Doctoral Degrees Conferred

1997-1998

ALABAMA

Auburn University, Auburn (9)

DISCRETE AND STATISTICAL SCIENCES

Grant, Carrie, An $n$ to $2^n$ 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 dendroids.

Kornman, Paul, ARI and refinal 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, 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.


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

Raina, Sidharth, 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.

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, 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.


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

Raina, Sidharth, 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.

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 Arizona (7)

APPLIED MATHEMATICS

Abbey, Craig, Assessment of reconstructed images.

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

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

Gifford, Howard, Theory and application of Fourier crossstalk: 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.

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

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.

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


Yan, Lirong, On part decompositions of graphs.

University of Arizona (7)

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 Arkansas, Fayetteville (1)

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

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-Meshkov instability in continuously stratified fluids.
Rudin, Mikhail K., Exponentially small splicing of separatrices and the Arnold's diffusion problem.
Sgouritsa-Philippakos, Russina, Nonlinear effects in elastic Raleigh waves.

Mathematics
Ajooodani-Namini, Shaolin, Large sets of tau-designs.
Bloom, Anthony, The perturbation of Hamiltonian systems with a non-Abelian symmetry.
Choi, Yanglim, (3, 1)-Surfaces via branched surfaces.
Mitsis, Theofilokos, 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.
Elishab, 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 E., 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.
Kuribayashi, Farid 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.
Tsalenta, 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.
Petersen, Derick Randall, Missing data models and the selection of explanatory variables in regression.

Industrial Engineering and Operations Research
Chichilnisky, Thawee, Optimizing semiconductor fabrication scheduling in the face of uncertain demand.
Jang, Woosung, Markovian quality control for multiple processes under capacity constraints.
Kuo, William, Adaptive sampling strategies for semiconductor manufacturing.
Li, Ting-Yu, 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, Binu, Krishnan-Sunder subfactors and a new countable family of subfactors related to trees.
Bromberg, Kenneth, Rigidity of hyperbolic 3-manifolds with geometrical finite ends.
Burlakov, Yuri, The phase space of a focusing cubic Schrodinger equation: a numerical study.
Dreher, Roland, On p-adic properties of families of curves.
Jones, David, Results on modular representations of GAL (Q/Q) in characteristic 3.
Kathottia, Vinay, Universal formulae for deformation quantization and the Campbell-Baker-Hausdorff formula.
Kleber, Michael, Finite-dimensional representations of quantum affine algebras.
Krapf, Donald, The applicability of certain Monte Carlo methods of the analysis of interacting polymers.
Larson, Paul, Variations of Fmax forcing.
Magidin, Arturo, Dominions in varieties of groups.
Mitchell, Julie, Hodge decomposition and expanding maps on flat tori.
Slyakhtenko, Dimitri, Free quasi-free states.
Staddon, Jessica, A combinatorial study of communication storage and traceability in broadcast encryption systems.
Steinberg, Benjamin, Decidability and hyperdeciability of joins of pseudovarieties.
Takahashi, Shuzo, Degrees of parametrization of elliptic curves by modular curves and Shimura curves.
Tenn, David, The distribution of shapes of cubic orders.
Tucker, Thomas, Some diophantine properties of points on curves.
Yield, Brian, Global existence of solutions and propagation of regularity of quasilinear viscoelastic systems of differential type.
Xaba, Enoch, Robust iterative solvers for linear and nonlinear finite element equations.

University of California, Davis (6)

Mathematics
Zaboronsky, Oleg, Localization and supergeometry.

Statistics
Chiu, 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, Los Angeles (21)

Mathematics
Afshartous, David, Prediction in multi-level 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.

Grabner, 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. Severi constants of ample vector bundles.

Hui, Unkit, Cocycle conjugacy of one parameter automorphisms 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 q-bar Neumann problem for two complex dimensional Hartogs domains with no analytic disks in the boundary.

Miller, Brian, Improvements in multiple phase flow computations.

Paha, 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.

Guo, 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, Triallitarian algebraic groups.

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

Lucas, 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 nonmeridian boundary in the complement of an alternating link.


Statistics and Applied Probability

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

Ghosh, Kaushik, Some contributions to inference using spacings.

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

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

Sachmacher, 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, Sturk, A dynamical systems approach to asymptotic diagonalization and integration of linear differential systems.

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

Kajima, 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 School of Mines, Golden (2)

Mathematics and Computer Sciences

Gokas, Ural, 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-Saldavar, 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 KdVtnsiev-Petviashvili equation.
Billings, Lora Merck, Dynamical systems methods applied to polynomial factorization families: a study of chaotic attractors.

Coulth, 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, Error estimates of groupoid structure.
Shaullis, Delphy Taunyko, Torsion points on the hyperelliptic rational image of Fermat curves.
Taggart, Jennifer Lyn, Extensions of hypergeometric series of type $A_1$.
Vestal, Donald, Generalized Dedekind eta functions with applications to additive number theory.

University of Colorado, Denver (3)
MATHEMATICS
Brezina, Marlan, Robust iterative methods on unstructured meshes.
Dillon, Mark, Conditional coloring.
Tezaehr, 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, Hai-May, Computation approach to Bayesian inference for risk assessment.
Ecker, Mark, Bayesian variogram modeling.
Iyengar, Malini K., Compositional data analysis for independent and serially correlated observations: a Bayesian approach.
Niverthi, Muratli, Bayesian methods in statistical quality control.

Wesleyan University (3)
MATHEMATICS
Hirschberg, Alan, Vector-valued marginal problems.

Silberger, Sylvia, Subshifts of the threadet 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, Supercritically 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 general methods.

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

DELWARE
University of Delaware (4)
MATHEMATICAL SCIENCES
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/scal families of statistics.

DISTRICT OF COLUMBIA
George Washington University (6)
MATHEMATICS
Fitzke, Thomas, Weakly mixing tiling flows arising from interval exchange transformations.
Kourouch, 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-Xia, 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 finite scale turbulence.
Darcy, Isabel, Biological metrics on DNA knots and catenanes.
Dinov, Ivaylo, Mathematical and statistical methods for modeling and analysis of medical data.
Kurbatski, Konstantin, Solid wall boundary conditions for computational aeroacoustics problems.
Liao, Xiaozhong, Compact wall 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 probabilistic convergence and filter spaces.

University of Florida (14)
INDUSTRIAL AND SYSTEMS ENGINEERING
Akansel, Mahmet, 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.
Krishnamurth, 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.
Matha, Mathiah, 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-Hsueh, Two-stage genome search design in affected-sib-pair method.
Yin, Ming, Noninformative priors with applications.
Zheng, Beiya, 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.
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
Krzystek, Kathleen, Describing convex sets in $R^n$.
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, Marla 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.

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.

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 Erdos and Hajnal.
Ran, Xiaohong, Choosing smoothing parameters in nonparametric curve fitting using kernel contrasts.

Northwestern University (13)
INDUSTRIAL ENGINEERING AND MANAGEMENT SCIENCE
Abeyasinghe, 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.

MATHEMATICS
Choi, Youngna, One dimensional Lorenz-like attractors.
Douna, Jason, Automorphisms of products of finite p-groups with applications to algebraic 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 $(GL_n, G_m)_n$.

Southern Illinois University, Carbondale (2)
MATHEMATICS
Arriagas, Mercedes, A stochastic calculus for functional differential equations.
Wu, Faneng, ω-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 Narasimhan-Mumford 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.
Schrage, Matthew, Poincaré inequalities with radial weights.
Shirokova, Nadya, Some applications of embedding theory.
Sreekantan, Ramesh, Higher Chow groups and CM cycles in families of Abelian surfaces.
Taback, Jennifer, Quasi-isometric rigidity for $PSL_2$($\mathbb{Z}$[$\frac{1}{2}$]).
Vemuri, Murari, Realizations of the canonical representation.
Whyte, Kevin, Discrete metric spaces, bilipschitz equivalence and coarse characteristic classes.
Yuan, Zhou, A general arithmetic Riemann-Roch theorem.
Zhang, Yongmin, Numerical solution of variational inequalities.

University of Illinois, Urbana-Champaign (17)

MATHEMATICS
Amini, Massoud, Local structure of operator algebras.
Collander, 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, Yih Siaong, The local-global structure of the Galois deformation space.
Mason, Alan Gregory, An application of stochastic flows to Riemannian foliations.
McCrea, Paul Robert, Visualizing Riemann surfaces, Teichmüller 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-Won, 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 University, Bloomington (12)

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

Catthamer, Peter, Distribution and sample path continuity of self-similar processes defined by multiple Wiener-Itô integrals.
Costa, Bruno, Time marching techniques for the non-linear Galerkin method.
Grujić, 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, Hut-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, Lower 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.
Lee, Nam Young, Wavelet-vauglelet decompositions and homogeneous equations.
Loo, Ken, Quantum mechanics in the space of distribution, Feynman path integrals, and nonstandard analysis.
Royer, Melvin, Ginzburg-Landau equations for a three-dimensional superconductor in a strong magnetic field.
Sundaram, Ganapathy, Composite coverings in characteristic $p$.
Tiao, Chieh-Istien, The Bergman kernel on Reinhardt domains.
Wahl, Rebecca, Composition operators with multivalent symbol.

Statistics
Sun, Chengyu, Modeling of fatigue crack propagation process: generalized linear mixed model approach.

University of Notre Dame (4)

MATHEMATICS
Fehér, Laszlo, Eta invariant and concordance classes of positive scalar curvature metrics.
Joachim, Michael, The twisted Atiyah orientation and manifolds whose universal cover is spin.

Stroufône, Alexei, Homology decompositions for classifying spaces of compact Lie groups.

Weiner, Paul, Multidimensional convolutional codes.

IOWA

Iowa State University (14)

Mathematics

Buske, Dale, Hilbert modules over semicrossed products of the disk algebras.


Wang, Hualin, Feedback stabilization of bilinear control systems.

Wojdylo, Jerzy, Relation algebras and vertex conditions in graph theory.

Statistics

Benner, Rebecca Jean, Contributions to survival analysis.

Brabek, Marek, Consistent estimation using approximation likelihoods.

Chitou, Bassirou, Inversion of sparse matrices using Monte Carlo methods.

Hsu, Nan-Jung, Hierarchical long-memory time series models.

Huang, Shi-Kun-Cheng, Spatial modeling using graphical Markov models and wavelets.

Kulper, Shonda Roelfs, Several techniques to detect and identify systematic biases when process constraints are bilinear.

Morse, Peter Neville, A comparison of one-sided variables acceptance sampling methods when measurements are subject to error.

Pascual, Francis Garcia (Jave), Planning fatigue experiments and analyzing fatigue data with the random fatigue-limit model and modified sudden death tests.

Sarkar, Pradipda, Estimation and prediction for non-Gaussian autoregressive processes.

Shin, Tae-Sung, Toward efficient maximum likelihood algorithms.

University of Iowa (14)

Applied Mathematical and Computational Sciences

Anticepscu, Mihai, Modeling rigid multi-body dynamics with contact and friction.

Sandu, Adrian, Numerical aspects of air quality modeling.

Mathematics

Abu Al-rub, Taher, Cyclic codes over the ring of integers mod m.

Chen, Dongjian, Some geometrical properties of Banach space and their applications.

Coroian, Dan, Numerical methods for simulation and optimization of multi-body systems.

Gelca, Razvan, Problems in topology and operator theory.

Huang, Yuan-Ching, Representations of the Cuntz algebras.

Jeeong, Eui-chai, Decomposition of Cuntz algebra representation.

Meissner, Monica, Lower and upper bounds on edge numbers and crossing numbers of knots.

Micula, Sanda, Numerical methods for the radiosity equation and related problems.

Neswan, Oki, Model theory without equality.

Rawdon, Eric, Thickness of polygonal knots.

Sheng, Rongjin, Interior-point methods for semidefinite programming.

Yu, Feng-Shuo, Two functions minimax theorem.

KANSAS

Kansas State University (6)

Statistics

Butine, Michael, A comparison of methods for analyzing binomial data in a mixed model setting.

Charrier, Kevin, Robust analysis of scale.

Gibson, Eric, Goodness of fit tests for composite hypotheses with right or left censored data.


Shaoshin, Chen, Adaptive local smoothing methods for turbulent reactive flow models.

Xiong, Chengjie, Wavelet nonparametric regression and chaotic time series.

Wichita State University (5)

Mathematics and Statistics

Bouchouer, Ilya, Inverse parabolic problems with applications to option price.

Eller, Matthias, Uniqueness of continuation theorems.

Horn, Mark, Iterative methods applied to some problems in conformal mapping and potential theory.

Ponomaryov, Igor, Numerical analysis of problems of tomography, radiotherapy and photonic crystal theory.

Qiu, Feng, Inverse problems for linear and semilinear elliptic equations of the Schrodinger type.

KENTUCKY

University of Kentucky (17)

Mathematics

Altayev, Abdulrakhim, Orthogonal spline collocation for nonlinear elliptic boundary value problems.

Ashby, Todd, The characterization of graded principal ideal domains and graded torsion free covering modules.

Aubuchon, Christopher, A functor from the category of complexes of left R-modules to the category of left R(+) modules.

Galloy, Michael, Harmonic univalent mappings on the unit disk and the punctured unit disk.

Hu, Wei, The initial-boundary value problem for higher order differential operators on Lipschitz cylinders.

Li, Bingkun, Discrete-time orthogonal spline collocation methods for Schrodinger-type problems.

Paroni, Roberto, Homogenization of polycrystalline materials.

Prather, John, Geometric properties of the Hadamard product.

Qian, Qingshan, Three numerical methods for solving generalized algebraic Riccati equations.

Scobee, Matt, Orientations of Ternary matroids.

Thompson, John, A study of harmonic mappings on punctured domains: an argument principle and some coefficient results.

Williams-Lind, Joy, Spectral bounds for entropy models.

Wilson, Daniel, Polyhedral methods for piecewise-linear functions.

Wu, Zhigiang, Trace-class estimates for elliptic operators and Weyl's law on exterior domains with fractal boundaries.

Statistics

Dmitrienko, Alexei, Sequential methods in linear and generalized linear models.


Xia, Chenghua, Maximum likelihood estimation for non-standard mixture models.

LOUISIANA

Louisiana State University, Baton Rouge (5)

Mathematics

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

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

Dittmann, John, Unavoidable minors of graphs of large type.

Heck, Brian, Graphs and number theory.

Paslaski, George, Weak convergence of interacting stochastic systems.

Tulane University (8)

Mathematics

Acosta, Daniel, Spin orbifolds and the minimal genus problem.
Boros, George, Some definite integrals and related results.
East, Gerard, Finite group actions and the topology of nonnegatively curved four-manifolds.
Estrella, Angel, Traveling wave solutions to McKean's caricature of the nerve equation in two dimensions.
Hopkins, Matthew, Computational modeling of the fluid dynamics of motile microorganisms.
Nischal, Atul, Stable classification of homotopy equivalences of fake lens spaces.
Ponder, Nathan, Asymptotics of eigenvalues of an operator associated with a pure jump Markov process.
Yu, Hongyi, Domain in decomposition multiplicative Schwarz method and adaptive mesh refinement strategy for solving a class of nonlinear parabolic equations.

University of Maryland, Baltimore (4)

MATHEMATICS AND STATISTICS
Clifton, Lawrence, Locking-free hp elements for elasticity problems.
Ivanova, Anastasia, A birth and death urn for randomized clinical trials.
Lurie, Anna, Change-point problems in auto-correlated data.
Mats, Vladimir, Design and likelihood-based estimation for binary response experiments under ethical constraints with application to Phase I clinical trials.

University of Maryland, College Park (27)

MATHEMATICS
Arteaga, Santiago, Nonlinear abd parallel algorithms for finite element method discretizations of the incompressible Navier-Stokes equations.
Belgrader, Igor, Counting negatively curved manifolds.
Cawthorne, Stephanie, Forcing with directed families of finite structures.
Chung, Yu-Fen, A central limit theorem for spatial regression based on generalized estimating equations.
DeOliveira, Victor, Prediction in some classes of non-gaussian random fields.
Denny, Diane Lynn, A well-posed system of equations modeling near-critical fluid flow.
Gallinaro, Alessandra, The orbit method for the unipotent group over finite fields.
Girard, Andrew, Semi-reformable bodies in an ideal fluid.
Gonzalez, Jose, On a category of "Uniform" spaces.
Harrison, Melissa, Frames and irregular sampling from a computational perspective.
Hecklen, Deborah, Decreasing sequences of sigma-algebras as in ergodic theory.
Hirs, Ali, Numerical algorithms for the convex-diffusion equations and variational gamma model.
Hoffman, Robert L., Optimization in air traffic control: ground delay programs.
Horn, Karen M., Classification of term orders on a module.
Jeffries, Neal, Logistic mixtures of generalized linear model time series.
Kehraus, Stefan, Hamiltonian formulations of the equilibrium conditions governing elastic rods.
Keswani, Navin, Relative ETA-invariants and C*-algebra K-theory.
Kümer, Misha Elena, Regularization of ill-posed problems.
King, Kimberly, Minimal models of genus 1 curves.
Kopytel, Leonid, On estimation of the marginal survival function.

Lightwood, Samuel, An embedding theorem for a class of $Z^2$ shifts of finite type.
Lubell, Amanda, Global interactions with regular types.
Rogers, Kathleen, Stability exchange in parameter-dependent constrained variational principles with applications to elastic rod models of DNA minicircles.
Rosenfeld, Andreas, On the K-cohomology of algebraic varieties.
Turnquist, Brian, Near model completeness and generic structures.
Wu, Hui-Chu, Multidimensional irregular sampling in terms of frames.
Yip, Shui-Chung, Asymptotic analysis of quasilinear parabolic-hyperbolic equations describing the large longitudinal motion of a light viscoelastic bar with heavy attachment.

MASSACHUSETTS

Boston University (2)

MATHEMATICS
Lee, Eileen, The structure and geometry of the Brieskorn numbers.
Soto-Treviño, Cristina, Geometric methods for periodic orbits in singularly perturbed systems.

Brandeis University (5)

MATHEMATICS
Gerard, Benoit, Singular connections on 3-manifolds and manifolds with cylindrical ends.
Gonzalez, Griselda, Weyl modules.
Lawler, Michael, Infinite dimensional solutions and symmetries of the self-dual Yang-Mills hierarchy.
Liberson, Daniel, Asymptotic properties of nonlinear feedback control systems.
Pires de Campos, Jose Eduardo, Boundary string links.

Harvard University (32)

BIOSTATISTICS
Belloc, Rino, Modification of HIV back-calculation models.
Bottai, Matteo, Asymptotic inference in one-dimensional identifiable parametric models when the Fisher information is zero.
Li, Qian, Marginal methods for analyzing multi-variate survival data.
Pett, Mary, Aspects of the analysis of crossover trials.
Wang, Xiaolin, Contributions to statistical genetics and survival analysis.
Zhang, Shu, Statistical models for informative dropout and feedback between outcomes and covariates.
Zhao, Hongwei, Survival analysis of quality adjusted lifetime.
Doctoral Degrees Conferred

ENGINEERING AND APPLIED SCIENCES
Bender, Michael A., New algorithms and metrics for scheduling.
Blackwell, Trevor L., Applications of randomness in systems performance measurement.
Chang, Kolding, IP-layer per-flow queueing and credit flow control.
Goodman, Joshua T., Parsing inside-out.
Horowitz, Larry W., The influence of boundary layer chemistry on global tropospheric ozone and nitrogen oxides.
Lin, Dong, Internet congestion control: cooperative end systems and gateway algorithms.
Ryall, Kathleen, Human-computer collaboration in the design of graphics.
Squires, Stephen L., Extensible sealing.
Young, Reginald C., Path-based compilation.

MATHEMATICS
Brennan, Thomas J., Variation of capacity for convex domains in Euclidean space.
Ellenberg, Jordan, Hilbert modular forms and the Galois representations associated to Hilbert-Blumenthal abelian varieties.
Emerton, Matthew J., 2-adic modular forms of minimal slope.
Gan, Wee Teck, Exceptional theta correspondences.
Hutchings, Michael, Reidemeister torsion in generalized Morse theory.
Lansky, Joshua, Hecke rings of groups over local fields.
Maino, Laila, Moduli space of enriched stable curves.
Padowitz, Seth, Traces of Hecke operators.
Pollack, David, Explicit Hecke actions on modular forms.
Roth, Michael, Calculations on the moduli space of genus zero covers.
Tiezira, Ralph Costa, Curvature motions, medical axes and distance transforms.
Wang, Chin-Lung, Topology of birational manifolds and applications to degenerations.
Wang, Mutao, Generalized harmonic maps and representations of discrete groups.
Wunsch, Jared, Microlocal analysis of the time-dependent Schrödinger operator.

STATISTICS
Scott, Steven, Bayesian methods and extensions for the two state Markov modulated Poisson process.
Zamutto, Elaine, Imputation for unit nonresponse: modeling sampled nonresponse follow-up, administrative records, and matched substitutes.

Massachusetts Institute of Technology (34)

MATHEMATICS
Beke, Tibor, Homotopy theory and topology.
Betanelli, Dmitri, Wavelets and PDEs: the improvement of computational performance using multi-resolution analysis.
Carlin, David, Moduli for pairs of elliptic curves with isomorphic N-torsion.
Chen, Sang, Initial data to vacuum Einstein equations with asymptotic expansion.
Constantinescu, Radu, Circular symmetry in topological quantum field theory and the topology of the index bundle.
D’Andrea, Alessandro, Structure theory of infinite conformal algebras.
Goldstein, Guillermo, On bubble dynamics and gas dynamics in open tubes.
Gupta, David, Some tiling moves explored.
He, Hongyu, Howe’s rank and dual pair correspondence in semistable range.
Jesurum, Caroline Esther, Local-rules based topological modeling of tetrahedral ceramic network structures.
Kitchloo, Nitya, Topology of Kac-Moody groups.
Lippert, Ross, Nonlinear eigenvalue problems.
Loya, Paul, On the p-biased differential calculus on manifolds with corners.
Luo, Huazhang, Stability of algebraic manifolds.
Mainetti, Matteo, Studies in projective combinatorics.
McCooquodale, Peter William, Fast multiple-type methods in one and two dimensions, with application to parallel Fourier transforms.
Nevins, Monica, Admissible nilpotent coadjoint orbits of p-adic reductive Lie groups.
Rietsch, Konstanze Christina, Total positivity and real flag varieties.
Shoﬄer, Michael, Never-breaking quasi-periodic solutions of weakly nonlinear gas dynamics.
Shen, Jianhong, Asymptotics of wavelets and filters.
Sipic, Radka, Generalized long wave evolution equations.
Sommer, Eric, Nilpotent orbits and the affine flag manifold.
Trapa, Peter Engel, Unitary representations of U(p, q) and generalized Robinson-Schensted algorithms.

OPERATIONS RESEARCH
Chryssikou, Efthalia, Multiperiod portfolio optimization in the presence of transaction costs.
D’Amato, Rebecca, Management of antiretroviral therapy for HIV infection: modeling when to change therapy.
Epstein, Rafael, Linear programming and capacitated network loading.
Hauksson, Arn, The commercialization of university research discoveries: are university technology transfer offices stimulating the process.
Knireg, Timothy, Itinerary-based airline fleet assignment.

Nunez-Araya, Manuel, Condition numbers and properties of central trajectories in nonconvex programming.
Osina, Edgar, Support vector machines: training and applications.
Raark, John, Implementing reusable solvers: an object oriented framework for operation research algorithms.
Toksay, Latif Berli, Analysis of a production inventory system under a stationary demand process and forecast updates.
Wang, Yi, Modeling and solving single and multiple facility network restoration problems.

Northeastern University (2)

MATHEMATICS
Goncovea, Nicolae, Schubert varieties, ladder determinantal varieties and toric varieties.
Oleinik, Igor, On the essential self-adjointness of Schrödinger type operators.

Tufts University (1)

MATHEMATICS
Zhou, Yiying, Support theorems and injectivity for Radon transforms.

University of Massachusetts, Amherst (8)

MATHEMATICS AND STATISTICS
Boucher, Christopher, Large deviations for doubly indexed stochastic processes with applications to statistical mechanics.
Dornback Boucher, Catherine, Characterizations of pyramids and their generalizations.
Heisler, Joseph, Computations of statistical equilibrium states for two dimensional turbulence with conserved vorticity moments.
Ji, Lu, Galerkin-finite element method for elastic wave equations with interface.
Luo, Haiping, Desingularizing the intersection between a catenoid and a plane.
Petersen Black, Christine, The mathematics of superfluid films in porous media.
Schwarz, Christine, Nilpotent orbits of mixed Hodge structure.
Wilder, Kenneth, Decision tree algorithms for handwritten digit recognition.

MICHIGAN

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MATHEMATICS
Englund, Timothy, Quadratic representations for groups of Lie type over fields of characteristic two.
Higdon, William, Composition operators on the Dirichlet space.
University of Michigan, Ann Arbor (33)

**BIOSTATISTICS**

Hauser, Elizabeth, Methods for linkage for complex genetic disease.

Zhang, Daowen, Inference in the generalized additive mixed models.

**INDUSTRIAL AND OPERATIONS ENGINEERING**

Fang, Ying-Che, Curve matching by energy minimization in unit quaternions.

Garcia, Alfredo, Approximating equilibria for infinite horizon dynamic games.

Hsieh, Chung-Chi, An invariance in the partial visibility due to mobile source in planar scenes.

Morse, Christopher, Stochastic equipment replacement with budget.

Neale, John J., Control of a batch processing machine.

Reaume, Daniel J., Efficient random algorithms for constrained global and convex optimization.

Reed, Matthew, Statistical and biomechanical prediction of automobile driving posture.

Zhang, Xiaodong, The development of a three-dimensional dynamic posture prediction model for seated operator motion simulation.

**MATHEMATICS**

Bainbridge, David, Phragmen-Lindelöf estimates for plurisubharmonic functions of linear growth.

Boland, Jeffrey, The dynamics and geometry of contact Anosov flows.

Dolong, Matthew, Relating elliptic curves to three-ranks of quadratic number fields.

Gao, Fan, Critically finite maps on P3.

Giguere, Pierre, On the conjecture of Langlands and Rapoport.

Gill, Robert, A generalization of the partition lattice, the combinatorial properties and the action of the symmetric group.

Hu, Po, The cohomology of real manifolds and calculations with the real Adams-Novikov spectral sequence.

Kostriki, James, Some completion theorems in algebraic topology.

Lee, Kevin, Complex cobordism, classifying spaces of finite groups, and generalized characters.

Linden, Alexander, Static spherically symmetric solutions of SU(2) Einstein Yang Mills equations with positive cosmological constant.

Robb, Raymond, The mean radius of a polytope and problems of combinatorial optimization.

Singh, Anurag, F-regularity, F-rationality and F-purity.

Stephenson, David, Some results on congruence p-adic group actions on the (p+1)-regular tree, and on the representations of numbers in the form \( \sum_{i=1}^{r} (l_i x_i + a_i)^p \).

Vazquez, Anthony, 4-ranks of K of rings of integers in quadratic number fields.

Vazquez, Dana, Invariants and projections of lines in projective space.

Von Dohlen, Brian, Brownian motion with random drift.


Wisdom, Joel, On the representations of numbers as sums of powers.

Yackel, Carolyn, Asymptotic behavior of annihilator lengths in certain quotient rings.

**STATISTICS**

Berabe, Julie, Models, analysis and efficiency of estimation for robust parameter designs.

Liao, Jinzhong, Inference for linear and nonlinear calibration problems.

Warner, John, Exact optimal designs for estimating the minimum of a quadratic response surface via stochastic programming.

Wu, Huaqing, Design, modeling, and estimation in circular measurement error models.

**Western Michigan University (6)**

**MATHEMATICS AND STATISTICS**

Crawford, Pamela, Fostering reflective thinking in first semester calculus students.

Figueroa-Centeno, Ramon Manuel, Surface models of finite geometries.

Kett, James, A portrait of assessment in reformed mathematics classrooms.

Low, Richard, Units in integral group rings for direct products.

Myeong, Ann, Perturbed Hamiltonian system of two parameters with several turning points.

Wahlberg, Melanie, The effects of writing assignments of second-semester calculus students understanding of the limit concept.

**MINNESOTA**

University of Minnesota, Minneapolis (20)

**BIOSTATISTICS**

Huang, Eugene, A class of tests against stochastically ordered alternatives for censored survival data.

Xia, Hong, Bayesian hierarchical modeling for mapping disease rates.

**MATHEMATICS**

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

Das, Pinaki, Double coverings of cyclotomic fields arising from algebraic Gamma monomials.

Dajager, Joel, Boundary control theory for nonlinear Schrödinger equations.

Hesse, Robert, Computational algorithms based on a variational approach to mechanical systems.

Krioukov, Alexei, Kaehler extensions of Riemannian manifolds.

Mendez, Osvaldo, Invertibility of layer potentials on Besov spaces.

Norman, David, A dynamical systems study of chemically reacting fluid flows.

Osterlund, Philip, Tensor decompositions of the regular representation of p-groups over fields of characteristic p.

Rijordan, James, Non-conforming approximation of martensitic crystals.

Schimacher, Ernesto, Log-concavity, q-analogs, and the exponential formula.

Schwartz, Christopher, Methods for understanding the structure of functions from complex to complex spaces.
Valero-Elizondo, Luis, On some invariants associated to simple group representations.
Yi, Sangkyu, Analytic torsions on quaternionic manifolds.
Yuan, Yu, Some qualitative properties of solutions to second order elliptic and parabolic equations.

STATISTICS
Agin, Marilyn, Optimal Bayesian design for nonlinear models.
Choi, Connie, Multivariate longitudinal data analysis, using generalized estimating equations.
Lee, Hakbae, Dimension reduction in binary response regression.
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.
Lang, Andrew, The Casimir effect.
McHale, Kimberly, Inequalities for vibration and buckling of a clamped plate.
Neuerburg, Kent, Relationships between invariants of angular plane curves.
STATISTICS
Jackson, Michael, Nonparametric analysis of covariance based on residuals.
Kim, Seong Woock, Bayesian model selection using intrinsic priors for commonly used models in reliability and survival analysis.
Lee, Sungwook, Semiparametric regression with random effects.
Reischman, Diann, Order restricted inferences on parameters in logistic regression.
Richardson, Mary, Power law process models for nonhomogeneous Poisson process change-points.
Tam, Kwok-Leung, Pricing risk for non-normal processes and conditional higher-order moments.

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.
Hill, Jeannie, Some ranking and selection procedures for the Weibull distribution based on the shape parameter.
Ryden, David, Irreducibility in inverse limits on intervals.

Washington University (13)
MATHEMATICS
Calverhouse, 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 a localized wavelet on R.
Hinrichs, Anthony, Factoring the Green's kernel for random walks on trees.
Munshower, Judy, The de Rham complex on unbounded domains with Sobolev space topology.
SYSTEMS SCIENCE AND MATHEMATICS
Brady, Kevin, Time-delayed control of tethered robotic manipulators.
Kiefer, Matthew, Singularities in solutions to the Hamilton-Jacobi equation and their implications for the optimal control problem.
Kiralyfahvi, Gyorgy, Mathematical model of elastic stability.
Lockman, David, Stochastic optimization with adaptive precision.
Markman, Jerry, Numerical solutions of the Hamilton-Jacobi equations arising in nonlinear H-infinity and optimal control.
Schwartz, Ben, Nonlinear MIMO control systems: normal forms, L2 disturbance attenuation and performance bounds.
Song, Mumin, Integration of task scheduling, sensing, planning, and control in a manufacturing work-cell.
Xiao, Dl, Multisensor based robotic manipulation in uncalibrated environments.
Yang, Shiw-Pying, Dynamic modeling and control of underwater vehicle with multiple robotic manipulators system.

NEBRASKA
University of Nebraska, Lincoln (11)
MATHEMATICS AND STATISTICS
Anderson, Douglas, Discrete Hamiltonian systems.
Avery, Richard, Multiple positive solutions to boundary value problems.
Butar-Butar, Ferry, Empirical Bayes methods in survey sampling.
Dawkins, Paul, Spurious eigenvalues in the spectral tau method.
Holley, Darren, Quotients of the multiplicative group of a field.
Homp, Michelle, A transport equation in porous media with an oblique, evolutionary boundary condition.
Jajcayova, Tatiana, HNN extensions of inverse semigroups.
Mueller, Jennifer, Inverse problems for singular differential equations.
Sapir, Olga, Identities of finite semigroups and related questions.
Van Peursem, Dan, Analytical modeling of groundwater flow.
Wei, Ruizhong, Traceability schemes, framework codes, key distribution patterns, and related topics - a combinatorial approach.

NEW HAMPSHIRE
Dartmouth College (1)
MATHEMATICS
Warner, Douglas, Dihedral folding operators and local orthogonal bases.

University of New Hampshire (3)
MATHEMATICS
Cranse, Adriana, Perfect matchings: modified Aztec diamonds, covering graphs, and n-matchings.
Poplicher, Mihaela, On some range inclusions.
Portnoy, Neil, Composition and differentiation on the Hardy and Bergman spaces.

NEW JERSEY
New Jersey Institute of Technology (2)
MATHEMATICAL SCIENCES
Gilchrist, John, Microwave heating of fluid/solid layers: a study of hydrodynamics stability and melting front propagation.
Peleks, John A., Diffusive and wavelike phenomena in thermal processing of materials.
Princeton University (13)

APPLIED AND COMPUTATIONAL
MATHEMATICS

Balan, Radu, A study of Weyl-Heisenberg and wavelet frames.

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

Chen, Yuchi, Diffraction effects on diffusive optical bistability and optic memory.

Ganguly, Kishor, Efficient numerical solvers for linear standing-wave problems.

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

Kramer, Peter, Passive scalar scaling regimes in rapidly decorrelating flow.

Smith, Stephen A., Dissipative closures for statistical moments, fluid moments, and subgrid scales in plasma turbulence.

MATHEMATICS

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

Kisin, Mark, Local constancy in $p$-adic families of Galois representations.

Rajaei, Ali, On lowering the levels in modular mod $E$ Galois representations of totally real fields.

Rastegar, Arash, On congruences between Drinfeld modular forms.

Rubinstein, Michael, Evidence for a spectral interpretation of the zeros of $L$-functions.

Vanderkam, Jeffrey, Non-vanishing of $L$ functions at the center of the critical strip.

Rutgers University, New Brunswick (17)

MATHEMATICS

Asselah, Amine M., Phase stability: stochastic particle system and P.D.E.

Costin, Rodica, Applications of the Polya-Painlevé test.

Csakany, Rita, On three combinatorial problems.

Hamer, Carol L., Congruences among the traces of the Hecke operators.

Higgins, Luke, Characterizing causality conditions using the conformal boundary of a simply connected Lorentz surface.

Kling, Daniel Harold, Doubly-periodic flat surfaces in three-space.

Kowalski, Emmanuel, The rank of the Jacobian of modular curves: analytic methods.

Li, Wenguai, Representations of vertex operator superalgebras and abelian intertwining algebras.

Maier, Luca, Two-descent, two-torsors and cohomology.

Ng, Shu-Hung, The Lie bialgebra structures on the Witt and Virasoro algebras.

Radulescu, Dan Constantin, A computer-assisted proof of uniqueness of phase for the hard-square lattice gas model in two dimensions.

STATISTICS

Buyika, Steve G., Optimal design for item calibration in computerized adaptive testing.

Choi, Suktae, A nonparametric empirical Bayes approach to checking frailty models with recurrent event-time data.

Hoh, Joe-Lan, Some statistical models and methods for analysis of screening data.

Leung, Harry K., Visualization of functions of many variables.

Parelius, Jesse M., Multivariate analysis based on data depth.

Sun, Wei, Some nonparametric methods for inferences of multiple events data.

Stevens Institute of Technology (2)

MATHEMATICAL SCIENCES

Kaplan, Mitchell A., Asymptotic expansion of certain $n$-dimensional Laplace integrals whose phase function has a degenerate critical point.

Nichols, Mark Lewis, Quasi-real time limited word replacement languages.

NEW YORK

City University of New York, Graduate Center (9)

MATHEMATICS

Arroyo, Edward, Dawson's chess, short on graphs and graph involutions.

Castro, Francis, Exponential sums and $L$-functions over finite fields.

Gendron, Timothy, Fuchsian germs.

Glavova, Irina, The Zak transform and a new approach to wavefield design.

Huang, Hualu, On the structure of the space of lattices in a class of simply connected 2-step solvable Lie groups and genus sets of certain spaces.

Huang, Xiaohan, Algorithms for fast rectangular matrix multiplications and their applications.

Peng, Qia, On the dynamics of nondegenerate polynomial endomorphisms in two dimensions.

Saadia-Otero, Marina, The composition of the finite Hilbert transform and the differentiation operator.

Zheng, Ai Leng, Studies in algorithms for fast structured matrices computations and their applications.

Clarkson University (1)

MATHEMATICS AND COMPUTER SCIENCE

Alfarah, Ali, Bessel integrals and sums: old and new.

Columbia University (8)

MATHEMATICS

Deloup, Florian, Explicit formulas for abelian quantum invariants of links in 3-manifolds.

Liu, Yang, Cartan geometry, CR and complex geometry.

Mokhtari-Sharghi, Shahriar, On spectral decomposition of tree lattices.

O'Sullivan, Cormac, Properties of Eisenstein series formed with modular symbols.

Ok, Youngbin, Gamma factors at 1/2 and distinction.


STATISTICS

Jin, Zhezhen, Some statistical methods for analysis of non-linear mixed effects models.

Spivak, Geman, Maximizing the probability of perfect hedge under partial information and non-linear dynamics.

Cornell University (26)

APPLIED MATHEMATICS

Allers, Donald, Patch survival in a mosaic hybrid zone.

Herzel, Stefano, Two problems on option pricing.

Rubio, Isabel, Groebner base for 0-dimensional ideals and applications to decoding.

NEW MEXICO

New Mexico State University (5)

MATHEMATICAL SCIENCES

Emery, David, Continuity properties of pseudo-differential operators defined by nonisotropic symbols.

Nmah, Benedict, Optimizing system reliability with integer programming.

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


Schlauch, Karen, An algorithm for the Quillen-Suslin theorem for discrete Hodge algebras.

University of New Mexico (3)

MATHEMATICS AND STATISTICS

Biswa, Anjan, Perturbation of optical solitons.

Gore, Rebecca, Quality assurance measures for continuous manufacturing sampling plans with supplemental rules.

Hardy, Michael E., Apportionment of availability in a manufacturing process where effort functions are unknown.

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Battig, Robert, Completeness of securities market models—an operator point of view.
Bellhouse, Ekman, Coexistence in a two species reaction diffusion process using a hydrodynamic limit.
Dawson, Jennifer Mary, Modal logics for continuous dynamics.
Oliva, Ricardo Antonio, On the combinatorics of external rays in the dynamics of the complex Henon map.
Shah, Nikhil, Predator mediated coexistence.
Solomon, David Reed, Reverse mathematics and ordered groups.
Teplyaev, Alexander Vycheslav, Spectral analysis on infinite Sierpinski gaskets.
Xiang, Yongjian, Computing Thom-Boardman singularities.

OPERATIONS RESEARCH AND INDUSTRIAL ENGINEERING
Averbakh, Victoria, Pricing American options using Monte Carlo simulation.
Caggiano, Kathryn, Flow time reduction for multistage cyclic scheduling with multiple partially ordered jobs.
Chow, Jong, Extensions to the capacitated lot-sizing problem: a solution framework.
Fleisch, Lisa, Separating maximally violated comb inequalities in planar graphs.
Hosten, Serkan, Degrees of Groebner bases of integer programs.
Krugh, Semyon, DNA sequencing and modeling repeat sequence evolution.
Rappold, James, Computationally efficient models for capacitated multi-echelon production-distribution systems.

STATISTICS
Eberly, Lynn, Convergence of interval estimates from the Gibbs sampler.
Gulyas, Stephen, Latent disease changepoint models for longitudinal biomarkers.
Ohman, Pamela, Approximated and estimated saddlepoint approximations.
Schulman, Andrew, A comparison of local bandwidth selectors for local polynomial regression.

NEWS YORK UNIVERSITY, COURANT INSTITUTE (13)

MATHEMATICAL SCIENCES
Bica, Ion, Iterative substructuring algorithms for the p-version of finite element method.
Chen, Connie Kangyan, Applications of the method of complex characteristics.
Givelberg, Edward, Modeling elastic shells immersed in fluid.
Huang, Jingfang, Direct adaptive methods for linear differential equations.
Jin, Weimin, Singular perturbation and the energy of folds.
Kilough, Matthew, A diffuse interface approach to the development of microstructure in martensite.
Kim, Seongwon, Excitable systems in motion: interactions between electrical and mechanical activities of the heart.
Lee, Kihun, Obstacle problems for the fully nonlinear elliptic operators.
Lu, Zhiguo, On the geometry of the moduli space of Calabi-Yau manifolds.
Nanda, Seema, Spatial random graphs and dynamics of disordered systems.
Ranian, Motiagh, Atire, Analysis on metric-measure spaces.
Sampieri, Dominick, Inverse problems, model selection and entropy in derivative security pricing.
Serdani, Hester, First-passage percolation on the Dalmay graph of a d-dimensional Poisson process.

RENSSELAER POLYTECHNIC INSTITUTE (10)

DECISION SCIENCE AND ENGINEERING SYSTEMS
Rush, Robert, Decision-constrained stochastic programming for asset-liability management.
Tao, Yi-Cheng, A differential control method for distributed database updates using concurrent rule-based shells.

MATHEMATICAL SCIENCES
Aliff, Mohammed, Adaptive hp-refinement of methods for singularly perturbed elliptic and parabolic systems.
Bredensteiner, Erich, Optimization methods in data mining and machine learning.
Gross, Laura, Weakly nonlinear dynamics of exothermic surfaces.
Kulkarni, Rahul, Acoustic pulse propagation in shallow-water environments.
McEntee, Anne, The shape of noisy discrete curves.
Portnoy, Arturo, Stable perturbations of spectral data for rectangular membranes.
Warlock, Arwen, Effect of wall friction on compaction and compression.
Zohler, Margaret, Analysis of nonlinear deformation of biological tissue.

STATE UNIVERSITY OF NEW YORK, ALBANY (10)

MATHEMATICS AND STATISTICS
Jaffe, Marc, Beurling type theorems for submodules of the Hardy space H1.
Lambert, Peter, Extreme points and support points in Bloch type spaces.
O'Neill, John, Test elements in finitely generated groups.
Replage, Daniel, Swan classes and realizable classes for integral group rings over groups of prime order.
Sabatka, Michael, Spherical diagrams and the solutions of equations over groups.
Smith, Harold III, Constructing Hopf orders in elementary abelian group rings.
Sowelaz, Mycroft, Growth functions of discrete non-cocompact groups of isometries of the hyperbolic plane.
Sterner, Michael, Fractional derivatives and convolutions of univalent functions.
Tse, Man-yiu, Hopf algebra actions on elementary abelian extensions of degree p^2.

STATISTICS AND BIOMETRY
Chen, Jianbin, Adaptive smoothing and its applications in change-point and image analysis.

STATE UNIVERSITY OF NEW YORK, BINGHAMTON (8)

MATHEMATICAL SCIENCES
Cardenas, Manuel, Localization for exact categories.
Pagano, Steve, Separability and representability of bias matroids of signed graphs.
Pavlovic, Tom, A polyhedral transversality theorem for one-parameter fixed point theory.
Rebholt, Denise, On generalized Hamiltonian groups.
Roy, Ranja, Integrality questions for virtual signature.
Sarmir, NorHaniza, On two-generator groups of nilpotent class two and their nonabelian tensor squares.
Weinberger, Arthur, Reducing fuzzy algebra to classical algebra.
Zhang, Qinhai, On abnormal subgroups of finite groups.

STATE UNIVERSITY OF NEW YORK, BUFFALO (5)

MATHEMATICS
Kullman, Charles, Adjoints and cohomology for presheaves of algebras over a poset.
Liu, Xia, Parametric for hypoelliptic operators in spaces of distribution with restricted growth.
Slavik, Petr, Approximation algorithms for set cover and related problems.

**STATISTICS**

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

**State University of New York, Stony Brook (23)**

**APPLIED MATHEMATICS AND STATISTICS**

Arechbala-Mireles, Orlando, A comparative study of tests for homogeneity of variances under order.
Galambs, Nora, An evaluation of the power and precision of missing data procedures.
Kowalski, James, Efficient collision detection for interacting 3D graphics and virtual environments.
Mancuso, James, Exact null distributions of runs statistics in occupancy arrangements with applications to disease clustering.
Marko, Mariano, Inverse problem algorithms and applications in renal concentrating mechanism models.
Neus, Jordan, EDF-based GOF tests for the homoscedastic two-component normal mixture.
Takacs, Tatiana, Analytical approximate solutions for the pricing of American exotic options.
Whitten, Vicki, Effect of unsheared layers on the renal concentrating mechanism.

**MATHEMATICS**

Pietro, Carlos, On Schottky vector bundles over Riemann surfaces.
Frink, Paul, Langlands parameters of subquotients of derived functor modules.
Kovari, Jan, Rational rays and critical portraits of complex polynomials.
Litscher, Janko, A generalization of Morse complex.
Mascher, Gideon, Distinguished Kähler metrics and equivariant cohomological invariants.
Petean, Jimmy, Indefinite Kähler-Einstein metrics on compact complex surfaces.
Rothman, Regina, Upper bounds of the length of the shortest closed geodesics on simply connected manifolds.
Schafer, Joseph, Stochastic analog of the Selberg trace formula.
Sebbar, Abdellah, Quantum groups, screening operators and universal q-de Rham cycles.

Slimowitz, Jennifer, Positive paths and length minimizing geodesics in Koeber geometry.
Yampolsky, Mikhail, Complex bounds for renormalization of one-dimensional dynamical systems.
Yang, Rongwei, Hardy modules.

**Syracuse University (3)**

**MATHEMATICS**

Boeklins, Matthew, On the spectral radius of positive operators.
Hardin, William, Comparing four approaches to teaching limits.
Niaz, Preety, The role of visualization in teaching undergraduate mathematics: a multilocal study of teachers' perceptions and practices.

**University of Rochester (7)**

**BIOSTATISTICS**

Liu, Ai, Estimation following sequential tests.
Marchetti, Carol, Robust analysis of variance.
Zou, Hong, Analysis of some transformation models for the two-sample problem with special reference to ROC curves.

**MATHEMATICS**

Cobelli, Cristian, Topics on the distribution of inverses mod q.
Fu, Shih-Shun, Oscillatory integral operators and the restricted two-plane transform.
Liu, Lianfang, Stability estimates for the two-dimensional inverse conductivity problem.
Losia, Celine, Singular homology of strong bouquets of Moore spaces.

**North Carolina State University, Raleigh (34)**

**MATHEMATICS**

Bancroft, James Michael, Multilevel methods for conductive-radiative heat transfer.
Butler, Jeffrey Victor, A random process model for dispersion in containment transport through porous media: analysis and computation.
Hardy, Peter Carley, On characterizing nilpotent Lie algebras by their multipliers, \( t(L) = 8 \).
Hessinger, Sabrina Anne, Computing Galois groups of linear differential equations of order four.
Hu, Xueqing, Derivation on prime gamma rings.
Jeffries, Michael Allen, Analysis and simulations of unsaturated groundwater flow in heterogenous media.
Klina, Richard Erwin, Involuntary commutants of the seventh order with applications to algebraic cryptography.
Lyder, Christopher Mark, Explicit construction of a level-two representation of \( G_2 \).
Schmidt, Michael Andreas, Quotient rings of T-rings.
Tocci, Michael David, Numerical methods for variably saturated flow and transport models.
Velumetnam, Somasundaram, Internal transition layers in singularly perturbed boundary value problems.
Yang, Zhiping, Monotone methods for analytic and numerical solutions of reaction diffusion systems.
Yonemans, Kevin Dean, Initialization issues in general nonlinear index differential algebraic equation integrators.
Zhong, Yangchun, Efficient numerical solution of general nonlinear higher index differential algebraic equations.

**STATISTICS**

Alpizar-Jara, Russell, Assessing assumption violations in line transect sampling.
Bay, Jeffrey, Adjusting data for measurement error.
Coffman, Cynthia, The effects of corridor-linked patches on metapopulation dynamics: a field experiment with microtus pennsylvanicus.
Dikin, Partosh, Quality of service modeling for wide area network based systems.
Easterling, Michael, The integral projection model: theory, analysis and application.
Evans, Barry, Estimation and hypothesis testing in nonstationary time series using frequency domain methods.
Gardner, Martha, Equipment fault detection using spatial signatures.
Hahn, William, Estimating the prevalence of a spatially dependent characteristic.
Haines, Dawn, Estimating population parameters using multiple frame and capture-recapture methodology.
Jonkman, Jeffrey, Estimation of percentiles using group testing when the underlying response variable is continuous.

Kim, Dongwooo, $4^N$ fractional factorial designs by pseudo-factors.

Kim, Seongyeon, Extended least squares estimator using Monte Carlo method in nonlinear random coefficient models.

Lee, Taeeyong, Unit root tests in nonstationary time series.

Lovren, Mark, Determination and modelling of benzene metabolism by mouse, rat and human microsomes.

Lung, Te-Hsin, Approximations for skewed probability densities based on Laguerre series and biological applications.

Martin, Eden, Extensions of the transmission/disequilibrium test for identifying human genes.

Peck, Steven, Spatial aspects of the evolution of pesticide resistance: models and recommendations.

Sen, Armit, New tests of structural stability and applications to consumption based asset pricing models.

Sidik, Kirex, Exact unconditional tests for discrete data.

Zhai, Jun, Multiresolution analysis of random processes and application.

**University of North Carolina, Chapel Hill (14)**

**MATHEMATICS**

Donnelly, Robert, Explicit constructions of representations of semisimple Lie algebras.

Kart, Michael, Combinatorial models for families of characters of Lie groups.

Koss, Lorelle, Ergodic and Bernoulli properties of analytic maps of complex projective space.

Leukert, Sven, Representations and nonpositively curved solvmanifolds.

Priebe, Natalie, Detecting hierarchy in tiling dynamical systems via derived Voronoi tessellations.

Schauwbroek, Lisbeth, Analytic and geometric properties of plane harmonic functions.

**OPERATIONS RESEARCH**

Arguelles, Cristina, Exploiting special structure to enhance efficiency of manufacturing simulation.

Gautham, Natarajan, Quality of service for multi-class traffic in high-speed networks.

Marasigan, Farah, Computing performance measures on planar graphs.

Reid, Marcia, $k$-net channel routing for VLSI design.

Reid, Thomas, Admission control for transient source systems.

**STATISTICS**

Duckworth, William, Minimax and maximin distance designs.

Mandal, Pranab, Topics in stochastic nonlinear filtering.

Marion, Michael, Asymptotics for conditional $U$-statistics with applications.

**University of North Carolina, Charlotte (1)**

**MATHEMATICS**

Kao, Kuo-Yuan, Hot and tepid combinatorial games.

**NORTH DAKOTA**

**North Dakota State University, Fargo (3)**

**MATHEMATICS**

Cai, Xiaotao, (SMODX)-cycles in graphs.

Sherman, Margaret, The identification of non-adjacent vertices in $n$-critical graphs.

Zhao, Yunhe, Numerical solutions for boundary integral equations.

**OHIO**

**Air Force Institute of Technology (3)**

**MATHEMATICS AND STATISTICS**

Anderson, Bruce, The rational resolution analysis: a generalization of multiresolution analyses with application to the specific emitter problem.

Schmitt, Lawrence (Larry), Optimal pulsed pumping for remediation of aquifers when sorption is rate-limited.

Suzuki, Laura, Representations, approximations, and algorithms for mathematical speech processing.

**Bowling Green State University (8)**

**MATHEMATICS AND STATISTICS**

Agustin, Ma. Zenita, Smooth goodness-of-fit tests for imperfect repair models.

Agustin, Marcus, Dynamic competing risks models: inference and applications.

Chowdhury, Javed, Preliminary test approach to shrinkage estimation of parameters in a variety of statistical models.

Green, Daniel, Normal-type structure, ultrapowers, and convexity conditions in Banach spaces.

Menad, Nacer, Covolume methodology for partial differential equations.

Ramanayake, Kaledi P. Asoka, Epidemic change point and trend analyses for certain statistical models.

Senior, Kenneth, Differentiability of solution maps in abstract parabolic PDE.

Warton, Pamela, Lexicographic powers of the real line.

**Case Western Reserve University (4)**

**MATHEMATICS**

Riggins, Remuel, On infinite groups and unitary duality.

**OPERATIONS RESEARCH AND OPERATIONS MANAGEMENT**

Liu, Cia-Shie, Group maintenance policies for queuing systems with unreliable servers.

Shu, Jung-Huei, Using a maximum matching to find a minimum vertex cover in a graph.

Zhong, Jianmin, A principle pivoting algorithm for solving the piecewise linear complementarity problem.

**Kent State University (9)**

**MATHEMATICS AND COMPUTER SCIENCE**

Baglama, James, Krylov subspace methods with applications in liquid crystal modeling.

Bernardes, Nilson Da Costa Jr., Some problems on iteration theory and on polynomials.

Bes, Juan, Three problems on hypercyclic operators.

Choi, Hong-In, Fault tolerance in bitonic sorting networks and static shuffle-exchange networks.

Fernandez, Cecilia, Some problems concerning multilinear and holomorphic maps on Banach spaces.

Goovaikula, Rohitha, On probabilistic aspects of summability theory.

Oskiewicz, Jeffrey, Summability of matrix submethods and spliced sequences.

Patterson, Richard, Some theorems in the theory of divergent double sequences.

Pawlowk, Piotr, The location of the zeros of a polynomial and a generalized Jensen's inequality.

**Ohio State University (13)**

**MATHEMATICS**

Balteanu, Corneliu, Coherence for iterated mononoidal categories and homological obstructions to delooping.

Chen, Yuqing, Farrell cohomology of automorphism groups of free groups of finite rank.

Golds, Jeffrey, Estimation of the fractal dimensions of selected classes of Julia sets using spectral radius calculations.

Hlavacek, Jan, Norms of powers of absolutely convergent Fourier series of modulus 1.

Larick, Paul, Results in polynomial recurrence.

Makarov, Mikhail, On the second Poisson structure for the Korteweg-DeVries equation.

Stadler, Jonathan, Schur functions, juggling and statistics on shuffled permutations.

Vompe, Dmitry, Numerical modeling of crystal growth in Bridgman device.

Wayrand, Le, Identifying communication obstacles that arise when translating the modern mathematics classroom to distance.

Weishaar, Robert, An asymptotic study of several models of sparse graphs.
Yao, Lihua, Topics in measure-valued processes.
Ye, Jian, The generalized toda lattices and the Whitham averaged systems for the defocusing nonlinear Schrödinger equations.
Zenkov, Dmitry, Integrability and stability of nonholonomic systems.

Ohio University (3)

MATHEMATICS
Bartholm, Savita, Semiperfect CS-rings.
Schalter, Elena, Admissibility and asymptotic behavior of first and second order differential equations in Banach spaces.
Tannan, Sujal Jhingan, Weakly self-adjoint matrix rings.

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)

STATISTICS
Kim, Chansoo, Robust tests using weighted likelihood estimation.
Masters, Brenda, Grade density estimation.
Richter, Scott, Exact and estimated exact tests for designs involving interactions using the rank transform.
Wilson, Craig, An approach to modelling the coefficient of variation in factorial experiments.

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

OREGON

Oregon State University (4)

MATHEMATICS
Fischer, James, A new look at the Ashtekar-Magnen energy condition.

STATISTICS
Kincaid, Thomas, Estimating absence.
Lyons, Benjamin, Applying higher order asymptotics to mixed linear models.
Pardy, Kathleen, Confidence intervals for variance components.

Portland State University (2)

MATHEMATICAL SCIENCES
Cresap, David, Contributions in survival analysis: estimation of location and scale using Cramer-von Mises methods on randomly censored data.
Roxana, Costinescu, On the transversal geometry of Poisson manifolds.

University of Oregon (3)

MATHEMATICS
Brewer, Joseph (Patrick), Complex subgroups of real reflection groups.
Heo, Sangwoo, Constructing curvature formulae on the disk, the triangle, and the sphere.
Herman, Edwin (Jed), Totally disconnected topological groups.

PENNSYLVANIA

Carnegie Mellon University (8)

MATHEMATICAL SCIENCES
Christopher, George, Structure and applications of totally decomposable metrics.
Davydov, Bogdan, Heavy-traffic analysis of queueing systems with due dates.
Kangro, Ralph, Analysis of artificial boundary conditions for Black-Scholes equations.
Kangro, Urve, Spurious fields in computational electromagnetics.
Perera, Priyanka, Liquid diffusion couple in a microgravity environment.
Simoneit, Neil, A dynamic programming approach to the traveling salesman problem.
Watson, Stephen, Unique global solvability for initial-boundary value problems in one-dimensional nonlinear thermoviscoelasticity with phase transitions.
Wysung, Uwe, Valuation of exotic options under short selling constraints as a singular stochastic control problem.

Lehigh University (4)

MATHEMATICS
Friedman, Theresa, Relating embedding properties with certain operator-theoretic properties.
McElroy, Kuntal, Stochastic analysis of Euclidean functionals.
McGinley, Katherine, Probabilistic limit theorems for combinatorial optimization problems.
Zelov, Vitaly, Immersions and embeddings of real projective spaces.

Pennsylvania State University (9)

MATHEMATICS
Chen, Jinghong, Hydrodynamic coupling between a viscoelastic gas/liquid interface and a swirling vortex flow.
Guysinsky, Moshe, Normal forms of extensions.
Payne, Garth H, Multivariate hypergeometric terms.
Succi, Livio C, The SU(3) wire model.
Wang, Feng, Efficient block interactive methods for convection-dominated problems and multigrid for long-thin elements.

University of Pennsylvania (13)

MATHEMATICS
Achter, Jeffrey, Stratifications on moduli spaces of Abelian varieties in positive characteristic.
Burstein, Alexander, Enumeration of words with forbidden patterns.
Greenwald, Sarah, Diameters of spherical Alexandrov spaces and constant curvature one orbifolds.
Hu, Shubin, On Eisenstein cocycles.
Lazarev, Andrey, Spectral sheaves in stable homotopy.
Mihalioiu, Aleksandras, A combinatorial approach to representations of Lie groups and algebras.
Pauls, Scott, On quasi isometric invariants rigidity and related phenomena.

STATISTICS
Selinger, Peter, Functionality, polymorphism, and concurrency: a mathematical investigation of programming paradigms.

STATISTICS
Craig (Kostrichnaya), Ksenia, On edge estimation in image reconstruction problems.
Lin, Yi, Tensor product space ANOVA models.
Olsen, Stephanie, Multivariate matching with non-normal covariates in observational studies.
Wang, Yichan, Asymptotic equivalence for nonparametric location models.
Zhang, Jing, Model selection and some extensions of Markov switching models.

University of Pittsburgh (8)

MATHEMATICS
Chen, Zhixiong, Wave propagation in neuronal models.
Fridg, Faisal, A two-level discretization method for the streamfunction form of the Navier-Stokes equations.
Pinto, David, Computational, experimental, and analytic explorations of neuronal circuits in the cerebral cortex.

Wang, Chie Bing, Asymptotics for Painlevé III by isomonodromic deformation method.


Wang, Xiyi, On positive definiteness reproducing spaces.

Statistics

Jong, Yi-Kuan (Joey), Burn-in and bathtub distributions.

Shen, Sa, A bootstrap confidence procedure for a pulse detection model for hormone secretion data.

RHODE ISLAND

Brown University (18)

Applied Mathematics

Bowe, 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 model analysis.

Gottlieb, Sigal, Convergence to steady state of weighted ENO schemes, norm preserving Runge-Kutta methods and a modified conjugate gradient method.

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

Nicholls, David, Traveling gravity water waves in two and three dimensions.

Ramaman, Kavita, Construction and large deviations analysis of constrained processes with applications to communication networks.

Robertson, Christopher, Tracking of objects from image sequences using Lagrangian dynamics and nonlinear filtering.

Stephens, Monica, A one-dimensional mixed-layer ocean model for use in 3-D climate simulations.

Su, Hsuan-Wen, Periodic solution of finite regularity for the nonlinear Klein-Gordon equation.

Tufo III, Henry Michael, Algorithms for large scale parallel simulation of unsteady incompressible flows with three-dimensional complex geometries.

Yang, Baolin, Spectral methods and absorbing boundary conditions.

Mathematics

Benedetto, Robert, Fatou components in p-adic dynamics.

Chin, Bing, Stabilization of a sequence of images.

Dreieckhalk, Daniel, A bitangency theorem for surfaces in Euclidean four-space.

Holden, Joshua, On the Fontaine-Mazur conjecture for number fields and an analogue for function fields.

Hukovic, Sanja, Singular integral operators in weighted spaces and Bellman functions.

Papanikolas, Matthew, Canonical heights in characteristic p.

University of Rhode Island (3)

Mathematics

Al-Amleh, Amal, Boundedness, periodicity, and stability of some difference equations.

Feurer, Jeffrey, Lynness-type difference equations.

Kent, Candace, Stability and periodicity of some difference equations and applications.

SOUTH CAROLINA

Clemson University (2)

Mathematical Sciences

Chen, Shehchong, Estimation and hypothesis testing for a mixture of two univariate normal distributions.

Wang, Jiahui, Some issues on nonparametric regression.

University of South Carolina (10)

Mathematics

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

Corm, Emil, Multiresolution analysis of nonlinear phenomenon arising in surface modeling.

Ho, Chih-Chang, The cycling of partitions and compositions under repeated shifts.

Nagy, Marton, Expandably finitely based algorithms.

Pan, Chuanliang, Insertion properties of monotonically defined spaces.

Szavvas, Tibor, Uniform Lp(w) spaces.

Statistics

Merchant, Aparna, Improved multiple comparisons in response surface methodology.

Owen, William Jason, Accelerated test models using the Birnbaum-Saunders distribution.

Street, Walter Scott, IV, B-splines and nonlinear mixed models for environmental time series.

Tu, Wanzhu, Empirical Bayes analysis of count data.

University of Tennessee (4)

Management Science

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

Mathematics

Collier Meescue, Suzanne, A theory on perturbations of the Dirac operator.

Kim, Hwanwoo, Factorization in monoid domains.

Kim, Yonguk, Codimension two submanifold decompositions that induce approximate fibrations.

Vanderbilt University (10)

Mathematics

Assaf, IV, David, Sensitivity of spline functions on triangulation to vertex perturbation.

Burton, David, On hypernormal tuples of commuting operators with finite rank self-commutators.

Dishman, Laurie Gail Plunk, Interassociativity and strong interassociativity.

Hata, Sanjukta, Mathematical models of respiratory function.

Johnson, Michael Eugene, Resonances in periodic chemotherapy scheduling: age structured models.

Kessler, Walter Bruce, Construction of orthogonal compactly-supported scaling functions and multiwavelets on arbitrary meshes.

Lee, Hoseung, Recognizable elements of quantalets: a result of Myhill revisited.

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

Taibert, 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.


McIlwain, Mary. Can you hear the size of a vertex? 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

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


Texas A&M University (21)

MATHEMATICS


Gu, Qiang. The wavelets and wavelet sets.

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

Hantisch, Jorg. Computational aspects of spline-wavelets.

Iacono, Eusei. On the structure of operators and wavelets.

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


Lauric, Vasile. Some results on invariant subspaces.

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

Mashat, Daoud. Fast algorithms and thier application to numerical quasi-conformal 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

Crow, 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.

Itruvia, Stephen. Applications and methodology in genetic epidemiology.

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

Liu, Andy Hsien. A diagnostic test of heteroscedasticity based on nonparametric smoothing.

Macca, Jeffrey Dean. Nonparametric regression and measurement error.

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

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

Texas Tech University (6)

MATHEMATICS AND STATISTICS

Chandrakasana, Kumar. Statistical inverse estimation of irregular input signals.

DeWoud, Yos. The role of musculoskeletal dynamics and neuromuscular control in stress development in bone.

Gilliam, Xiaoming. 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

Khouri, 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 solutions of a class of nonstrictly hyperbolic systems of conservation laws.

University of North Texas (3)

MATHEMATICS

Bacz, 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


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, Wai-Yi. Optimal fractional factorial designs.

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

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


Harpar, 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 Delta surgery on infinitely many distinct knots in $S^3$.

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


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

Yeav, Riciek. 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.


University of Utah (6)

MATHEMATICS

Chen, Hsuehrow. 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.
Mityshev, Igor, Exotic homology theories and negative curvature in groups.
Xie, Min, Theoretical studies of forced excitable systems.

Utah State University (1)
MATHEMATICS AND STATISTICS
Copenhaver, Erin, Bootstraping regression quantiles.

VERMONT
University of Vermont (2)
MATHEMATICS AND STATISTICS
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.
Saiter, 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.
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.
Suhrka, Arief, Tactical network flow and discrete optimization models and algorithms for the empty railcar transportation problem.

MATHEMATICS
Mackin, Gall, On an order-parameter model of solid-solid phase transitions.
Ranalli, Ramona, The structure of the 2-Sylow subgroups of the ideal class groups of imaginary periodic 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.

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 incomplete covariate data.
Lumley, Thomas, Marginal regression modelling of weakly dependent data.
Nunn, Martha, Influence diagnostics for correlated data.
Peckova, 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 in 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.
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-Grallada, Evelyn, A FOSIL method for the overlapping grid problem.
Tsai, Tsung-Hai, 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-ling, o-minimal expansions of ordered sets with unary functions.
Yeh, Nai-Sher, Contributions to forced capillary-gravity waves under Hocking's edge condition.

Statistics
Borght, Elaina, Methods of inference in Strauss disc processes.
Chen, Yinzhang, 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.
Ye, In-Kwon, On alternative power transformation to handle skewness.
Zhang, Yueli, 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, Daping, 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 refection manifolds.
Nabhan, Maha, The weighted continuous Galerkin method for initial value problems.
Petersen, Hans-Huergen, A spline estimate of the score function in Adaptive I-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.
Woo, 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.


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
Azm, Fatima Mohammad, Computation of the equivariant coycle of the Dirac operator.

DISTRICT OF COLUMBIA

American University (9)

Mathematics and Statistics

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

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


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

Kapner, 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 imputed data.

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


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, Qihou, Simultaneous confidence bounds for hazard data.

Zhang, Halying, 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.