

# Doctoral Degrees Conferred 2005–2006

## Supplementary List

The following list supplements the list of thesis titles published in the February 2007 *Notices*, pages 277–97.

### CALIFORNIA

#### University of California, Davis (4)

##### STATISTICS

*Kerr, Joshua*, Signal extraction for seismic array data via partially linear least-squares.

*Wu, Ping-Shi*, Time-dynamic density estimation and functional discrimination for high-dimensional data.

*Zhang, Ying*, Time-varying functional regression models for time-to-event.

#### University of California, Irvine (4)

##### MATHEMATICS

*Akhmedov, Anar*, Smooth Structures on 4-manifolds with small Euler characteristics.

*Beyaz, Ahmet*, A new construction of spin smooth 6-manifolds.

*Haessig, Douglas*, On the symmetric power of the P-adic D-airy family.

*Zhao, Rui*, Computational studies of morphogen gradients.

#### University of California, Riverside (2)

##### STATISTICS

*Kwon, Soonil*, Spatial discrete choice models for multinomial responses.

*Zainal, Mohammad*, Skew-normal distribution with a cauchy skewing function.

### IOWA

#### Iowa State University (4)

##### MATHEMATICS

*Alm, Jeremy*, Weak representation theory in the calculus of relations.

*Kim, Joohyung*, Classification of small class association schemes coming from certain combinatorial objects.

*Meyer, Kristen*, A new message authentication code based on the non-associativity of quasigroups.

*Rajaram, Rajeev*, Exact boundary controllability results for sandwich beam systems.

### KENTUCKY

#### University of Kentucky (4)

##### STATISTICS

*Bush, Heather*, Khatri-Rao products and conditions for the uniqueness of PARAFAC solutions for  $1 \times J \times K$  arrays.

*Chen, Min*, Some contributions to the empirical likelihood method.

*Tarima, Sergey*, Consistency and generalization error bound of feed-forward neural network trained with smoothing regularizer.

*Liu, Chengan*, Some sequential and two-stage procedures for selecting the best of treatments in clinical trials.

### MARYLAND

#### University of Maryland, Baltimore County (6)

##### MATHEMATICS AND STATISTICS

*Bebu, Ionut*, Some statistical and probabilistic problems in Markov chains.

*Gavrea, Bogdan*, Simulation of rigid body system with joints, contact and friction.

*Li, Cao*, The assessment of multivariate bioequivalence.

*Liu, Guohui*, Sequential designs for logistic phase-I clinical trials.

*Wu, Yanping*, Topics in univariate bioequivalence testing.

*Zhang, Lanju*, Response-adaptive randomization in clinical trials with continuous and survival time outcomes.

### MASSACHUSETTS

#### Tufts University (1)

##### MATHEMATICS

*Finn, Lucas*, A variational approach to vortex core identification.

### MICHIGAN

#### Western Michigan University (2)

##### STATISTICS

*Ratanaruamkarn, Sauwanit*, New estimates of a circular median.

*Scherzer, Rebecca*, Testing procedures for group sequential clinical trials with multiple survival endpoints.

### NEW JERSEY

#### Princeton University (8)

##### PROGRAM IN APPLIED COMPUTATIONAL MATHEMATICS

*Anthoine, Sandrine*, Different wavelet-based approaches for the separation of noisy and blurred mixtures of components. Application to Astrophysical data.

*Frierson, Dargan*, Studies of the moist general circulation with a simplified moist GCM.

*Gerber, Edwin*, A dynamical and statistical understanding of the North Atlantic oscillation and annual modes.

*Golden, Cliona*, Spatio-temporal methods in the analysis of fMRI data in neuroscience.

*Leslie, Nandi*, Spatial stochastic models for landscape degrading and deforestation in Bolivia and Brazil.

*Rustamov, Raif*, On Heegard Floer homology of three-manifolds.

*Sharp, Richard*, Computational methods inspired by chemistry: multiscale modeling and mechanics of control.

*Zou, Jing*, Sublinear algorithms for the Fourier transform of signals with very few Fourier modes: theory, implementations, and applications.

## NEW YORK

### Cornell University (2)

#### BIOMETRICS UNIT

*Denogean, Lisa Renee*, Improved approximations of the density functions of estimators in population genetics.

*Long, Yu*, Bayesian Analysis of Levy processes with financial applications.

## OHIO

### Case Western Reserve University (6)

#### EPIDEMIOLOGY AND BIOSTATISTICS

*Campbell, Robert*, Burden of disease amongst Carolina lupis patients: economic, humanistic, and clinical factors.

*Davidson, Carrie*, Efficiency, quality and costs in Ohio nursing homes.

*Diggs, Jessica*, The impact of medicaid outreach initiatives on the health and healthcare access of children in Ohio.

*Mascha, Edward*, Assessing individual treatment effect heterogeneity for binary outcomes.

*Schumacher, Fredrick Ray*, Relation between selenoprotein gene, selenium, and prostate cancer.

*Wang, Tao*, Extensions of Haseman-Elstron regression for linkage analysis.

## SOUTH CAROLINA

### University of South Carolina (3)

#### STATISTICS

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

*Parody, Robert*, Simultaneous inference on the improvement in response surfaces.

*Vera, Francisco*, General convex stochastic orderings and related martingale-type structures.

## VIRGINIA

### Virgina Tech (8)

#### STATISTICS

*Chen, Younan*, Bayesian hierarchical modeling on dual response surfaces.

*Duan, Yuyan*, A modified Bayesian power prior approach with applications in water quality evaluation.

*Eisenbies, Penelop*, Bayesian hierarchical methods and use of ecological thresholds and changepoints for habitat selection models.

*Jensen, Willis*, Profile monitoring for mixed model data.

*Modarres-Mousavi, Shabnam*, Monitoring Markov dependent binary observations with a log-likelihood ratio base CUSUM control chart.

*Sego, Landon*, Applications of control charts in medicine and epidemiology.

*Yan, Mingjin*, Methods of determining the number of clusters in a data set and a new clustering criterion.

*Zhong, Xin*, Efficient sampling plans for control charts when monitoring an autocorrelated process.

## WISCONSIN

### University of Wisconsin, Madison (9)

#### STATISTICS

*Lu, Yuefeng*, Contributions to functional data analysis with biological applications.

*Monuz, Alendro*, On approximate p-values for time series outlier detection.

*Peng, Limin*, Contributions to semi-completing risks data.

*Song, Qinghua*, Contributions to regression and classification tree methods.

*Wang, Lin*, Imputation methods for non-monotone non-ignorable missing data in longitudinal studies.

*Xie, Xianhong*, Smoothing in magnetic resource image analysis and a hybrid loss for support vector machine.

*Yang, Hyuna*, Model-based clustering of genomic observations: generalizing the instability selection network model.

*Yan, Ping*, Bayesian cluster modeling for space-time disease counts.

*Yue, Wei*, Multi-resolution tree-structured spatial models.

### University of Wisconsin, Milwaukee

(3)

#### MATHEMATICAL SCIENCES

*Liu, Zhiyuan*, Vortices in deformation background flow-A sensitivity source of the atmosphere.