Doctoral Degrees Conferred 1991–1992

The following list contains the names and thesis titles of recipients of doctoral degrees in the mathematical sciences (July 1, 1991 to June 30, 1992) reported in the 1992 Annual AMS-MAA Survey by 231 departments in 166 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. A supplementary list, containing names received since compilation of this list, will appear in a spring 1993 issue of the *Notices*.

ALABAMA

Auburn University (4)

ALGEBRA, COMBINATORICS AND ANALYSIS

Gardner, Robert Bentley, *On the zeros of polynomials and Bernstein type inequalities for polynomials and related entire functions.*

Grable, David Alan, *Some applications of the probabilistic method to design.*

FOUNDATIONS, ANALYSIS AND TOPOLOGY

Darji, Udayan Babubhai, *On completely Ramsey sets and limits of differentiable functions.*

Reardon, Patrick, *Classical measure spaces in the Ellentuck and density topologies.*

University of Alabama, Huntsville (1)

MATHEMATICAL SCIENCES

Ranasinghe, Arjuna Indraraja, *On a linearizing transformation for Burgers equation.*

University of Alabama, Tuscaloosa (5)

MANAGEMENT SCIENCE AND STATISTICS

Ahire, Sanjay, *Special models for a one-warehouse, N-retailers inventory system.*

Lau, Ronald, *Growth and profitability of the U.S. airline industry: A Markovian analysis.*

Matson, Jack Ernest, *An object-oriented approach to software cost estimation using function point analysis.*

MATHEMATICS

Cho, Gyeong-Mi, *Stability analysis in stochastic multiple objective programming problems.*

Rigsby, Myron, *Sylow p-subgroups of pseudo-complete nilpotent groups.*

ARIZONA

Arizona State University (2)

MATHEMATICS

Zhu, Hsiu Rong, *The existence of stable periodic orbits for a system of 3-dimensional differential equations that are competitive.*

Zhu, Xin Jie, *Adaptive control of linear systems.*

University of Arizona (12)

APPLIED MATHEMATICS

Alameddine, Mona Fouad, *Size structured competition models with periodic coefficients.*

Avila-Murillo, Fernando, *At integrated development of correspondence analysis with applications to environmental data.*

Campini, Marco, *The fluid dynamical limits of the linearized Boltzmann equation.*

Jin, Shan, *The semiclassical limit of the defocusing nonlinear Schroedinger flows.*

Jin, Shi, *Numerical transport in diffusive regimes.*

Pitucco, Anthony P, *Differential-geometric aspects of adapted contact structures.*

Roitner, Heinz, *Applications of the inverse spectral transform to a Korteweg-de Vries equation with a Kuramoto-Sivashinsky-type perturbation.*

Schober, Constance, *Numerical and analytical studies of the discrete nonlinear Schroedinger.*

Tsay, Jhishen, *Wave scattering in random media.*

Varatharajah, Paramanathan, *Propagation of light beams at the interface separating nonlinear diffusive dielectrics.*

MATHEMATICS

Rocha-Martinez, Jose Maria, *Discrete Imperfect repair.*

Tso, Taicheng, *The zero disperion limits of nonlinear wave equations.*

ARKANSAS

University of Arkansas (1)

MATHEMATICAL SCIENCES

Yaz, Ilke, *Control of discrete-time infinite dimensional systems.*

CALIFORNIA

California Institute of Technology (10)

APPLIED MATHEMATICS

Ammons, Richard L. M., *Mathematical control theory for liquid chromatography.*

Kaper, Tasso Jost, I. *On the structure in separatrix-swept regions of slowly modulated Hamiltonian systems.* II. *On the quantification of mixing in chaotic Stokes' flows: The eccentric journal bearing.*

Lui, Shiu-Hong, I. *Multiple bifurcations.* II. *Parallel homotopy method for the real nonsymmetric eigenvalue problem.*

Melman, Aharon, *Complexity analysis for the Newton modified barrier function method.*

VanPutten, Maurice H. P. M., *MHD in divergence form: A computational method for astrophysical flow.*

MATHEMATICS

Chen, Wei-Feng, *Birkhoff periodic orbit, Aubry-Mather sets, minimal geodesics and Lyapunov exponents.*

Ditzen, Achim, *Definable equivalence relations on Polish spaces.*

Evasius, Dean Matthew, *Carleman inequalities with convex weights.*

Naimi, Ramin, *Constructing essential laminations in some 3-manifolds.*

Qian, Nantian, *Rigidity phenomena of group actions on a class of nilmanifolds and Anosov $\mathbb{R}^n$ actions.*

Claremont Graduate School (4)

MATHEMATICS

Converse, Cherlyn, *Lower bounds for the maximum number of stable pairings for the general marriage problem based on the latin marriage problem.*

Green, Gregory, *Confidence bounds on functions of parameters with applications to reliability theory.*

Herring, Susan, *Statistical tests for stochastic dominance.*

Wu, Binghui, *Integrated semigroup and its application to inverse problems.*

Naval Postgraduate School (1)

OPERATIONS RESEARCH

Stephens, James, *An investigation of multivariate adaptive regression splines for modeling and analysis of time series systems.*

Stanford University (16)

ENGINEERING-ECONOMIC SYSTEMS

Agosta, John Mark, *Probabilistic recognition networks: An application of influence diagrams to visual recognition.*

Einav, David, *Reasoning automation under resource constraints.*

Kim, Choon Shik, *Strategies for new products in fast changing high-technology markets.*

Kim, Sung Kook, *Optimal dynamic hedging and hedger's asset pricing of a state contingent asset.*

Ng, Seok-Hui, *Creating and sustaining competitive advantage: Competing through a skill base approach.*

Robinson, Douglas R., *A framework for determining optimal petroleum leasing.*

Seiver, Adam, *Decision analysis: A framework for critical care decision-making.*

Tao, Yong, *A theory of discount rate for corporate investment decision analysis.*

MATHEMATICS

Gregori, Giovanni, *Regularity estimates for equations and systems of mean curvature types.*

Hewett, Thomas, *Hermitian forms over quaternion algebras, modular invariants and* $H^*(BF_4(q), \mathbb{F}_2)$.

Katznelson, Yonatan, *The number of singular integral matrices in a region.*

Pollack, Daniel, *The extent of nonuniqueness for the Yamabe problem.*

Radunskaya, Ami, *Statistical properties of deterministic Bernoulli flows.*

OPERATIONS RESEARCH

Chan, Nathaniel Yau-Ghi, *Optimal hydraulic aquifer management with reliability constraints.*

DeCroix, Gregory Alan, *Equilibrium warranties and prices.*

Eldersveld, Samuel K., *Large-scale sequential quadratic programming algorithms.*

University of California, Berkeley (34)

BIOSTATISTICS

Gerson, Jack Richard, *Estimating posterior distributions in the non-linear mixed model using the Gibbs sampler and the metropolis algorithm.*

MATHEMATICS

Abadie, Beatriz, *On the K-theory of the non-commutative Heisenberg manifolds.*

Bishop, Edward Evrett, *Machines and complexity over the p-adic numbers.*

Carlson, Neil Norton, *Topological defect model of superfluid vortex filaments.*

Cowan, Stuart, *Dynamical systems arising from game theory.*

Crofoot, Robert Bruce, *Multipliers between shift-invariant subspaces.*

Davis, Benjamin Mark, *Positive analytic functions and toeplitz classes.*

Gorodski, Claudio, *Closed minimal hypersurfaces in compact symmetric spaces.*

Hernandez, Alejandro, Ω_1*-saturated models of stable theories.*

Hoffman, Detlev, *Function fields of quadratic forms.*

Jungreis, Douglas, *Braids, Seifert fiber spaces and Anosov flows.*

Kientzle, Timothy Brian, *Categorial generalization of classical monoid theory.*

King-Smith, Oliver Peter, *Some analytic relations between holomorphic compositions operations in* L_1 *and* H_2.

Kuprat, Andrew Paul, *Creation and annihilation of nodes for the moving finite element method.*

Lu, Tzon-Tzer, *Minimum eigenvalue separation.*

Medina, Herbert, *Hilbert space operators arising from irrational rotations on the circle group.*

Nehaniv, Chrystopher, *Global sequential coordinates on semigroups, automata, and infinite groups.*

Nistor, Victor, *A bivariant Chern-Connes character.*

Pember, Richard Bissel, *Numerical methods for hyperbolic conservation laws with stiff relaxation.*

Peterzil, Ya'acov Amos, *Some definability questions in structures over the reals and in general* ∞ *minimal structures.*

Rida, Ahmed-Said, *On subfactors with the generating property and graphs.*

Rowan, William Haynie, *Enveloping ringoids of universal algebras.*

Schaefer, Edward Frank, *Class groups and Selmer groups.*

Schirokauer, Oliver, *On pro-finite groups and on discrete logarithms.*

Starr, Edith N., *Curves in handlebodies.*

Tau, Yu, *Numerical study of Stokes flows with suspended particles.*

Vineberg, Susan Nicolet, *Conditionalization and rational belief change.*

Zeitz, Paul, *Rank-one actions.*

Zidaritz, Adrian, *Composition operators acting on measures.*

STATISTICS

Bajamonde, Alex Catane, *On efficient and robust estimation in semiparametric linear regression models with missing data.*

Bose, Smarajit, *A method for estimating nonlinear class boundaries in the classification problem and comparison with other existing methods.*

Guerra, Rudy, Jr., *Statistical methodology for the estimation of species distances as indicated by DNA-DNA hybridization.*

Nguyen, Trang Diem, *Statistical models and methods in molecular evolution.*

Zhou, Bin, *Analysis of volatile time series, with reference to foreign exchange rates.*

University of California, Davis (4)

MATHEMATICS

El-Ekhtiar, Ali Ali Ali, *Integral geometry in Minkowski spaces.*

Iseri, Howard, *Least area and minimal annuli with singular boundaries.*

Klebanoff, Aaron, *Chaos in three species food chains.*

Nguyen, Nam Duc, *Decision problems for some tag systems.*

University of California, Irvine (5)

MATHEMATICS

Acosta, Victor, *Analyticity of the density of states in the Anderson model on the Bethe lattice.*

Ho, Tony, *Derivations of Jordan Banach triples.*

Hudgins, Lonnie H., *Wavelet analysis of atmospheric turbulence.*

Jones, Donald A., *Determining nodes and long time approximations to the Navier-Stokes equations.*

Lao, Norman Yung-Pei, *A numerical approximation on the norms of integral operators.*

University of California, Los Angeles (27)

BIOSTATISTICS

English, Patricia Ann, *Extreme tail robustness of the T-statistic.*

Kim, Dong Kee, *Regression models for overdispersed binomial data.*

Sun, Guo-Wen, *Markov renewal proportional hazards models model for longitudinal survival data.*

Wang, Chao, *Nonlinear multivariate analysis of variance with application to event-related potential studies.*

Wang, Yongxiao, *Structural covariance models for longitudinal data with smoothing techniques.*

MATHEMATICS

Borzellino, Joseph Ernest, *Riemannian geometry of orbifolds.*

Burke, Douglas R., *Stationary sets and towers.*

Chang, Shaoping, *Hypersurfaces of constant scalar curvatures in spheres.*

Chang, Yu-chung, *Comparison of finite difference and the pseudo spectral approximation for hyperbolic equations and implementations on the connection machine.*

Chen, Jian-Shen, *Confidence intervals for parametric functions in nonlinear regression.*

Darwin, Sophia Katharine, *Construction and properties of difference sets and related designs.*

Donato, June, *Analysis and design of iterative methods for scalar and systems of elliptic equations.*

Gebelt, Nicholas Watts, *The Bergman kernel on certain weakly pseudoconvex domains.*

Grieser, Daniel, L^p *estimates for eigenfunctions and spectral projections of the Laplacian near concave boundaries.*

Koh, Liang-Khoon, *Geometric quantities and topological structures of Riemannian manifolds.*

Kuang, Weijia, *Resistive instabilities in rapidly rotating fluids.*

Liedahl, Steven, *$Q(i)$-division rings and admissibility.*

Melas, Antonios, *Some properties of eigenfunctions and eigenvalues of the Laplacian.*

Montgomery, Peter Lawrence, *An FFT extension of the elliptic curve method of factorization.*

O'Hara, Paul Patrick, *Gaps in the range of the stable processes.*

Okikiolu, Kate, *The analogue of the strong Szegő limit theorem for the torus and for the three-sphere.*

Reider, Marc B., *Development of higher order numerical methods for two-dimensional incompressible flow with applications to flows around circular cylinders and air foils.*

Schimmerling, Ernest, *Combinatorial principles in the core model for one Woodin cardinal.*

Sinclair, Rodney, *Thermodynamics of quantum and classical Liouville equations.*

St. Pierre, Martin, *On the numerical simulation of rapidly rotating, strong fields dynamos.*

Tong, Boning, *Uniformly high order strictly non-oscillatory numerical schemes for the hyperbolic conservation laws.*

Xu, Geng, *Subvarieties of general hypersurfaces in projective space.*

University of California, Riverside (5)

MATHEMATICS

Ahn, Sung Hun, *Asymptotic primes and grade functions.*

Allen, Joseph Norbert, *Curvature of intrinsic measures on complex manifolds.*

Ushijima, Kazuchika, *A ring representing a finite projective geometry.*

STATISTICS

Bentley, James, *Change-point estimation in logistic regression.*

Lucas, Thomas William, *Robust Bayesian inference when the data conflicts with the prior.*

University of California, San Diego (19)

MATHEMATICS

Beaulieu, Raymond Anthony, *Extensions of Noetherian rings: Bounds, Morita contexts, and exact embeddability.*

Benbourenane, Mohamed, *The hierarchical basis multigrid method for convection-diffusion equations.*

Bloom, Laura Anne, *Bijective combinatorial methods in the comparison of optimal algorithms.*

Fierro, Ricardo D., *Collinearity and total least squares.*

Franks, Edwin Samuel, *Polynomially subnormal operator tuples.*

Harland, John Ro, *Nevanlinna-Pick interpolation with topological constraints.*

Hashemi-Asasi, Siamak, *Nevanlinna-Pick interpolation on Sobolev spaces with boundary conditions.*

Hwang, Yoon Sung, *The corestriction of valued division algebras over Henselian fields.*

Jensen, Anders, *Quotient rings and embeddings of Noetherian rings.*

Meylan, Francine, *Reflection principle in complex space for some class of hypersurfaces and mappings.*

Patton, Linda J., *Interpolation of Nevanlinna-Pick type on the boundary of the polydisc.*

Poulos, Steven Christopher, *Graph theoretic and spectral properties of finite upper half planes.*

Santos, Rafael, *Moving space-time finite element methods for convection-diffusion problems.*

Shick, Jonathan Edward, *Quadratic forms over function fields of elliptic and hyperelliptic curves.*

Shimozono, Mark Masami, *Littlewood-Richardson rules for ordinary and projective representations of symmetric groups.*

Tao, David, *A variety associated to an algebra with involution.*

Whitehead, Sara Tamsen, *The computation of Kronecker products and transition matrices.*

Xiao, Bing, *New bounds in cell probe model.*

Yarbrough, Mark G., *The structure of the doubly adjacent gray code for the symmetric group.*

University of California, Santa Barbara (12)

MATHEMATICS

Bratholdt, James Stuart, *The topology of character varieties of representations into SL_2.*

Doll, Helmut Richard, *A generalization of bridge number to links in arbitrary three manifolds.*

Grady, Michael James, *Congruence patterns in subgroup counting functions.*

Keller, Paul Stanley, *Omega-limit sets of various classes of real functions.*

Lorica, Benjamin Tito, *Differential geometry and orbits in mechanical systems.*

Papadopoulos, Caroline Anne, *An alternating iteration method for the solution of certain free boudnary value problems.*

Song, Young-Seop, *On modules of vector-valued functions.*

STATISTICS AND APPLIED PROBABILITY

Gross, Aaron, *Ergodic properties of some stationary infinitely divisible stochastic processes.*

Kozubowski, Tomasz J., *The theory of geometric stable distributions and its use in modeling financial data.*

Liu, Wei, *Sensibility and stability of posterior quantities.*

Panorska, Anna Katarzyna, *Generalized convolutions.*

Wu, Chufang, *The theory of Marshall-Olkin stable laws.*

University of California, Santa Cruz (4)

MATHEMATICS

Imamoglu, Ozlem, *Theta functions and the Kubota homomorphisms for $\mathrm{Sp}(2n, O(i))$.*

Lou, Shu-xian, *The second order asymptotics of a class of integral operators with discontinuous symbols.*

Tappero, Susan L., *Saddlepoint characterizations of solutions to semilinear operator equations.*

Thorsen, Bobette Hayden, *An asymptotic expansion for the trace of certain integral operators.*

University of Southern California (5)

MATHEMATICS

Jochner, Michael Paul, *Representations by definite quadratic forms.*

Mao, Chaolin, *An approximation theory for the identification of nonlinear degenerate distributed parameter systems.*

Pei, Xiang, *Flux for incompressible stochastic flows in the plane.*

Quenell, Gregory Tyler, *Trace-formula methods in the spectral theory of graphs.*

Rolke, Wolfgang, *Entropy in probability and statistics.*

COLORADO

Colorado School of Mines (1)

MATHEMATICAL AND COMPUTER SCIENCES

Katz, Joseph H., *An algorithm for solving a class of nonlinear, unconstrained, multivariable, signomial optimization problems using geometric programming.*

Colorado State University (6)

MATHEMATICS

Hasan, Mohammed, *Bifurcation problems in nonlinear programming.*

Oliver, Dale, *Spreads in $PG(3, q)$ admitting $Cq^2 - 1$ and related association schemes.*

Poje, Mia, *Some free cyclic group actions on the 3-sphere.*

Rijavec, Nenad, *A Lagrangian relaxation algorithm for some multidimensional assignment problems.*

STATISTICS

Breidt, F. Jay, *On the structure of innovations for non-Gaussian linear processes.*

Chen, Changhua, *Model selection and missing value estimation in time series analysis.*

University of Colorado, Boulder (8)

APPLIED MATHEMATICS

Allan, Fathi, *Numerical investigations of the transition to turbulence in the Balsius.*

Nesbitt, Martha, *The dynamics of shooting methods for solving Sturm-Liouville problems.*

MATHEMATICS

Almada, Carlos, *Harmonic reductions in principle fiber bundles.*

Husain, Ali Ojan, *Orthogonal grid generation in three dimensions.*

Hyndman, Jennifer P., *Cover pairs in the lattice of interpretability types of varieties.*

Knill, Emanuel, *Generalized degrees and densities for families of sets.*

Lundy, Thomas, *The inverse of L-matrices.*

McDonald, Brian E., *Towards a meaningfulness and truth : An introduction to variational semantics (a provisional essay).*

University of Colorado at Denver (2)

MATHEMATICS

King, Hugh, *A method of system identification applied to a simulation of human exercise.*

Otto, James, *Multilevel methods for the solution of advection-dominated elliptic problems on composite grids.*

University of Northern Colorado (1)

MATHEMATICAL SCIENCES

Chattamvelli, Rajan, *A comparison of selected algorithms for four noncentral statistical distributions.*

CONNECTICUT

University of Connecticut (8)

MATHEMATICS

Feng, Yanling, *The study of nonlinear flexings in a floating beam by variational methods.*

LaBarre, Robert, *Computational geometry techniques for 2D and 3D unstructured mesh generation with application to the solution of divergence form partial differential equations.*

Pan, Shiho, *Descriptive topological spaces and perfect maps.*

Pan, Zhidong, *Properties of nest algebras.*

Weber, Frank Peter, *Invariant constructions in the relative r.e. degrees and embeddings into initial segments of the lattice of ideas of r.e. degrees.*

Xiao, Ding, *Numerical analysis of mappings associated with positive definite Toeplitz matrices.*

Yu, Xun, *Investigation of steady state solutions for electrochemical processes.*

STATISTICS

Yiannoutsos, Constantin T., *Sampling based approaches for marginalization, conditioning and propagation of information in dependence networks.*

Wesleyan University (3)

MATHEMATICS

Johnson, Paul, *Functors of sub-descent type.*

Molitor, Andrew, *Covers of compact Hausdorff spaces via localic methods.*

Zivkovic, Dejan, *Non-probabilistic techniques in circuit complexity.*

Yale University (8)

MATHEMATICS

Cameron, John Alexander, *The reduction of Einstein's equations on spacetimes with spacelike $U(1)$ isometry groups.*

Epelbaum, Yonathan, *Knottings of orientable surfaces in 1-connected 4-manifolds.*

Mac Manus, Paul Raymond, *Quasi conformal mappings on Ahlfors-David curves.*

Nahmod, Andrea Rica, *Geometry of operators and spectral analysis.*

Walden, Byron Lee, *L^p Integrability of derivatives of Riemann mappings on Ahlfors-David regular curves.*

STATISTICS

Crowley, Evelyn Mary, *Estimation of clustered parameters.*

Mohanty, Surya Prakash, *Detecting bimodality using the minimal spanning tree.*

Riceman, David, *An estimator for the linear model.*

DELAWARE

University of Delaware (6)

MATHEMATICAL SCIENCES

Borkowski, John J., Jr., *The evaluation of mixed resolution designs.*

Ju, Huey Lin, *Split plotting and randomization in industrial experiments.*

Mehrotra, Devan, *Circularity diagnostics for repeated measures designs.*

Snikeris, Alfred Christian, *Bioequivalence as a linear structural relationship estimation of formulation intersubject and intrasubject variability and a two-step method for asessing bioequivalence.*

Tong, Zengxiang, *Existence of discontinuous optimal solutions for infinite horizon problems in optimal control and calculus of variations.*

Zhao, Yagu, *Operator theory of the Drazin inverse.*

DISTRICT OF COLUMBIA

American University (1)

MATHEMATICS AND STATISTICS

Ellis, Nancy F., *The effect of in-class study groups on achievement and course completion rates in developmental algebra classes.*

FLORIDA

Florida Institute of Technology (2)

APPLIED MATHEMATICS

Kiaer, Lynn C., *Discrete optimization strategies for timetabling.*

Koksal, Semen, *Nonuniform boundedness and stability properties of the solutions of the systems of ordinary differential equations.*

Florida State University (7)

MATHEMATICS

Coulliette, David Lee, *Initiation and development of creeping thermal plumes.*

Edelstein, Eric E., *Singularities in high codimensional decompositions over generalized manifolds.*

STATISTICS

Antoine, Robin, *Identifiability in the autopsy model of reliability theory.*

Kurien, T. V., *Limit theorems for Markov random fields.*

Lee, Sau-Chi, *Estimation and testing of some nonlinear time series biological population models.*

Narasimhan, B., *Optimal search in an ordered array.*

Zhang, Mei-Jie, *Cumulative regression function methods in survival analysis and time series.*

University of Florida (13)

MATHEMATICS

Basavaraj, Udai, *Screw problems in blocking sets.*

Gu, Xiao-Ping, *Hausdorff dimension of some invariant sets.*

Kitto, Cyrus L., *Some problems in blocking sets.*

Kitto, Wei Z., *An isomorphism theorem between the extended generalized balanced ternary numbers and the p-adic integers.*

Reinke, Edward, *Integration of locally convex valued functions.*

Shihai, Li, *Chaos, recurrence and inverse limit spaces.*

STATISTICS

Baskin, Robert, *Confidence sets for functions of variance components in a mixed linear model.*

Capen, Robert, *Exact testing procedures for unbalanced random and mixed linear models.*

Chung, Daehyun, *Baseline hazard junction in Cox's regression model under order restriction.*

Lang, Joseph, *On model fitting for multivariate polytomous response data.*

Namgung, Yearnok, *The effects of an option-3 measurement scheme in detecting changes in longitudinal data.*

Pikounis, William, *Two-sample problems in survival analysis.*

Sun, Fangshi, *Bayesian approach to the adaptive DPCM for AR(P) and two-dimensional AR(1,1) model.*

University of South Florida (3)

MATHEMATICS

Budzban, Gregory M., *Weak convergence of convolution iterates of probability measures on topological semigroups.*

He, Xisheng (Matthew), *Weighted polynomial approximation and zeros of Faber polynomials.*

Sun, Jung-Fan, *On some general polynomials over finite fields.*

GEORGIA

Emory University (1)

MATHEMATICS AND COMPUTER SCIENCE

Eaton, Nancy, *Some results in graph Ramsey theory and graph representations.*

Georgia Institute of Technology (7)

MATHEMATICS

Arrieta, Jose M., *Spectral properties of Schrodinger operators under perturbations of the domain.*

Arrigo, Daniel J., *Group properties of a Monge-Ampère type equation.*

Green, Edward L., *Spectral theory of Laplace-Beltrami operators with periodic metrics.*

King, James F., *Dimension characteristics for invariant measures.*

Kuai, Wenming, *Neural networks constructed using families of dense subsets of $L_2(R)$ functions and their capabilities in efficient and flexible training.*

Kwek, Keng-Hut, *On Cahn-Hilliard type equation.*

Van Vleck, Eric S., *Random and numerical aspects of the shadowing lemma.*

University of Georgia (9)

MATHEMATICS

Lovorn, Renet, *Rigorous, subexponential algorithms for discrete logarithms over finite fields.*

STATISTICS

Bau, Jiin Jonp, *Subset selection procedure with a statistical test.*

Guo, Jiin Huarng, *Causal autoregressive processes on a plane.*

Hwang, Sun Young, *Asymptotic optimal inference for a class of nonlinear time series models.*

Park, You Sung, *Extreme value theory for queueing processes and related discrete valued stochastic processes.*

Sethuraman, Sankar, *Statistical inference for spatial time series with long range dependence.*

Thiruvaiyaru, Dharma, *Some problems of inference for queueing systems and networks.*

Zhang, Hu-Ming, *Developments and applications of the law of the iterated logarithm.*

Zhao, Zhen, *Nonhomogeneous Markov models for the AIDS epidemic.*

HAWAII

University of Hawaii (1)

MATHEMATICS

Perry, Patrick Neal, *A covering space approach to (d.K.) constrained codes.*

IDAHO

Idaho State University (1)

MATHEMATICS

Woldmedhin, Delelegne, *The Schwarzian derivative in the theory of univalent functions.*

ILLINOIS

Illinois Institute of Technology (2)

MATHEMATICS

Feigl, Kathleen A., *Numerical simulation of a KBKZ fluid in a four-to-one axisymmetric contraction domain.*

Karamolengos, Michael, *Some new approaches to plasticity and damage.*

Illinois State University (3)

MATHEMATICS

Army, Patricia D., *An approach to teaching a college course in trigonometry with applications and graphing calculators.*

Becker, Barbara A., *The concept of function: Misconceptions and remediation at the collegiate level.*

Chumni, Wichai, *A discrete mathematics course for the first two years of study.*

Northern Illinois University (4)

MATHEMATICAL SCIENCES

Schell, Vicki, *An investigation of the role of symmetry in partitioning tasks.*

Tsutsui, Hiseya, *The structure of rings all of whose ideals are prime.*

Wang, Rongdon, *Absolute stability of nonlinear differential systems.*

Wilkins, David, *Some results on the Mackey dual of a Banach space.*

Northwestern University (4)

MATHEMATICS

Bauer, John, *Toward a proof that Ashley's matrix is a counterexample to William's conjecture.*

Hetzler, Steven, *An entropy for elements of the rotation set of a lift of a torus homeomorphism.*

Langsetmo, Lisa, *K-theory, v_1-periodic homotopy, and localization.*

Ratliff, Thomas, *Congruence subgroups and elliptic cohomology.*

Southern Illinois University (7)

MATHEMATICS

Bassam, Issa, *An approach to coincidence theory through regular covering spaces.*

Eubanks, David Allen, *Wavelet transforms with translation parameter on* **Z** *and* **R**.

Liu, Hetao, *On a class of partial integro-differential equations and applications in viscoelasticity.*

Park, Mihee, *Permutations for the mixed radix FFT and FHT.*

Schroeder, Marcin, *Dependence systems.*

Van Fleet, Patrick Joe, *Numerical evaluation of multivariant spline functions.*

Zhang, Bo, *Periodic solutions of nonlinear abstract differential equations with infinite delay.*

University of Chicago (8)

MATHEMATICS

Daskalopoulos, Panagiota, *The Cauchy problem for generalized porous medium equations.*

Fine, Benjamin Lee, *Disconnected equivariant rational homotopy theory and formality of G-Kähler manifolds.*

Goodman, Albert J., *Automorphism groups of graphs: Asymptotic problems.*

Gutschera, Karl Robert, *Ergodic elements for actions of Lie groups.*

Keenan, Philip Thomas, *Thermal simulation of pipeline flow.*

Mildenhall, Stephen J. M., *Cycles in a product of curves.*

Pommersheim, James Erik, *The Todd class of a simplicial toric variety, Dedekind sums, and lattice points in a tetrahedron.*

Seydoux, Guillaume, *Rigidity of ergodic volume-preserving actions of semisimple groups of higher rank on compact manifolds.*

University of Illinois, Chicago (18)

MATHEMATICS, STATISTICS AND COMPUTER SCIENCE

Abual-Rub, Said Marwan, *Non-linear partial differential equations applied to diffusion problems arising in Mathematical biology.*

Afenya, Kwasi Evans, *Modelling abnormal granulocytopolesis and it's chemotherapy.*

An, Jianbei, *2-weights for finite general linear groups and 2-blocks.*

Chai, Feng-Shun, *On the construction and optimality of linear trend-free and nearly trend-free designs.*

Cirulis, Astrida, *Three prospective elementary teachers' belief and the impact of their mathematics courses.*

Ferreirim, Marie Andre' Isabel, *On varieties and quasivarieties of hoops and their reducts.*

Holland, Kitty, *Geometries associated with strongly minimal theories.*

Jarvis, Dennis J., *Performance and application of multiprocessor systems.*

Kunin, Boris, *A probabilistic model for predicting scatter in brittle fracture.*

Mei, Jing-Dong, *Asymptotic approach to the performance analysis of closed queueing.*

Messmer, Margit, *Groups and fields interpretable in separably closed fields.*

Naimipour, Kumarss, *Numerical convergence for the Bellman equation of stochastic optimal control with quadratic costs and constraints.*

Shi, Niadong, *Construction of stable and omega-stable pseudoplanes.*

Sun, Feng, *Linear separation of stable sets in graphs.*

Tan, Ruby Q., *On Hilbert transforms, cardinal interpolation and Bernstein's inequality.*

Tsai, Han-Ping, *Existence of certain extremal self-dual codes.*

Xu, Huihuang, *Data parallel methods in large scale scientific computations.*

Zabric, Eva, *Hall polynomials for sympletic groups.*

University of Illinois, Urbana-Champaign (19)

MATHEMATICS

Aldaz, Jesus, *Representations of measures via the standard part map.*

Bachman, Gennady, *On the coefficients of cyclotomic polynomials.*

Blaylock, Richard, *Some results on e-genericity and recursively enumerable weak truth table degrees.*

Bu, Qiyue, *On initial-boundary value problems for the non-linear Schrödinger equation and the Ginzberg-Landau equation.*

DeCastro, Rodrigo, *Combinatorial principles in second order theories of bounded arithmetic.*

Foguel, Tuval, *Finite groups with a special 2-generator property, and order of centralizers in finite groups.*

George, John, *1-factorizations of tensor products of graphs.*

Haputantirige, Sunil Gunaratne, *Generalized Kummer congruences and Iwasawa invariants.*

Kugendran, Thambithura, *Quasiconvex optimization via generalized gradients and symmetric duality.*

Kwon, Ki-Ho, *Growth comparisons for certain Nevannlinna theory functionals.*

Lee, Jinsik Mok, *Geometrical and martingale characterizations of UMD and Hilbert spaces.*

Lichtblau, Daniel, *Invariant proper holomorphic maps between balls.*

Pe, Joseph, *Polynomial time Martin-Löf type theory.*

Pudaite, Paul, *Explicit mathematical models for behavioral science theories.*

Snevily, Hunter, *Combinatorics of finite sets.*

STATISTICS

Amarasinghe, Upali Ananda, *Comparison of several curves in the context of nonparametric regression.*

Chang, Hua-Hua, *Some theoretical and applied results concerning item response theory model estimation.*

Huang, Bidan, *Design, estimation, and prediction of computer experiments with applications of spatial data.*

Park, Jeong Soo, *Tuning complex computer codes to data and optimal designs.*

INDIANA

Indiana University (11)

MATHEMATICS

Chen, Min, *Incremental unknown methods.*

Collet, Jean-Francois, *On the existence and regularity of the solutions of a system of conservation equations arising in oil engineering.*

Lee, Chan-Ho, *Iterated random maps and nonlinear autoregressive time series models.*

Mu, Jun, *Regularity of solutions of degenerate variational inequalities.*

Niyikiza, Clet, *Multivariate Behrens-Fisher problems with constraints on the covariance matrices.*

Sun, Shan, *Asymptomatic behavior of the perturbed empirical quantiles and perturbed empirical distribution functions.*

Tarpey, Thaddeus, *Principal points.*

Usadi, Karin M., *On the classification of equivariant surface maps.*

Wachsmuth, Bert, *On the degenerate Monge Ampère equation.*

Wang, Shi-Lin, *Distribution and norm-inequalities of Littlewood-Paley operators.*

Yan, Jun, *Fixed design nonparametric regression for linear process.*

Purdue University (32)

INDUSTRIAL ENGINEERING

Bringelson, Liwana, *Group mental model transfer.*

Eneyo, Emmanuel, *An integrated knowledge-based approach to maintenance control systems for automated manufacturing.*

Jahn, Chungen, *Concurrent design for constraint-oriented permanent assembly.*

Kaiser, Mark, *Centers of convex bodies.*

Kim, Chang, *The operation of an automated guided vehicle system in a manufacturing job shop.*

Mooney, Ed, *Tabu search heuristics for resource scheduling with course scheduling applications.*

Ng, Peh, *Leontief flow problems: Integrality properties and strong extended formulations.*

Noble, James, *A framework for the design justification material handling systems.*

Rais, Abdur, *The 2-connected Steiner subgraph problem.*

Veeramani, Dharmaraj, *Physical resource management in large computer-controlled manufacturing systems.*

Ye, Nong, *Development and validation of a cognitive model of human knowledge system: Toward an effective adaptation to differences in cognitive skills.*

MATHEMATICS

Chen, Zhangxin, *On the relationship between mixed and Galerkin finite element methods.*

Cleveland, Bennett W. Jr., *Pre-wavelets and image compression.*

Goonetilleke, Mestiyage Don Lasantha, *Characteristic numbers and equivariant homotopy type.*

Hensley, Jeffrey, *Scattering of Type II Biot waves in inhomogeneous media.*

Jeong, Moonja, *Approximation theorems on mapping properties of the classical kernel functions of complex analysis.*

Keirouz, Malhab Chafic, *Electrostatics and the index of vector fields.*

Kim, Hyoungsoon, *Semicontinuity for unbounded operators affiliated with operator algebras.*

Ma, Peiming, *Local boundary regularity of the Bergman projection in non-pseudoconvex domains.*

Park, Mikeung, *On estimates for the tangential Cauchy-Riemann operator on weakly pseudoconvex CR-manifolds.*

Raghavan, K. N., *Uniform annihilation of local cohomology; powers of ideals generated by quadratic sequences.*

Sadraoui, Houcine, *Hyponormality of Toeplitz operators and composition operators.*

Sheen, Dong-Woo, *Absorbing boundary conditions for wave transmissions.*

Wong, Ngai-ching, *The left quotient of a C^*-algebra and its representation through a continuous field of Hilbert spaces.*

Zhang, Yitang, *The Jacobian conjecture and the degree of field extension.*

STATISTICS

Basu, Sanjib, *Robustness of Bayesian and classical inference under distribution bands and shape restricted families.*

Hande, Sayaji Namdeo, *Contributions to nonparametric selection and ranking procedures.*

Hwang, Jinsoo, *Sequential estimation for the proportional hazards model in the presence of nuisance parameters.*

Mueller, Peter, *Numerical integration in Bayesian analysis.*

Pliego, German J., *Curve fitting through orthogonal wavelets.*

Sun, Dongchu, *Bayesian sequential reliability for Weibull and related distributions.*

Zen, Mei-Mei, *Bayesian inference with nonconjugate priors.*

University of Notre Dame (7)

MATHEMATICS

Besana, Gian Mario, *The geometry of quadric fibrations arising in adjunction theory.*

Chowdhury, Ambar Kumar, *On the number of non-isomorphic models of size $|T|$.*

Chowdhury, Mary, *Rank* I *preserving maps on the unitary Lie ring over a discrete valuation ring.*

Low, Leefong, *Some properties of geometrically simple state theories.*

Olson, Roger, *The coefficient of t^{-n} in the asymptotic expansion of the local trace of the heat kernel for the $\overline{\partial}_b$-Laplacian on $(0,1)$-forms on a compact strictly pseudoconvex CR manifold.*

Spalinski, Jan, *Strong homotopy theory of cyclic sets.*

Wang, Kaining, *The heat equation for a sum of squares of vector fields.*

IOWA

Iowa State University (7)

STATISTICS

Lu, Chi-Hsien Joseph, *The use of degradation measures in assessing reliability.*

Medak, Frederick Martin, *Heirarchical testing using the power-divergence family of statistics.*

Robison-Cox, James Franklin, *Order statistics under linear trend.*

Tiro, Muhammad Arif, *Edgeworth expansion and bootstrap approximation for M-estimators of linear regression parameters with increasing dimensions.*

Ver Hoef, Jay Michael, *Statistical analysis of spatial pattern in ecological data.*

Wang, Kui-Jang, *Contributions to design of experiments.*

Wang, Morgan Chung-Ching, *Numerical methods for self-validating computation of probabilities and percentiles in selecting distributions using interval analysis.*

University of Iowa (21)

APPLIED MATHEMATICAL SCIENCES

Chi, Mei-Hsiu, *Linear semi-infinite programming methods for robot trajectory planning problems.*

Suelzer, Michael T., *Analysis of human quantitative judgement: Models of sequential magnitude estimation.*

Zhen, Huang, *Mathematical models and algorithms for distribution system design and operation.*

MATHEMATICS

Chi, Mei-Hsiu, *Linear semiinfinite and nondifferentiable programming methods for robot trajectory planning problems.*

Doucette, Robert, *Boundary integral equation methods for solving Laplace's equation with non-linear boundary conditions on a polygon.*

Gao, Linda, *Disease transmission models with density dependent demographics.*

Ho, Yue-Chan, *Some results on rings generated by semigroups.*

Hu, Zhibao, *Some properties related to the Radon-Nikodým property in Banach spaces.*

Huang, Zhen, *Mathematical models and algorithms for distributions systems design and operation.*

Kim, Donggyun, *Quadratic lifting of supercuspidal representation of GL_2.*

Knopp, Kent, *Ideals generated by powers of elements.*

Lee, Eun Ho, *On the lattice of semigroup whose proper right congruences form a tree.*

Mastrangelo-Puech, Laura, *On radicals of triangular operator algebras.*

Naseer, Muhammad, *Colorings of commutative rings.*

Qiu, Chaoxin, *K-theory for triangular operator algebras.*

Radloff, Kathryn, *Properties of arrangement which are related to asphericity.*

Smith, Karen, *Generalized braid arrangements and related quotient spaces.*

Suelzer, Michael, *Analysis of human quantitative judgement: Models of sequential magnitude estimation.*

Teo, Beng-Chong, *On the spherical widths of metric balls in complete Riemannian manifolds.*

Van Ark, James, *Analysis of epidemiological models with heterogeneity.*

Zhang, Wenyao, *Some geometric and topological properties in Banach spaces.*

KANSAS

Kansas State University (2)

MATHEMATICS

Li Hung, Peiqing, *Investigation of some ill-posed and inverse problems.*

Taghavi, Mohsen, *Lower bounds for the correlation coefficients of Rudin-Shapiro polynomials.*

University of Kansas (6)

MATHEMATICS

Chen, Yuanqian, *Lattice-ordered groups.*

LaBerge, Timothy J., *ACRIN spaces, Ostaszewski spaces, and preservation of normality.*

Lin, Shinemin, *Lattice-ordered groups.*

Mooney, Douglas D., *Applications of prime open filters to the theory of H-closed extensions.*

Nelson, David George, *Indecomposable root systems and lattice-ordered groups.*

Wu, Hongyou, *Submanifold geometry, nonlinear partial differential equations and Banach loop groups.*

Wichita State University (2)

MATHEMATICS

Powell, Jeffrey, *Some inverse boundary value problems.*

Sinclair, Paul, *Metrics on bundle spaces and harmonic Gauss maps.*

KENTUCKY

University of Kentucky (9)

MATHEMATICS

Bennett, Karin Remington, *Parallel collocation methods for boundary value problems.*

Bigdel, Fariba, *Regular triangulations of convex polytopes and d-cubes.*

Fernandes, Ryan Ivan, *Alternating direction implicit finite element methods for solving time dependent problems.*

Hatfield, Barbara, *Gradient estimates for the capillary problems.*

Park, Sangwon, *The Macaulay-Northcott functor.*

Pupplo-Cody, Evelyn, *A structural formula for a class of typically real functions and some consequences.*

Robinson, Mark P., *Numerical solution of Schrödinger equations using finite element methods.*

STATISTICS

Rahman, Mahibbur, *Some contributions to goodness of fit tests and nonparametric estimation of variance.*

Zhong, Jianhua, *Some contributions to the spherical regression model.*

LOUISIANA

Louisiana State University (4)

MATHEMATICS

Kingan, Robert, *Tournaments and ideal class groups.*

Lee, Jung Soon, *Fourier transform and heat equation in white noise analysis.*

Moss, James D., *Special polarizations in nilpotent Lie algebras.*

Wargo, Lawrence, *Some results on minors for graph and matroids.*

Tulane University (2)

MATHEMATICS

Doucet, Julien, *Zigzag continua.*

Lung, Chien-An, *The nuclear cusp condition in spin polarized Thomas-Fermi theory.*

University of Southwestern Louisiana (9)

MATHEMATICS

El-Kassar, Nasser, *Generalizations of Lehmer's equations, greatest common divisor matrices and Euler's totient for a UFD.*

Fox, Dorene J., *Translatable groups and the Graev operator.*

Jan, Chen-Huan Jack, *Expression parsing and rigorous computation of bounds on all solutions to practical nonlinear systems.*

Ke, Lan, *Nonquenching, quenching, and beyong quenching.*

Prejean, Jennifer Marie, *Point semiuniformities.*

STATISTICS

Elfessi, Abdulaziz, *Some point estimation problems in a decision-theoretic setup.*

Guo, Ying-Yueh, *Decision theoretic point estimation in a multivariate normal distribution.*

Jin, Chun, *Equivariant point and confidence estimation of a multivariate normal mean vector using a normal concomitant vector for covariance adjustment with applications.*

Sapkota, Sijan, *Sensitivity of Klaasen's spread inequality to the choice of prior distribution.*

MARYLAND

Johns Hopkins University (13)

BIOSTATISTICS

Bilker, Warren, *Statistical methods for cross-sectional survival data.*

Chang, Yue-Cune, *The trade-off between bias and precision: Some statistical considerations.*

Tsou, Tsung-Shan, *Robust likelihoods.*

MATHEMATICAL SCIENCES

Chan, Onn, *The Grassman manifold and statistics.*

Gabriel, Steven A., *Algorithms for the nonlinear complementarity problem: The NE/SQP method and extensions.*

Merino, Dennis I., *Topics in matrix analysis.*

MATHEMATICS

Abramson, Gabrielle, *A model's theorem for multicategorical realizations.*

Kashiwabara, Takuji, *On the complex cobordism and infinite loop spaces.*

Mao, Yiping, *Poisson kernel on noncompact harmonic manifolds and spherical mean operators.*

Martin, Roland, *Generalized Igusa localization zeta functions associated to enlarged connected Chevalley K-groups of type A_l, B_l, C_l, P_l, E_6, E_7, E_8, F_4, G_2, and their functional equations.*

Morishita, Masanori, *Toward non-abelian Kummar theory.*

Nelles, Françoise, *Syzergies among the Plücker relation.*

Soh, Sun Tae, *Formal factorization of prime ideals.*

University of Maryland, College Park (25)

MATHEMATICS

Carmona, Sara Ianda Correa, *A large deviations principle and wave front propagation for a reaction-diffusion equation.*

Collins, James Patrick, III, *Implicit-explicit Godunov schemes for unsteady gas dynamics.*

Garibay-Bonales, Fernando, *Perturbations of the time one map of an Anosov flow.*

Goldberg, David, *Reducibility of individual representations for classical p-adic groups.*

Graubard, Barry I., *Statistical methods for the analysis of complex survey data with biomedical applications.*

Guo, Xian-Zhong, *Multilevel preconditioners: analysis, performance, enhancements and parallel algorithms.*

Haddad, Kamel N., *Limiting notions of the IP-type in the enveloping semigroup of a compact metric dynamical system.*

Han, Weimin, *Error estimations of mathematical idealizations for elliptic problems with uncertain data.*

Helmreich, James E., *Ultrahomogeneous 2-graphs.*

Huang, Danrun, *Flow equivalence of reducible shifts of finite type, generalized inverses over Banach algebras.*

Lee, Sangyeol, *Testing Gaussianality of time series.*

Lopes, Silvia Regina Costa, *Spectral analysis in frequency modulated models.*

Park, Pil S., *Iterative solution of sparse singular systems of equations arising from queuing networks.*

Park, Young Ho, *Period integrals for* O(4.2) *and values of Langlands L-functions.*

Pavlopoulos, Haralabos, *Statistical inference for optimal thresholds.*

Perry, Elgin S., *Distributional properties of parameters derived from Leslie matrix models.*

Rutman, Elizabeth W., *Computing primary decompositions of modules.*

Searle, Catherine, *Positively curved manifolds with large symmetry groups.*

Sime, Patrick, *On the ideal class group of real biquadratic fields.*

Troendle, James F., *An iterative filtering method of frequency detection in a mixed spectrum model.*

Vidras, Alexos, *Interpolation and division problems in spaces of entire functions with growth conditions and their applications.*

Wilhelm, Frederick H., Jr., *Gromov-Hausdorff distance in the presence of a lower curvature bound.*

Wissman, Joseph, *Material response and inverse problems of incompressible elasticity.*

You, Zhiping, *Numerical study of stable and unstable manifolds of some dynamical systems.*

Zhang, Zhimin, *Solving free boundary problems by the finite element method.*

MASSACHUSETTS

Boston University (7)

MATHEMATICS

Alexander, Daniel, *The historical background to the works of Pierre Fatou and Gaston Julia in complex dynamics.*

Cole, Bernard, *A parametric model for performing cost-benefit analysis in the presence of completing risks and multiple failures.*

Copenhafer, Donna, *The robustness of the F-test when applied to ordinal scaled data.*

Figueiredo, Ana-Maria, *Differential-delay equations of advanced type and discretization of Kirchoff integral equation.*

Haruta, Mako, *The dynamics of Newton's method on the exponential function.*

Slammert, Lionel, *Differentiability properties of bifurcation phenomena of two parameter families of circle diffeomorphisms.*

Sullivan, Lisa, *Robustness of analysis of covariance applied to data distorted from normality by floor effects and to ordinal scaled data.*

Brandeis University (5)

MATHEMATICS

Baltuch, Jacob, *On reducible* $(1,2)$*-polarized Abelian surfaces.*

Nappari, Mark, *Nearly holomorphic modular forms.*

Park, Joonsang, *Geometric and analytic characterization of isoparametric submanifolds.*

Park, Seung Kyung, *Enumeration of multipermutations.*

Shipman, Joseph, *Cardinal conditions for strong Fubini theorem.*

Harvard University (30)

APPLIED SCIENCES

Ariola, Zena M., *An algebraic approach to the compilation and operational semantics of functional languages with I-structures.*

Bestavros, Azer, *Time-constrained reactive automata: A novel development methodology for embedded real-time series.*

Chen, Lilei, *Deriving parallel and systokic programs from data dependence.*

Cochran, Douglas W., *Nonlinear signal compression and reconstruction.*

Ferrier, Nicola J., *Trajectory control of active vision systems.*

Freeman, D. Kent, *Extremely narrow resonances in closed-loop arrays of quantum mechanical and electromagnetic interactions.*

Fuh, Chiou-Shann, *Visual motion analysis: Estimating and interpreting displacement fields.*

Galindo-Legaria, Cesare A., *Algebraic optimization of outerjoin queries.*

Goradia, Tushar M., *Stochastic models for human gene mapping.*

Gordon, Gaile G., *Face recognition from depth and curvature.*

Kilian, Michael F., *Parallel sets: An object-oriented methodology for massively parallel programming.*

Partrigdge, Craig, *Late-binding RPC: A paradigm for distributed computation in a gigabit environment.*

Rak, Edward, *Locl methods for robust matching.*

Shi, Leyuan, *Optimization of discrete event dynamic systems.*

Wang, Shiwei, *A class of new optimized concurrency control protocol for transaction processing systems.*

Zhou, Yuli, *A fix point theory of nonmonotonic functions and its applications to logic programs, deductive databases and production rule systems.*

MATHEMATICS

Azcue, Pablo, *On the dimension of the Chow varieties.*

Chandler, Karen Anne, *Hilbert functions of zero-dimensional schemes in uniform position.*

McQuillan, Michael L., *Division points on semi-Abelian varieties.*

Rosenthal, Jeffrey S., *Rates of convergence for Gibbs sampler and other Markov chains.*

Schwartz, Andrew J., *Functorial smoothing of morphisms in equal characteristic 0.*

Szenes, Andras, *The Verlinde formulas and moduli spaces of vector bundles.*

Voevodsky, Vladimir, *Homology of schemes and covariant motives.*

Wang, Xuesung, *Higher-order characteristic classes in arithmetic geometry.*

Wong, Hon-Wai, *Dolbeault cohomologies and Zuckerman modules associated with finite rank representations.*

STATISTICS

Blyth, Stephen James, *Local regression coefficients and the correlation curve.*

Hwang, Jing-Shiang, *Prototype Bayesian estimation of U.S. state employment and unemployment rates.*

Schafer, Joseph L., *Algorithms for multiple imputation and posterior simulation from incomplete multivariate data with ignorable nonresponse.*

Schmid, Christopher Henry, *Measurement error models for logistic and longitudinal regression.*

Vangel, Mark Geoffrey, *Iterative algorithms for integral equations of the first kind with applications to statistics.*

Massachusetts Institute of Technology (36)

MATHEMATICS

Ando, Matthew, *Operations in complex-oriented cohomology theories related to subgroups of formal groups.*

Beck, Jonathan, *Representations of quantum groups at even roots of unity.*

Borkovitz, Debra K., *Maximal Hilbert series of quadratic-relator algebras.*

Chan, Clara S., *On shellings and subdivisions of convex polytopes.*

Dhagat, Aditi, *Searching in the presence of errors.*

Dou, Carl C. Z., *Studies of random walks on groups and random graphs.*

Engel, Mark, *Weakly nonlinear surface waves in a ferrofluid.*

Fromm, Stephen B., *Regularity for the Dirichlet problem in convex domains.*

Garnica-Vigil, Eugenio, *On the classification of tempered representations for a group in the Harish-Chandra class.*

Goddard, Wayne D., *Three graphic tales.*

Grojnowski, Ian, *Character sheaves on symmetric spaces.*

Herscovici, David S., *Minimal paths between maximal chains in finite rank semimodular lattices.*

Hoff, Edwin K., *A computer-aided combinatorial analysis of the game of cribbage.*

Jockusch, William, *Perfect matchings and perfect squares.*

Nachtigal, Noel, *A look-ahead variant of the Lanczos algorithm and its application to the quasi-minimal residual method for non-Hermitian linear systems.*

Petters, Arlie O., *Singularities in gravitational microlensing.*

Randall, Ellen, *Resonant interactive effects on systems of hyperbolic equations.*

Reddy, Satish C., *Pseudospectra of operators and discretization matrices and an application to stability of the method of lines.*

Roby, Thomas W., V, *Applications and extensions of Fomin's generalization of the Robinson-Schensted correspondence to differential posets.*

Steingrimsson, Einar, *Permutations statistics of indexed and Poset permutations.*

Tschinkel, Yuri, *Arithmetic of algebraic surfaces.*

Wein, Joel M., *Algorithms for scheduling and network problems.*

Wheeler, Erlan E., II, *Convexity theorems for diametral families of sets.*

Zhao, Ying, *On project pursuit learning.*

Zhuang, Shunhuang Peter, *Formal theory of linear homogeneous Q-difference equations.*

OPERATIONS RESEARCH

Abe, Makoto, *A marketing mix model developed from single source data: A semiparametric approach.*

Athaide, Christopher, *Capacity allocation and safety stocks in manufacturing systems.*

Bai, Sherman Xiewei, *Scheduling manufacturing systems with work-in-process inventory control.*

Chevalier, Philippe, *Two topics in multistage manufacturing systems.*

Hall, Susan, *New directions in queue inference for management implementation.*

Kodialam, Muralidharan, *The O-D shortest path problem and connectivity problems on periodic graphs.*

Ou, Jihong, *Dynamic scheduling of queueing networks.*

Pappu, Suguna, *Production planning with due-date constraints.*

Polychronopoulos, George H., *Stochastic and dynamic shortest distance problems.*

Talluri, Kalyan T., *Issues in the design and analysis of survivable networks.*

Vranas, Peter B., *The multi-airport ground-housing problem in air traffic control.*

Northeastern University (3)

MATHEMATICS

Bonias, Ioannis, *T-colorings of complete groups.*

Cohen, Daniel C., *Cohomology and intersection cohomology of complex hyperplane arrangements.*

Tang, Junjie, *Prescribing curvature on manifolds with singularities.*

Tufts University (1)

MATHEMATICS

Ching, Kenny, *Graphs of small girth which are locally projective spaces.*

University of Massachusetts, Amherst (4)

MATHEMATICS AND STATISTICS

Li, Gong-qin, *Some problems for Helmholtz equations in regions containing an interface.*

Pillen, Cornelius, *Tensor products and injectives for groups of Lie type.*

Wei, Fusheng, *The existence and topology of properly embedded minimal surfaces in* $\mathbb{R}^3$.

Yang, Chengda, *Stochastic methods for image restoration.*

MICHIGAN

Michigan State University (5)

MATHEMATICS

Deng, Shangrong, *Variational problems on contact manifolds.*

Li, Kuiyuan, *Homotopy methods and algorithms for real symmetric eigenproblems.*

Zeng, Zhonggang, *Homotopy-determinant method for matrix eigenvalue problems and its parallelizations.*

STATISTICS AND PROBABILITY

Farshidi, Jamshidi, *Autoregressive expansion of linear predictor for stationary stochastic processes.*

Noble, William, *First order allocations.*

University of Michigan, Ann Arbor (34)

BIOSTATISTICS

Bagin, Robert G., *The estimation of marginal dose-response from joint toxicity information.*

Balagtas, Cecile C., *Marginal models for the analysis of crossover experiments with a categorical response.*

Cheng, Joanna C., *Some aspects of mixture and response surface designs.*

Coelho, Carlos A., *Generalized canonical analysis.*

Olson, Jane M., *Log-linear analysis of survival data with a censored covariate.*

Ten Have, Thomas R., *Exchangeable log-linear models.*

Young, Martin R., *Estimating optimal transformations for multivariate data.*

INDUSTRIAL ENGINEERING AND OPERATIONS RESEARCH

Beck, Douglas, *Human factors of posture entry into ergonomics analysis systems.*

Byun, Seong-Nam, *A computer simulation using a multivariate biomechanical posture prediction model for manual materials handling tasks.*

Chang, Sung-Ho, *Statistical evaluation and analysis of form and profile errors based on discrete measurement data.*

Chen, Lin-Lin, *Visibility algorithms for mold and die design.*

Chou, Shuo-Yan, *Circular and parabolic visibility and their applications.*

Hughes, Richard E., *Empirical evaluation of optimization based lumbar muscle force prediction models.*

Karabakal, Nejat, *The capital rationing replacement problem.*

Park, Joon Young, *Mash generation with quasi-equilateral triangulation.*

Ting, Jame-John, *An object oriented distributed approach to the development of integrated manufacturing systems.*

MATHEMATICS

Auckly, David R., *Computing secondary and spectral invariants.*

Bagchi, Atish, *Topoi satisfying De Morgan's law and related identities.*

Cunningham, Robin J., *Univalent functions which map onto regions of prescribed transfinite diameter.*

Darrow, Dale S., *Some properties of a higher-order coboundary operator.*

Godinho, H-mar, *A pair of additive quartic forms.*

Goh, Say Song, *The two-functional conjecture for univalent functions.*

Kim, Yonggu, *On normal quintic Enriques surfaces.*

Leung, Man Chun, *Harmonic maps between asymptotically hyperbolic spaces.*

Needham, Roger E., *Term rewriting and the word problem for certain infinite presentations.*

Octavio, Alfredo, *Dual algebras generated by commuting contractions.*

Richardson, Thomas M., *Local subgroups of the Monster and odd code loops.*

Ryu, Jeong Seog, *Development mapping on CR-manifolds and the manifolds with constant holomorphic sectional curvature.*

Ryu, KiWon, *Properties of John disks.*

Sankey, Alyssa D., *Regular weights on strongly regular graphs.*

Yang, Shanshuang, *Quasiextremal distance domains and quasiconformal reflections.*

STATISTICS

Eisele, Jeffrey, *An adaptive biased coin design for the Behrens-Fisher problem.*

Hwang, Chang-Ha, *Model selection methods in discriminant analysis.*

Melfi, Vincent, *A nonlinear renewal theorem with statistical applications.*

Western Michigan University (4)

MATHEMATICS AND STATISTICS

Chen, Hang, *Common moment sets of graphs and their compliments.*

Li, Hung-Ir, *On rank procedures for the logistic models.*

Liu, Jiuqiang, *Maximal and maximum independent sets in graphs.*

Yahya, Hilmi, *A progressive disease model for doubly-censored bivariate survival data that accommodates covariate information.*

MINNESOTA

University of Minnesota, Minneapolis (18)

BIOSTATISTICS

Anderson, Jon E., *Time dependent association measures for bivariate survival distributions.*

MATHEMATICS

Catalano, Michael, *Stable splittings for classifying spaces of groups of order thirty-two.*

Chen, Xinfu, *Phase transition and free boundary problems.*

Doyle, Philip Wendell, *Differential geometric Poisson bivectors and quasilinear systems in one space variable.*

Gui, Changfeng, *on semi-linear elliptic and parabolic equations in entire space.*

Hou, Suchung, *A finite element method for conservation laws: multi-dimensional case.*

Lin, Hwei-Ting, *On the dynamic of a model in the propagation of genes.*

Liu, Wenxiong, *Blowup problems of semilinear heat equations.*

Ma, Jin, *Topics on singular stochastic control and related stochastic differential equations.*

Romero, Cristina, *Potential theory for the Kohn Laplacian on the Heisenberg group.*

Seo, Jin Keun, *Regularity for solutions of transmission problems across internal Lipschitz boundaries.*

Shin, Heayong, *An investigation of the singularities of harmonic maps.*

Spiro, Andrea, *Studies of the geometry of infinite dimensional Lie groups.*

Triandaf, Ioana-Alexandra, *A numerical method for semi-conductor device equations.*

Zhou, Qing, *Some topics in the computable analysis of* R^n.

Zhou, Xiaoming, *On the decomposition map of Grothendieck groups.*

STATISTICS

Hsu, Ching, *Admissibility of formal Bayes decision rules.*

Weng, Shipei, *Sequential allocation to maximize the probability of achieving a number of successes.*

MISSOURI

University of Missouri, Columbia (3)

STATISTICS

Ibrahim, Moh'd, *Towards a better understanding of Bayesian methods.*

Lei, Xingye (Cherry), *A test of homogeneity with a simply ordered alternative based on dependent observations.*

Qu, Shankang, *Optimal design and parameter estimation for the Langmuir models.*

University of Missouri-Rolla (2)

MATHEMATICS AND STATISTICS

Natsis, Dimitrios, *Convergence of Fourier series and representations of Fourier and Stieltjes coefficients.*

Worth, Fredrick E., *Concerning the expansive property and shift homeomorphisms of inverse limits.*

Washington University (11)

MATHEMATICS

Candel, Alberto, *Uniformization of foliations by surfaces.*

Fontana, Luigi, *Sharp borderline Sobolev estimates for functions on compact Riemannian manifolds.*

Freudenburg, Gene, *On the automorphism group of the polynomial ring in three variables.*

Kelly, Susan Elaine, *Pointwise convergence for wavelet expansions.*

Nowak, Krzysztof, *Toeplitz operators and commutators based on the Calderón reproducing formula.*

Ouyang, He, *On isospectral deformations on two-step nilmanifolds.*

Paluszynski, Maciej, *Characterization of Lipschitz spaces via the commutator operator of Coifman, Rochberg and Weiss; A multiplier theorem for a semigroup of contractions.*

Zhao, Hesheng, *Hardy spaces on rank one symmetric spaces of noncompact type.*

SYSTEMS SCIENCE AND MATHEMATICS

Ramakrishna, Viswanath, *Symmetry in nonlinear design with applications towards singularities in geometric control.*

Sturtz, Kirk Edward, *Polynomial solution of continuous-time linear programming problems.*

Wu, Yaw-Tyng, *Estimating three-dimensional motion parameters from feature-based image sequence: A perspective-system approach.*

MONTANA

Montana State University (1)

MATHEMATICAL SCIENCE

Schwartz, Susan Pamela, *Some planar embeddings of chainable continua can be expressed as inverse limit spaces.*

NEBRASKA

University of Nebraska-Lincoln (3)

MATHEMATICS AND STATISTICS

Ahn, Byung Moo, *Path integrals, Fourier transforms and Feynman's operational calculus.*

Fosnaugh, Linda, *Tilings with the neighborhood property and tiling lattice points with blocks.*

Wu, Qiu-Rong, *On properties and constructions of t-designs, λ-designs and perpendicular arrays.*

NEW HAMPSHIRE

Dartmouth College (4)

MATHEMATICS

Albert, Jeanne, *Biproducts in the rational cohomology of biformal spaces.*

DeStefano, Alisa, *Discrete observability of the wave equation.*

Tiu, Philip, *A new class of binary linear codes.*

Welch, George, *Computing bounds for the Hausdorff dimension of the residual set of the Apollonian packing.*

University of New Hampshire (1)

MATHEMATICS

Rector, Judy, *Beliefs, autonomy and mathematical knowledge.*

NEW JERSEY

Princeton University (10)

MATHEMATICS

Bar-Natan, Dror, *Perturbative aspects of the Chern-Simons topological quantum field theory.*

Ferenbaugh, Charles, *On the modular functions involved in "monstrous moonshine".*

Lindenstrauss, Ayelet E., *On cyclic homology and topological Hochschild homology of global rings and of extensions of Z/pZ.*

Margolin, Richard, *Integral representations of Mathieu groups.*

Mochizuki, Shin, *The geometry of the compactification of the Hurwitz scheme.*

Mostad, Petter, *Bounded K-theory of the Bruhat-Tits building for the special linear group over the P-adics with application to the assembly map.*

Niziol, Wieslawa, *On a cohomological functor associated to crystalline representations.*

Ramakrishna, Ravi K., *On a variation of Mazur's deformation functor.*

Sutor, Robert, *The calculation of some geometric monodromy groups.*

Zhao, Yude, *Certain zeta functions attached to automorphic forms over imaginary quadratic fields.*

Rutgers University (14)

MATHEMATICS

Aboufadel, Edward F., *A priori bounds for solutions of singularly-perturbed ordinary differential equations.*

Alessandrini, Stephen, *Some two-dimensional plate models: derivation, asymptotic properties, and numerical approximation.*

Barr von Oehsen, James, *Level N elliptic genera and Jacobi polynomials.*

Bohus, Geza, *On some combinatorial problems in discrepancy and geometry.*

Cai, Da-Mu, *Reduced continuity finite element methods for hyperbolic equations.*

Comezana, Gustavo Raul, *Bordism of layered cycles and generalized intersection homology theory.*

Francsics, Gabor, *Microlocal homotopy formulas in the tangential Cauchy-Riemann complex of higher codimension.*

Latka, Brenda, *Finitely constrained classes of homogeneous directed graphs and well quasi-ordered families of tournaments.*

Pitt, Nigel J. E., *Convolutions of automorphic L-series.*

Rosengarten, Richard, *Aleph-zero stable Lie algebras.*

To, Tze-Ming, *Asymptotic expansions of Whittaker functions at irregular singularities.*

Xie, Xianwen, *Uniqueness and stability of slowly oscillating periodic solutions of differential delay equations.*

Xu, Jian-Ming, *An analysis of the dynamical equations of elastic rods and their numerical approximation.*

Xu, Xiaoping, *Untwisted and twisted gluing techniques for constructing self-dual lattices.*

NEW MEXICO

New Mexico State University (2)

MATHEMATICAL SCIENCES

Hughes, Lorenz, *Results of the theory of valuated p-groups.*

Masaedeh, Basem, *Limiting inclusions for classes of weight functions.*

University of New Mexico (8)

MATHEMATICS AND STATISTICS

Barr, Joseph, *Maximum bipartite subgraphs, maximum K-colorable subgraphs and Nordhaus-Gaddsen type theorems.*

Crawford, Thomas Arleigh, *Full holomorphic maps from the Riemann sphere to complex projective space.*

Fisher, Robin, *Essentially non-parametric Bayes empirical Bayes procedures.*

Hellmer, Ronald, *Random splitting times for ergodic processes.*

Hembree, Barry, *Adaptive hierarchical Bayes Kalman filtering with application to quantity control.*

Kim, Joo-Hwan, *Discrimination of objects with Poisson signals: Theory and application.*

Stoecker, Michael, *Admissible boundary conditions for a linearized model of slightly compressible viscous flow.*

Torres, Joseph D., *Differentiation and multiplication operators and the product rule.*

NEW YORK

Clarkson University (1)

MATHEMATICS AND COMPUTER SCIENCE

Hyun, Kio Chung, *Consistency checking mechanism using ATMs in a distributed knowledge based system.*

Columbia University (7)

MATHEMATICS

Bertolini, Massimo, *Iwasawa theory, L-functions and Heegner points.*

Feehan, Paul Matthew Niall, *Geometry of the moduli space of self-dual connections on the four-sphere.*

Li, Wei-Ping, *Moduli space of stable bundles over ruled surfaces and computation of Donaldson polynomials.*

Pappas, Georgios, *Arithmetic models for Hilbert-Blumenthal modular varieties.*

Pinson, Haru Tsuii, *Toward an intrinsic characterization of the minimal models.*

Yang, Hongjie, *Transition functions and a blow up formula for Donaldson polynomials.*

STATISTICS

Cvitanic, Jaksa, *Convex duality in constrained portfolio optimization.*

Cornell University (25)

APPLIED MATHEMATICS

Adler, Frederic Russell, *Models of structured populations.*

Berkooz, Gal, *Turbulence, coherent structures and low dimensional models.*

Chen, Dingju, *Algorithm restructuring for parallelism and data locality in scientific computing.*

Critchlow, Carol Maria, *The inherent cost of achieving casual consistency.*

Guo, Baining, *Modeling arbitrary smooth objects with algebraic surfaces.*

Hanisch, Mark Robert, *Multigrid preconditioning for mixed finite element methods.*

Mahalov, Alex Semyon, *Attractors, bifurcations and resonances in two problems of fluid dynamics.*

Swart, Pieter Johan, *The dynamical creation of microstructure in material phase transitions.*

Wynters, Erik Lanny, *Optimal motion planning for multiple point robots in the plane.*

BIOMETRICS

Bekele, Isaac, *Sequential procedures for estimation of the time of attainment of a threshold value.*

Frongillo, Edward A., Jr., *Combining information using hierarchical models.*

Umbach, David M., *Methodologies for testing separate families of hypotheses : An odyssey.*

MATHEMATICS

Acosta, Ernesto, *On the essential self-adjointness of Dirichlet operators on nonlinear path space.*

Anderson, Bruce Bernard, *Sign sequences and Rolle's restrictions : why not all real differentiable functions and polynomials satisfying Rolle's theorem are constructible.*

Bridson, Martin Robert, *Geodesics and curvature in metric simplicial complexes.*

Chern, Shuh-Jye, *Mathematical theory of the barotropic model in geophysical fluid dynamics.*

Delman, Charles Ira, *Essential laminations in knot complements.*

Hermiller, Susan Marie, *Rewriting systems for Coxeter groups.*

Kautz, Steven M., *Degrees of random sets.*

Meier, John Edward, *Endomorphisms of negatively curved polygonal groups.*

Setti, Alberto Giulio, *Eigenvalue and heat kernel estimates for the weighted Laplacian on a Riemannian manifold.*

Song, Li Min, *Special values of L-functions of curves over finite fields.*

Stein, Melanie Ida, *Groups of piecewise linear homeomorphisms.*

STATISTICS

He, Kun, *Some ancillarity paradoxes in estimation.*

Huwang, Longcheen, *Good coverage probability confidence sets in linear errors-in-variable models.*

CUNY, Graduate Center (3)

MATHEMATICS

Finz, Harold R., *Studies in computational group theory.*

Jeong, Dal Young, *Polytopal graphs and arrangements of curves.*

McGowan, Jeffrey, *The p-spectrum of the Laplacian on compact hyperbolic three manifolds.*

New York University, Courant Institute (17)

MATHEMATICS

Fannjiang, Chyunjia Albert, *Convection enhanced diffusions.*

Fechter, Ronald, *Sholem functions, Hibert's ε symbol and the lambda calculus.*

Fontes, Luiz Renato, *Results of the phase diagram of continuum $1/R2$ Ising models.*

Guevara Jordan, Juan Manuel, *A numerical method for the two-phase flow in a Hill Shaw cell.*

Isopi, Marco, *The triangle law for products of large random matrices.*

Kamvissis, Spyridon, *On the long time behavior of the doubly infinite toda lattice under shock initial data.*

Klapper, Isaac, *Chaotic fast dynamics.*

Li, Tong, *On the Riemann problem and the initiation problem for a combustion model.*

Miller, David, *Non-characteristic embeddings of the n-dimensional Torus in the $(n+2)$ dimensional form.*

Olson, Tamara, *Overall properties of granular Piezolectrics: Bounds and effective medium approximations.*

Pietruska-Paluba, Katarzyna, *The Lifschitz singularity for the Brownian motion on the Sierpinski gasket.*

Singer, Stephanie, *The geometry of the full Toda lattice.*

Tian, Feiran, *Oscillations of the zero dispersion limit of the Korteweg-de Vries equation.*

Wetton, Brian, *Convergence of numerical approximations for the Navier-Stokes equations with boundaries: Vorticity and primitive formulations.*

Yang, Yahan, *Solution of functional equations of Peskin Cochlea method and some results of model equations on incompressible fluid flow.*

Zeng, Yanni, *Asymptotic behavior of nonlinear viscoelastic model with fading memory and compressible, isentropic, viscous 1-D flow.*

Zhang, Xuejun, *Studies in domain decomposition: Multi-level methods and the biharmonic Dirichlet problem.*

Polytechnic University (4)

MATHEMATICS

Chan, Eva, *Bootstrapping a repeated measurement on endocrinology data.*

Connell, Roy, *Lattice measures and associated topological spaces.*

Hajallie, Kamal, *Lattice measures and separation.*

Ragland, Frank, *General problem of Zenodorus.*

SUNY at Albany (4)

MATHEMATICS

Adams, Terrence M., *Uniform sweeping out.*

Al-Grouz, Ibrahim M., *Functionals on univalent functions and univalent polynomial approximation.*

Burke, Kevin, *Duality of the Bergman spaces on some weakly pseudoconvex domains.*

Lawrence, Deborah A., *Constructions and properties of transitive dynamical systems.*

SUNY at Binghamton (1)

MATHEMATICAL SCIENCES

Ries, Heather D., *On torsion free Abelian groups which are almost finitely generated.*

SUNY at Buffalo (3)

MATHEMATICS

Chang, Yi-Hua, *An asymptotic symmetry of the rapidly forced pendulum.*

Liu, Bing, *The complete asymptotic expansion of a duck-solution of a van der Pol-like oscillator with application to a pair of coupled oscillators.*

Liu, Xiaosong, *Some analyses of the Navier-Stokes equations and the Kuramoto-Sivashinsky equation.*

SUNY at Stony Brook (12)

APPLIED MATHEMATICS AND STATISTICS

Kim, Sunyoung, *Quasi-Newton algorithms for solving large systems of algebraic equations.*

Li, Jian-Hua, *Stress analysis of Griffith cracks in nonhomogeneous elastic solids.*

Shinde, Madhvi, *Stochastic models in inventories and games.*

Zhang, Zhuo, *Subadditive functions and integer programming polyhedra.*

MATHEMATICS

Anderson, James Wyatt, *Mixing elements into Kleinian groups.*

Kim, Jongsu, *On a class of a 4-dimensional minimum energy metrics and hyperbolic geometry.*

Lüttecke, Francisco, *Summability of subsequences.*

Lee, Mei-Man, *Solution 6 Hamiltonian structure for quasi-geostropic flow.*

Paternain, Gabriel, *Geometric and topological properties of manifolds with completely integrable geodesic flow.*

Slome, Susan, *On the Lefschetz fixed point theorem and some of its extensions.*

Sorin, Dragomir, *CR maps between strictly pseudoconvex CR manifolds, interpolation manifolds and CR foliations.*

Yu, Guoliang, *K-theoretic indices of Dirac type operators on complete manifolds.*

Syracuse University (3)

MATHEMATICS

Agarwal, Amita, *Asymptotic properties of regression estimates for invariate and multivariate normal distribution under type* I *censoring.*

Habre, Samer, *Second-order linear elliptic systems on the complex plane.*

Ranganathan, Murali K., *Endomorphism rings of nonfree, stably free ideals.*

University of Rochester (1)

STATISTICS

Guang-Qin, Ma, *Two problems associated with ROC Curves.*

NORTH CAROLINA

Duke University (7)

MATHEMATICS

Bourgeois, Alfred James, *Validity of the quasigeostrophic model for large-scale flow in the atmosphere and ocean.*

Ferrari, Andrew B., *On the blow-up of solutions of the 3-D Euler equations in a bounded domain.*

Mueller, William Joseph, *Relative computability and abstract degree structures.*

Nailor, Jeanne Marie, *Behavior of equilibria in quasi-thermodynamic chemical reaction networks with mass-action kinetics.*

Porter-Locklear, Freda, *A numerical study of propagation of singularities in semilinear hyperbolic systems.*

Vuono, Charles Michael, *The Kodaira embedding theorem for Kähler varieties with isolated singularities.*

Yu, Yunliang, *Minimal hypersurfaces in* S^4 *with second fundamental form of constant length.*

North Carolina State University, Raleigh (14)

MATHEMATICS

Chen, Hong-Wei, *Blow-up of solutions for nonlinear parabolic boundary value problems.*

Ferng, Ruennhwa, *Lanczos-based condition estimation in signal processing and optimization.*

Hwang, Dongming, *Convergence of Broyden's method in Banach spaces.*

Jang, Ho-Jong, *The equilibrium equation: Substructing and the force method.*

Mathews, David McCoy, *Valuations defined by Ostrowski nets.*

Mukundan, Lakshmi, *Convergence analysis of the harmonic balance method.*

Nagy, James Gerard, *Toeplitz least squares computations.*

Sumner, Suzanne, *Dynamical systems associated with pioneer-climax models.*

Vallin, Robert William, *Shell porosity in metric spaces.*

Yang, Yadong, *Explicit solutions of a class of riemann problems of mixed type.*

STATISTICS

Lamb, Ronnie Hartwell, *Testing for treatment effects on variance in designed experiments.*

Liu, Chia-yee Jerry, *Parameter estimation of continuous time point process: Serial dependence and neural applications.*

O'Connell, Michael Anthony, *Contingency table models for estimation of the size of a partitioned population.*

Wheeless, Sara Cabe, *Some inference problems in least absolute values regression.*

University of North Carolina, Chapel Hill (10)

BIOSTATISTICS

Bennett, Leah, *Covariate analysis of bivariate survival data.*

Koch, Matthew, *Precision, bias, and the cost in the* 2×2 *crossover with baselines.*

Legault, Claudine, *Analyzing multiple endpoints with a two-stage group sequential design in clinical trials.*

Lesser, Virginia, *A comparison of periodic survey designs employing multi-stage-sampling.*

Pekow, Penelope, *A mixed model analysis of tracking for inconsistently-timed longitudinal data.*

Smith, Fraser, *Mixed model analyses of censored normal distributions via the Em algorithm.*

Tudor, Gail, *Survival analysis using primary and surrogate endpoints.*

MATHEMATICS

Nawrocki, David, *Propagation and spreading of singularities for semilinear hyperbolic mixed problems with general boundary conditions.*

OPERATIONS RESEARCH

Bonazzi, Alberto, *Modeling intransitive preferences among objects with transitively.*

Hariharan, Rema, *Routing and scheduling and queueing networks.*

OHIO

Bowling Green State University (5)

MATHEMATICS AND STATISTICS

Boukaabar, Kaddour, *The median problem on the lattice of partitions.*

Hewage, Thilan, *Policy functions of optimal growth models.*

Moore, Philip, *Conjugating extensions of lattice-ordered groups.*

Oluyede, Broderick, *Dependence of bivariate random variables and testing dependency in ordinal contingency tables.*

Wojciechowski, Piotr, *Orderpotent rings.*

Case Western Reserve University (4)

EPIDEMIOLOGY AND BIOSTATISTICS

Soegiatso, Restuti, *A covariate model in finite mixture survival distributions.*

OPERATIONS RESEARCH

Fuh, Du-Shean, *Hierarchical workforce scheduling with limited substitution as well as full-time and part-time workforce mix.*

Li, Anlong, *Three essays on contingent claim pricing.*

Reddy, Chandupatla Surender, *The impact of product group forcing on individual item forecast accuracy.*

Kent State University (4)

MATHEMATICS AND COMPUTER SCIENCE

Fellah, Abdelaziz, *Alternating finite automata and related problems.*

Lacruz, Miguel, *Four aspects of modern analysis.*

Shih, Chih-Ming (Jimmy), *Adding fault-tolerance to the cube-connected cycles network.*

Trevisan, Vilmar, *Univariate polynomial factorization.*

Ohio University (1)

MATHEMATICS

Schommer, John Joseph, *Nearly realcompact and nearly pseudocompact spaces.*

The Ohio State University (13)

MATHEMATICS

Brozovic, Douglas, *On length of chains in Lie type groups in characteristics* 3.

Cao, Jianzhong, *Viscoelastic jets and fibers with torsion.*

Craighead, Robert Lincoln, *Hypergroups and semiproper functions.*

Donahue, Michael, *The angle between null spaces of the radon and related transforms.*

Kim, Jeongjin, *Mandatory representation designs.*

Ling, Tianwen, *Borel diagonalization theorems and second-order arithmetics.*

Nemethi, Andras, *The zeta function and the spectrum of the hypersurface singularities.*

O'Ryan, Manuel, *Trace forms of higher degree.*

Randby, Scott, *Embedding K_5 4-connected graphs.*

Reinhold-Larsson, Karin, *Almost everywhere convergence of weighted averages.*

Reyes, Noli, *An asymptotic formula in best approximations.*

Xiong, Chuyu, *Low modes truncation method on Sine-Gordon equation.*

Zhang, Qing, *Multiple recurrence and mixing properties for actions of amenable groups.*

University of Cincinnati (3)

MATHEMATICAL SCIENCES

Oh, Sei-Qwon, *Primitive ideals in algebras of functions on certain quantum spaces.*

MATHEMATICAL SCIENCES

Hinestroza, Doris, *Numerical identification of transmissivity coefficients in elliptic and parabolic equations by mollification techniques.*

Kim, Seong A., *Convexity criteria and the hyperbolic density.*

OKLAHOMA

Oklahoma State University (3)

MATHEMATICS

Farmer, David Wayne, *Mean value of Dirichlet series associated with cusp forms.*

Noel, Linda Hand, *The fundamental theorem of algebra: A survey of history and proofs.*

STATISTICS

Payton, Mark E., *An examination of sequential procedures for the testing of three hypotheses.*

University of Oklahoma (2)

MATHEMATICS

Hong, Sung Bok, *Myrberg-Agard density points and groups of divergence type.*

Shin, Joonkook, *Isometry groups of three-dimensional Lie groups.*

OREGON

Oregon State University (5)

MATHEMATICS

Goulet, Marc Robert, *One-dependence and K-block factors.*

Hagelberg, Carl Richard, *Existence of a solution to a variational data assimilation method in two-dimensional hydrodynamics.*

Hart, Dianne Ruth, *Building concept images-supercalculators and students' use of multiple representations in calculus.*

Jubran, Isa Sabri, *A chaotic embedding of the Whitehead continuum.*

STATISTICS

Lin, Lie-Fen, *Uses of Bayesian posterior modes in solving complex estimation problems in statistics.*

University of Oregon (7)

MATHEMATICS

Boardman, Michael, *Relative spectra in complete locally multiplicatively-convex algebras with applications.*

Harlander, Jens, *Groups with cyclic relation module.*

Kangas, Steven, *The nonextendability of the Jones representation for mapping class groups.*

Kotlar, Daniel, *Some induced characters of finite groups of Lie type.*

Lei, Junjiang, *Approximation by multi-integer translates of functions having global support.*

O'Connor, Christopher, *Seminormalizations of coordinate rings of unions of hyperplanes.*

Wu, Sheng L., *Classification of torsion-free self-dual LCA groups.*

PENNSYLVANIA

Bryn Mawr College (1)

MATHEMATICS

Heath, Sister Ann M., *Rational period functions, Dirichlet series with functional equations and arithmetical identities.*

Carnegie Mellon University (13)

MATHEMATICS

Antonić, Nenad, *Memory effects in homeogenization and propagation of singularities.*

Blair, Louis Frederic, *The displacement response of an elastic-perfectly plastic oscillator to a periodic external force.*

Bridge, David S., *Finite fuel singular stochastic control of an n-dimensional infinite horizon discounted problem.*

Chiou, Sea-Mean, *Theory of connections.*

Issar, Sunil, *Operational issues in automated theorem proving using matings.*

Tronci, Enrico, *Equational programming in lambda calculus via SL-systems.*

Wang, Keming, *Uniqueness theorems for ordinary differential equations with applications in mechanics.*

Wu, Xiaonan, *Analysis and applications of the covolume method for the Navier-Stokes equations.*

STATISTICS

Erkanli, Alaattin, *Laplace approximations for posterior expectations and marginal densities when the mode is on the boundary of the parameter space.*

Short, Thomas H., *Algorithms for simultaneous image restoration and segmentation.*

Slate, Elizabeth H., *Reparameterization of statistical models.*

Stangl, Dalene, *Modeling heterogeneity in multi-center clinical trials using Bayesian hierarchical survival models.*

Vaidyanathan, Suresh K., *Stochastic control of sequential manufacturing processes.*

Drexel University (1)

MATHEMATICS AND COMPUTER SCIENCE

DeSesa, Blaise Phillip, *Sieved orthogonal polynomials.*

Pennsylvania State University (14)

MATHEMATICS

Draghicescu, Cristina I., *Efficient algorithms for particle methods.*

Konieczny, Janusz, *Semigroups of binary relations.*

Mabizela, Sizwe Gladwell, *Parametric approximation.*

Mitsuma, Kunio, *Profinite semigroups and related topics.*

Okamoto, Shingo, *Invariants for subfactors arising from coexter graphs.*

Rukimbira, Philippe, *Some properties of almost contact flows.*

Shann, Wei Chang, *Finite element methods for Maxwell's equations with stationary magnetic field and Galerkin-wavelets methods for two-point boundary value problems.*

Sun, Wenzhi, *Stationary ideals and stationary cardinals.*

STATISTICS

Basu, Ayanendranath, *Minimum disparity estimation in the continuous case: Efficiency, distributions, robustness, and algorithms.*

Coakley, Clint, *Advances in the study of breakdown and resistance.*

Lee, Myung Hwi, *Robust M-estimation under type 1.5 censoring and its application to accelerated life testing.*

Mazumdar, Madhuchhanda, *A combination of tests and publication bias in meta-analysis.*

Torbeyns, Anne, *Some goodness-of-fit tests for regression with censored data.*

Zheng, Hongjie, *The conditional approach to multiple time series modeling.*

Temple University (9)

MATHEMATICS

Jiang, Yiping, *Some results for the domain of attraction of $H_{3,0}(x)$.*

Johnston, Clifford Andrew, *On the solvability of nonlinear second order degenerate elliptic partial differential equations with large zeroth order coefficient.*

STATISTICS

Cheung, Albert, *Bivariate extension of Wang-Ryzin smoothing procedures in discrete density estimation.*

Kouassi, Alex, *Semi-parametric approach to hazard estimation with randomly right censored observations.*

Saranadasa, Hewa, *Discriminant analysis based on some concepts of experimental design.*

Schultz, Delray, *Topics in nonadaptive group testing.*

Vargas, Jose, *Detection of outliers in censored exponential samples.*

University of Pennsylvania (3)

MATHEMATICS

Blute, Richard, *Linear logic, coherence and dinaturality.*

Markman, Eyal, *Spectral curves and integrable systems.*

STATISTICS

Liu, Wanyun, *Variable selection in observational studies.*

University of Pittsburgh (7)

BIOSTATISTICS

Damaraju, Chandrasekharro Vinkata, *Ordinal regression models in longitudinal studies.*

Kardatzke, David, *Hypothesis testing and signal detection theory: ROC curves for comparing test statistics.*

Kuntoro, *Designing a breast cancer registry in Indonesia with a built-in statistical quality control component.*

MATHEMATICS AND STATISTICS

Chen, Zhibo, *On polynomial representations of functions over integer residue class rings and over finite fields.*

Harris, Melaine Jeanne, *Linearly stratifiable spaces.*

Mi, Jie, *Optimal burn-in.*

Santmyer, Joseph, *Discordant permutations, Rook polynomials and factorization domains.*

RHODE ISLAND

Brown University (14)

APPLIED MATHEMATICS

Black, Kelly, *A parallel multi-domain approximation for parabolic equations using Chebyshev polynomials and the penalty method.*

Chang, Eugene Jen-Ming, *Accelerated motion of rigid spheres in unsteady flows at low to moderate Reynolds numbers.*

Hilgers, Michael Gene, *A different kind of nonuniqueness of solutions of certain hyperbolic systems of conservation laws with spatial dimension greater than one.*

Katz, Richard Alan, *Transitions to turbulence: Determinism in nature.*

Kehagias, Athanasios, *Approximation of stochastic processes by hidden Markov models.*

Mallier, Roland, *Weakly nonlinear waves in mixing layers.*

Mello, David, *The stability of oscillatory flow in a circular pipe.*

Rovelli, Todd Anthony, *Simultaneous estimation of isotope intensity and attenuation coefficients in single photon emission tomography.*

Ruetsch, Gregory Roland, *The structure and dynamics of the vorticity and passive scalar fields at small scales in homogeneous isotropic turbulence.*

Solomonoff, Alex Leonard, *Spectral methods for discontinuous problems.*

Zhu, Hang, *Dynamical programming and variational inequalities in singularly stochastic control.*

MATHEMATICS

Crannell, Annalisa, *The existence of many periodic non-travelling solutions to the Boussinesq equation.*

Lieman, Daniel Bennett, *Automorphic forms and cubic twists of elliptic curves.*

Shu, Linghsueh, *Cyclotomic type theorems over global function fields.*

SOUTH CAROLINA

Clemson University (6)

MATHEMATICAL SCIENCES

Boland, James W., *Inclusive connectivity, a local graph connectivity parameter.*

Ebiefung, Aniekan A., *The generalized linear complementarity problem and its applications.*

Grabbe, Michael Thomas, *Optimal control of robot manipulators.*

King, Belinda B., *Modeling and control of multiple component structures.*

Majumdar, Aniket, *Neighborhood hypergraphs: A framework for covering and packing parameters in graphs.*

McIntyre, Dale L., *Time invariance and stability of stochastic linear hereditary systems as characterized by their covariance functions.*

Medical University of South Carolina (3)

BIOMETRY, EPIDEMIOLOGY, AND SYSTEM SCIENCE

Chen, Qulu, *Compton scattering connection in the qualifications of single photon emission computer tomogram.*

Denslow, Stewart, *Numerical characterization of fiber directionality in digital confocal images of embryonic heart.*

Torsella, Joni, *A method for determining the critical number of bindings sites in biological transduction phenomena.*

University of South Carolina (8)

MATHEMATICS

Chen, Hsinjun, *Compact convex sets and the barycenter in L_0^+.*

Hong, Weihu, *Interpolation of function spaces.*

Kammoun, Jamel, *Products with a K-metrizable factor.*

Li, Kuo-Ming, *L_0-type spaces.*

Liu, Derfen, *Graph homomorphisms and the Channel assignment problem.*

Sun, Christine H.-W., *Binomial determinants with applications.*

Zhao, Shiying, *Square area integral estimates for subharmonic functions in NTA domains.*

STATISTICS

Gulati, Sneh, *Smooth nonparametric function estimation from record breaking data.*

TENNESSEE

Memphis State University (3)

MATHEMATICAL SCIENCES

Bedrossian, Pascal, *Forbidden subgraph and minimum degree conditions for hamiltonicity.*

Chen, Guantao, *Hamiltonian graphs and graphs with cycles of length divisible by three.*

Ko, Youn Hee, *Some refinements of asymptotic stability, uniform asymptotic stability, and instability for functional differential equations.*

University of Tennessee (4)

MATHEMATICS

Davis, Reid, *Covers, q-binomial series and q-lattices.*

Drake, John Bryant, *Convection in the melt.*

Lee, Hyun Young, *Galerkin/Runge-Kutta discretization for the nonlinear Schrödinger.*

Sidani, Mohammad Majed, *A parallel algorithm for the non-symmetric eigenvalue problem.*

Vanderbilt University (6)

MATHEMATICS

Brewer, Lora Lee, *A study of the motion of zeros of the Epstein zeta function associated to* $m^2 + y^2 + n^2$ *as* y *varies from* 1 *to* $\sqrt{6}$.

Haynes, Todd Michael, *The isomorphism problem for two-generator, one-relator groups with relator of length ten or less.*

Jipsen, Peter, *Computer aided investigations of relation algebras.*

Pinter, Michael Raymond, *W-2 graphs and strongly well-covered graphs; two well-covered graph subclasses.*

Rossa, Bernd Erich, *Asynchronous exponential growth of linear* C_0*-semigroups and a new tumor cell population model.*

Shirley, Kevin Lynn, *A scalar-valued analytic model for a class of subnormal operators.*

TEXAS

Southern Methodist University (5)

MATHEMATICS

Barrett, Andrew Victor, *The numerical solution of boundary value problems for differential algebraic equations.*

STATISTICAL SCIENCE

Daniel, David, *A locally weighted least squares approach to nonparametric regression.*

Ford, Cindy, *The Gegenbauer and Gegenbauer auto-regressive moving average long-memory time series models.*

Kalkomey, Cindy, *Modeling quasi-periodic and seasonal long memory processes.*

Moon, Myung-Sang, *Polynomial measurement error modeling.*

Texas A&M University (6)

STATISTICS

Alvarez, Marta, *Parameter estimation for compartmental mixture models.*

Baek, Jangsun, *Kernel estimation for nonparametric additive models.*

Karunaratne, Baladarage (Mahinda), *Estimating the odds ration under double sampling.*

Sepanski, Jungsywan Hwang, *Semiparametric quasilikelihood and variance function estimation in measurement error models.*

Yang, Sheng-Nah (Christine), *A matrix exponential and bootstrap analysis of nonlinear least squares estimation for compartmental models.*

Yeh, Chyon-Hwa, *Solving classification problems with the partial least squares method and classification trees.*

Texas Tech University (3)

MATHEMATICS

Li, Zhu, *An inverse problem for linear dynamic systems with noise.*

Martinez-Morales, Manuel, *Adaptive premium control in an insurance risk process.*

Stamp, Mark S., *A generalized linear complexity.*

University of Houston (2)

MATHEMATICS

Cardan, David, *Concerning hypernormal approximation of doubly stochastic matrices.*

Chu, Che Chen (Peter), *Finite dimensional representations of function algebras.*

University of Texas, Austin (13)

MATHEMATICS

Glosup, Jeffrey Glenn, *Nonparametric regression and its uses in checking model fit.*

Gong, Linguo, *Sensitivity and stability analysis of problems in chance constrained programming.*

Harms, Eerik Thomas, *Three level forms in* S^4.

Huang, Zhimin, *Vector extremal approaches to competitive models in economics and business activities.*

Huang, Pi-Hsiang, *Balanced factorial structure with the hypercubic association scheme.*

Liau, Pen Hwang, *Fractional factorial designs.*

Lu, Wang-shu, *Empirical and hierarchical Bayes estimation of several means in the natural exponential family.*

Rade, Johan, *On the Yang-Mills heat equation in two and three dimensions.*

Serio, Frank Jr., *Uppers to* (0) *in intersections of prime ideals in polynomial rings.*

Shah, Chandni, *Integral uppers.*

Sullivan, Michael, *The prime decomposition of knotted periodic orbits in dynamical systems.*

Westmoreland, Michael, *Extension and contraction properties of Dubrovin valuation rings.*

Zhang, Dagan, *Optimization of pursuit and reliability on discrete graphs.*

University of Texas at Dallas (4)

MATHEMATICAL SCIENCES

Qin, Mingqian, *The asymptotic properties of Bayesian nonparametric estimates for tolerance curves.*

Ribera, Leslie Ann, *Robust regression for non-Gaussian models.*

Sang, Ding, *Performance analysis of music method for DOA estimation.*

Xu, Zhigang, *Input-output linearization.*

UTAH

University of Utah (6)

MATHEMATICS

Candia, Mario Ricardo, *Analytic completion of highest weight modules.*

Conner, Gregory Ralph, *Metrics on groups.*

Corti, Alessio, *3-dimensional Del Pezzo fiberings.*

Eyre, David Jay, *Dynamics of patterns for two phase separation equations.*

White, Paula Denise, *Nonsolvable Hall subgroups of the general linear group.*

Yin, Guangyan, *Sinc solution of Navier-Stokes equations.*

Utah State University (2)

MATHEMATICS AND STATISTICS

Lee, Sang-Gu, *Inequalities for generalized matrix functions.*

Lee, Yoon-Mee, *An implicit free boundary problem for the differential equation.*

VIRGINIA

George Mason University (1)

OPERATIONS RESEARCH AND APPLIED STATISTICS

Xie, Jennifer, *Cyclic service systems with limited service disciplines.*

University of Virginia (9)

APPLIED MATHEMATICS

Horn, Mary Ann, *Exact controllability and uniform stabilization of the Euler-Bernoulli and Kirchoff plate equations with boundary feedback acting via bending moments only.*

Senning, Jonathan Reed, *Parallel methods for elliptic finite element problems on a shared memory vector multiprocessor.*

Straughan, Robert Ashby, *The parallel solution of three-dimensional positive definite finite element problems.*

Tataru, Daniel Ioan, *A-priori pseudoconvexity energy estimates in domains with boundary and applications to exact boundary controllability for conservative P. D. E.*

MATHEMATICS

Housworth, Elizabeth, *Escape rates for a conditioned 2-dimensional Brownian motion.*

Hu, Xiaoyu, *Measure properties of random fractals.*

Krason, Piotr, *On the category of unstable modules modulo its nilpotents.*

Szajda, Douglas, *Spectral theory of a class of unitary pseudo-differential operators.*

Wang, Daoyi, *Prediction problems for random fields.*

Virginia Commonwealth University (7)

BIOSTATISTICS

Cao, Lihong, *CDF estimation from data with measurement errors.*

Guo, Ji-Yang, *Partial weighting for inference with the mixed MANOVA-GMANOVA model.*

Myers, William R, *Optimal experimental designs for fitting the logistics regression model.*

Pacheco, Miriam (Annett), *Representation and asymptotic properties of the thin plate smoothing spline.*

Sullivan, Esau Kenneth, *Determining Therapeutic synergism in a nonparametric regression setting.*

Symanowski, Sharon, *Kendall's tau as a multiple correlation coefficient for censored data.*

Weller, Edie A., *A multivariate rank test under ordered alternatives.*

Virginia Polytechnic Institute and State University (5)

MATHEMATICS

Carpenter, Lonnie, *Cascade analysis and synthesis of transfer functions of infinite dimensional linear systems.*

Ferry, John, *Rational and harmonic approximation on F.P.A. sets.*

Gokhale, Dhananjay Ra, *Resolutions mod* I, *Golod pairs.*

Rondoni, L., *A stochastic treatment of reaction and diffusion.*

Yordanov, Russi Georg, *On the Cauchy problem for the linearized GPkdv and gauge transformations for a quadratic pencil and AKns system.*

WASHINGTON

University of Washington (11)

APPLIED MATHEMATICS

Bun, Yeng, *Evolution of three dimensional disturbances in a mixing layer.*

Gates, Kevin E., *Divide and conquer methods for the symmetric tridiagonal eigenvalue problem.*

Greenough, Jeffrey, *A weakly nonlinear theory of confined supersonic instability modes.*

MATHEMATICS

De Angelis, Valerio, *Polynomial beta functions and positivity of polynomials.*

Guo, Li, *On a generalization of Tate dualities with application to Iwasawa theory of arithmetic of elliptic curves.*

Lawrence, Mark G., *Polynomial hulls and geometric function theory of several complex variables.*

Long, Bing, *On the stable splitting of the smash products of some mapping cones.*

Praggastis, Brenda, *Markov partitions for hyperbolic toral automorphisms.*

Wan, Daqing, *p-adic properties of generalized zeta functions.*

Yang, Jun, *Hain-MacPherson high logarithms and algebraic K-groups of number fields.*

STATISTICS

Praestgaard, Jens Thomas, *General-weight bootstrap of the empirical process.*

WISCONSIN

University of Wisconsin, Madison (31)

MATHEMATICS

Brandt, Keith A., *A combinatorial study of the module of derivations of an arrangement of hyperplanes.*

Chavey, Keith L., *Combinatorial methods in the study of matrices and matrix spaces.*

Choi, Jeongwhan, *Contribution to the theory of capillary-gravity internal waves in a two layer fluid over an obstruction.*

Daniel, Timothy Lee, *Normality in box products and Σ-products.*

Fishback, Paul E., *Homomorphic functions that map continuous nonanalytic functions into the disc algebra, and nicely placed subsets of the real line.*

Gravner, Janko, *Mathematical aspects of excitable media.*

Hart, Evelyn L., *An algebraic study of Nielsen fixed point theory.*

Jin, Renling, *Independence relative to nonstandard analysis.*

Jung, Hyung Chan, *Some contributions to the combinatorial theory of partially ordered sets.*

Kaptanoglu, Hakki Turgay, *Möbius-invariant spaces and algebras in polydiscs.*

Kunkle, Thomas J., *A multivariate interpolant with nth derivatives not much larger than necessary.*

Lamb, David A., *Pseudocompact and densely compact spaces in products.*

Lazarevic, Zorana, *Some shrinking spaces.*

Lewis, Thomas M., *A law of the iterated logarithm for random walk in random scenery.*

Linton, Thomas J., *Partial isomorphisms and continuous reductions with games.*

Mekias, Hocine, *Flow due to a singularity beneath a free surface.*

Muchlis, Ahmad, *Some combinatorial properties of polytopes of symmetric, nonnegative matrices with prescribed line-sums.*

Norton-Odenthal, Brigitte E., *A product formula of generalized Lefschetz number.*

Schuette, Paul H., *Large deviations for trajectories of sums of random variables.*

Son, Geum Sug, *Contributions to combinatorial matrix theory and coding.*

Tuckey, Curtis D., *Nonstandard methods in the calculus of variations.*

Turbek, Peter S., *On compact Riemann surfaces with a maximal number of automorphisms.*

Yung, Siu Pang, *Results on infinite dimensional Hamilton-Jacobi equations.*

STATISTICS

Ahn, Hongshik, *Survival modeling through regression trees.*

Chen, Youyi, *On quasi-likelihood estimation.*

Colosimo, Enrico A., *Some issues related to the stratified proportional hazards model.*

Lee, Eric, *Regression analysis for correlated failure time data.*

Lin, Jin-Sying, *Linear regression analysis for multivariate failure time observations.*

Mouhab, Abderrahmaine, *A new Bayesian decision theory approach to screening and classification with large sample results.*

Wendelberger, Joanne, *Impact identification and estimation of sources of transmitted variation.*

Yao, Tzy-Jyun, *Random effects models for clustered proportions.*

University of Wisconsin, Milwaukee (4)

MATHEMATICAL SCIENCES

Letellier, Julie Ann, *Orthogonal plolynomials in statistical estimation.*

O'Neill, Bruce Edward, *Applications of function theory to interpolation of the differential operator and to distributional solutions of dilation equations.*

Stafford, Keith, *Malcev-Neumann group rings and their generalizations.*

Vachuska, Peter, *Applications of the T-full socle.*

WYOMING

University of Wyoming (2)

MATHEMATICS

Samandra-Marakkala, S. Ananda, *Inverse eigenvalue problems for Sturm-Liouville differential equations.*

Smith, Stanley S., *Finite-strip and finite-layer methods: Analysis and applications to groundwater flow modeling.*

CANADA

McGill University (2)

MATHEMATICS AND STATISTICS

Gannon, Terry, *Lattices and theta functions.*

Van Rooyen, Marchand, *Stable parametric optimization.*

Queen's University (6)

MATHEMATICS AND STATISTICS

Dillon, Douglas A., *A proposed curriculum and its implementation for OAC algebra and geometry.*

Dzieciolowski, Krzysztof S., *Methods of inference and analysis of influence in multiresponse nonlinear regression.*

Grinnell, Raymond, *Lorentz-improving measures on compact abelian groups.*

Huang, Jay J., *Tail probability of noncentral indefinite Gaussian quadratic form with applications to trellis coded MDPSK studies.*

Jaworski, Wojciech, *Poisson and Furstenberg boundaries of random walks.*

Ngai, Hung Man (James), *Simultaneous estimation of Poisson means–a hierarchical Bayes approach.*

Simon Fraser University (5)

MATHEMATICS AND STATISTICS

Chen, Ge Mai, *Empirical processes based on regression residuals theory and applications.*

Das, Salil, *Parameter estimation in oceanographic flows driven by density gradient.*

Hare, Donovan, *The block-intersection graph of pairwise balanced designs.*

Ren, Yuhe, *Theory and computation of moving mesh methods for solving time-dependent partial differential equations.*

Zhang, Shuhua, *Mal'cev products and related topics on the lattice of completely regular semigroups varieties.*

Université de Montréal (5)

MATHÉMATIQUES ET STATISTIQUE

Adjengue, Luc Désiré, *Estimation pour des processus spatiaux définis sur un treillis triangulaire.*

Benlahcene, Moussa, *Représentations poids maximal des algèbres de Kac-Moody affines, engendrées par l'action d'une sous-algèbre de Heisenberg.*

Houde, Louis, *Estimation de densité pour données groupées.*

Nekka, Fahima, *Equations fonctionnelles en géométrie fractale, courbes et surfaces irrégulariéres.*

Yezza, Abdelwahab, *Optimisation des systèmes gouvernés par des équations intégrales.*

Université de Sherbrooke (3)

DÉPARTEMENT DE MATHÉMATIQUES ET D'INFORMATIQUE

Hadjou, Brahim, *Théorèmes de décomposition en théorie de la mesure non-commutative.*

Mansouri, Abdelatif, *Méthodes de pénalités mixtes à un et deux paramètres: Extrapolation et convergence asymptotique superlinéaire en deux étapes.*

Saadi-Drissi, Khadija, *Solutions presque périodiques d'équation différentielle du type pendule forcé.*

University of Alberta (8)

MATHEMATICS

Fabbri, Marc, *Generalized Heisenberg algebras and their vertex operator representations.*

Kim, Pansoo, *Groups with permutable subgroups and infinite metabelian groups.*

Liu, Keqin, *The quantum Witt algebra and quantizations of some modules over the Witt algebra.*

McLaughlin, David, *Smoothness and decompositions in Banach spaces.*

Shi, Zhiyong, *Graded groups and toroidal groups.*

Vanderwerff, Jon, *Renormings and smoothness in Banach spaces.*

Yang, Feng, *A study of mathematical models for a chemostat with periodic input and for a cyclostat.*

STATISTICS AND APPLIED PROBABILITY

Yang, Zhen Lin, *Inference following box-Cox transformation.*

University of British Columbia (3)

MATHEMATICS

Chang, Huaxiong, *Incompressible viscous flow in tubes with partial occlusions.*

Chiarolla, Maria, *Geometric approach to monotone stochastic control.*

Lisle, Ian, *Equivalence transformations for classes of differential equations.*

University of Regina (1)

MATHEMATICS AND STATISTICS

Wang, Hong, *Zero-one laws for extreme order statistics.*

University of Toronto (9)

MATHEMATICS

Ahia, Francis, *Singular perturbation theory for Schrödinger eigenvalue problem. Interaction between discrete and continuous spectra.*

Gorelic, Isaac, *Set-theoretic forcing and Lindelöf topological spaces.*

Leung, Allen Yuklun, *Integral formulae in differential geometry via mixed exterior algebra.*

Livshits, Leonid, *Generalized Schur product for matrices with operator entries.*

STATISTICS

Brimacombe, Michael Bruce, *On a conditional approach to nonlinear regression: Confidence regions and second order.*

Rahman, Sheikh Mukhlesur, *On assessing, comparing and combining probability forecasts.*

Stafford, James Edmond, *Symbolic computation and the comparison of traditional and robust test statistics.*

Wu, Yanhong, *Some contributions to on-line quality control.*

Zhu, Yiliang, *Generalized information measures and asymptotic efficiency.*

University of Waterloo (10)

COMBINATORICS AND OPTIMIZATION

Gitler, Isidoro, *Delta-Wye-Delta transformations algorithms and applications.*

Martin, William Joseph, III, *Completely regular subsets.*

Mongeau, Marcel, *Discontinuous piecewise differentiable optimization.*

PURE MATHEMATICS

Atkins, Richard, *Equivalence: Invariance, normal forms and symmetry.*

STATISTICS AND ACTUARIAL SCIENCE

Doray, Louis G., *Prediction of INBR events with generalized regression time series and compound Poisson model.*

Ebong, Ephraim O., *Prepayment and pricing of mortgage-backed securities.*

El-Haddad, John N., *Outliers and time series modelling.*

Long, David L., *Estimating function methods for spatial binary data.*

Meester, Steven G., *Methods for clustered categorical data.*

Ravindran, Kannoo, *Generalized secretary problems.*

University of Western Ontario (4)

APPLIED MATHEMATICS

Ahmady, Mohammad Reza, *Electroweak calculations in the presence of nonperturbative QCD effects.*

Li, Ninghua, *Strong asymptotics of Padé polynomials.*

MATHEMATICS

Bryden, John Milton, *Exterior power operations in representation theory.*

Li, Zaiquing, *Hopf algebras and cohomology operations.*

University of Windsor (2)

MATHEMATICS AND STATISTICS

Qin, Yu, *Flow and stability studies in porous media based on some non-Darcian models.*

Sun, Weiwei, *Adaptive boundary element method.*

Doctoral Degrees Conferred 1987–1988
Supplementary List

The following list supplements the list of thesis titles published in the November 1988 *Notices*, pages 1314–1342, the April 1989 *Notices*, pages 383–384, and the November 1989 *Notices*, page 1188.

CANADA

University of Alberta (1)

MATHEMATICS

Kuang, Yang, *Limit cycles in Gauss-type predator-prey systems.*

Doctoral Degrees Conferred 1989–1990
Supplementary List

The following list supplements the list of thesis titles published in the November 1990 *Notices*, pages 1231–1250, the May/June 1991 *Notices*, page 419, and the November 1991 *Notices*, pages 1121–1122.

CANADA

University of Alberta (4)

MATHEMATICS

Huang, Yin Xi, *Positive global solutions of nonlinear elliptic equations.*

Latif, Raja, *Semi-open sets and mappings in topological spaces.*

Skantharajah, Mahatheva, *Amenable hypergroups.*

Yip, Lee Wah, *On Carmichael type problems for the Schemmel totients and some related questions.*

Doctoral Degrees Conferred 1990–1991
Supplementary List

The following list supplements the list of thesis titles published in the November 1991 *Notices*, pages 1103–1121 and the May/June 1992 *Notices*, pages 422–423.

KENTUCKY

University of Kentucky (3)

MATHEMATICS

Akatsa, Victor, *Flat envelopes and negative torsion functors.*

Lilly, Glenn M., *The C_ℓ generalization of Bailey's transform and Bailey's lemma.*

Stenerson, Jon C., *Space curves as set-theoretic complete intersections.*

MINNESOTA

University of Minnesota (1)

STATISTICS

Johnson, Bradford, *On the admissibility of improper Bayes inferences in fair Bayes decision problems.*

WASHINGTON

University of Washington (1)

BIOSTATISTICS

Anderson, Kevin, *Efficient deconvolution of episodic hormone data.*

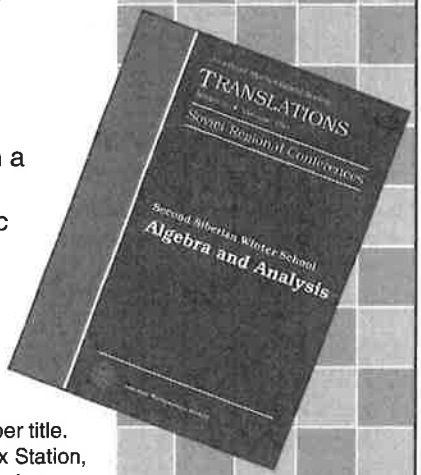
Translations, Series 2, Soviet Regional Conferences

Second Siberian Winter School "Algebra and Analysis"

I. A. Aleksandrov, L.A. Bokut', and Yu G. Reshetnyak, Editors

Volume 151

This book, the second in the series of proceedings of Soviet Regional Conferences, contains papers presented at the Second Siberian Winter School: Algebra and Analysis, held at Tomsk State University in 1989. The papers touch on a variety of topics, including Lie algebras and Lie groups, sheaves, superalgebras, graded Lie algebras, Teichmüller theory, nonstandard functional analysis, hyperbolic geometry, *p*-adic *L*-functions, automorphic forms, and resolution of singularities.



1991 *Mathematics Subject Classification*: 11, 14, 17, 32, 46; 30, 58
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Doctoral Degrees Conferred

Supplementary List

1991–1992

The following list supplements the list of thesis titles published in the November 1992 issue of the *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.

DISTRICT OF COLUMBIA

George Washington University (2)

OPERATIONS RESEARCH

Al-Mutairi, Dhaifalla Khalid, *Stochastic processes and their stochastic monotonicity properties in a layered defense system.*

Vopatek, Anne Louise, *Design of accelerated life tests: A Bayesian approach.*

IOWA

University of Iowa (1)

STATISTICS AND ACTUARIAL SCIENCE

Chang, Chee Jen, *Random coefficient Regression models in longitudinal studies.*

NEW YORK

Rensselaer Polytechnic Institute (4)

MATHEMATICAL SCIENCES

Borchers, Brian, *Improved branch and bound algorithms for integer programming.*

Fiedler, Stuart, *Model enhancement of stationary iterative methods.*

Kalocsai, Andre, *A study of asymptotic theories in nonlinear optics and hypersonic aerodynamics.*

Schurman, Iman, *Parabolic approximation models for acoustic and electromagnetic wave propagation.*

TEXAS

University of North Texas (4)

MATHEMATICS

Cossio, Jorge Ivan, *Multiple solutions for semilinear elliptic boundary value problems.*

Schlee, Glen Alan, *Borel sets with convex sections and extreme point selectors.*

Taylor, John, *Aspects of universality in function iteration.*

Wright, William Glen, *An algebraic characterization of stability groups.*

VIRGINIA

Virginia Polytechnic Institute and State University (1)

STATISTICS

Selander, Keith, *A function space approach to the generalized nonlinear model with applications to frequency domain spectral estimation.*

CANADA

University of Calgary (4)

MATHEMATICS AND STATISTICS

Boroczky, Karoly, *Intrinsic volumes of finite ball-packings.*

Li, Boyu, *The PT-order, cutsets and fixed points in posets.*

Misi, Titus S., *Random bivariate rays, statistical societies and Buffon's pi.*

Wang, Hong, *Packings, factors and factorizations of graphs.*

1990–1991

The following list supplements the list of thesis titles published in the November 1991 *Notices*, pages 1103–1121, the May/June 1992 *Notices*, pages 422–423, and the November 1992 *Notices*, page 1060.

GEORGIA

University of Georgia (1)

MATHEMATICS

Lin, Chin-Cheng, *H^p multipliers on the Heisenberg groups.*

NEW YORK

Rensselaer Polytechnic Institute (3)

MATHEMATICAL SCIENCES

McComb, Todd, *A study of two diverse problems in fluid dynamics in three parts.*

Orchard, Bradley, *Derivation and analysis of time-domain paraxial approximation for ocean acoustic wave propagation.*

Wang, Yun, *An adaptive local Hpr-refinement finite element method for parabolic partial differential equations.*

Erratum

Doctoral information for Robert Kelley and Catherine Samuelsen, Department of Mathematical Sciences, Rice University, was reported in the 1990–1991 list of doctoral degrees conferred. This information should have been reported in the list of doctoral degrees in 1991–1992.