

Doctoral Degrees Conferred

2004–2005

ALABAMA

Auburn University (2)

MATHEMATICS AND STATISTICS

Das, Kumer, Ruin estimates under interest force.

Granado, Michael, On the moving off property and weak additivity of local connectedness and metrizable.

University of Alabama, Birmingham (3)

BIOSTATISTICS

Richman, Joshua S., Sample entropy statistics.

MATHEMATICS

Lee, Young-Ran, Spectral properties of a polyharmonic operator with limit-periodic potential in dimension two.

Lesort, Claire, Statistical efficiency and complexity of curve fitting algorithms.

University of Alabama, Tuscaloosa (10)

INFORMATION SYSTEMS, STATISTICS AND MANAGEMENT SCIENCE

Fan, Guangzhe, Regression and survival tree analysis using TARGET.

Hong, Bo, Multivariate surveillance schemes for infectious diseases on multiple locations.

Howington, Eric, A genetic algorithm for computing the minimum volume ellipsoid estimates.

Yadav, Prashant, Collaborative forecasting and supply chain coordination.

Yu, Jing, Space-time interaction models for mortality data.

MATHEMATICS

Eddins, Melanie, Variation of M/G/1 queues with batch services.

Gong, Minqing, Waiting time in a combined first-come-first-served and shortest-time-first queue.

Kwon, Miyeon, A class of operation on Hardy space in Schatten-von Neumann class and its properties.

Simmons, Carolyn, A comparison of polynomial preconditioners for solving linear systems.

Zhang, Xinjun, A matrix version of corona theorem for algebras of functions on reproducing kernel Hilbert spaces.

ARIZONA

Arizona State University (6)

MATHEMATICS AND STATISTICS

Dueck, Amylou, Robust imputation in multivariate hierarchical data.

Gordillo, Luis, Q -Hausdorff summability.

Lant, Timothy, Transition kernels, integral semigroups on spaces of measures, and perturbation by cumulative outputs.

Li, Jiaxu, The dynamics of glucose-insulin endocrine metabolic regulatory system.

Murakami, Junko, Parameter estimate of a hidden Markov chain.

Rahman, Mohammad Mahbuber, Numerical approximations to stochastic differential equations with applications to mathematical neurosciences.

University of Arizona (11)

MATHEMATICS

Lozano, Guadalupe, Poisson geometry of the Ablowitz-Ladik equations.

Perlis, Alexander, The projective geometry of curves of genus one, and an algorithm for the jacobian of such a curve.

Shipmar, Patrick, Plant patterns.

PROGRAM IN APPLIED MATHEMATICS

Alvarez-Sierra, Oliverio, Acoustic resonance in a cavity under a subsonic flow.

Frey, Sarah, Characterization of instabilities in the problem of elastic planetary tides.

Kim, Sangil, Ensemble filtering methods for nonlinear dynamics.

Kondrashov, Dmitry, Protein control of a ligand: Modeling nitric oxide release in nitrophorin 4.

Lehovich, Andre, List-mode SPECT reconstruction using empirical likelihood.

Lu, Yixia, The integrability of second order nonlinear ordinary differential equations with Painlevé properties and Lie symmetries.

Park, Subok, Signal detection with random backgrounds and random signals.

Swiercoski, Rosangela, Multiscale analytical solutions and homogenization of n -dimensional generalized elliptic equations.

ARKANSAS

University of Arkansas, Fayetteville (3)

MATHEMATICAL SCIENCES

Karber, Kristen, Star-shift invariant subspaces of $H^2(\mathbb{D})$.

Shores, Emily, Regularity theory for weak solutions of systems in Carnot groups.

Singh, Pramod, Decomposition of nonlinear operators on Banach lattices.

CALIFORNIA

California Institute of Technology (13)

APPLIED AND COMPUTATIONAL MATHEMATICS

Stredie, Valentin Gabriel, Mathematical modeling and simulation of aquatic and aerial animal locomotion.

Westhead, Andrew, Upscaling for two-phase flows in porous media.

Yu, Xinwei, Localized non-blowup conditions for 3D incompressible Euler flows and related equations.

The above list contains the names and thesis titles of recipients of doctoral degrees in the mathematical sciences (July 1, 2004, to June 30, 2005) reported in the 2005 Annual Survey of the Mathematical Sciences by 215 departments in 152 universities in the United States. Each entry

contains the name of the recipient and the thesis title. The number in parentheses following the name of the university is the number of degrees listed for that university. A supplementary list containing names received since compilation of this list will appear in a summer 2006 issue of the *Notices*.

CONTROL AND DYNAMICAL SYSTEMS

Bhat, Harish S., Lagrangian averaging, nonlinear waves, and shock capturing.
Del Vecchio, Domitilla, State estimation in multi-agent decision and control systems.
Gregory, Irene, Design and stability analysis of an integrated controller for highly flexible advanced aircraft utilizing the novel nonlinear dynamic inversion.

Papachristodoulou, Antonis, Scalable analysis of nonlinear systems using convex optimization.
Prajna, Stephen, Optimization-based methods for nonlinear and hybrid systems verification.

MATHEMATICS

Cai, Kaihua, Dispersive property of Schrödinger operators.
Johnson, Jennifer, Artin L -functions for abelian extensions of imaginary quadratic fields.
Katz, Daniel, On p -adic estimates of weights in Abelian codes over Galois rings.
Nenciu, Irina, Lax pairs for the Ablowitz-Ladik system via orthogonal polynomials on the unit circle.
Whitehouse, David, The twisted weighted fundamental lemma for the transfer of automorphic forms from $\mathrm{GSp}(4)$ to $\mathrm{GL}(4)$.

Claremont Graduate University (1)

SCHOOL OF MATHEMATICAL SCIENCES

Le, Hieu, Delamination detection in composite laminates using genetic algorithm optimization.

Stanford University (14)

STATISTICS

Arias-Castro, Ery, Graphical structures for geometric detection.
Bair, Eric, Methods of predicting patient survival based on DNA microarray data.
Chatterjee, Sourav, Concentration inequalities with exchangeable pairs.
Elkaroui, Noureddine, Extended validity of Tracy-Widom limiting law, with statistical application.
Finkelman, Matthew, Statistical issues in computerized adaptive testing.
Hooker, Giles, Diagnostics and extrapolation in machine learning.
Liu, Ruixue, New findings of functional ANOVA with applications to computational finance and statistics.
Paul, Debashis, Nonparametric estimation of principal components.
Peng, Jie, Score statistics to map genes in humans.
Qing Feng, Zhang, A basis function approach to interest rate derivative valuation.
Stone, Eric, Statistical advances in inter-specific data analysis.

Terentyev, Sergiy, Asymmetric counterparty relations in default modeling.
Wang, Pei, Statistical methods for CGH array analysis.
Xiaohu, Zhang, Thin blue noise sampling and its application to antialiasing in computer graphics.

University of California, Berkeley (37)

BIOSTATISTICS

Neugebauer, Romain, Double robust estimation of causal parameters in marginal structural models.
Tai, Yu Chuan, Multivariate empirical Bayes models for replicated microarray time course data.
Xing, Biao, Statistical methods for detecting cis-regulatory motifs and constructing transcriptional regulatory networks.

MATHEMATICS

Bejenaru, Ioan, Quadratic derivative nonlinear Schrödinger equation.
Corn, Patrick, Del Pezzo surfaces and the Branner-Manin obstruction.
Ealy, Clifton, Thorn forking in simple theories and a Manin-Mumford theorem for T -modules.
Esty, Norah, Orbit structures of groups of homeomorphisms on S_1 .
Ghioca, Dragos, The arithmetic of Drinfeld modules.
Hall, H. Tracy, Counterexamples in discrete geometry.
Hogan, Apollo, General topology under the axiom of determinacy: The beauty of topology without choice.
Kamnitzer, Joel, Mirkovic-Vilonen cycles and polytopes.
Kirkup, George, Examples of decomposition of ideals.
Levin, Aaron, Generalizations of Siegel's and Picard's theorems.
Levy, Dan, Applications of graph theory to chromosome rearrangements and phylogenetics.
Milanov, Todor, Singularity theory and integrable hierarchies.
Mirani, Luisa, Matrix valued orthogonal polynomials.
Nguyen, Nghi, Whitney theorems and Lefschetz pencils over finite fields.
Pribik, Peter, Integrable soliton hierarchies for so^* and $2n$ via intertwining operators.
Roberts, Lawrence, Heegaard-Floer homology and d -based links in three manifolds.
Shvets, Yelena, Problems of flooding in porous and fissured porous rock.
Siegel, Aaron, Loopy games and computation.
Sinton, Andrew, The spherical transform on projective limits of symmetric spaces.
Speyer, David, Tropical geometry.

Sullivan, Seth, Toric ideals in algebraic statistics.
Tseng, Hsian-Hua, Quantum Riemann-Rock, Lefschetz and Serre theorems for orbifold Gromov-Witten theory.
Van Luijk, Ronald, Rational points on $K3$ surfaces.
Villareal, Oscar, Countable unions of subvarieties of semiabelian varieties.
Voight, John, Quadratic forms and quaternion algebras: Algorithms and arithmetic.
Yu, Yifeng, L^∞ variational problems, Aronsson equations and weak KAM theory.

STATISTICS

Chen, Aiyou, Semiparametric inference for independent component analysis.
Collin, Francois, Analysis of oligonucleotide data with a view to data quality assessment.
Hallgrimsdottir, Ingileif, Statistical methods for gene mapping in complex diseases.
Liang, Gang, Statistical inference in network tomography.
Ng, Vivian, Univariate and bivariate variable selection in high dimensional data.
Roginsky, Michael, Modeling of transient processes in Markov chains with an application to the Internet traffic description.
Shi, Tao, Polar cloud detection using satellite data with analysis and applications of kernel learning algorithms.
Zhao, Xiaoyue, Statistical methods for elucidating DNA motifs and modules.

University of California, Davis (9)

MATHEMATICS

Dieng, Momar, Distribution functions for edge eigenvalues in orthogonal and symplectic ensembles: Painlevé representations.
Jerdonek, Christopher, The girth of a Heegaard splitting.
Tamareis, John, Mathematical modeling of arterial endothelial cell responsiveness to flow.

STATISTICS

Branscum, Adam, Bayesian nonparametric and semiparametric inferences for disease risk and ROC curves.
Gui, Jiang, Regularized estimation in the high-dimension and low-sample size settings with applications to genomic data.
Last, Michael, Detecting abrupt changes in time-varying power spectra.
Tseng, Yi-Kuan, Joint modelling of time-to-event and longitudinal data.
Wai, Newton, Change trees and mutagrams for the visualization of local changes in sequence data.

Zhou, Lei, A new expression index based on the generalized logarithm and differential expression analysis of affymetrix GeneChip arrays.

University of California, Los Angeles (24)

MATHEMATICS

Bene, Alex, Intersections of cycles in the combinatorial moduli space.

Biswas, Kingshook, On the geometry of hedgehogs and log-Riemann surfaces.

Caston, Laurent, Super Lie groups, their actions and applications.

Chung, Tsz Shun Eric, Finite volume and discontinuous Galerkin methods for the numerical approximation of wave propagation problems.

Cotta, Brian, Numerical methods for stiff reaction-diffusion equations with applications to cardiological modeling.

Garibaldi, Julia, Erdős distance problem in other convex metrics.

Jones, Nathan, Almost all elliptic curves are Serre curves.

Kostadinov, Boyan, The Picard-Fuchs equation and its monodromy for a family of Calabi-Yau hypersurfaces in $\mathbb{C}P^{N-1}$.

Lee, Sunmi, Artificial boundary conditions for linear elasticity and atomistic strain models.

Li, Xiaosheng, Inverse scattering problem for system of differential operators.

Mocanasu, Mona, Borel-Moore homology and algebraic oriented theories.

Molnar, Stephanie, Sharp growth estimates for $T(b)$ theorems.

Nguyen, Lan, The Ramanujan conjecture for Hilbert modular forms.

Peng, Pan, Integrality structure in the Gromov-Witten theory.

Soderlund, Christina, Characterizing fixed point sets of maps homotopic to a given map.

Somogyi, Zoltan, Stability of an imploding spherical wave in a van der Waals gas.

Staecker, Peter Christopher, The Reide-meister trace: Computation by nilpotentization and extension to coincidence theory.

Tornquist, Asger, The Borel complexity of orbit equivalence.

Viridol, Cristian, Zeta functions of twisted quaternionic Shimura varieties.

Weisbart, David, Schrödinger operators with matrix potentials and convergence of quantum systems on grids.

Yakes, Christopher, Composition operators on L -domains.

Yip, Andy Ming Ham, Mathematical models for data clustering.

STATISTICS

Tranbarger, Katherine, Point process prototypes and other applications of point processes distance metrics.

Yu, Tianwei, Study of the transcription regulation in *Saccharomyces cerevisiae*.

University of California, Riverside (5)

MATHEMATICS

Carrion-Alvarez, Miguel, Loop quantization versus Fock quantization of p -form electromagnetism on static spacetimes.

Chung, Jae-Wook, The algebraic structure of n -punctured ball tangles.

Culhan, Dustin, Associated primes and primal decomposition in modules and lattice modules, and their duals.

Overholser, Eric, Boundary behavior of an infinitesimal metric and intrinsic measure on domains and moduli space.

STATISTICS

Chu, Li Ping, Robustness of the respondents-generated interval.

University of California, San Diego (8)

MATHEMATICS

Donohue, Michael, Rank regression and synergy assessment.

Ericksen, Stefan, New settings of the first order Stark conjectures.

Griffin, Joshua D., Interior-point methods for large-scale nonconvex optimization.

Hazel, Graham P., Triangulating Teichmüller spaces using the Ricci flow.

Juhlin, Robert, Normal forms and convergence of formal CR mappings.

Shaheen, Anthony M., Finite planes and finite upper half planes: Their geometry, a trace formula, modular forms, and Eisenstein series.

Suaray, Kagba, On kernel density estimation for censored data.

Yu, Li, Superalgebraic interpretation of quantization maps of Weil algebras.

University of California, Santa Barbara (5)

MATHEMATICS

Delp, Kelly, Almost periodic flows on 3-manifolds.

Lyons, William, Fast algorithms with applications to PDEs.

Miller, Jeffrey, A 3rd order accurate positive scheme for hyperbolic systems of conservation laws in multi-dimensions.

Wills, Michael, Extension of spectral scales to unbounded operators.

STATISTICS AND APPLIED PROBABILITY

Kulkarni, Priya, Bootstrap methods for time series.

University of Southern California (2)

MATHEMATICS

Wan, Xuhu, Dynamic principal-agent problem in continuous time.

Zhang, Yu, Global and local multiple sequence alignment by an Eulerian path approach.

COLORADO

Colorado School of Mines (3)

MATHEMATICS AND COMPUTER SCIENCES

Abushama, Abeer, Modified nodal cubic spline collocation for Poisson's and bi-harmonic equations in the unit square.

Feng, Yan, Interactive floorplanning in VLSI.

Hayes, Timothy, Multiple choice programming.

Colorado State University (3)

MATHEMATICS

Grande, Beau, Time-stepper based numerical bifurcation analysis: An application to the Taylor-Couette problem.

STATISTICS

Gilleland, Eric, Statistical models for quantifying the spatial distribution of seasonally derived ozone standards.

Hess, Ann, Models and methods for the analysis of microarray data: Before and after the fold change calculation.

University of Colorado, Boulder (15)

APPLIED MATHEMATICS

Burrell, Neil, Merger and alignment of three-dimensional quasigeostrophic vortices.

Carvalho, Marcio, Applying perfect simulation to solve stochastic difference equations that arise from certain time series models.

Hwang, Feng-Nan, Some parallel linear and nonlinear Schwarz methods and applications in computational fluid dynamics.

Maclachlan, Scott, Improving robustness in multiscale methods.

Mullowney, Paul, Lagrangian particle transport/mixing in roll switching systems.

Petersen, Mark, A study of geophysical and astrophysical turbulence using reduced equations.

Roehrle, Oliver, Multilevel first order system least squares for quasi-linear elliptic partial differential equations.

Tearle, Matthew, Optimal perturbation analysis of stratified shear flow.

Thaler, Eric, An evaluation of the operational use of numerical solutions to the quasigeostrophic diagnostic equations by weather forecasters.

Vadlamani, Srinath, An algorithmic unification of particle-in-cell and continuum methods and a wave particle description for the electron temperature gradient (ETG) instability saturation.
Westphal, Chad, First-order system least squares for geometrically-nonlinear elasticity in nonsmooth domains.

MATHEMATICS

Brown, Christopher, Connectedness and reflections in symmetry algebras of differential equations.
Cohen, Robert, Construction of an order theoretic duality for certain groups.
Horne, Jennifer Anne, Cardinal functions on pseudo-tree algebras, and a generalization of homogeneous weak density.
McAlister, Erich, Noncommutative CW-complexes arising from crystallographic groups and their K -theory.

University of Colorado, Denver (2)

MATHEMATICS

Busch, Arthur, III, Arc-traceable tournaments.
Stewart, Dustin, Domination and matrix properties in tournaments and generalized tournaments.

University of Northern Colorado (1)

MATHEMATICAL SCIENCES

Duvall, Sally, Students' concept images of parameters in a multi-representational differential equations course.

CONNECTICUT

University of Connecticut (7)

MATHEMATICS

Laurentier, Alexander, Uniqueness of the martingale problem for some degenerate elliptic operators.
Nurkhaidarov, Ermek, On automorphisms of models of Peano arithmetic.

STATISTICS

Huang, Lan, Bayesian methods for analyzing missing covariates data.
Majumdar, Anandamayee, Some problems in multivariate spatial and spatio-temporal modeling.
Mallick, Madhuja, Stable random family effects models for multivariate times to effects analysis.
Paliwal, Prashni, Chronological event modeling and computation of conditional rates.
Wu, Shanshan, Statistical model development toward explaining species diversity.

Wesleyan University (5)

MATHEMATICS AND COMPUTER SCIENCE

Coe, Russell, Variational principles for relative d -bar pressure.
Krishnan, Ayalur, Universal quantifiers in logic programming via indexed categories.
Rokicki, Anna, Finiteness results for definite η -regular and almost η -regular Hermitian forms.
Roychowdhury, Mrinal, Finitary orbit equivalence.
Wynne, Brian, Continuous functions on essential P -spaces: A model-theoretic analysis of some non-projectable lattice-ordered groups.

Yale University (6)

BIOSTATISTICS DIVISION

Buenconsejo-Sinfuego, Joan, A Bayesian hierarchical model for estimation of disease incidence using two surveillance datasets.
Duan, Fenghai, Analysis of microarray data.
Feng, Rui, A latent variable model for ordinal traits.
Liu, Nianjun, Statistical methods for haplotype analysis in genetic studies.
Wu, Yu-Te, Detecting rare adverse events in post-marketing studies: Sample size considerations.

STATISTICS

Valaitis, Eduardas, Testing the bimodality of normal mixtures.

DELAWARE

University of Delaware (5)

MATHEMATICAL SCIENCES

Chandler, David, The Smith normal forms of designs with classical parameters.
Dmytrenko, Vasyl, Classes of polynomial graphs.
Muniz, Wagner, A modified linear sampling method valid for all frequencies.
Tourrucoo, Fabricio, Perturbation methods in mathematical finance: Zero coupon bonds and bond options.
Williford, Jason, Constructions in finite geometry with applications to graphs.

DISTRICT OF COLUMBIA

American University (5)

MATHEMATICS AND STATISTICS

Begleri, Valbona, Prediction intervals for the Poisson model with applications to Atlantic storms data.
Jalali, Behzad, An investigation of the relationship between the ability to read and comprehend and mathematical skills.

Makhlouf, Fairouz, Regional scores for localizing genes.
Rishmawi, Shireen, Fitting concentration data with stable distributions.
Safi, Samir, The efficiency of OLS in the presence of auto-correlated disturbances in regression models.

George Washington University (2)

MATHEMATICS

Togha, Ataollah, On automorphisms of structures in logic and orderability of groups in topology.

STATISTICS

George, Barbara Jane, Bayesian regression for circular data.

Howard University (3)

MATHEMATICS

Farrier, Sandra, Fixed point and ergodic theorems for nonexpansive mappings on ultrametric Banach spaces.
Syafrida, An approach to approximation of $(0, q)$ meromorphic forms on a stem manifold.
Tankersley, Barbara, Some algebraic and combinatorial interpretations of lower triangular matrices from the Hankelization of sequences.

FLORIDA

Florida Institute of Technology (1)

MATHEMATICAL SCIENCES

Shaikh, Shoab, Design optimization using statistical techniques.

Florida State University (4)

MATHEMATICS

Ibrahim Boulis, Caroline, Finite abelian group actions on orientable circle bundles over surfaces.

STATISTICS

Chaimongkol, Saengla, Modeling differential item functioning (DIF) using multilevel logistic regression models: A Bayesian perspective.
Neher, Robert, Jr., A Bayesian MRF framework for labeling terrain using hyperspectral images.
Ye, Gang, Nonparametric estimation for general time-varying covariate effect regression models.

University of Central Florida (4)

MATHEMATICS

Amezziane, Mohamed, Smoothing parameter selection in nonparametric functional estimation.

Edwards, Heather, Measures of concordance of polynomial type.

Masino, Aaron, Wave structure function and temporal frequency in weak to strong optical turbulence.

Salman-Mohamed, Mohamed, Utilization of total mass as a control in diffusion processes.

University of Florida (10)

MATHEMATICS

Huang, Feng, Applications of variational PDE models in medical image processing.

Huang, Shu-Jen, Multiscale discretization of electric-field equations.

Sheu, Yuan-Chyuan, Partition properties and Halpern-Lauchli theorem on the C_{\min} forcing.

Smith, Rebecca, Combinatorial algorithms involving pattern containing and avoiding permutations.

Warren, Daniel, Optimizing the packing behavior of layered permutation patterns.

STATISTICS

Hitchcock, David, Smoothing functional data for cluster analysis.

Klingenberg, Bernhard, Regression models for discrete time series data.

Marchev, Dobrin, Monte Carlo methods for posterior distributions associated with multivariate student's t data.

Sinha, Karabi, Some contributions to small area estimation.

Sinha, Samiran, Bayesian inference for matched case-control studies.

University of South Florida (3)

MATHEMATICS

Chen, Zhao, Bayesian and empirical Bayes on power law process and microarray analysis.

Mahalingam, Kalpana, Involution codes: With application to DNA strand design.

Tookos, Ferenc, Hölder continuity of Green's functions.

GEORGIA

Emory University (7)

BIostatistics

Chen, Ying, Evaluation of a diagnostic test with partially missing gold standard information based on the test ignorance region.

Guo, Ying, Assessing agreement for survival outcomes.

Yang, Yang, Design and analysis of infectious disease intervention trials.

MATHEMATICS AND COMPUTER SCIENCE

Garten, Heather, Satellite graphs.

Schmitt, John, On potentially P -graphic degree sequences and saturated graphs.

Siggers, Mark, Hypergraph packings and Galois cohomology.

Wilson, Ulrica, Cyclicity of division algebras over an arithmetically nice field.

Georgia Institute of Technology (2)

SCHOOL OF MATHEMATICS

Sammer, Marcus, A transportation approach to the concentration of measure.

Song, Zixia, The extremal function for K_9 minors.

University of Georgia (10)

MATHEMATICS

Almeida, Paulo, Sign changes of error terms related to certain arithmetic functions.

Blair, James, On the embedding of triangles into integer lattices.

Gwena, Tawanda, Degenerations of Prym varieties and cubic threefolds.

Matthews, Graham, Computing generators and relations for matrix algebras.

Nash, Milton, Special values of Hurwitz zeta functions and Dirichlet L -functions.

Pooh, Charles, Capacity theory and algebraic integers.

Shumbusho, Rene-Michel, Elliptic curves with prime conductor and a conjecture of Cremona.

STATISTICS

Jiang, Yan, Semiparametric ANCOVA using shape restrictions.

Yang, Ying, Nonparametric Bayesian inference in biostatistics.

Zhang, Zhengang, Marginal models for zero-inflated clustered data.

HAWAII

University of Hawaii (2)

MATHEMATICS

Seffrood, Jiajia, Non-Desarguesian planes.

Xiong, Jianfei, Some topics on geometry and singularities.

IDAHO

Idaho State University (1)

MATHEMATICS

Moon, Bonnie, Radius of injectivity for a quarter plane.

University of Idaho (2)

MATHEMATICS

Abdo, Zaid, Computationally intensive methods for choosing, assessing and validating statistical models describing polymorphism, with applications in population genetics, phylogenetics and microbial ecology.

Sampson, Koffi, Structured coalescent with nonconservative migration.

ILLINOIS

Illinois State University (5)

MATHEMATICS

Adeyemi, Cheryl, Semiotic chaining: Pre-service teacher beliefs and instructional practices.

Carter, John, Effects of lesson study on the beliefs and practices of novice mathematics teachers.

Seidelmann, Antoinette, Students' conceptions of zero.

Tomás Ferreira, Rosa, Portuguese mathematics student teachers' evolving teaching models: A modified teacher development experiment.

Yu, Paul, Prototype development and discourse among middle school students in a dynamic geometry environment.

Northern Illinois University (2)

MATHEMATICAL SCIENCES

Fowler, Kari, Normal functions, the MacLane class and complex differential equations in the unit disc.

Haertzen, Kevin, Geometric aspects of Sturm-Liouville problems.

Northwestern University (9)

ENGINEERING SCIENCE AND APPLIED MATHEMATICS

Comissiong, Donna, A stability analysis of polymerization fronts.

Norman, Catherine, A level set method to numerically determine the dynamics of gas bubbles in inclined channels.

MATHEMATICS

Chen, Jun, Transonic shocks and gas dynamics.

Cheng, Xuezhi, Transferring C_{∞} -structures.

Clay, Lisa, Some conjectures about the slopes of modular forms.

Kim, Young-Heon, Holomorphic extensions of Laplacians and their determinants.

Saghin, Radu, Generic properties of Lagrangian systems and conservative diffeomorphisms.

Yang, Zaiyong, Laminations and connecting orbits on lattice.

Zhu, Dianwen, Euler equations and steady supersonic flows.

University of Chicago (16)

MATHEMATICS

- Barakat, Aliaa*, On the moduli space of deformations of bihamiltonian hierarchies of hydrodynamic type.
- Cherkashin, Dmitriy*, Perception game.
- Dani, Pallavi*, Statistical properties of elements in infinite groups.
- Draganescu, Andrei*, Two investigations in numerical analysis: Monotonicity preserving finite element methods and multigrid methods for inverse parabolic problems.
- Duchin, Moon*, Geodesics track random walks in Teichmüller space.
- Fedorov, Roman*, Algebraic and Hamiltonian approaches to isostokes deformations.
- Leyenson, Maxim*, On some questions of the Brill-Noether theory for $K3$ surfaces.
- Ogilvie, David*, Isomorphisms of Hecke algebras and deformation rings in the function field case.
- Pereira, Rochelle*, Higher order cohomology operations and minimal atomicity.
- Spice, Loren*, Supercuspidal characters of SL_l over a p -adic field, l a prime.
- Toumpakari, Evelin*, On the abelian sandpile model.
- Winn, Brandy*, Traveling fronts in a reactive Boussinesq system: Bounds and stability.

STATISTICS

- Clifford, David*, The nature of spatial variation in crop yields.
- Min, Wanli*, Inferences on time series driven by dependent innovations.
- Sen, Rituparna*, Modeling the stock price process as a continuous time jump process.
- Tong, Liping*, Statistical inference for multi-color optical mapping data.

University of Illinois, Chicago (10)

MATHEMATICS, STATISTICS AND COMPUTER SCIENCE

- Booton, Barry*, Norm inequalities for certain classes of functions and their Fourier transforms.
- Chang, Li*, Statistical analysis of high frequency intraday security prices.
- Chen, Jian*, Growth rates with paths, non-commuting loops and Thurston's compactness theorem.
- Ding, Junfeng*, Efficient association ruling mining among infrequent items.
- Radin, Dale*, Unidimensional Zariski-type structures and applications to the model theory of compact complex spaces.
- Takata, Ken*, Listing algorithms for combinatorial objects and related combinatorial problems.
- Unlu, Fatih*, On explicit representations of the Grothendieck fundamental class.

- Wang, Yusong*, Computing dynamic output feedback laws with Pieri homotopies on a parallel computer.
- Yan, Xu*, Optimal designs in stability studies.
- Yao, Haishen*, Asymptotic analysis of the infinite server shortest queue problems.

University of Illinois, Urbana-Champaign (22)

MATHEMATICS

- Chan, Song Heng*, On cranks partitions, generalized Lambert series, and basic hypergeometric series.
- David, Murphy*, Equivariant embeddings of algebraic groups.
- Demeter, Ciprian*, Qualitative and quantitative analysis of weighted ergodic theorems.
- Galway, William Floyd*, Analytic computation of the prime-counting function.
- Giarlotta, Alfio*, Lexicographic products of linear orderings.
- Groisman, Pavel*, New family of constant mean curvature surfaces with non-coplanar ends.
- Hahn, Heekyoung*, Einstein series, analogues of the Roger-Ramanujan functions, and partitions identities.
- Jegdic, Katarina*, Analysis of spacetime discontinuous Galerkin method for systems of conservation laws.
- Kang, Jeong Hyun*, Coloring of metric spaces and $L(2, 1)$ -labeling of graphs.
- Kulosman, Hamid*, Ideals of linear type and c -sequences.
- Mileti, Joseph*, Partition relations and computability theory.
- Nakprasit, Kittikorn*, Coloring and packing problems for d -degenerate graph.
- Petracovič, Boris*, Analysis of a space-time discontinuous Galerkin method for elastodynamics.
- Petrenko, Bogdan*, Primitive elements in finite fields.
- Sano, Akira*, The geometry of finite lattice varieties over Witt vectors.
- Selvakumaran, T. V.*, Morita stable equivalence of certain algebras.
- Shebalov, Sergey*, Polyhedra study of mixed integer programs with variable upper bounds.
- Wong, Kittipat*, Intrinsic ultracontractivity and other properties of mixed barrier Brownian motion.
- Yesilyurt, Hamza*, Contributions to theory of Q -series and mock theta functions.

STATISTICS

- Georgescu, Constantin*, Finite population quantile estimators.
- Wei, Ying*, Longitudinal growth charts based on the semiparametric quantile regression.
- Xu, Xueli*, Computerized adaptive testing and equating methods with nonparametric IRT models.

INDIANA

Indiana University, Bloomington (12)

MATHEMATICS

- Carter, Nathan*, Logics that prove their own completeness.
- Cheskidov, Alexey*, The Navier-Stokes-alpha model and boundary-layer turbulence.
- Ellett, Andrew*, Portfolio management toward optimal consumption and terminal wealth.
- Gu, Wentao*, Fixed design regression for associated random fields.
- Himpel, Benjamin*, A splitting formula for spectral flow on closed 3-manifolds.
- Im, Bo-Hae*, The rank of elliptic curves over large fields.
- Kong, Maiying*, Nonparametric statistical techniques in bioassay.
- Kudzin, Matthew*, Cohomogeneity one manifolds of non-negative curvature.
- Martinez, Maricarmen*, Common sense reasoning via product state spaces.
- Mersch, John*, Equational logic of recursive program schemes.
- Qian, Lei*, Message dependence and formal verification of authentication protocols.
- Wen, Su-Chi*, Hyperbolic extensions of algebras with involution.

Purdue University (20)

MATHEMATICS

- Butske, William*, Computational aspects of the endomorphism ring of the Jacobian of a curve of genus two.
- Enoch, Ruth*, Formal power series solutions for Schroeder's equation in several complex variables.
- Glotov, Dmitry*, Current and vortices in the three-dimensional thin-film Ginzburg-Landau model of superconductivity.
- Gower, Jason*, Square form factorization.
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Louisiana State University (7)

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Johns Hopkins University (16)

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University of Mississippi (4)

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St. Louis University (1)

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University of Nebraska, Lincoln (3)

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NEW HAMPSHIRE

Dartmouth College (3)

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New Mexico State University, Las Cruces (2)

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Doliga, Stanislaw, Real algebraic geometry.

Glubokov, Andrey, Jet spaces of the quantum plane.

Justo, Dagoberto, High order mimetic methods and absorbing boundary conditions.

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NEW YORK

City University of New York, Graduate Center (8)

PROGRAM IN MATHEMATICS

Diop, Serigne, Non-Gaussian models of financial markets: Paths simulation via series representation.

Kahrobaei, Delaram, Residual solvability, generalized free products, finitely generated nilpotent groups, free groups, and one-relator groups.

La Luz, José, The Bousfield-Kan spectral sequence for Moravalk-theory.

Leibman, George, Consistency strengths of modified maximality principles.

Nouri, Fereydoun, Graph homology.

Pineiro, Jorge, Mahler formula for dynamical systems on p^n .

Ushakov, Alexander, Fundamental search problems in group theory.

Zucker, Marc, Studies in cryptological combinatorics.

Columbia University (20)

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Wong, Kam-Fai, Statistical analysis of current status data.

Wu, Songmei, Nonlinear modeling strategies for metabolism rate data in brain imaging studies.

Wu, Ya-Chi, Linear regression with incomplete dependent variable.

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Hedden, Matthew, Knot Floer homology and cabling.

McInroy, Adam, Orbifold mirror symmetry for complex tori.

Moser, Harriet, Proving a manifold to be hyperbolic once it has been approximated to be so.

Niccolai, John, Triple product L -functions.

Qiu, Yannan, Special cycles on Siegel 3-folds.

Sherman, Morgan, The infinitely near Borel-fixed points on the Hilbert scheme.

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Wambach, Eric, Integral representations on $U(2) \times U(3)$ and geometric applications.

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Hadjiladis, Olympia, Change-point direction of two-sided alternatives in the Brownian motion model and its connection to the gambler's ruin problem with relative wealth perception.

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Cornell University (18)

APPLIED MATHEMATICS

Grasso, Catherine, Partial order graphs for multiple sequence alignment.

Guzman, Johnny, Pointwise estimates for discontinuous Galerkin methods and for the standard finite method with numerical integration.

He, Changhong, Estimation of volatilities under a Merton's jump-diffusion model and an uncertain volatility model.

Henniger, Jay, Small portfolio selection for benchmark tracking and option hedging under basis risk.

Shontz, Suzanne, Numerical methods for problems with moving meshes.

Singer, Michael, Efficient time splitting methods for reacting flow calculations.

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Ciubotaru, Dan, Unitary representations of exceptional p -adic groups.

Cortissoz, Jean, On the Ricci flow in rotationally symmetric manifolds with boundary.

Francisco, Christopher, Hilbert functions and graded free resolutions.

Gabay, Yuval, Double jump inversions and strong minimal covers in the Turing degrees.

Greenberg, Noam, The role of true finiteness in the admissible recursively enumerable degrees.

Ku, Ja Eun, Least-squares methods for second-order elliptic partial differential equations.

Leykekhman, Dmitriy, Pointwise weighted error estimates for parabolic finite element equations.

Lin, Yi, Equivariant symplectic Hodge theory and strong Lefschetz manifolds.

Schwartz, Fernando, Scalar curvature problems on manifolds with boundary.

Zhou, Hilibin, Minimax estimation with thresholding and asymptotic equivalence theory for Gaussian variance regression.

Rensselaer Polytechnic Institute (6)

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Peng, Jufeng, Multiple robot coordination: A mathematical programming approach.

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Thorp Kusel, Elizabeth, New parabolic equation solutions for high frequency and elastic media problems.

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State University of New York, Albany (1)

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Kures, Osman, The Bergman projection and related integral operators on the unit ball in C^n .

State University of New York, Binghamton (4)

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Koban, Lori Jean, Two generations of biased graphs: Circuit signatures and modular triples of matroids and biased expansions of biased graphs.

Palmatier, Joshua, M -zeroids: Structure and categorical equivalences.

Saldarriaga, Omar Daria, Fusion algebras, symmetric polynomials, orbits of N -groups and rank level duality.

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State University of New York, Buffalo (9)

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Blanariu, Mihaela, Asymptotic analysis of patterns and islands in strained alloy films.

Cheptea, Dorin, A topological quantum field theory for the Le-Murakami-Ohtsuki invariant of three-dimensional manifolds.

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Georgescu, Catalin, The boundary map and the connecting set in Conley index theory.

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Kuppum, Srikanth, Edge polynomials, Newton and norm polygons of a family of hyperbolic manifolds.

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State University of New York, Stony Brook (20)

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Curry, Michael, Applications of stochastic methods for periodic scheduling.

Greene, Nataniel, Reconstructing piecewise smooth functions from their spectral data.

Kim, Jieun, Path analysis of the visual attention network using fMRI data.

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NORTH CAROLINA

Duke University (11)

INSTITUTE OF STATISTICS AND DECISION SCIENCES

Gunn, Laura, Bayesian order restricted methods with biomedical applications.

Rappold, Ana, Using expert knowledge when the data model is not known in modeling the mixed layer of the Atlantic Ocean.

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- Cain, John*, Issues in the one-dimensional dynamics of a paced cardiac fiber.
- Curto, Carina*, Matrix model superpotentials and Calabi-Yau spaces: An ADE classification.
- Feist, Andrew*, Two problems in delay differential equations.
- Fox, Daniel*, Second order families of coassociative 4-folds.
- Yang, Guoqiang*, Quantitative models for dorsal closure in drosophila embryos.
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- Cook, William*, Affine Lie algebras, vertex operator algebras and combinatorial identities.
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- Finkel, Daniel*, Global optimization with the DIRECT algorithm.
- Gibson, Nathan*, Terahertz-based electromagnetic interrogation techniques for damage detection.
- Hatch, Andrew*, Model development and control design for high speed atomic force microscopy.
- He, Taiping*, Reaction-diffusion systems with discontinuous reaction functions.
- Hillman, Rebecca*, Relationship between symmetric brace algebras and pre-Lie algebras.
- Jackson, Farrah*, Characterization of involutions of $SP(2N, K)$.
- Kyei, Yaw*, Numerical method and control theory.
- Levy, Rachel*, Partial differential equations of thin liquid films: Analysis and numerical simulation.
- Perry, John*, Combinatorial criteria for Gröbner bases.
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- Gosky, Ross*, Bayesian analysis and matching errors in closed population capture recapture models.
- Hwang, Sang Pil*, Dynamic time series analysis using logistic function.
- Li, Erning*, Estimation for generalized linear models when covariates are subject specific parameterized mixed models with longitudinal measurements.
- Lin, Jiang*, Topics in application of non-parametric smoothing.
- Lokhnygina, Yuliya*, Topics in design and analysis of clinical trials.
- Lu, Na*, Statistical issues in coherent risk management.
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- Remlinger, Katja*, Statistical design and analysis of high throughput screening data using pooling experiments and data mining techniques.
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- Wu, Yujun*, Controlling variable selection by the addition of pseudo-variables.

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- Ahn, Chaehyung*, Detecting linked changes in fast evolving genomes.
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- Capuano, George*, A joint latent autoregressive model for patient dropout and longitudinal health related quality of life subject to informative missingness.
- Deng, Shibing*, Some aspects on linear model analysis of microarray gene expression data.
- Gurka, Matthew*, The Box-Cox transformation in the general linear mixed model for longitudinal data.
- Jung, Inkyung*, Robust inference in unbalanced heteroscedastic one-way random effects models using rank-based methods.
- Lu, Bing*, Estimating correlation parameters in cluster intervention trials with binary responses using estimating equations.
- Neelon, Brian*, Bayesian order restricted inference.
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- Robbins, Tania*, Combining microarrays with QTL analysis.
- Schwartz, Todd*, A study of sample size recalculation with particular focus on active- and placebo-controlled non-inferiority trials.

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- Chang, Soo-Ah*, Factorizations in some special block monoids.
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- Guo, Xunxiang*, On frame wavelets.
- Herron, John*, Weighted conditional expectation operators on L^p space.
- Hill, David*, Time delayed dynamical systems and the Duffing equation.
- Hill, Jennifer*, An inventory optimization model with Markov-modulated commodity prices.
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- Jin, Xiaodong*, Contributions to kernel methods and estimation of extreme value index.
- Xiong, Huaiyu*, Nonparametric and semi-parametric functional coefficient instrumental variable models.

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Bowling Green State University (6)

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- Grinevitch, Oxana*, Student understanding of abstract algebra: A theoretical examination.
- Harrar, Solomon*, Linear models under non-normality.
- Kerns, (Gary) Jay*, Signed measures in exchangeability and infinite divisibility.
- Rolli, William*, Frames and operator decompositions in Hilbert spaces.
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- Beaird, Heather*, Putative DNRH agonist therapy and dementia: An application of medicare hospitalization claims data.
- Kasehagen, Laurin*, Duffy-negativity and vivax malaria epidemiology: A study of dual and multiple-record system estimation and patterns of association in Papua New Guinea.
- Mascha, Edward*, Assessing individual treatment effect heterogeneity for binary outcomes.

Nock, Nora, Development and application of DNA damage and DNA repair indices to prostate cancer.

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Stein, Catherine, Genetic and environmental influences on tuberculosis susceptibility.

Traore, Fatoumata, A conceptual model for understanding sexual risk among persons living with HIV/AIDS.

Zhu, Guohua, Ascertainment in two-phase sampling designs for segregation and linkage analysis.

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Hahn, Philip, Origination and propagation of reaction diffusion waves in three spatial dimensions.

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Kitska, David, Simultaneous inference for functional linear models.

Piryatinska, Alexandra, Inference for the Lévy models and their applications in medicine and statistical physics.

Snyder, Scott, Evaluation of an implantable medical device: Design and modeling of a three dimensional workspace.

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Ohio State University (15)

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Ghazaryan, Anna, Nonlinear convective instability of fronts: A case study.

Guloglu, Ahmet M., On low-lying zeros of automorphic L -functions.

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Liu, Xing, Rigorous exponential asymptotics for a nonlinear third order difference equation.

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Chen, Haiying, Ranked set sampling for binary and ordered categorical variables with applications in health survey data.

Duncan, Kristin, Case and covariate influence: Implications for model assessment.

Gibellato, Marilisa, Stochastic modeling of the sleep processes.

Pavlicova, Martina, Thresholding in fMRI images.

Sun, Junfeng, Stochastic models for compliance analysis and applications.

Wang, Tao, Statistical analysis of gene expression experiments.

Ohio University (4)

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Al-Hazmi, Husain, A study of CS and Σ -CS rings and modules.

Alsulami, Saud, On evolution in Banach spaces and commuting semigroups.

Castillo, Rene, Generalized non-autonomous Kato classes and nonlinear Bessel potentials.

Constantin, Elena, Optimization and flow invariance via high order tangent cones.

University of Akron (1)

THEORETICAL AND APPLIED MATHEMATICS

Kim, Shinuk, A numerical study of parameter identification in linear and nonlinear elastic and viscoelastic plates.

University of Cincinnati (4)

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Galstyan, Anahit, Existence and number of global solutions to model nonlinear partial differential equations.

Oh, Jiyeon, Error analysis of the exponential Euler method and the mathematical modeling of the retinal waves in neuroscience.

Zhao, Shuhong, Statistical inference on binomial proportions.

Zhou, Rong, Bayesian analysis of log-binomial models.

OKLAHOMA

Oklahoma State University-Stillwater (1)

STATISTICS

Bagour, Ali, Probability proportional to size sampling.

University of Oklahoma (4)

MATHEMATICS

Borovikova, Marina, Partial regularity of weak solutions of quasilinear elliptic systems and weak Harnack inequalities.

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Xu, Tao, Model-data synthesis in terrestrial ecosystem modeling: Inverse analysis and uncertainty analysis.

OREGON

Oregon State University (2)

STATISTICS

Amer, Safaa, Neural network imputation: A new fashion or a good tool.

Jia, Siwei, Optimization, conservation and valuation of contingent claims in economic resource management under uncertainty.

Portland State University (2)

MATHEMATICS AND STATISTICS

Fish, Daniel, Metriplectic systems.

Santoro, Emanuele, Thermodynamic metrics and the geometry of equilibrium surfaces.

University of Oregon (5)

MATHEMATICS

Harker, Hayden, Cohomology of a sub-Hopf algebra of a Steenrod algebra.

Loft, Brian, Connected components of the space of positive scalar curvature metrics on spheres.

Merchant, Eric, Structural properties of Hadamard designs.

Nordstrom, Hans, Associated primes over Ore extensions and generalized Weyl algebras.

Ruiz, Efren, A classification theorem for direct limits of extensions of circle algebras by purely infinite C^* -algebras.

PENNSYLVANIA

Carnegie Mellon University (14)

MATHEMATICAL SCIENCES

Baia, Margarida, Variational multiscale problems and applications to thin films.

Brown, Chad, Set comprehension in Church's type theory.

Janecek, Karel, Futures trading model with transaction costs.

Ojakian, Kerry, Combinatorics in bounded arithmetic.

Pankavich, Stephen, The Vlasov Poisson system with infinite mass and energy.

Petrelli, Luca, Variational principle for general diffusion problems.

Pirvu, Traian, Maximizing portfolios growth rate under risk constraints.

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Tudorascu, Adrian, Optimal mass transportation methods for gradient flows in the weak topology.
Winger, Aris, On pattern formation in a one dimensional viscoelastic system with numerical computation.

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Araneda, Anita, Statistical inference in mapping and localization for mobile robots.
Dunn, Michelle, Applying particle-filter and path-stack methods to detecting anomalies in network traffic volume.
Slavkovic, Aleksandra, Statistical disclosure limitation beyond the margins: Characterization of joint distributions for contingency tables.

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Moller, Trisha, t -Split interval orders.

Pennsylvania State University, University Park (18)

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Damjanovic, Danijela, Local rigidity of partially hyperbolic higher rank Abelian actions on the torus.
Gerenrot, Dmitry, Residue formulation of Chern character on smooth manifolds.
Handzy, Nestor, Experimental observations and mathematical description of micellar fluid flow.
Krat, Svetlana, Approximation problems in length geometry.
Lee, Young-Ju, Modelling and simulations of non-Newtonian fluid flows.
Raven, Jeffrey, An equivariant bivariant Chern character.
Saunders, Christopher, Floer homology for almost Hamiltonian isotopies.
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Sostarecz, Michael, Experiments and modeling in viscoelastic fluids: Dimpled drops and beaded filaments.
Ugarcovici, Ilie, Symbolic dynamics for geodesic flows, hyperbolic measures and periodic orbits.

STATISTICS

Antoniou, Efi, Nonparametric imputation and (mid)-rank test for mixed effects models with missing data.
Bai, Steven, Cluster analysis of high dimensional data and dimension reduction for regression.
Ding, Rui, Multiple response ridge analysis.
Kwanisai, Mike, Estimation in link-tracing designs with subsampling.
Wang, Haiyan, Testing in multifactor heteroscedastic anova and repeated measures design with large number of levels.

Wang, Shaoli, Dimension reduction in regression.
Yang, Ke, Using the Poisson kernel in model building and selection.
Zhan, Xiaojiang, Bayesian semiparametric inference based on ranks.

Temple University (8)

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Mammo, Behailu, A mean value theorem for discriminants of abelian extensions of a number field.
Nguyen, Truyen Van, On Monge-Ampère type equations arising in optimal transportation problems.
Tesemma, Mohammed Seid, Reflection groups and semigroup algebras in multiplicative invariant theory.
Wen, Xiangdong, Rigorous experimental mathematics applied to the Goulden-Jackson method, construction of symmetric chains and the Sprague-Grundy function.

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Cai, Gengqian, Further results on Simes test and Benjamin-Hochberg false discovery rate procedure.
Deng, Ling, Heterogeneous and space-dependence of substitution rates—an application of zero-inflated models GEE and composite likelihood methods.
Li, Li, Design and analysis of DNA microarray data—model validation and sensitivity analysis.
Zhang, Hongyan, A Cox proportional hazard model for monotonic severity marked failures.

University of Pennsylvania (14)

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Bana, Gergely, Soundness and completeness results for the formal model of symmetric encryption.
Barwick, Clark, (∞, n) -Cat as a closed model category.
Byun, Jungyeon, A generalization of Connes-Kreimer Hopf algebra.
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Lee, Dong Uk, p -Adic monodromy of the ordinary subscheme of Picard modular variety.
Maxim, Laurentiu, Alexander invariants of hypersurface complements.
Mehrotra, Sukhendu, Triangulated categories of singularities, matrix factorizations and LG-models.
Sabitova, Maria, Root numbers of Abelian varieties and representations of the Weil-Deligne group.
Tripp, James, Contact structures on open 3-manifolds.
Yap, Shirley, Prescribing curvature forms: Solvability and obstruction results.

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Greery, Robert Alan, Jr., Noncompliance, covariance adjustment, and matching in randomized controlled trials.
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Sang, Weilian, Empirical comparison of U.S. Census Bureau population estimates used in morality and population data system of the University of Pittsburgh, Department of Biostatistics.

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Cross, Wesley, Principal value volumes of p -adic rational polyhedra.
Domokos, Andras, On the regularity of p -harmonic functions in the Heisenberg group.
Dunca, Argus Adrian, Space averaged Navier-Stokes equations in the presence of walls.
Grigoryan, Vahan, Multimodal biometric analysis for monitoring of wellness.
Kaya, Songul, Numerical analysis of a variational multiscale method for turbulence.
Krisner, Ed, Multi-bump solutions of a one dimensional Wilson-Cowan type model.
Merdan, Huseyin, Renormalization group methods in applied mathematical problems.
Pahlevani, Faranak, Sensitivity analysis of eddy viscosity models.
Scott-Pomerantz, Colleen, The k -epsilon model.
 STATISTICS
Czanner, Gabriela, Applications of statistics in neuroscience.
Gogtas, Hakan, Improving coverage of rectangular confidence interval.
Jia, Gang, Use of simultaneous inference under order restriction, stepdown testing procedure and stage-wise sequential optimal design in clinical dose study.

Sengul, Tulay, The time varying autoregressive model with covariates to analyze longitudinal data with missing values.

Sun, Zhuoxin, Repeated measures mixture modeling with application to neuroscience.

RHODE ISLAND

Brown University (15)

APPLIED MATHEMATICS

Chen, Shanqin, The heterogeneous multiscale method based on the discontinuous Galerkin and finite volume schemes.

Chen, Ting-Li, On the statistics of natural images.

Curran, John, Adaptive learning among interacting agents: An analysis of the many-agent, long-term limit.

Gao, Yun, Statistical models in neural information processing.

Harrison, Matthew, Discovering compositional structure.

Sirisup, Sirod, Issues in low-dimensional modeling of unsteady flows: Convergence, asymptotic stability and reconstruction procedures.

Strain, Robert, Some applications of an energy method in collisional kinetic theory.

Xu, Jin, High Reynolds number simulation and drag reduction techniques.

Xu, Zhengfu, Anti-diffusive flux corrections for high order finite difference WENO schemes.

Zhang, Xiao, On large deviations approximations for occupancy models.

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Acquista, Karen, A generalization of class field theory using motivic complexes.

Jones, Rafe, Galois martingales and the hyperbolic subset of the p -adic Mandelbrot set.

Joyce, Michael, Rational points on the E_6 cubic surface.

Lauzon, Michael, Harmonic analysis for vector-valued functions with operator weights.

Wick, Brett, Analytic projections, the geometry of holomorphic vector bundles and applications to the corona problem.

University of Rhode Island (3)

MATHEMATICS

Chatterjee, Esha, Global behavior in rational difference equations.

Collins, Jarred, Moore-Greig designs.

Faubert, Glenn, Caterpillar tolerance representations of graphs.

SOUTH CAROLINA

Clemson University (4)

MATHEMATICAL SCIENCES

Hunt, Brian, Multiobjective programming with convex cones: Methodology and applications.

Limbupasiriporn, Jirapha, Partial permutation decoding for codes from designs and finite geometrics.

Limbupasiriporn, Prasit, Hidden subgroup problem in quantum computing.

Roop, John Paul, Variational solution of the fractional advection dispersion equation.

Medical University of South Carolina (1)

BIostatistics, BIOinformatics AND EPIDEMIOLOGY

Yoo, Wonsuk, Bayesian hierarchical change-point model for longitudinal biomarkers.

University of South Carolina, Columbia (9)

EPIDEMIOLOGY AND BIostatistics

Moran, Robert, Working and analyzing clinical data in a family practice.

Shoultz, Gerald, Sprawl, measures of sprawl and chronic obstructive pulmonary disease: A Bayesian spatial analysis.

Sutton, Shae, Modeling of spatially-referenced event data in a South Carolina population.

MATHEMATICS

Kidd, Travis, On the irreducibility of Laguerre polynomials of $L_m(m)(x)$.

Vatchev, Vesselin, Analysis of the intrinsic mode functions.

Zhao, Jie, Multigrid methods for fourth order problems.

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Hare, David, Simultaneous inference for ratios of linear combinations of general linear model parameters.

Han, Jun, Parametric latent class model for longitudinal markers and recurrent events.

Stocker, Russell, A general class of parametric models for recurrent event data.

TENNESSEE

University of Memphis (3)

MATHEMATICAL SCIENCES

Montagh, Balázs, Unavoidable substructures.

Schroeder, Jason, Estimation from response-biased incomplete data and supplementary information.

Zhong, Ping, Stochastic modeling of HIV pathogenesis under therapy and vaccine.

University of Tennessee, Knoxville (2)

MATHEMATICS

Iskra, John, Decidability in algebraic geometry.

Vasilevska, Violeta, Fibrator properties of PL manifolds.

Vanderbilt University (1)

MATHEMATICS

Sonkin, Dmitriy, On groups of large exponents n and n -periodic products.

TEXAS

Baylor University (3)

MATHEMATICS

Da Cunha, Jeffrey, Lyapunov stability and Floquet theory for nonautonomous linear dynamic systems on time scales.

Karna, Basant K., Comparison of smallest eigenvalues and extremal points.

STATISTICAL SCIENCE

Clark, Deeanna Antosh, Statistical issues concerning modeling and evaluating student achievement and school accountability.

Rice University (3)

MATHEMATICS

Meng, Zheng, Geometric variational problems with cross-sectional constraints.

Trout, Aaron, Spaces with positive combinatorial curvature.

Zhang, Jun, Geometric compactification of moduli space of cubic surfaces and Kirwan blowup.

Texas A&M University (24)

MATHEMATICS

Feng, Zhaosheng, Some results on the wave equation with Van der Pol type nonlinear boundary condition and the Burgers-Korteweg-de Vries equation.

Hamid, Sami, On the structure of a class of operators.

Hoang, Luan, Asymptotic expansions of the regular solutions to the 3D Navier-Stokes equations and applications to the analysis of the helicity.

Kolev, Tzanio, Dual least-squares methods for computational electromagnetics.

Ryan, John, Global existence of reaction diffusion equations over multiple domains.

Wang, Yanqiu, Preconditioning for the mixed formulation of linear plane elasticity.

Yao, Xudong, A min-max method for finding multiple critical points in Banach space.

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- Apanasovich, Tatiyana*, Testing for spatial correlation and semiparametric spatial modeling of binary outcomes with application in aberrant crypt foci in colon carcinogenesis experiments.
- Bae, Kyoung-hwa*, Bayesian model based approaches with MCMC computation to some bioinformatics problems.
- Chang, Ilsung*, Bayesian inference on mixture models and their applications.
- Dunlap, Mickey*, Using the bootstrap to analyze variable stars data.
- Hu, Zonghui*, Semiparametric functional data analysis for longitudinal/clustered data: Theory and application.
- Ju, Hyunsu*, Topics in analyzing longitudinal data.
- Jung, Jeesun*, High resolution linkage and association study of quantitative trait loci.
- Kim, Hyun Sun*, Topics in ordinal logistic regression and its applications.
- Ko, Kyungduk*, Bayesian wavelet approaches for parameter estimation and change point detection in long memory processes.
- Lee, Ho-Jin*, Functional data analysis classification and regression.
- Leyk Williams, Malgorzata (Gosia)*, FLARE assay images in colon carcinogenesis.
- Liu, Li-Yu Daisy*, Coefficient of intrinsic dependence a new measure of association.
- Pokta, Suriani*, Bayesian model selection using exact and approximated posterior probabilities with applications to star data.
- Ryu, Duchwan*, Bayesian regression analysis with longitudinal measurements.
- Song, Joon Jin*, Bayesian multivariate spatial models and their applications.
- Song, Juhee*, Bootstrapping in a high dimensional but very low sample size problem.
- Spinka Holan, Christine*, Gene environment interactions in genetic epidemiology.

Texas Tech University (5)

MATHEMATICS AND STATISTICS

- Franklin, Scott*, A computational three-field methodology for non-conforming finite elements over partitioned domains.
- Khoujmane, Ali*, Improving regression function estimators.
- Murphy, Eric*, Complex variables and circle packing.
- Swim, Edward*, Non-conforming finite element methods for fluid-structure interaction.
- Willis, Nicholas*, Singular points of real sextic curves.

University of Houston (4)

MATHEMATICS

- Boiarkine, Oleg*, Mixed hybrid finite element methods for diffusion equations on nonmatching meshes.
- Jacobs, Philip*, Symmetric attractors with non-trivial isotropy.
- Martynenko, Andrey*, Numerical methods for advection-diffusion equations on locally refined meshes.
- Pepper, Ryan*, Binding independence.

University of North Texas (2)

MATHEMATICS

- Coiculescu, Ion*, Dynamics, thermodynamic formalism and perturbations of transcendental entire functions of finite singular type.
- Ghenciv, Petre*, Hamiltonian cycles in subset and subspace graphs.

University of Texas, Arlington (2)

MATHEMATICS

- Dimitrov, Dobromir*, Nonstandard finite difference methods for dynamical systems with applications in mathematical biology.
- Zhu, Xiao Ping*, Preliminary test and shrinkage estimators for the mean of bivariate normal distribution.

University of Texas, Austin (13)

MATHEMATICS

- Baker, Kenneth*, Knots on once-punctured torus fibers.
- Condon, John*, Mahler measure evaluations in terms of polylogarithms.
- Fukshansky, Leonid*, Algebraic points of small height with additional arithmetic conditions.
- Kelliher, James*, The vanishing viscosity limit for incompressible fluids in two dimensions.
- LaMar, M. Drew*, Human acoustics: From vocal chords to inner ear.
- Lehr, Heather*, Analysis of a Darcy-Stokes system modeling fluid flow in vuggy porous media.
- Parker, Adam*, An elementary construction of $M_{0,0}(\mathbb{P}^r, d)$.
- Petersen, Kathleen*, One-cusped congruence subgroups of $PSL_2(\mathcal{O}_K)$.
- Portillo-Bobadilla, Francisco*, Computations on an equation of the BSD type.
- Silvestre, Luis*, Regularity of the obstacle problem for a fractional power of the Laplace operator.
- Sinclair, Christopher*, Multiplicative distance functions.
- Stoikov, Sasha*, Optimal strategies in incomplete financial markets.
- Teixeira, Eduardo*, Regularity of free boundary in variational problems.

University of Texas, Dallas (5)

MATHEMATICAL SCIENCES

- Banks, Troy*, Invariant kernels and their orthogonal polynomials.
- Barakat, Moe*, Polynomials in several non-commuting variables and some of their asymptotic properties.
- Costa, Fred*, Structured matrix calculations via quaternions.
- Navarra-Madsen, Junalyn*, Colorability, tangles and quandles.
- Odushkin, Taras*, Mathematical models of atomic scale deformations and spatial nonuniformities in solid bodies.

UTAH

Brigham Young University (1)

MATHEMATICS

- Brown, Sarah*, A numerical scheme for Mullins-Sekerka flow in 3-space dimensions.

University of Utah (4)

MATHEMATICS

- Cavaleri, Renzo*, A topological quantum field theory of intersection numbers for moduli spaces of admissible covers.
- Folias, Stefanos*, Stimulus-induced waves and breathers in synaptically-coupled neural networks.
- Le, An*, Nonlinear eigenvalue problems.
- Sato, Fumitoshi*, Relations in tanto logical rings by localization.

VIRGINIA

Old Dominion University (2)

MATHEMATICS AND STATISTICS

- Mav, Deepak*, Statistical analysis of longitudinal and multivariate discrete data.
- Walker, Steven*, The straggling Green's function method for ion beam transport.

University of Virginia (6)

MATHEMATICS

- Helmstutter, Randall*, Quillen equivalent categories of functors.
- Richardson, Pamela*, Centroids of quadratic Jordan superalgebras.
- Roche, Jennifer*, Radices and matrix rings.

STATISTICS

- Chan, Kuo-Chen*, Proposal of a new semiparametric method that does not rely on the assumption of normality in the transformed data and is suitable for non-normally distributed transformed data.

Guise, Thomas, *D*-optimal biased coins for clinical trials.

Soukup, Matthew, Evaluating classification performance.

Virginia Polytechnic Institute and State University (9)

MATHEMATICS

Brunnhofner, Harald, Forced capillary-gravity waves in a 2D rectangular basin.

Chinyoka, Tirivanhu, Numerical simulation of stratified flows and droplet deformation in 2D shear flow of Newtonian and viscoelastic fluids.

Cline, Danny, On the computation of invariants in non-normal, non-pure cubic fields and in their normal closures.

Colon-Reyes, Omar, Monomials dynamical systems over finite fields.

Krueger, Denise, Stabilized finite element methods for feedback control of convection diffusion equations.

Pierson, Mark, Theory and application of a class of abstract differential-algebraic equations.

Rothstein, Ivan, Semiclassical scattering for two and three body problems.

Singler, John, Sensitivity analysis of partial differential equations with applications to fluid flow.

Vugrin, Kay, On the effects of noise on parameter identification optimization problems.

WASHINGTON

University of Washington (15)

APPLIED MATHEMATICS

Farnum, Edward, Stability and dynamics of solitary waves in nonlinear optical materials.

Hewitt, Sarah, Dynamics and stability of periodic spatial patterns in the optical parametric oscillator.

Komuro, Rie, Multi-objective evolutionary algorithms for ecological process methods.

Medlock, Jan, Integro-differential-equation models in ecology and epidemiology.

Pelanti, Marica, Wave propagation algorithms for multicomponent compression flow with applications to volcanic jets.

Peters, Matthew, Moist convection and the large scale tropical calculation.

Williams, David, Solving singular perturbation problems: An amplitude equation approach.

MATHEMATICS

Blair, Matthew, Strichartz estimates for wave equations with coefficients of Sobolev regularity.

Chebolu, Sunil, Refinements of chromatic towers and Krull-Schmidt decompositions in stable homotopy categories.

Hanusa, Christopher, A Gessel-Viennot-type method for cycle systems with applications to Aztec pillows.

Meyer, Daniel, Melting snowballs.

Nichifor, Alexandra, Iwasawa theory for elliptic curves with cyclic isogenies.

Skokan, Michael, Regularity of ghosts of geodesic X-ray transform.

Swanson, Jason, Topics in stochastic analysis.

STATISTICS

Gottardo, Raphael, Robust Bayesian analysis of gene expression microarray data.

Washington State University (5)

MATHEMATICS

Edmeade, Dean, Nonlinear stability analysis of hexagonal optical pattern formation in an atomic sodium vapor ring cavity.

Goff, Matthew, Multivariate discrete phase-type distributions.

Miller, James, Exon and intron detection in human genomic DNA.

Nag, Parthasarathi, Energy decay estimates for certain class of nonlinear systems arising in models of power systems.

Sasaki, Takashi, Maxwell's equations with temperature effect.

WEST VIRGINIA

West Virginia University (2)

MATHEMATICS

Martinez-Montejano, Jorge, Results on hyperspaces.

Niu, Jianbing, Graph minor.

WISCONSIN

Marquette University (1)

MATHEMATICS, STATISTICS AND COMPUTER SCIENCE

Luo, Jinghui, Construction and analysis of airway water clearance models.

Medical College of Wisconsin (1)

BIOSTATISTICS

Wong, Hong, Inference for the shared power variance function frailty model and correlated gamma frailty model.

University of Wisconsin, Madison (10)

STATISTICS

Barrios, Ernesto, Topics on engineering statistics.

Cheng, Bin, Some hypothesis testing results for two-way linear models in clinical trials.

Dahl, David, Conjugate Dirichlet process mixture models: Efficient sampling, gene expression and clustering.

Hong, Quan, A pseudo empirical likelihood approach to nonignorable nonresponse.

Jin, Chunfang, Contributions to the design and analysis of quantitative trait loci experiments.

Leng, Chenlei, Some problems in model selection.

Ma, Shuangge, Penalized *M*-estimation for partly linear transformation models with current status data.

Song, Yang, Two-way latent variable clustering.

Yuan, Ming, Automatic smoothing and variable selection.

Yuan, Zhilong, Designs for phase I cancer trials: Incorporation of grade information and multiple risk group studies.

University of Wisconsin, Milwaukee (2)

MATHEMATICAL SCIENCES

Bartl, Michael, On a hyper-Hilbert transform and singular integrals.

Yousuf, Muhammad, Smoothing schemes for inhomogenous linear and semilinear parabolic problems with nonsmooth data.

WYOMING

University of Wyoming (4)

MATHEMATICS

Christian, Justin, Three problems in combinatorial matrix theory.

Kim, In-Jae, Spectral properties of combinatorial classes.

STATISTICS

El-Houbi, Ashraf, Methods for resource selection studies using correlated data.

Greenwood, Mark, Functional data analysis for glaciated valley profile analysis.

Doctoral Degrees Conferred 2004–2005

Supplementary List

The following list supplements the list of thesis titles published in the February 2006 *Notices*, pages 230–45.

ALABAMA

University of Alabama, Huntsville

(2)

MATHEMATICAL SCIENCES

Park, Thomas, Age structure in epidemic models of vector-borne infections.

Wang, Yan, Acquisition numbers and completion-acquisition numbers.

CALIFORNIA

University of California, Irvine (8)

MATHEMATICS

Koslover, Deborah, Quasiperiodic Jacobi matrices of magnetic origin.

Liu, Chiung-ju, Banado-Futaki invariants on hypersurfaces and Tian-Yau-Zelditch expansions.

Nakamura, Remi, MLE of parameters in the drifted Brownian motion and its error.

Rooze, Matthew, The use of unbounded activation functions in neural networks and neural network approaches to nuisance parameter problems.

Sadovsky, Alexander, A biodynamical study of epidermal wound repair in embryos.

Schulteis, Melinda, Continuity of the Lyapunov exponent for quasiperiodic Jacobi matrices.

Sinek, John, Integrated multi-scale modeling of therapeutics delivery to cancerous lesions.

Xiaoming, Zheng, Adaptive finite-element/level-set methods of free boundary problems: applications to multiphase flows and reaction-diffusion models of tumor growth.

University of California, Santa Cruz

(3)

MATHEMATICS

Bass, Jamey, A Calabi-Yau analogue of the Dedekind Eta function.

Raske, David, Q-curvature on closed Riemannian manifolds of dimension greater than four.

Moura, Francisco, Three novel clustering algorithms and their application to microarray encephalogram data.

Stanford University (7)

MATHEMATICS

Adams, Tarn, Flat chains in Banach spaces.

Godin, Veronique, A category of bordered fat graphs and the mapping class group of a bordered surface.

Grueneberg, Michel, The Yamabe flow on three-manifolds.

Kim, Byoung-Du, The parity conjecture and algebraic functional equations for elliptic curves at primes with supersingular reduction.

Lee, Dan Archibald, Connected sums of special Lagrangian submanifolds.

Shi, Danzhu, Capillary surfaces at a re-entrant corner.

Zhu, Ke, Degeneration of the moduli space of J-holomorphic discs and Legendrian contact homology.

CONNECTICUT

Yale University (7)

MATHEMATICS

Brenner, Eliot Philip, Grenier Domains for arithmetic groups and associated tilings.

Ershov, Mikhail V., On finite presentability of some pro-p groups on related questions

Kim, Sangjib, Standard monomial theory for flag algebras.

Salmasian, Hadi, A new notion of rank for unitary representation based on Kirillov's orbit method.

Samuels, Beth Sharon, Ramanujan complexes, their non-uniform quotients, and isospectrality.

Schul, Raanan, Subsets of rectifiable curves in Hilbert space and the analyst's TSP.

MASSACHUSETTS

Harvard University (8)

MATHEMATICS

Green, Peter, Geometricity of local p -adic representations.

Grigorov, Grigor, Kato's Euler system and the main conjecture.

Kaplan, Jonathan, Morphlets; a multiscale representation for diffeomorphisms.

Khosla, Deepak, Moduli spaces of curves with linear series and the slope conjecture.

Lef, Edward, A modular non-rigid Calabi-Yau threefold.

Mast, Jerrel, Pseudoholomorphic punctured spheres in the symplectization of a quotient.

Mohta, Vivek, Applications of Chiral perturbation theory.

Neel, Robert, The heat kernel at the cut locus.

MICHIGAN

Western Michigan University (5)

MATHEMATICS

Chaiyakarn, Archara, Structure preserving algorithms for computing the symplectic singular value decomposition.

Gera, Ralucca M., Stratification and domination in graphs and digraphs.

Noh, Jihwa, An investigation of secondary teachers' knowledge of rate of change in the context of teaching a standard-based curriculum.

Pacheenburawana, Pariwatana, Global optimality conditions in mathematical programming and optimal control.

Shafer, Kathryn, Two high school teachers' initial use of geometer's sketchpad: Issues of implementation.

MINNESOTA

University of Minnesota, Minneapolis (10)

MATHEMATICS

Alexandrov, Oleg, Wave Propagation in optical fibers analysis and optimization.

Cho, Sungwon, Boundary behavior of solutions to second order elliptic and parabolic equation.

Erbán, Radek, From individual to collective behavior in biological systems.

Galbraith, Michael, Geometric optics, convex functions, Carleman estimates and interfaces in the boundary control of the wave equation.

Hall, John, Combinatorial deformations of the full transformation semigroup.

Han, Young Ae, An efficient solver for problems of scattering.

Kang, Minchul, Temporal and spatial aspects of calcium dynamics in astrocytes.

Tarfulea, Nicolae, Constraint preserving boundary conditions for hyperbolic formulations of Einstein's equations.

Yenikaya, Bayram, Adaptive methods for Hamilton-Jacobi equations.

Zhang, Jian, Scattering problems in inhomogeneous scalar wave equation.

MISSOURI

University of Missouri, Columbia (6)

MATHEMATICS

Batchenko, Volodymyr, On the spectra of Schrödinger and Jacobi operations with complex-valued quasi-periodic algebra-geometric coefficients.

Bilyk, Dmytro, Distributional estimates for multilinear operators.

Cramer, David, Fredholm determinants and the Evans function.

Honzik, Petr, Maximal operators associated with Fourier multipliers.

Luo, Shangzhen, Filtering of hidden weak Markov chain and its application to finance.

Mayboroda, Svitlana, The Poisson problem in Lipschitz domains.

NEW JERSEY

Rutgers University, Graduate School (6)

STATISTICS

Ganning, Kenneth, An examination of the mean and quantiles from a relational system with a fixed just unnoticeable difference representation.

Grothendieck, John, Tracking changes in language.

Heath, Susan, A new model for wireless telephony.

Lakshminarasimhan, Ramprasath, Statistical options-crash resistant financial contracts based on robust location estimators.

Wang, Hongwei, Selected topics in longitudinal data analysis and modeling.

Xia, Qi, Exact methods applied to group sequential and other stratified comparative Poisson designs.

NEW YORK

Courant Institute, New York University (14)

MATHEMATICS

Apfaltrer, Felix, Population density methods in 2 spatial dimensions and application to neural networks with realistic synaptic kinetics.

Siefring Richard, Intersection theory of finite energy surfaces.

Eng, David, Scaling limits of random Schrodinger equations.

Feng, Fan-Fu, On the totally asymptotic zero range process.

Kobre, Elisha, Rates of diffusion in dynamical systems with random groups.

Rottenstreich, Sivan, Error bounds for the weak coupling Schrodinger equation.

Sun, Rongfeng, Convergence of coalescing nonsimple random walks to the Brownian web.

Wendl, Chris, Finite energy foliations and surgery on transverse links.

Cascini, Paolo, On the cotangent bundle of a projective variety.

Ko, Yueh Joy, Partially regular and singular solutions to the Landau-Lifshits (Gilbert) equations.

McGahagan, Helena, Some existence and uniqueness results for Schrodinger maps and Landau-Lifshitz equations.

Oliveira, Roberto, Preferential attachment.

Zygouras, Nikolaos, Limit Theorems: for a periodically or randomly driven semilinear equation.

Papazoglu-Statescu, Oana, Maximizing the expected utility of final time wealth with little trading.

Polytechnic University (1)

MATHEMATICS

Pistoia, Marco, A unified mathematical model for stack- and role-based authorization systems.

Syracuse University (1)

MATHEMATICS

John, Thomas, Selection procedures for lognormal populations.

TEXAS

Rice University (6)

COMPUTATIONAL AND APPLIED MATHEMATICS

Castillo, Zenaida, A new algorithm for continuation and bifurcation analysis of large scale free surface flows.

Nguyen, Hoang, Domain decomposition methods for linear-quadratic elliptic optimal control problems.

Padula, Anthony, Software design for simulation driven optimization.,

Teng, Cong, Model reduction of second linear dynamical systems.

Vincent-Finely, Rachel, A reduced basis method for molecular dynamics simulation.

Wrightman, Jennifer, Approximation and computation of the solution to the magneto-ionosphere coupling equation via mixed formulation.

Stefansson, Narfi, The structure of sparse representations of images using tight frames.

El-Guindy, Ahmad, Weierstrass point on modular curves.

Halfpap, Jennifer, Contributions to the theory of the holomorphic extension of CR functions.

Laghi, Norberto, A topics in the regularity theory of fourier integral operators.

Southern Methodist University (4)

STATISTICAL SCIENCE

Carmack, Patrick, Recursive partitioning in spatially correlated data.

Liu, Yushan, On estimation of the number of multinomial cells from cluster sampling.

Wang, Zhu, The application of the Kalman filter to nonstationary time series chirp process through exponential transformation.

Shen, Shuyi, Minimum L_2 estimation for Poisson mixtures.

WASHINGTON

University of Washington(6)

BIOSTATISTICS

Bergemann, TracyLee, Image analysis and signal extraction from cDNA microarrays.

Buzkova, Petra, Marginal regression analysis of longitudinal data with irregular, biased sampling.

Chen, Lu, Semiparametric analysis of failure time data from case-control family studies on candidate genes.

Haneuse, Sebastien, Ecological studies using supplemental case-control data.

Liu, Hao, Semiparametric marginal mean models for multivariate counting processes.

Zhang, Zheng, Semiparametric least-squares analysis of the receiver operating characteristic curve.

WISCONSIN

University of Wisconsin, Madison

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MATHEMATICS

Benesh, Bret, Counting generators in finite groups that are generated by two subgroups of prime power order.

Taylor, Paul, Bochner-Riesz means with respect to a rough distance function.

Chatterjee, Rohit, On class polynomials and supersingular j -invariants.

Cossey, James, Generalizations of the Fong Swan Theorem.

Sutherland, Jamie, Values in university mathematics placement practice.