Hikmat, *An algorithm with degeneracy resolution for solving certain quadratic programming problems.*

Lee, Cheng-Shyong, *Generalizations of the Lebedev-Milin inequalities.*

Lee, Kwang Young, *On the E and MV-optimality of block designs having unequal block sizes.*

WISCONSIN

University of Wisconsin, Madison
(27;18,7,0,0,1,1,0)

MATHEMATICS

Burke, Maurice, *The use of counterexample logic by adolescents.*

Castillo-Chavez, Carlos, *Linear and nonlinear deterministic character-dependent models with time delay in population dynamcis.*

Chavey, Darrah Perry, *Periodic tilings and tilings by regular polygons.*

Chin, William, *Prime ideals in differential operator rings and crossed products.*

Farmer, William Michael, *Length of proofs and unification theory.*

Feldman, Alexander, *Recursion theory in a partial order with greatest lower bound.*

Gunter, Carl A., *Profinite solutions for recursive domain equations.*

Hatziafratis, Telemachos E., *Integral representation formulas on analytic varieties.*

Jacobs, Jonathan M., *Unfoldings of fixed points of one-dimensional dynamical systems.*

Klingler, Lee, *Modules over ZG, G a non-abelian group of order pq.*

Kwong, Ying-Chuen, *Asymptotic behaviour of the plasma equation.*

Lee, Tien-you (Daniel), *Some problems in cardinal spline interpolation and approximation.*

Neidhardt, Wayne L., *The BGG resolution, character and denominator formulas, and related results for Kac-Moody algebras.*

Pritikin, Daniel, *Extremal problems in graph homomorphisms and vertex identifications.*

Quinn, Declan P., *Group-graded rings, differential operator rings and duality.*

Rebarber, Richard Lewis, *Control of holomorphic semigroups generated by a class of spectral operators.*

Slavin, Charles Paul, *Properties of power-series coefficients of $H^2(\pi_+)$ functions and related Poisson integrals with weights.*

Solomon, Wiremu, *Limit theorems for random measures with applications.*

Tomaszewski, Boguslaw, *Interpolation by Lipschitz holomorphic functions and inner maps that preserve measure.*

Weiner, Daniel Charles, *Limit theorems, regularity and moments for affine normalized sums of independent, identically distributed random vectors.*

STATISTICS

Chen, Chung, *On a random level shift time series model.*

Cho, Sinsup, *Robust model-free prediction and control.*

Deng, Lih-Yuan, *Statistical inference in finite population sampling when auxiliary information is available.*

Ferreiro, Osvaldo, *Strategies for estimating missing observations in time series.*

Koschat, Martin Anselm, *Simultaneous inference in linear regression models.*

Tse, Siu-Keung, *Estimation and experimental design for quantal response models.*

Wincek, Michael, *Estimation of parameters of regression-time series models with possibly nonconsecutive data.*

University of Wisconsin, Milwaukee
(3;2,0,0,0,1,0,0)

MATHEMATICAL SCIENCES

Benzaid, Zoubir, *Global null controllability of perturbed linear control systems.*

Danielson, John Ernest, *The τ-semicritical socle series of a module.*

Marafino, John, *Concerning boundary behavior under conformal mappings.*

WYOMING

University of Wyoming
(2;1,0,0,0,1,0,0)

MATHEMATICS

Fausett, Laurene Van Camp, *An analysis of mathematical models of underground coal gasification.*

STATISTICS

Shorland, Michael D., *The detection and correction of multi-variate outliers with application in factor analysis.*

CANADA

Carleton University
(5;4,1,0,0,0,0,0)

MATHEMATICS AND STATISTICS

Bleuer, Susana G., *Confidence intervals for quantile-quantile plots and testing for normality.*

Cutler, Colleen Diane, *Some topological and measure-theoretic results for measure-valued and set-valued stochastic processes.*

Menzie, Chacon Santiago, *A catalogue of indecomposable representations of Euclidean diagrams.*

Roberts, Georgia Ruth, *Contributions to chi-squared tests with survey data.*

Seager, Suzanne Marie, *A bound on the rank of solvable primitive permutation groups.*

Dalhousie University
(1;1,0,0,0,0,0,0)

MATHEMATICS, STATISTICS AND COMPUTING SCIENCE

Ward, Douglas Eric, *Tangent cones, generalized subdifferential calculus and optimization.*

McMaster University
(3;3,0,0,0,0,0,0)

MATHEMATICAL SCIENCES

Poole, David Gordon, *Prime ideals and localization in Noetherian-Ore extensions.*

Roddy, Michael Stewart, *Varieties of modular ortholattices.*

Torres de Squire, Maria Luisa, *Amalgams of L^p and ℓ^q.*

Queen's University
(2;0,2,0,0,0,0,0)

MATHEMATICS AND STATISTICS

Nebebe, Fassil, *Bayes and empirical Bayes shrinkage estimates for regression coefficients, with application to* WISC *data.*

Ross, William H., *Measuring influence in nonlinear regression.*

Simon Fraser University
(2;1,0,0,0,1,0,0)

MATHEMATICS

Croitoro, Elena, *Perturbations about a finite elastic inflation.*

Huss, Mary Elizabeth, *Varieties of lattice ordered groups.*

Université de Montréal
(6;2,3,0,0,1,0,0)

MATHÉMATIQUES ET STATISTIQUE

Colin, Dominique, *L'étude de tests asymptotiquement non paramétriques en régression linéaire multiple.*

Dahel, Sahnoun, *Estimation et inférence pour la moyenne d'une loi multinormale avec information additionnelle.*

Fournier, Richard, *Quelques nouveaux résultats à propos de certaines classes de fonctions univalentes.*

Froda, Sorana, *Étude non paramétrique de questions d'estimation et de tests d'hypothèses relatives au problème d'un échantillon.*

Ouansafi, Abdellatif, *Méthodes d'approximation discontinue des problèmes de commande optimale.*

Tanguay, Monique, *Variante continue d'un problème de transport.*

Université de Sherbrooke
(2;2,0,0,0,0,0,0)

MATHEMATICS

Blais, Michel, *Méthodes et résultats en théorie des processus stochastiques.*

Violette, Donald, *Indice de point fixe pour les fonctions multivoques non compactes et fonctions multivoques différentiables.*

Université Laval
(3;2,0,0,0,1,0,0)

MATHÉMATIQUES, STATISTIQUES ET ACTUARIAT

Boudreau, Jean-René, *Stationnarité pour une classe de systèmes aleatoires à liaisons complètes.*

Fortin, André, *Méthodes d'éléments finis pour les équations de Navier-Stokes.*

Hébert, Michel, *Sur la nature et l'existence des algèbres libres.*

University of Alberta
(2;0,0,0,0,2,0,0)

MATHEMATICS

So, Joseph Wai Hung, *A study on some one-and two loci predator-prey interaction models.*

Wolkowicz, Gail Susan Kohl, *An analysis of mathematical models related to the chemostat.*

University of Calgary
(1;0,0,0,0,0,0,1)

MATHEMATICS AND STATISTICS

El-Zahar, Mohamed Hamid, *Three problems in graph theory and partially ordered sets.*

University of Waterloo
(9;4,4,0,0,1,0,0)

APPLIED MATHEMATICS

Kamran, Niky, *Contributions to the study of the separation of variables and symmetry operators for relativistic wave equations on curved space-time.*

COMBINATORICS AND OPTIMIZATION

Celmins, Uldis Alfred, *On cubic graphs that have no edge 3-colouring.*

Mahadev, Nadimpalli V. R., *Stability numbers in structured graphs.*

PURE MATHEMATICS

Blanton, George R., Jr., *Disjoint groups of homeomorphisms on an open interval.*

Riedel, Herbert Heinz Joachim, *Existentially closed algebras and the Boolean product construction.*

STATISTICS AND ACTUARIAL SCIENCE

Dewanji, Anup, *Analysis of incomplete life time data.*

Ramsay, Colin Mark, *Compound birth-death processes and the ruin problem of risk theory.*

Struthers, Cyntha Anne, *Asymptotic properties of linear rank tests with censored data.*

Viveros-Aguilera, Roman, *Estimation in small samples.*

University of Windsor
(1;0,1,0,0,0,0,0)

MATHEMATICS

Tajuddin, Islamuddin H., *Fourth moment and simulated powers of* MRPP *statistics.*

Grossman, George William, *Finite-difference algorithms for inviscid incompressible flow over an arbitrary symmetric profile.*

Doctoral Degrees Conferred 1984–1985

Supplementary List

The following entries supplement the list of thesis titles published in the November 1985 *Notices*, pages 774–786, and the March 1986 *Notices*, page 298.

COLORADO

Colorado State University
(1;0,0,0,0,0,0,1)

MATHEMATICS

Meyerowitz, Aaron, *Partial geometric lattices.*

NEW YORK

Cornell University
(1;0,0,0,1,0,0,0)

OPERATIONS RESEARCH

Domich, Paul David, *Residual methods for computing Hermite and Smith normal forms.*