Doctoral Degrees Conferred

1997–1998

ALABAMA

Auburn University, Auburn (9)

DISCRETE AND STATISTICAL SCIENCES

Grant, Carrie, An n to $2n$ embedding of incomplete idempotent latin squares for small value of n.

Parker, Carol, Complete bipartite graph path decompositions.

Wehrung, Lloyd B., Maximum packings of K_n with fish.

MATHEMATICS

Choi, Jongsool, Cohomological properties of compacta.

Clark, Alex, Linear flows on solenoids, exponents and denjoids.

Kornman, Paul, ARI and refinable maps on CANR spaces.

Lamar, Tuwaner, Analysis of a 2n-th order differential equations with Lidstone boundary.

Larsen, Eric, Large intersection of continuous nowhere monotone functions with smooth functions.

Weathers, Tony, Weak solutions to a system of equations arising from MHD theory.

University of Alabama, Birmingham (4)

BIOSTATISTICS

Fox, Liesl M., An exploration of the pseudo-binomial distribution with applications to survival curve confidence intervals.

Peschell, Kenneth J., Likelihood-ratio-based asymptotic fiducial and Bayesian methods for therapeutic equivalence assessment (TEA) using survival distributions.

Zaidi, Akbar A., A family of confluent hypergeometric distributions.

MATHEMATICS

Yung, Joyce, Mathematical applications of diffusion equations in cancer tumor growth.

University of Alabama, Huntsville (2)

MATHEMATICAL SCIENCES

Lampert, Douglas, Independence related graph theory parameters.

Youree, Roger, Convergence of discrete-time European option problems with hereditary price structures to continuous time versions.

University of Alabama, Tuscaloosa (6)

MANAGEMENT SCIENCE AND STATISTICS

Bauskar, Milind E., Special models for a multi-item, multi-location, multi-echelon, multi-period inventory system with centralized replenishments and restricted transshipment.

Dale, Cheryl, Sequence dependent production scheduling using the p-media integer linear programming model and hierarchical clustering techniques: an empirical study.

Dyer, John N., Evaluation of control charting techniques for monitoring autocorrected processes.

Jones, Lady Allison (L. Allison), Topics on data intensive and computationally intensive control charting methods.

Raina, Sidhartha, Multi-criteria decision analysis approach to evaluation of inter-organizational systems.

Solis, Adriano, Evaluation of the negative binomial approximation and stochastic leadtimes in a multi-echelon inventory model.

ARIZONA

Arizona State University (9)

MATHEMATICS

Diaz-Rivera, Ivonne, The dynamics of queues of re-entrant manufacturing systems.

Ding, Xiaohong, Theoretical and numerical evaluation of convergence acceleration for the Stokes problem.

Hong, Kang, Robust multivariate analysis: principal components analysis and discriminant analysis.

Le, Dung, Nonlinear parabolic systems and attractors.

Little, Leigh, A finite element Navier-Stokes solver using an adaptive BICGSTAB(L) algorithm.

Sieben, Nandor, Actions of inverse semigroups on C^*-algebras.

Siefker, Andrew, Characteristics of non-uniformly spaced discrete-time signals from their Fourier phase.

Van Wieren, Jack, Using diagonally implicit multistage integration methods for solving ordinary differential equations.

Yan, Lirong, On part decompositions of graphs.

University of Arizona (7)

APPLIED MATHEMATICS

Abbey, Craig, Assessment of reconstructed images.

Brazier, Richard, Seismic wave propagation stitching: matching local and global techniques.

Ghamasaee, Rahman, A neural network approach for the solution of traveling salesman and basic vehicle routing problems.

Gifford, Howard, Theory and application of Fourier crosstalk: an evaluator for digital-system design.

Horsch, Karla, Attractors for Lyapunov cases of the complex-Ginsburg Landau equation.

MATHEMATICS

Gillis, Gregory, Design considerations in composite conductors: an exposition of percolation theory.

Simek, Olga, Hear trace asymptotics for domains with singular boundaries.

ARKANSAS

University of Arkansas, Fayetteville (1)

MATHEMATICAL SCIENCES

Alhami, Kifah, Cyclic vectors for the shift on Bergman spaces.

CALIFORNIA

California Institute of Technology (8)

APPLIED MATHEMATICS

Hill, David J., Part I: Vortex dynamics in wake models; Part II: Wave generation.

Meloon, Mark R., Models of Richtmyer-Meskhov instability in continuously stratified fluids.

Rudnon, Mikhail K., Exponentially small splicing of separatrices and the Arnold's diffusion problem.

Sgoureva-Philippakos, Russina, Nonlinear effects in elastic Raleigh waves.

MATHEMATICS

Ajoodani-Namini, Shahin, Large sets of tau-designs.

Blaom, Anthony, The perturbation of Hamiltonian systems with a non-Abelian symmetry.

Choi, Yanglim, (3, 1)-Surfaces via branched surfaces.

Mitsis, Themistokus, On a problem in geometric measure theory related to sphere and circle packing.

Claremont Graduate University (3)

MATHEMATICS

Besnard, Eric, Prediction of high lift flows with separation.

Elshihabi, Azzam, Disturbance decoupling with stability for nonlinear systems using static/output feedback: a geometric approach.

Giray, Okten, Contributions to the theory of Monte Carlo and quasi-Monte Carlo methods.

Naval Postgraduate School (1)

MATHEMATICS

Beaver, Philip F., On the quasimonotonicity of a square linear operator with respect to a nonnegative cone.

Stanford University (8)

MATHEMATICS

Bray, Hubert Lewis, The Penrose inequality in general relativity and volume comparison theorems involving scalar curvature.

Entov, Mikhail, Surgery on Lagrangian and Legendrian singularities.

Iga, Kevin Mitsuo, Moduli spaces of Seiberg-Witten flows.

Kurlberg, Par Martin, A local Riemann hypothesis.

Lien, Wen-Ching, Hyperbolic conservation laws with a moving source.

Pezzoli, Elena, Complexity of type-two functionals and of logical games on finite structures.

Ryzhik, Leonid V., High frequency waves and transport in a random medium.

Tsalenko, Anna M., Stochastic stability of Bernoulli flows.

University of California, Berkeley (29)

BIOSTATISTICS

Hubbard, Alan Edward, Applications of locally efficient estimation to censored data models.

Peterson, Derick Randall, Missing data models and the selection of explanatory variables in regression.

INDUSTRIAL ENGINEERING AND OPERATIONS RESEARCH

Chitchachornvanich, Thawee, Optimizing semiconductor fabrication scheduling in the face of uncertainties.

Jang, Wooseung, Markovian quality control for multiple processes under capacity constraints.

Kuo, William, Adaptive sampling strategies for semiconductor manufacturing.

Liu, Ting-Yun, Equipment acquisition planning in the semiconductor industry—considering learning effects in equipment efficiency.

Shen, Youxun, Stochastic water fabrication scheduling.

MATHEMATICS

Alvarez, Catherine, Inverse nodal problems with mixed boundary conditions.

Badoian, Leslie, Flow equivalence of shifts of finite type and flow K-theory.

Bhattacharyya, Bina, Krishnan-Sunder subfactors and a new countable family of subfactors related to trees.

Bromberg, Kenneth, Rigidity of hyperbolic 3-manifolds with geometrically finite ends.

Burlakov, Yuri, The phase space of a focusing cubic Schroedinger equation: a numerical study.

Dreier, Roland, On p-adic properties of families of curves.

Jones, David, Results on modular representations of GAL $(\overline{Q}/Q)$ in characteristic 3.

Kathotia, Vinay, Universal formulae for deformation quantization and the Campbell-Baker-Hausdorff formula.

Kleber, Michael, Finite-dimensional representations of quantum affine algebras.

Krapp, Donald, The applicability of certain Monte Carlo methods of the analysis of interacting polymers.

Larson, Paul, Variations of P_{max} forcing.

Magidin, Arturo, Dominions in varieties of groups.

Mitchell, Julie, Hodge decomposition and expanding maps on flat tori.

Shlyakhtenko, Dimitri, Free quasi-free states.

Staddon, Jessica, A combinatorial study of communication storage and traceability in broadcast encryption systems.

Steinberg, Benjamin, Decidability and hyperdecidability of joins of pseudovarieties.

Takahashi, Shuzo, Degrees of parametrizations of elliptic curves by modular curves and Shimura curves.

Terr, David, The distribution of shapes of cubic orders.

Tucker, Thomas, Some diophantine properties of points on curves.

Tvedt, Brian, Global existence of solutions and propagation of regularity of quasilinear viscoelastic systems of differential type.

Wilkerson, Daniel, Communication on networks of finite automata: three instances of wormhole routing.

Xaba, Enoch, Robust iterative solvers for linear and nonlinear finite element equations.

University of California, Davis (6)

MATHEMATICS

Rutaganira, Thomas, Numerical simulation of blood flow in arteries: effect of elastic walls.

Zaboronsky, Oleg, Localization and supergeometry.

STATISTICS

Chiou, Jeng-Min, Nonparametric quasi-likelihood and curve data modelling.

Vestrup, Eric, A comparison of Bayesian and frequentist shrinkage.

Wood, Matthew, Analysis of the effects of missing data in the NAS data set.

Yee, Julie, Large and small sample Bayesian inference and diagnostics for models with latent variables.

University of California, Irvine (1)

MATHEMATICS

Ni, Lei, Vanishing theorems on complete Kahler manifolds and their applications.

University of California, Los Angeles (21)

MATHEMATICS

Afshartous, David, Prediction in multilevel models.

Blomgren, Peter, Total variation methods for restoration of vector valued images.

Carrero, Jesus, Lie theoretical aspects of self gravitating Riemann ellipsoids.

Cowden Vassilev, Janet, Test ideals in Gorenstein isolated singularities and F-finite reduced rings.

Gao, Su, The isomorphism relation between countable models and definable equivalence relations.

Go, Susie, Multilevel methods on unstructured grids.

Graber, Thomas, Enumerative geometry of hyperelliptic plane curves.

Grassi, Michele, Characteristic cohomology of smooth manifolds.

Guerrini, Luca, Construction and deformation of infinite dimensional Lie algebras.

Hacon, Christopher, Divisors on principally polarized Abelian varieties. Seshadri constants of ample vector bundles.

Hui, Unkit, Cocycle conjugacy of one parameter automorphism of AFD factors of type III.

Lin, Chi-Tien, On approximate solutions for hyperbolic conservation laws and Hamilton-Jacobi equations.

Matheos, Peter, Failure of compactness for the d-bar Neumann problem for two complex dimensional Hartogs domains with no analytic disks in the boundary.

Miller, Brian, Improvements in multiple phase flow computations.

Puha, Amber, A reversible interacting particle system on homogeneous tree.

Sharapov, Ilya, Multilevel subspace correction for large scale optimization problems.

Strong, David, Adaptive total variation minimizing image restoration.

Wald, Linda, Minimal inherently non-finitely based varieties of groupoids.

Wan, Wing-Lok, Scalable and multilevel iterative methods.

Wang, Caitlin, Calderon-Zygmund inequality for differential forms on a compact Riemannian manifold.

Yeung, Man-Chung, Probability and symmetry in computational linear algebra.

University of California, Riverside (9)

MATHEMATICS

Dimitrov, Ivan, Weight modules of infinite-dimensional Lie algebras and Lie superalgebras.

Fisher-Vasta, Tammy, Presentations of Z-forms for the universal enveloping algebras of affine Lie algebras.

Guu, Ching, The circular wirelength of cubes.

Hanley, William, On the Lorenz zonoid representation of distributional variability.

Mohanty, Sara, Invariants of degree 1 of almost generic plane curves.

Vasta, Joseph, Orthogonal product of simplices.

Wallace, Laura, Graded Mori rings.

STATISTICS

Fairchild, Lisa, Testing interactions between treatments and subgroups within groups in a two-period crossover trial.

Liu, Thomas, Optimal mixture designs in orthogonal blocks.

University of California, San Diego (10)

MATHEMATICS

Agol, Ian, Topology of hyperbolic 3-manifolds.

Brockman, William Bennett, The atomic decomposition of the q-Kostka polynomials in combinatorics and geometry.

Carlson, Stephen John, Normal bases in class fields over real Abelian number fields.

Chang, Carol Haekyung, Geometric interpretations of the Macdonald polynomials and the n! conjecture.

Gamst, Anthony Collins, Stochastic Burgers flow.

Garibaldi, Ryan Lee, Trialitarian algebraic groups.

Hunziker, Markus, Harish-Chandra systems on a reductive Lie algebra and the Zuckerman functor.

Lucia, Ned F., A center of mass method with applications to the solution of the two-dimensional Stokes equations in a channel.

Miller, Wendy L., Counting points on certain CM elliptic curves modulo primes.

Zabrocki, Michael Alan, On the action of the Hall-Littlewood vertex operator.

University of California, Santa Barbara (12)

MATHEMATICS

Bart, Anneke, Some results concerning surface groups in surgered manifolds.

Calvo, Jorge, Geometric knot theory: the classification of spatial polygons with small number of edges.

Ebert, Todd, Applications of recursive operators to randomness and complexity.

Gaulter, Mark, Characteristic vectors of unimodular lattices over the integers.

Shell, Glenn, Locally nonconical convex sets.

Sola, Dino, Essential surfaces with non-meridian boundry in the complement of an alternating link.

Woodward, Scot, The global dimension of a q-skew polynomial ring.

STATISTICS AND APPLIED PROBABILITY

Gallagher, Colin, Fitting ARMA models to heavy-tailed data.

Ghosh, Kaushik, Some contributions to inference using spacings.

Haynatzka, Vera, An application of probability metrics in epidemiology.

Lund, Ulric, Regression and goodness of FIT for circular data.

Schumacher, Norbert, Option pricing with definitely divisible returns.

University of California, Santa Cruz (2)

MATHEMATICS

Hoyle, Mark, Perfect Morse functions on the moduli space of parabolic bundles.

Ortega, Juan-Pablo, Symmetry reduction and stability in Hamiltonian systems.

University of Southern California (5)

MATHEMATICS

Bodine, Sigrun, A dynamical systems approach to asymptotic diagonalization and integration of linear differential systems.

Hoffman, Corneliu, On some problems in representation theory of finite Chevalley groups.

Kojima, Tetsuro, Positive definite unimodular forms as trace forms.

Ouyang, Min, Actions of Hopf algebras.

Pappacena, Christopher, Some problems in the representation theory of associative algebras.

COLORADO

Colorado School of Mines, Golden (2)

MATHEMATICS AND COMPUTER SCIENCES

Goktas, Unal, Algorithmic computation of symmetries, invariants and recursion operators for systems of nonlinear evolution and differential-difference equations.

Knudson, David, A piecewise Hermite bicubic finite element Galerkin method for the biharmonic Dirichlet problem.

Colorado State University (7)

MATHEMATICS

Adair, Ronnie Jr., Simulations of Taylor-Couette flow.

Marak, Tyrel, A filtration for K_0 of the inverse limit of a diagram of rings.

STATISTICS

Al-Karni, Said H. M., On the distribution of quadratic forms and of their ratios.

Chu, Jui-Yuan, Model identification in factorial experiment.

Delgado-Saldivar, Jaime, Optimal design of experiments in nested variance components models.

Smith, David, Adjusting for publication bias and quality effects in Bayesian random effects meta-analysis.

Ueng, Chang-Yue, Confidence intervals for variance components in two components mixed models.

University of Colorado, Boulder (8)

APPLIED MATHEMATICS

Bernard, Deconinck, The initial-value problem for multiphase solutions of the Kadomtsev-Petviashvili equation.

Billings, Lora Merck, Dynamical systems methods applied to polynomial factorization families: a study of chaotic attractors.

Coult, Nicholas, A multiresolution strategy for homogenization of partial differential equations.

MATHEMATICS

Ream, Robert, Distribution of additive functions (mod 1) over intervals and representations of integers as products and quotients of given sets.

Sallam, El-Sayed Kamel Morsey, Cohomology of groupoid structure.

Shaulis, Delphy Tsuyuko, Torsion points on the hyperelliptic rational image of Fermat curves.

Taggart, Jennifer Lyn, Relations among hypergeometric series of type $_4F_3(1)$.

Vestal, Donald, Generalized Dedekind eta functions with applications to additive number theory.

University of Colorado, Denver (3)

MATHEMATICS

Brezina, Marian, Robust iterative methods on unstructured meshes.

Dillon, Mark, Conditional coloring.

Tezaur, Radek, Analysis of Lagrange multiplier based domain decomposition.

CONNECTICUT

University of Connecticut (9)

MATHEMATICS

Caggiano, Jay, Sets of interpolation for Fourier transforms of Frechet measures.

Dai, Hong, Measuring and analyzing volatility risk in disability income.

Hill, Sharon, Numerical and theoretical investigation of the variational formulation of a water.

Xia, Shiqin, Fast numerical schemes for Fredholm integral equations of the second kind.

STATISTICS

Chen, Jie, Approximations and inequalities for discrete scan statistics.

Chu, Hui-May, Computation approach to Bayesian inference for risk assessment.

Ecker, Mark, Bayesian variogram modeling.

Iyengar, Malini K., Compositional data analysis for independent and serially correlater observations: a Bayesian approach.

Niverthi, Murali, Bayesian methods in statistical quality control.

Wesleyan University (3)

MATHEMATICS

Hirshberg, Alan, Vector-valued marginal problems.

Silberger, Sylvia, Subshifts of the threedot system.

Widman, Jack, Groups and algebras convergence and order.

Yale University (5)

MATHEMATICS

Hui, Tai-Hing Dennis, Mixing and certain integral point problems on semi-simple Lie groups.

Lifschitz, Lucy, Superrigidity theorems in positive characteristics.

Styrkas, Konstantin A., Quantum groups, conformal field theories, and duality in tensor categories.

Vu, Van Ha, Anti-Hadamard matrices, extremal set systems and nibble method.

STATISTICS

Cheang, Gerald, Neural network approximation and estimation of functions.

DELAWARE

University of Delaware (4)

MATHEMATICAL SCIENCES

Collins, Joseph, Functional estimation: the asymptotic regression approach.

Gorka, Sandra, Several set functions and set maps.

Zack, Charles, ARC-length quadrature domains.

Zhang, Xiaosha, Bootstrap based goodness of fit test for non-location/scale families of statistics.

DISTRICT OF COLUMBIA

George Washington University (6)

MATHEMATICS

Fitzkee, Thomas, Weakly mixing tiling flows arising from interval exchange transformations.

Kouatchou, Jules, High-order multigrid techniques for partial differential equations.

McDaniel, Michael, Subspaces of Vassiliev invariants using cabling.

STATISTICS

Anand, Ravinder, Sequential monitoring of informatively censored longitudinal data.

Friedlin, Boris, Change point tests and other statistical problems common to legal and medical applications.

Hu, Ming-Xiu, Robust estimating functions with nuisance parameters.

Howard University (2)

MATHEMATICS

Nkwanta, Asamoah, Lattice, paths, generating functions and the Riordan group.

Ombolo, Remi, Deformation of Leibnitz algebras and Lie bi-algebras.

FLORIDA

Florida State University (7)

MATHEMATICS

Auriault, Laurent, Jet mixing noise from fine scale turbulence.

Darcy, Isabel, Biological metrics on DNA knots and catenanes.

Dinov, Ivaylo, Mathematical and statistical techniques for modeling and analysis of medical data.

Kurbatski, Konstantin, Solid wall boundary conditions for computational aeroacoustics problems.

Liao, Xiaozhong, Compact Riemann surfaces with symmetry using symbolic computation.

Shen, Hao, Numerical simulation of the jet research phenomenon.

STATISTICS

Stein, Jeffrey W., A class of space-time models for monitoring station data with application to El Nino events.

University of Central Florida (2)

MATHEMATICS

Kelly, Deborah, Temporal propagation characteristics of ultrashort space-time Gaussian pulses in a laser satellite communication system.

Minkler, Jing, On the regularity of probablistic convergence and filter spaces.

University of Florida (14)

INDUSTRIAL AND SYSTEMS ENGINEERING

Akansel, Mehmet, Solution techniques for single-job lot streaming problems in flow shops.

MATHEMATICS

Du, Zhaowei, Schur indices of projective representations of hyperoctahedral groups.

Finn, Robert, Homological features of rings of continuous functions.

Krishnamurthi, Chithra, Self similar sets in complete metric spaces.

Lone, Amjad, Generalized Poisson distributions.

McGovern, Warren, Algebraic and topological properties of $C(X)$ and the F-topology.

Muthu, Muthiah, The stochastic integral of process measures.

STATISTICS

Ajmani, Vivek, Robust multivariate control charts.

Coull, Brent, Subject-specific modelling of capture-recapture.

Dallas, Michael, Permutation tests for randomly right censored data consisting of both paired and unpaired observations.

Tanaka, Yoko, A proportional hazards model for informatively censored survival times.

Teng, Chi-Hse, Two-stage genome search design in affected-sib-pair method.

Yin, Ming, Noninformative priors with applications.

Zheng, Beiyao, Summarizing the predictive power of a generalized linear model.

University of Miami (1)

MATHEMATICS AND COMPUTER SCIENCE

Fernandez, Higinio, Span and real functional diameter of metric continua.

University of South Florida (3)

MATHEMATICS

Dragnev, Peter, Constrained energy problems for logarithmic potentials.

Markov, Lubomir, An L^2 approach to second order functional evolutions in Banach spaces.

Simeonov, Plamen, Weighted polynomial and rational approximation with varying weights.

GEORGIA

Emory University (5)

BIOSTATISTICS

Golm, Gregory, Semiparametric methods for mismeasured exposure information in HIV vaccine trials.

Stiger, Thomas, Small-sample performance and validation of the proportional odds model for correlated ordinal data fitted with GEE.

MATHEMATICS AND COMPUTER SCIENCE

Krzastek, Kathleen, Describing convex sets in R^2.

Lu, Xiaowu, Symplectic integration for Hamiltonian systems and applications.

Nardo, John, Equilateral random polygons are globally knotted.

Georgia Institute of Technology (12)

MATHEMATICS

Belogay, Eugene, Construction of smooth orthogonal wavelets with compact support.

Bin, Tan, Invariant manifolds, invariant foliations and linearization theorems in Banach spaces.

Carbinatto, Maria do Carmo, The Conley index and chaos.

Keeve, Michael, Study and implementation of Gauss Runge-Kutta schemes and application to Riccati equations.

Kuhn, Wolfgang, Rigorous and reasonable error bounds for the numerical solution of dynamical systems.

Kuhn, Zuzana, Ranges of vector measures and valuations.

Lara, Teodoro, Controllability of cellular neural networks.

Liu, Weishi, Center manifold theory for smooth invariant manifolds.

O'Connell, W. Richard Jr., Estimates for the St. Petersburg game.

Pederson, Steven, Homoclinic tangencies and families of interval maps with non-constant topological entropy.

Salazar-Gonzalez, Jose Domingo, Boundary and internal layers in a semilinear parabolic problem.

Yang, Xue-Feng, Extensions of Sturm-Liouville theory: nodal sets in both ordinary and partial differential equations.

University of Georgia (9)

MATHEMATICS

Fox, Glenn, A P-adic 1-function of two variables.

James, Kevin, On congruences for the coefficients on modular forms and some applications.

Park, Mu Yeol, Classification of stable cut loci of surfaces.

Penniston, David, The unipotent part of the generalized Jacobian of a curve.

Rushton, Joseph, On exact finite dimensional filters in mixed time.

STATISTICS

Allen, Michael, Bootstrap and inference for some linear time series models.

Day, Bann-Mo, Bayes and empirical Bayes estimation with application to small area estimation.

Kim, Sahmyeong, Inference for nonlinear time series models via estimating functions.

Srivastava, Anjali, Parameter estimation and saddlepoint distributions for models in plant disease epidemics.

HAWAII

University of Hawaii (1)

MATHEMATICS

Hanson, Jason, Algebraic realization of smooth group actions.

IDAHO

Idaho State University (2)

MATHEMATICS

Darrow, Jeffrey, Revitalizing the curriculum: using original sources, history, and writing in undergraduate mathematics.

Thornburg, Mark, Order intervals of matrices and linear transformations.

University of Idaho (1)

MATHEMATICS

Johnson, Kathrine, Sufficiency and maximum likelihood estimation for a class of population genetic models.

ILLINOIS

Illinois State University (2)

MATHEMATICS

Hassani, Sarah, Calculus students knowledge of the composition of functions and the chain rule.

Kersaint, Gladis, Preservice elementary teachers ability to generalize functional relationships.

Northern Illinois University (2)

MATHEMATICAL SCIENCES

Manning, Gregory, The $m(4)$ problem of Erdős and Hajnal.

Ran, Shiaohong, Choosing smoothing parameters in nonparametric curve fitting using kernel contrasts.

Northwestern University (13)

INDUSTRIAL ENGINEERING AND MANAGEMENT SCIENCE

Abeysinghe, Rasika, External effects on firm technology strategy in Sri Lanka: an analysis of firm technology strategy in local and global context.

Berger, Rosemary, Location-routing models for distribution systems design.

Creticos, Peter, Task and skill based job matching.

Johnson, Michael, Jr., An optimization model for location of subsidized housing in metropolitan areas.

Kaminsky, Philip, Probabilistic analysis and effective algorithms for large scale machine scheduling problems.

Owen, Jonathan H., Disjunctive approaches for solving general mixed-integer linear programs.

Wigal, Cecelia M., Introducing *SAGT*: A methodology for evaluating large complex systems. A case study application.

MATHEMATICS

Choi, Youngna, One dimensional Lorenz-like attractors.

Douma, Jason, Automorphisms of products of finite p-groups with applications to algebriac topology.

Garcia-Rodriguez, Antonio, Arnold diffusion near elliptic-hyperbolic fixed points.

Richeson, David, Connection matrix pairs for the discrete Conley index.

Tran, Thy, Function-theoretic operator theory on finitely connected planar domains.

Yagunov, Sergei, Geometrically originated complexes and the homology of the pair (GL_n, Gm_n).

Southern Illinois University, Carbondale (2)

MATHEMATICS

Arriojas, Mercedes, A stochastic calculus for functional differential equations.

Wu, Funeng, α-unimodal discrete distributions.

University of Chicago (18)

MATHEMATICS

Basterra, Maria, André Quillen cohomology of commutative S-algebras.

Belorousski, Pavel, Chow rings of moduli spaces of pointed elliptic curves.

Brosnan, Patrick, Topics in algebraic geometry: an algebraic Napier-Ramachandran theorem and Steenrod operations on Chow groups.

Clair, Bryan, Residual amenability and the approximation of L^2-invariants.

Coffman, Adam, Enumeration and normal forms of singularities in Cauchy-Riemann structures.

Dimitrov, Alexander, Aspects of cortical information processing.

Haines, Thomas, On connected components of Shimura varieties.

Huntsinger, Reid, Some aspects of invariant harmonic analysis on the Lie algebra of a reductive P-adic group.

Kresch, Andrew, Chow homology for Artin stacks.

Rolvung, Christian, Nonisotropic Schrödinger equations.

Schrag, Matthew, Poincaré inequalities with radial weights.

Shirokova, Nadya K., Some applications of embedding theory.

Sreekantan, Ramesh, Higher Chow groups and CM cycles in families of Abelian surfaces.

Taback, Jennifer, Quasi-isometric rigidity for $PSL_2(\mathbf{Z}[\frac{1}{p}])$.

Vemuri, Murali, Realizations of the canonical representation.

Whyte, Kevin, Discrete metric spaces, bilipschitz equivalence and coarse characteristic classes.

Yuhan, Zha, A general arithmetic Riemann-Roch theorem.

Zhang, Yongmin, Numerical solution of variational inequalities.

University of Illinois, Chicago (11)

MATHEMATICS, STATISTICS AND COMPUTER SCIENCE

Chen, Jan-Jo, Concurrent processing in distributed systems: algorithms, database, and networking.

Fabijonas, Bruce, Secondary instabilities of linear flows with elliptic streamlines.

Hu, GuoQing, Finite dimensional filters with nonlinear drift.

Jiao, Juhui, Hypothesis testing in competing risks theory.

Krebes, David, An obstruction to embedding A-tangles in links.

LaFalce, Silvia, On the equivalence operation in algebras of logic.

Park, Henry, Optimality of selection procedures.

Porter, Diann, William Fogg Osgood: agent of a transformation of mathematics.

Tsaparas, Irene, On learnability of atomic formulas.

Wu, Julin, Structural characterizations of graphs, chordality and balance.

Xiang, Niandi, Normal estimates of Banach based valued random series and their applications in harmonic analysis.

University of Illinois, Urbana-Champaign (17)

MATHEMATICS

Amini, Massoud, Local structure of operator algebras.

Colliander, James Ellis, The initial value problem for the Zakharov equations.

Hartman, Christopher M., Extremal problems in graph theory.

Iskra, Boris, Families of rank zero twists of elliptic curves.

Kim, Dong-Hyun, Topics in the theory of q-additive and q-multiplicative functions.

Liow, Yihsiang, The local-global structure of the Galois deformation space.

Mason, Alan Gregory, An application of stochastic flows to Riemannian foliations.

McCreary, Paul Robert, Visualizing Riemann surfaces, Teichmuller spaces, and transformation groups on hyperbolic manifolds using free time interactive animator (RTICA) graphic.

Meyer, Jeffrey Lyle, Analogues of Dedekind sums.

Miller, Claudia Marie, Hypersurface sections: a study of divisor class groups and of the complexity of tensor products.

Murray, John Cyril, Dade's conjecture for the McLaughlin's simple group.

Rohde, Gareth Scott, Alternating automata and the temporal logic of ordinals.

Shim, Jae-Kwan, The Baum-Connes map for a smooth groupoid.

Stankewitz, Rich Lawrence, Completely invariant Julia sets of rational semigroups.

Wu, Yu-Fen, Groups in which commutativity is a transitive relation.

Xiao, Mingqing, H-infinity control in infinite dimensional spaces and related partial differential equations.

STATISTICS

Gao, Furong, DIMTEST enhancements and some parametric IRT asymptotics.

INDIANA

Indiana University, Bloomington (12)

MATHEMATICS

Brin, Leon, Numerical proof of stability for viscous shock waves.

Caithamer, Peter, Distribution and sample path continuity of self-similar processes defined by multiple Wiener-Ito integrals.

Costa, Bruno, Time marching techniques for the nonlinear Galerkin method.

Daniel, Arthur Mark, A splitting formula for spectral flow.

Grujic, Zoran, Estimates of the space and time analyticity radii for semilinear parabolic PDE's.

Huang, Fuqing, On Edgeworth expansions for sums of weakly dependent random vectors.

Lai, Raymond, On the relativistic Vlasov-Maxwell-Fokker-Planck system.

Prunaru, Bebe, Dual algebras and invariant subspaces.

Smith, Lawrence, Computing resolutions over associative algebras with ordered basis.

Wang, Hui-Hsien, Convex Riemannian manifolds with positive Ricci curvature.

Woodworth, Jennifer, BMO, Hardy spaces, and pointwise multipliers.

Ziane, Mohammed, Asymptotic analysis of the Navier-Stokes equations. Applications to climatology.

Purdue University, West Lafayette (12)

MATHEMATICS

Barut, Yasar, On the foundation of intertemporal economic models.

Ghosechowdhury, Subhajit, Lowner expansions.

Giorgi, Tiziana, The breakdown of superconductivity in high magnetic fields.

Iyengar, Srikanth, Free resolutions, and depth for complexes.

Lanzani, Loredana, A new perspective on the Cauchy transform for non-smooth domains in the plane and applications.

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Weiner, Paul, Multidimensional convolutional codes.

IOWA

Iowa State University (14)

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Kansas State University (6)

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LOUISIANA

Louisiana State University, Baton Rouge (5)

MATHEMATICS

Baeumer, Boris, Vector-valued operational calculus and abstract Cauchy problems.

Brusamarello, Rosali, On the second Stiefel-Whitney class of scaled trace forms of central simple algebras.

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Tulane University (8)

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University of Southwestern Louisiana (4)

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MARYLAND

Johns Hopkins University (9)

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University of Maryland, Baltimore (4)

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Lurie, Anna, Change-point problems in auto-correlated data.

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Michigan State University (14)

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Western Michigan University (6)

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MINNESOTA

University of Minnesota, Minneapolis (20)

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Chu, Sun-Chin, A geometric intepretation for the Hamilton's Harnack inequality in the Ricci flow.

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Agin, Marilyn, Optimal Bayesian design for nonlinear models.

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Nelson, David, Stepwise Bayes methods for incorporating prior information in finite population sampling.

MISSISSIPPI

University of Mississippi (1)

MATHEMATICS

Holland, Jason, The orthocompletion and the Dedekind completion of certain lattice-ordered groups.

MISSOURI

University of Missouri, Columbia (11)

MATHEMATICS

Cazacu, Constantin, Twisted sums of Orlicz spaces.

Lammers, Mark, Genus n Banach spaces.

Lang, Andrew, The Casimir effect.

McHale, Kimberly, Inequalities for vibration and buckling of a clamped plate.

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Richardson, Mary, Power law process models for nonhomogeneous Poisson process change-points.

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University of Missouri, Rolla (4)

MATHEMATICS AND STATISTICS

Adams, Katherine, Weighted Sidon sets.

Haile, Brian, Analytic solutions of nth order differential equations at a singular point.

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Ryden, David, Irreducibility in inverse limits on intervals.

Washington University (13)

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Culverhouse, Robert, Sharp majorization-inequalities for sums of independent uniformly distributed random variables.

Garrigos, Gustavo, The characterization of wavelets and related functions and the connectivity of α-localized waveletes on R.

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MONTANA

Montana State University (1)

MATHEMATICAL SCIENCES

Raquepas, Joseph, Geometric analysis of a reaction-diffusion equation with nonlocal inhibition.

University of Montana, Missoula (1)

MATHEMATICAL SCIENCES

Al-Hawary, Talal Ali, Toward an elementary axiomatic theory of the category of loopless pointed matroids and strong maps.

NEBRASKA

University of Nebraska, Lincoln (11)

MATHEMATICS AND STATISTICS

Anderson, Douglas, Discrete Hamiltonian systems.

Avery, Richard, Multiple positive solutions to boundary value problems.

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Dawkins, Paul, Spurious eigenvalues in the spectral tau method.

Holley, Darren, Quotients of the multiplicative group of a field.

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Sapir, Olga, Identities of finite semigroups and related questions.

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Wei, Ruizhong, Traceability schemes, frameproof codes, key distribution patterns, and related topics - a combinatorial approach.

NEW HAMPSHIRE

Dartmouth College (1)

MATHEMATICS

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University of New Hampshire (3)

MATHEMATICS

Cransac, Adriana, Perfect matchings: modified Aztec diamonds, covering graphs, and n-matchings.

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NEW JERSEY

New Jersey Institute of Technology (2)

MATHEMATICAL SCIENCES

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Pelesko, John A., Diffusive and wavelike phenomena in thermal processing of materials.

Princeton University (13)

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Callet, Jonathan, Long time asymptotics for fast wave averaging of the rotating shallow water equations.

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Johnson, Mark, Computer-assisted studies and visualization of nonlinear phenomena: two-dimensional invariant manifolds, global bifurcations, and robustness of global attractors.

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Cordoba Gazolaz, Diego, Absence of simple hyperbolic blow-up for the quasi-geostrophic and Euler equations.

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NEW MEXICO

New Mexico State University (5)

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Quinones-Rico, Eduardo, Quaternionic homology of the tensor algebra of an algebra with an involution.

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University of New Mexico (3)

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NEW YORK

City University of New York, Graduate Center (9)

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Clarkson University (1)

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Columbia University (8)

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Rensselaer Polytechnic Institute (10)

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Shen, Han, Bayes sequential experimental design for multiparameter nonlinear models.

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Duke University (7)

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McCulloch, Colin, High-level image understanding through Bayesian hierarchical models.

Petris, Giovanni, Bayesian analysis of long memory time series.

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University of North Carolina, Charlotte (1)

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NORTH DAKOTA

North Dakota State University, Fargo (3)

MATHEMATICS

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OHIO

Air Force Institute of Technology (3)

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Bowling Green State University (8)

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Case Western Reserve University (4)

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Kent State University (9)

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University of Cincinnati (1)

QUANTITATIVE ANALYSIS AND OPERATIONS MANAGEMENT

Cochran, James, Statistical properties of optimal solutions to coverage problems over sample data.

OKLAHOMA

Oklahoma State University (4)

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University of Oklahoma (1)

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Bhatia, Kavita, Pleating coordinates for a slice of the deformation space of a hyperbolic 3-manifold with compressible boundary.

OREGON

Oregon State University (4)

MATHEMATICS

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Kincaid, Thomas, Estimating absence.

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PENNSYLVANIA

Carnegie Mellon University (8)

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Achter, Jeffrey, Stratifications on moduli spaces of Abelian varieties in positive characteristic.

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STATISTICS

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University of Pittsburgh (8)

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RHODE ISLAND
Brown University (18)

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Boue, Michelle, Representations, asymptotics and approximations for large deviations and risk-sensitive problems.

Chi, Zhiyi, Probability models for complex systems.

Ferry, James, Thermal convection: a numerical simulation and modal analysis.

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Kochanek, Kevin, Dynamic programming algorithms for maximum likelihood decoding.

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University of Rhode Island (3)

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SOUTH CAROLINA
Clemson University (2)

MATHEMATICAL SCIENCES

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University of South Carolina (10)

MATHEMATICS

Al-Lawatia, Mohammed, Algorithm development and numerical analysis of transport equations.

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TENNESSEE
University of Memphis (3)

MATHEMATICAL SCIENCES

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Flanagan, Debra, Optimal monitoring systems using statistical experimental design.

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Vanderbilt University (10)

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Menser, David, Lower bounds on the circumference of graphs in terms of girth and degree conditions.

Talbert, Robert, Stratified and equivariant homology via homotopy colimits.

Vandergriff, Jim, Contributions to the class number problem for real quadratic number fields.

TEXAS
Rice University (7)

COMPUTATIONAL AND APPLIED MATHEMATICS

Martinez, Monica, A priori error estimates of finite element models of systems of shallow water equations.

Williams, Pamela, Effective finite termination procedures in interior point methods for linear programming.

Yang, Chao, Accelerating the Arnoldi iteration-theory and practice.

MATHEMATICS

Cunningham, Nancy, A variational approach to local uniqueness of immersed minimal surfaces in R^3.

Hawking, Christopher, A minimization of a curvature functional on fiber bundles.

Ledbetter, Ashley, Energy minimizers, gradient flow solutions, and computational investigation in the theory of biharmonic maps.

McIlwain, Mary, Can you hear the size of vertices? An inverse spectral problem of Laplacians on weighted graphs.

Southern Methodist University (4)

MATHEMATICS

Gonzalez Santos, J. German, A numerical study of simple shearing flow of foams.

Kamm, Julie, Singular value decomposition-based methods for signal and image processing.

STATISTICAL SCIENCE

Hartfield, Molly Isbell, Characterizing changes in time across geographical regions.

Vergara, Stephen Wiechecki, Semiparametric estimation for long memory parameters via wavelet packet.

Texas A&M University (21)

MATHEMATICS

Bobby, Daniel, Concerning the Hahn-Mazurkiewicz theorem in monotonically normal spaces.

Chiu, Wang, Hypercontractivity of order statistics and increments of fractional Brownian motion.

Gu, Qing, The wavelets and wavelet sets.

Han, Deguang, Irrational rotation unitary systems and extensions of triangular operators.

Hanisch, Jorg, Computational aspects of spline-wavelets.

Ionascu, Eugen, On the structure of operators and wavelets.

Kamat, Vishnu, Operator algebras, wandering subspaces and wavelet theory.

Lau, Wai Wah, Reflexive sheaves on Pc and the dimension of spaces of multivariate splines.

Lauric, Vasile, Some results on invariant subspaces.

Lu, Shijin, Wavelets associated with a multi-resolution analysis (MRA) and infinite matricially normed spaces.

Mashat, Daoud, Fast algorithms and thier application to numerical quasiconformal mappings of doubly connected domains onto annuli.

Sun, Tong, Locking-free finite element methods for thin plates and shells.

Zheng, Yan, Multi-scale parameter estimation for the steady state diffusion equation.

STATISTICS

Crown, John, On the theory and practice of fitting distributions to data.

Galindo, Christian, Topics in nonparametric regression: mean functional estimation and bootstrap confidence intervals for local estimating equations.

Iturria, Stephen, Applications and methodology in genetic epidemiology.

Li, Chin-Shang, Testing lack of heteroscedastic regression models.

Liaw, Andy I-Hsuen, A diagnostic test of heteroscedasticity based on nonparametric smoothing.

Maca, Jeffrey Dean, Nonparametric regression and measurement error.

Newman, Richard, Testing parallelism among the profiles after a certain time period.

Park, Eun Sug, Multivariate receptor modeling from a statistical science viewpoint.

Texas Tech University (6)

MATHEMATICS AND STATISTICS

Chandrawansa, Kumari, Statistical inverse estimation of irregular input signals.

DeWoody, Yssa, The role of musculoskeletal dynamics and neuromuscular control in stress development in bone.

Gilliam, Xiaoning, Wavelet detection of coherent structures in wind fields.

Hodges, Lucille, Quadrature, interpolation and observability.

Tomlinson, John, Functional techniques for data analysis.

Wheeler, William, On properties of the zeros of the Cesaro approximants to outer functions.

University of Houston (3)

MATHEMATICS

Khoury, Raja, Closest points to the space of stochastic matrices.

Reiff, Andrea, Existence of weak solutions for a class of conservation laws with multiple characteristics.

Zhang, Zhuangzhi, The existence and decay of solution of a class of non-strictly hyperbolic systems of conservation laws.

University of North Texas (3)

MATHEMATICS

Baciu, Dragos, Spaces of measures and an introduction to functional analysis.

Hayes, Diana, Minimality of the special linear groups.

Opalecky, Robert, A topological uniqueness result for special linear groups.

University of Texas, Arlington (3)

MATHEMATICS

Anabtawi, Mahmoud, A study of stochastic partial differential equations.

Corley, Herbert W., Jr., Maximization with respect to cones.

Potter, Andrew Jay, A generalization of the Shapley value for games in partition function form: axioms, formula and potential.

University of Texas, Austin (13)

MATHEMATICS

Abramson, Daniel, On an integral related to Vinogradov's integral.

Chiu, Wan-Yi, Optimal fractional factorial designs.

Dresden, Gregory, Spectra of heights over certain finite groups.

Fogel, Karrolyne, Stark's conjecture for octahedral extensions.

Handfield, Francis, Adiabatic limits of the anti-self-dual equation.

Harper, Shinko, Segre class of almost complete intersections.

Judd, Robert, On Bourgain's index and Schreier sets.

Lane, David, Exceptional surfaces for resolution of isolated threefold singularities.

Osoinach, John, Manifolds obtained by Dehn surgery on infinitely many distinct knots in s^3.

Paul, Randall, Normal form techniques in degenerate Hamiltonian systems.

Sedgwick, Eric, On the classification and stabilization problems for Heegaard splittings of three-manifolds.

Shults, Benjamin, Discoveries and experiments in the automation of mathematics.

Yoav, Rieck, Heegaard surfaces and Dehn fillings: $G(M) - 1 \leq T(X) \leq G(M)$.

University of Texas, Dallas (1)

MATHEMATICAL SCIENCES

Zuo, Yijun, Contributions to the theory and applications of statistical depth functions.

UTAH

Brigham Young University (3)

MATHEMATICS

Goodsell, Troy, Projections of compacta in R^n.

Omran, Mohammad, The real positive semi-definite completion problem for two unspecified entries.

Zeng, Chongchun, Normally hyperbolic invariant manifolds and invariant foliations for semiflow in Banach spaces.

University of Utah (6)

MATHEMATICS

Chan, Hsungrow, Nonexistence of isometric immersions of noncompact surfaces with nonpositive curvature.

Chen, Chi-kan, Non-local thermo elastic phase field models.

Fletcher, Jeffrey, Homological group invariants.

Macura, Natasa, Quasi-isometries and mapping Tori.

Mineyev, Igor, Exotic homology theories and negative curvature in groups.

Xie, Min, Theoretical studies of forced excitable systems.

Utah State University (1)

MATHEMATICS AND STATISTICS

Gobena, Ermias, Bootstrapping regression quantiles.

VERMONT

University of Vermont (2)

MATHEMATICS AND STATISTICS

Brill, Stephen, The solution of two-dimensional partial differential equations via hermite collocation with block red-black Gauss-Seidel preconditioner.

Herrera, Graciela, Cost effective groundwater quality sampling network design.

VIRGINIA

College of William and Mary (1)

MATHEMATICS

Glen, Andrew, A probability programming language: development and applications.

George Mason University (2)

APPLIED AND ENGINEERING STATISTICS

Ahn, Sung, A maximum likelihood method for density estimation.

Levine, Jonathan, Choosing strata weights in two group fixed effect analysis of variance with multiple strata when interaction may be present: a problem in analyzing multicenter clinical trials.

University of Virginia (4)

MATHEMATICS

Roycroft, Denise, A quantum mechanical manifold and its integral geometric transfer to classical phase space.

Saiers, Nelson, Involutions fixing products of projective spaces.

Terry, Christopher, Normal subgroups of $GL(2, A)$.

STATISTICS

McFarland, Harry, The exact distributions of "Plug-in" discriminant functions in multivariate analysis.

Virginia Commonwealth University (4)

BIOSTATISTICS

Farina, Dianne, The development of D-optimal designs for exponential survival models.

Kuhn, Andrew, Incorporating noise and dispersion effects into medical experiments involving failure time data.

London, Wendy, Application of within-cluster correlations in a generalized estimating equations approach (GEE): implications for inference in survival analysis.

Tesfaye, Fisseha, Modeling onset times in twins based on multivariate frailty model.

Virginia Polytechnic Institute and State University (13)

INDUSTRIAL AND SYSTEMS ENGINEERING

Al-Loughani, Intesar, Algorithmic approaches for solving Euclidean distance location and location-allocation problems.

Suharko, Arief, Tactical network flow and discrete optimization models and algorithms for the empty railcar transportation problem.

MATHEMATICS

Kang, Jinghong, The computational Kleinman-Newton method in solving nonlinear nonquadratic control problems.

Mackin, Gail, On an order-parameter model of solid-solid phase transitions.

Ramirez-Gomez, Edgaurdo, Finite element methods for parameter estimation in steady-state diffusion equation.

Ranalli, Ramona, The structure of the 2-Sylow subgroups of the ideal class groups of imaginary bicyclic biquadratic fields.

Repp, Andrew, Discrete Riemann maps and the parabolicity of tilings.

Taylor, Frank, Abelian quintic fields.

Yu, Tom, On-line traffic signalization using robust feedback control.

STATISTICS

Beaghen, Michael, Canonical variate analysis and related methods with longitudinal data.

Kim, Ki-Ho, Construction and analysis of linear trend-free factorial designs under a general cost structure.

Kitchin, Patty, A new method for comparing experiments and measuring information.

Wang, Shin-Cheng (David), Analysis of zero heavy data using a mixture model approach.

WASHINGTON

University of Washington (20)

APPLIED MATHEMATICS

Jackson, Trachette, Mathematical models in two-step chemotherapy.

Nelson, Patrick, Mathematical models of HIV pathogenesis and immunology.

Stollnitz, Eric, Reproducing color images with custom inks.

Thompson, Christopher, A stochastic, linear, dynamic model El Nino/southern oscillation.

BIOSTATISTICS

Kulich, Michal, Additive hazards model with imcomplete covariate data.

Lumley, Thomas, Marginal regression modelling of weakly dependent data.

Nunn, Martha, Influence diagnostics for correlated data.

Pecková, Monika, Adaptive testing for difference in survival distributions.

Xie, Sharon, Covariate measurement error methods in failure time regression.

MATHEMATICS

Burton, Cynthia, Hopf algebras and Dieudonné modules.

Jay, Jon, Recovering a layered viscoacoustic medium from its response to a point source.

Martinez-Morales, José Luis, Geometric data fitting.

Wang, Jenn-Nan, Inverse backscattering for acoustic and Maxwell's equations.

Wiegmann, Andreas, The explicit jump immersed interface method and interface problems for differential equations.

STATISTICS

Catlin, Sandra, Statistical inference for partially observed Markov population processes.

Hu, Hui-lin, Large sample theory for pseudo maximum likelihood estimates in semiparametric models.

Keim, Michelle, Bayesian information retrieval.

Sardy, Sylvain, Regularization techniques for linear regression with a large set of carriers.

Schaffner, Andrew, Tools for the advancement of undergraduate statistics education.

Zhang, Ying, Estimation for counting processes with incomplete data.

Washington State University (4)

PURE AND APPLIED MATHEMATICS

Begashaw, Negash, Optimization algorithms based on conic approximations and collinear scalings.

Hakim, Sara, Generalized Andre planes with rank three collineation.

Jiang, Pelei, Interior point methods for stochastic programming and related problems.

Zhu, Min, Techniques for large-scale nonlinear optimization– principals and practice.

WEST VIRGINIA

West Virginia University, Morgantown (4)

MATHEMATICS

Buchanan, II, Hollie, Graph factors and Hamiltonian decompositions.

Cropper, Matthew, Hall's condition and list coloring.

Jordan, Francis, Cardinal numbers connected with adding Darboux-like functions.

Zhu, Chen, Asymptotics behaviors of solutions to some hydrodynamics models of semiconductors.

WISCONSIN

University of Wisconsin, Madison (35)

MATHEMATICS

Alrefaei, Mahmoud H., Discrete stochastic optimization using random search.

Andersson, Carl D., Bow and stern flows with gravity and surface tension.

Catoiu, Stefan, Ideals of enveloping algebras.

Caughman, John S., Bipartite P- and Q-polynomial association schemes.

Eisen, Nicolas L., Holomorphic sections of an orientable vector bundle.

Flores, Manuel T., L^2-theory for some rigid generalizations of the Heisenberg group.

Folch-Gabayet, Magali L., Boundedness of certain convolution operators.

Griffiths, Evan J., Completely mitotic Turing degrees, jump classes, and enumeration degrees.

Hermann, Paul D., Symmetric and unsymmetric buckling of circular arches.

Kim, Joonil, Hilbert transform and maximal function along curves in the Heisenberg group.

Lewis, Heather Ames, Homotopy and distance-regular graphs.

Lindhurst, Scott C., Computing roots in finite fields and groups, with a jaunt through sums of digits.

Logan, Mark J., Homology and invariants of reflection groups and Lie algebras.

Montgomery, Aaron G., Lusternik-Schnirelmann category and simplicial sets.

Moon, Dongho, Schur-Weyl duality for Lie super algebra and Lie color algebras.

Nam, Ki-Bong, Generalized Witt algebras over a field of characteristic zero.

Parker, Darren B., Hopf Galois extensions and forms of coalgebras and Hopf algebras.

Shaw, May Shu-Mei, Solution to the coagulation and fragmentation and partial differential equation.

Sneyd, Elizabeth S., Tolerance graphs and pseudo-interval graphs.

Strom, Jeffrey A., Category weight and essential category weight.

Torres-Gallardo, Evelyn, A FOSLS method for the overlapping grid problem.

Tsai, Tsung-Hsi, The uniform CLT and LIL for Markov chains.

Uen, Wuu-Nan, A descriptive study of mathematical teaching styles of junior high mathematics teachers in Taiwan.

Westlund, Eric R., The boundary manifold of an arrangement.

Yeh, Chien-ning, o-minimal expansions of ordered sets with unary functions.

Yeh, Nai-Sher, Contributions to forced capillary-gravity waves under Hocking's edge condition.

STATISTICS

Borghi, Elaine, Methods of inference in Strauss disc processes.

Chen, Yinzhong, Inference with complex survey data under random hot deck imputation.

Hsiao, Chin-Fu, Are sequential trial designs Bayes?.

Ladd, William, Two-dimensional self-modeling.

Martin, Sandra, Profiling methods in nonlinear models inverse prediction, and calibration.

Pan, Wei, Nonparametric and semiparametric survival analysis with left truncated and internal censored data.

Tao, Huageng, Estimation methods of statistical models for longitudinal data.

Yeo, In-Kwon, On alternative power transformation to handle skewness.

Zhang, Yunlei, Two new algorithms for nonparametric analysis given incomplete data.

University of Wisconsin, Milwaukee (9)

MATHEMATICAL SCIENCES

Abroell, Sigrid, Asymptotic behavior and design of a sieve estimator for a Gaussian mean function.

Balser, Tobias, New approximations for avoiding Gibbs phenomenon in wavelet subspaces.

Chen, Daning, Multipliers on certain function spaces.

Diestelkamp, Wiebke, Projections, decompositions and parameter inequalities for orthogonal arrays.

Fischer, Hanspeter, Visual boundaries of right angled Coxeter groups and reflection manifolds.

Nabhan, Maha, The weighted continuous Galerkin method for initial value problems.

Petersen, Hans-Juergen, A spline estimate of the score function in Adaptive L-estimation for linear regression.

Price, Kenneth, Enveloping algebras of Lie color algebras.

Shen, Xiaoping, Wavelet based numerical methods.

WYOMING

University of Wyoming (6)

MATHEMATICS

Bornholdt, Bryan, On isometries of Frechet spaces.

Desai, Alpana, Homogenization analysis applied to biofilm growth in porous media.

Lister, Lisa, Graph decomposition.

Liu, Mingjun, Mathematical theory and numerical methods for the valuation of American options.

Wo, Shaochang, The mathematical modeling and numerical approaches for microbial permeability modification of enhanced oil recovery processes.

STATISTICS

Seier, Edith, A family of skewness and Kurtosis measures.

Doctoral Degrees Conferred 1996–1997
Supplementary List

The following list supplements the list of thesis titles published in the January 1998 *Notices*, pages 45–63.

COLORADO

University of Colorado, Boulder (1)

MATHEMATICS

Azmi, Fatima Mohammad, Computation of the equivariant cocycle of the Dirac operator.

_____, *Everybody Counts: A Report to the Nation on the Future of Mathematics Education*, National Academy Press, Washington, DC, 1989.

_____, *Renewing U.S. Mathematics: A Plan for the 1990s*, National Academy Press, Washington, DC, 1990.

National Science Board, *Science and Engineering Indicators—1993* (NSB 93-1), U.S. Government Printing Office, Washington, DC, 1993.

National Science Foundation, *Science and Technology Data Book* (NSF 94-323), Washington, DC, 1994.

_____, *Science and Engineering Degrees: 1966-89* (NSF 91-314), Washington, DC, 1991.

_____, *Science and Engineering Doctorate Awards: 1993* (NSF 94-318), Selected data tables, Arlington, VA, 1994.

_____, *Science and Engineering Doctorates: 1960-1991* (NSF 93-301), Detailed statistical tables, Washington, DC, 1993.

_____, *Academic Science and Engineering: Graduate Enrollment and Support, 1989* (NSF 90-324), Detailed statistical tables, Washington, DC, 1991.

_____, *Selected Data on Graduate Students and Postdoctorates in Science and Engineering, Fall 1991* (NSF 92-335); Selected Pamphlet No. 11: *Institutional Listings* (NSF 90-324-11); Selected Pamphlet No. 12: *Postdoctorates and Other Nonfaculty Research Staff* (NSF 90-324-12); Washington, DC, 1990.

_____, *Survey of Mathematics and Statistics Departments at Higher Education Institutions*, Higher Education Surveys Report, Survey Number 5, Washington, DC, December 1990.

_____, *Foreign Participation in U.S. Academic Science and Engineering: 1991* (NSF 93-302), Washington, DC, 1993.

Supplemental Listing of Doctoral Degrees Conferred, 1997-1998

DISTRICT OF COLUMBIA

American University (9)

MATHEMATICS AND STATISTICS

Fofack, Hippolyte, Distribution of parallel market premium under stable alternative modeling.

Foret, Katia, Teaching induction: Historical perspective and current views.

Hackett, Linda, The effects of writing in an applied calculus course: An analysis of performance and error.

Jones, Kenneth, The effects of the base of graphing calculation on learning-disabled students' achievement and attitudes in a university finite mathematics course.

Kpamegan, Eloi, Optimal designs for binary random variables in a bivariate treatment space.

Merriweather, Michelle, A study of high school mathematics teachers on their attitude towards and use of calculators.

Montiquila, Jill, A new approach to variance estimation in the presence of inputed data.

Randou, Elena, Theory and application of empirical distribution functions in the inter-satellite calibration problem.

Tawfig, Abu-Diab, The impact of writing assignments in mathematics classes on the language minority students' performance.

NEW YORK

Columbia University (4)

BIOSTATISTICS

Hu, Xiao-Ping, Survival analysis for competing risks model.

Panageas, Katherine, Statistics in periodontal research: Interval estimation of the common odds ratio under cluster sampling.

Shi, Qiuhu, Simultaneous confidence bounds for hazard data.

Zhang, Haiying, Nonparametric method for longitudinal studies with dropout.

New York University, Courant Institute (1)

MATHEMATICAL SCIENCES

Jorge, Helena, Geometry and combinatorics of polytopes with a finite group of symmetries.

VIRGINIA

University of Virginia (2)

APPLIED MATHEMATICS

Ong, John, Global existence, uniqueness and stability of a quasilinear hyperbolic equation with boundary dissipation.

Shuster, David, A composite grid streamline diffusion method for hyperbolic problems.