

March 2011

CONTENTS

- 1 **RSS Guy Medals**
- 2 **Members' News:** Vincenzo Capasso; **Tweedie Award:** Hui Zou
- 3 **Medallion lecture:** Heping Zhang
- 4 **Rick's Ramblings:** Re: Reading the Classics
- 5 **IMS Collections volume 7**
- 6 **Using statistics to fight infection?**
- 7–11 **Meeting reports:** Dhaka University; MCMSki III; ICM
- 12 **Statistical societies: past and future**
- 13 **Statistical Encyclopedia nominated for Nobel Peace Prize; "Mathematics on Planet Earth" initiative**
- 14 **Terence's Stuff:** Books, now and then
- 15 **IMS meetings**
- 19 **Other meetings**
- 22 **Employment Opportunities**
- 23 **International Calendar of Statistical Events**
- 27 **Information for Advertisers**

RSS Guy Medals honor IMS Fellows

The Royal Statistical Society (RSS) is the United Kingdom's only professional and learned society devoted to the interests of statistics and statisticians. This year's prestigious Guy Medals are awarded to two IMS Fellows and an IMS member.

Guy Medals in gold, silver and bronze

Named after the distinguished statistician William Guy FRS, the Guy Medals are intended to encourage the cultivation of statistics in their scientific aspects and promote the application of numbers to the solution of important problems in all the relations of life in which the numerical method can be employed, with a view to determining the laws that regulate them. There are three Guy medals: in gold, silver and bronze. The silver and bronze medals are awarded annually, while the gold medal is normally awarded every three years.

The Guy Medal in Gold is awarded to **Calyampudi Radhakrishna Rao** for his fundamental contributions to statistical theory and methodology, including unbiased estimation, variance reduction by sufficiency, efficiency of estimators, information geometry, as well as the application of matrix theory in linear statistical inference.

The Guy Medal in Silver is awarded to IMS President **Peter G. Hall**, for his papers "Empirical Functionals and Efficient Smoothing Parameter Selection" (*JRSS B*, 54 (1992), 475–530, with Iain Johnstone), read to the Society in 1991, and "Fractal Analysis of Surface Roughness by using Spatial Data" (*JRSS B*, 61 (1999), 3–37, with S. Davies), read to the Society in 1998; and taking account of his many important contributions to the theory and practice of statistics, in areas including nonparametric density estimation, regression and classification, extreme value theory, deconvolution and measurement error problems, nonparametric inference for mixture distributions, functional data analysis, empirical likelihood and the bootstrap.

The Guy Medal in Bronze goes to **Nicolai Meinshausen** for his innovative work on theoretical, methodological and computational aspects of high-dimensional data analysis, including his paper read before the Society, "Stability Selection" (*JRSS B*, 72 (2010), 417–473, with Peter Bühlmann), and for his important work as an applied researcher, for example in the study of climate change.



C.R. Rao



Peter Hall



Nicolai Meinshausen

Contact information

IMS Bulletin Editor: Dimitris Politis

Assistant Editor: Tati Howell

Contributing Editors: Peter Bickel, Anirban DasGupta, Rick Durrett, Nicole Lazar, Terry Speed

To contact the IMS Bulletin:

✉ IMS Bulletin
2 Lampern View, Uley, Dursley
GL11 5TD
UK

e bulletin@imstat.org

To contact the IMS regarding your dues, membership, subscriptions, orders or change of address:

✉ IMS Dues and Subscriptions Office
9650 Rockville Pike, Suite L3503A
Bethesda, MD 20814-3998
USA

t 877-557-4674 [toll-free in USA]

t +1 216 295 5661 [international]

f +1 301 634 7099

e staff@imstat.org

To contact the IMS regarding any other matter, including advertising, copyright permission, offprint orders, copyright transfer, societal matters, meetings, fellows nominations and content of publications:

✉ Executive Director, Elyse Gustafson
IMS Business Office
PO Box 22718, Beachwood
OH 44122, USA

t 877-557-4674 [toll-free in USA]

t +1 216 295 5661 [international]

f +1 216 295 5661

e erg@imstat.org

Executive Committee

President: Peter Hall
president@imstat.org

President-Elect: Ruth Williams
president-elect@imstat.org

Past President: J. Michael Steele
president-past@imstat.org

Treasurer: Jean Opsomer
jopsomer@stat.colostate.edu

Program Secretary: Guenther Walther
walther@stat.stanford.edu

Executive Secretary: Marten Wegkamp
wegkamp@stat.fsu.edu

IMS Members' News

IMS Tweedie New Researcher Award

Hui Zou is the winner of this year's Tweedie New Researcher Award. Dr. Zou received his PhD in 2005 from Stanford University, and is currently an Associate Professor at the University of Minnesota.

The IMS Travel Awards Committee, selected Dr. Zou "for valuable contributions to sparse inferences in high dimensions; for novel developments in likelihood estimation and asymptotic properties when the parameter dimension exceeds the sample size; for seminal work in improved 'lasso-type' procedures; and for innovative computational algorithms."

The IMS Tweedie New Researcher Award will fund Dr. Zou's travel to present the Tweedie New Researcher Invited Lecture at the IMS New Researchers' Conference, held this year in Miami, Florida, USA in July. The award was created in memory of Richard L. Tweedie, who played a significant role throughout his professional career in mentoring young colleagues at work and through professional society activities.

Hui Zou said, "I am very honored, and humbled, to be selected as the recipient of the 2011 Tweedie New Researcher Award. Professor Tweedie was a great role model for young statisticians. I am also very happy to be invited to speak at the New Researchers Conference."



European Academy of Sciences has statistician as President

Vincenzo Capasso, a member of IMS and Fellow of ISI, has taken the Presidency of the European Academy of Sciences (www.eurasc.org) for the period 2011–2012.



Vincenzo Capasso

The mission of the European Academy of Sciences (EAS) is to promote excellence in science and technology and their essential roles in fostering social and economic development and progress.

The Academy is registered and operates under rules and regulations of the Kingdom of Belgium, having been recognized by Royal Decree issued by Albert II, the King of Belgium.

The European Academy of Sciences awards the **Blaise Pascal Medal** (to recognise an outstanding and demonstrated personal contribution to science and technology and the promotion of excellence in research and education); the **Leonardo da Vinci Award** (for outstanding lifelong achievement); and a new award, the Kepler Award. In order to bridge great minds to great promises in the European Research Area, the European Academy of Sciences established in 2010 the **Kepler Award for European Young Scientists (KEYS)**. This award has the goal of steering the cooperation of highly talented young scientists in Europe interested in research crossing the borders of disciplines and states. By offering communication and cooperation with its members the interactions between generations is going to be enhanced. One Kepler Award is given per year. See <http://www.eurasc.org/kepler/kepler.asp>.

Medallion Lecture: Heping Zhang

Heping Zhang is Professor of Biostatistics, Child Study, and Statistics, and Director of the Collaborative Center for Statistics in Science, at Yale University. He received his doctoral degree in Statistics with a minor in Computer Science from Stanford University in 1991. He has been on the Yale faculty since 1992.

Dr. Zhang was the recipient of a FIRST Award from the National Institute of Child Health and Human Development, and an Independent Scientist Award from the National Institute on Drug Abuse. He is an elected fellow of the American Statistical Association and the Institute of Mathematical Statistics, and an elected member of the International Statistical Institute. He was named as a Myrto Lefkopoulou Distinguished Lecturer by Harvard School of Public Health. Internationally, he is named as a Chang-Jiang Professor by the Chinese Ministry of Education and an Honorary Professor by the University of Hong Kong. He serves as the Editor-in-Chief of *Statistics and Its Interface* and also directs the Research Training Program in Mental Health Epidemiology at Yale School of Public Health.



Heping Zhang

Heping Zhang will deliver this

Medallion Lecture at the ENAR/IMS meeting in Miami, provisionally on Tuesday, March 22, at 3:45pm. See the ENAR pro-

gram for details, at http://www.enar.org/meetings/2011_preliminary_program.pdf.



A Nonparametric Test for Multivariate Outcomes and Studies of Co-morbidity

From college admissions to job searches to scientific investigations, we make inferences based on multi-dimensional data. For example, in psychiatric and behavioral research, about six out of ten people with a substance-use disorder suffer from another form of mental illness as well, making it necessary to consider multiple conditions as we study the etiologies of these conditions. The occurrence of multiple disorders in the same patient is referred to as co-morbidity. Identifying the risk factors for co-morbidity is an important yet difficult topic in psychiatric research. The effect of studying the genetics for co-morbidity can be tracked back a century ago. Thus, for the purposes of both statistical science and clinical investigation, it is important to consider and develop inferential tools for multivariate outcomes, particularly when the outcomes are discrete.

There is extensive literature on the statistical analysis of multivariate normal variables as well as on nonparametric tests for a single variable of non-normal distribution. However, few options are available for the inference when we have multiple non-normally distributed variables and potentially a hybrid of continuous and discrete variables. To overcome this challenge, we made use of several useful statistical techniques such as the rank-based U-statistics and the kernel-based weighted statistics to accommodate the mix of continuous and discrete outcomes and the presence of important covariates. We conducted thorough simulation and analytic evaluation to assess the control of the type I error and the power of our proposed test. Both empirical and theoretical results suggest that our proposed test increases the power of testing association when adjusting for covariates. Applications of our test to real data sets also reveal novel insights. The presentation includes a series of joint work with Yuan Jiang, Ching-Ti Liu, Xueqin Wang, and Wensheng Zhu.

IMS Editors

IMS Journals and Publications

Annals of Statistics: Peter Bühlmann and Tony Cai
<http://imstat.org/aos>

Annals of Applied Statistics: Bradley Efron, Stephen Fienberg, Michael Stein, Karen Kafadar & Samuel Kou
<http://imstat.org/aoas>

Annals of Probability: Ofer Zeitouni
<http://imstat.org/aop>

Annals of Applied Probability: Andrew Barbour
<http://imstat.org/aap>

Statistical Science: Jon Wellner
<http://imstat.org/sts>

IMS Lecture Notes – Monograph Series
<http://imstat.org/publications/lecnotes.htm>

IMS Collections
<http://imstat.org/publications/imscollections.htm>

NSF-CBMS Regional Conference Series in Probability and Statistics:
<http://imstat.org/publications/nsf.htm>

IMS Co-sponsored Journals and Publications

Electronic Journal of Statistics: David Ruppert
<http://imstat.org/ejs>

Electronic Journal of Probability: Bálint Tóth
<http://www.math.washington.edu/~ejpecp>

Electronic Communications in Probability:
Timo Seppäläinen
<http://www.math.washington.edu/~ejpecp/ECP/index.php>

Current Index to Statistics: George Styan
<http://www.statindex.org>

Journal of Computational and Graphical Statistics:
Richard Levine
<http://www.amstat.org/publications/jcgs>

Statistics Surveys: Lutz Dümbgen
<http://imstat.org/ss>

Probability Surveys: Geoffrey Grimmett
<http://imstat.org/ps>

IMS Supported Journals

Annales de l'Institut Henri Poincaré (B): Alice Guionnet
<http://imstat.org/aihpc>

Bayesian Analysis: Herbie Lee
<http://ba.stat.cmu.edu>

Bernoulli: Richard Davis
<http://isi.cbs.nl/bernoulli>

Brazilian Journal of Probability and Statistics: Silvia Ferrari
<http://imstat.org/bjps>

IMS Affiliated Journals

ALEA: Latin American Journal of Probability and Statistics:
Claudio Landim
<http://alea.impa.br/english>

Probability and Mathematical Statistics: M. Musiela,
J. Rosiński, W. Szcotka, A. Weron &
W.A. Woyczyński
<http://www.math.uni.wroc.pl/~pms>

Other IMS contacts

IMS website: <http://imstat.org>

Managing Editor: Michael Phelan
phelanm@uci.edu

Production Editor: Patrick Kelly
pkelly@wharton.upenn.edu

Rick's Ramblings Re: Reading the Classics

Our new Contributing Editor, Anirban DasGupta, is off to a very good start. I found his first column very stimulating, though I have a different answer to the question: what are the classic texts in probability?

Feller, Vol. 1. (1948). YES! It is hard to believe that this was the *first* undergraduate probability book, or that it was ever used by undergraduates. At Stanford I had this book in a master's level stochastic processes course. It has a wonderful treatment of combinatorial probability and generating functions, and also features one of the hardest elementary probability problems: show that a random walk restricted to a subgraph of \mathbb{Z}^2 is recurrent. If you can't do this one on your own, read the book by Doyle and Snell for the answer.

Feller, Vol. 2 (1965) is a solid piece of work which I turn to for information about Laplace transforms, Tauberian theorems, the Berry-Esseen theorem, and $o(n)$ large deviations for sums of independent random variables—but, like the second *Pirates of the Caribbean*, it does not quite reach the level of the first one. Of course, Feller's first volume was written at Cornell and the second at Princeton, where he had to fight the opinion that probability is not real math.

Doob's (1953) *Stochastic Processes* took important first steps in the difficult continuous time theory of martingales and Markov processes. However, some of the terminology is strange—lower semimartingale—and some parts are obsolete. Doob described Döblin's approach to Markov chains on continuous state space, but that theory became much more powerful when it was paired with Harris's idea that it is enough for Döblin's condition to hold on a set that is large enough.

Loève, Vol. 1, is not one of my favorites. It takes 400 pages to develop the strong law and the central limit theorem. But perhaps my trouble is that I am looking at the fourth edition. The first edition was in 1955. The Math Review of the 1960 second edition sounds vaguely familiar: "Users of the first edition have noticed the large number of errors, not all minor, which are frequently obscured by the brevity of the style."

Much better (IMHO) is Chung's *First Course in Probability*, first edition in 1968 and the second in 1974. In keeping with the time it had a lot of refined results concerning sums of independent random walks. However, the book ends with a chapter on martingales, just when probability really starts to get interesting.

Curiously Breiman's great (1968) book is not on Anirban's list. Breiman has classic material on the form of stable laws and their domains of attraction, but also covers stationary processes, Markov chains and the renewal theorem. Chung and Breiman's books are

In the last issue, our new Contributing Editor Anirban DasGupta proposed a "Classics Reading" course for PhD students. Rick Durrett responds...



two of four classic books that were the cornerstones on which *Probability: Theory and Examples* was built. The third is the beautiful treatment of discrete parameter martingales by Neveu (1975). The fourth is Billingsley's (1968) classic on weak convergence, which cleans up the definition of the Skorokhod topology to make it a nice metric space, and has the first thorough discussion of invariance principles.

Anirban lists David Williams's (1979) manic book *Markov Processes and Martingales*, which Williams calls a missionary tract not a theological treatise. I loved this book when I first read it, since its natural soundtrack is the Ride of the Valkyries, or 99 Red Balloons. It covers large part of the general theory processes without getting bogged down in the boring measure theoretic details. The same cannot be said for the 861-page, two-volume work by Rogers and Williams that completes Williams's initial sketch. As Frank Knight said in his review "The assertion that we need never go beyond Ray processes skips over the question of when and whether we need to go that far."

While the Williams book is fun, it pales in significance to some earlier works on stochastic processes. Dynkin's 1965 classic two-volume set on Markov processes laid the foundation for this subject and is still a good source for semi-groups and generators and the PDE approach to constructing diffusions. In a more concrete vein is Itô and McKean's 1965 book on one-dimensional diffusion processes and their sample paths. Yes, that book does get a little too preoccupied with the weird edges of the subject that come when one wants complete generality, and as the old saying goes: Itô wrote it in English and McKean translated it into Japanese. However, it is full of beautiful formulas and crazy Gothic letters.

Turning to the subject of stochastic calculus, Paul-André Meyer's lengthy article in Strasbourg Seminar X (*Springer Lecture Notes in Math* 511) was the first comprehensive treatment of stochastic calculus with jumps, and about the last time the subject made sense to me. I have many fond memories of nights spent at Mike Harrison's house at Stanford, drinking wine and translating the text into English, so that he and Stan Pliska could begin to

extend the Harrison-Kreps theory of option pricing to continuous time.

Like the end of the year “top 100” countdown, I have saved the best classic for last. Paul Lévy’s *Processus Stochastiques et Mouvement Brownien*. His book stresses intuition and derives some results that were well before its time. When I was working on *Brownian Motion and Martingales in Analysis*, I turned to Lévy’s book to see how he proved the conformal invariance of Brownian motion. My French is not so great (when I order in French, waiters answer me

in English), so I read the section several times before I realized that the little paragraph which basically says “analytic functions preserve angles” ends with the letters CQFD, the French equivalent of QED.

Having disagreed with our new columnist, let me close by endorsing his idea that our students have a lot to gain by reading the works of the masters. They can see important ideas and results before they became encumbered by technicalities and proofs obscured by the pursuit of maximum generality. ■

IMS Collections: Volume 7

IMS Collections Volume 7 is a Festschrift in honor of Professor Jana Jurečková, *Nonparametrics and Robustness in Modern Statistical Inference and Time Series Analysis*, edited by J. Antoch, M. Hušková and P.K. Sen. The editors say, “In the broader domain of statistics and probability theory, Jana Jurečková is a distinguished researcher, especially in Europe and among women researchers. Her fundamental research contributions stemmed from the inspiring ideas of her advisor Jaroslav Hájek and covered the evolving areas of nonparametrics, general asymptotic theory, robust statistics, as well as applications in sampling theory, econometrics and environmetrics. She has a longstanding and exemplary leadership of academics; the Czech school of statistics has benefited from her professional acumen. Jana has an illuminating career in the Department of Probability and Mathematical Statistics at the Faculty of Mathematics and Physics, Charles University in Prague, for over forty years. It was thought that at the juncture of her career, Jana should be honored and recognized for her standing in her professional field. Besides an article of appreciation of Jana’s life and work by the three editors, there are twenty-four articles with a list of over 40 co-authors.” The volume is also priced at \$98 for IMS members, or \$164 for non-members.

Both this volume and the recently-released Volume 6 (a Festschrift for Larry Brown) can be ordered securely online at <https://www.imstat.org/secure/orders/imsbooks.html> or by sending payment (US bank check payable to Institute of Mathematical Statistics; or credit card details) to the IMS Dues & Subscriptions Office, 9650 Rockville Pike, Suite L3503A, Bethesda MD 20814-3998 (fax 301-634-7099, tel 877-557-4674 or email staff@imstat.org).

Prague, February 3, 2011

To the contributors to
IMS Collections, Vol. 7

I would like to thank cordially all
colleagues for the papers that they
contributed to *IMS Collections* Vol.
7, “*Nonparametrics and Robustness
in Modern Statistical Inference and
Time Series Analysis*.”

I will always consider it a great
honor, and it encourages me to
continue in the work. Many of you
deserve a ‘Collection’ in your name,
only you have not yet reached my
age!

Let us keep the statistics alive.

Jana Jurečková

Using statistics to fight infection?

NIH-NIAID supports development of mathematical models and statistical methods as important tools to fight against infectious diseases

The National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health (NIH), recently awarded an \$11.9 million contract to the University of Rochester (UR) Medical Center to continue the work of the Center for Biodefense Immune Modeling (CBIM) for another five years.

The co-directors of the UR-CBIM are Dr. **Hulin Wu**, a statistician and Professor of Biostatistics (and IMS member), Department of Biostatistics and Computational Biology, and Dr. Martin Zand, a professor in the Department of Medicine at the UR Medical Center. The Center provides a good example for successful collaborations between quantitative scientists and experimental investigators.



Hulin Wu

This successfully awarded renewed proposal builds on the work of the UR-CBIM, which was established five years ago, with the original total award of \$10 million. During the past five years, the UR-CBIM, composed of a multi-disciplinary team of statisticians, mathematical and engineering modelers, computer scientists, software developers, bioinformaticians, and biomedical investigators, sought to develop novel mathematical models, statistical methods, and bioinformatics tools to decipher the host immune responses to influenza infection and other infectious agents. Extensive experimental data from mice were collected to support the development and validation of the proposed models, statistical methods, and bioinformatics tools. This project resulted in 60 manuscripts (50 published/accepted and 10 submitted or under revision) over the past five years: 10 in biomathematical modeling journals, 27 in statistical or biostatistical journals, 5 in bioinformatics/biocomputing journals, and 18 in biomedical science journals. Many of these papers were published in top statistical/biostatistical journals such as the *Annals of Statistics*, *JASA*, *Biometrika*, and *Biometrics*. Several bioinformatics tools were also developed. In particular, a differential equation modeling tool, DEDiscover, is a user-friendly software for both modelers and biomedical scientists, providing model simulation, parameter estimation and model evaluation functions, freely available at <https://cbim.urmc.rochester.edu/software>. Extensive experimental data for model development and model validation were also generated and will be available via the NIAID/NIH immunology database, ImmPort (www.immport.org) and the UR-CBIM website.

The UR-CBIM aims to develop multi-level and multi-type mathematical/computational models for immune responses that

include ordinary differential equation models, stochastic differential equation models, state-space models, stochastic process models, agent-based models, and network models at the cellular, protein, and genetic levels. Novel statistical methods will be developed for these complex dynamic models that are used to quantify immune responses to influenza infection and vaccination. Extensive experiments in both mice and human subjects will be performed and high-throughput experimental data at cellular, protein, and genetic levels will be collected to support development, validation, and testing of the proposed models and methods. The developed modeling techniques and statistical methods will be converted into user-friendly tools for biomedical investigators and modelers to easily use to further better understanding of immune responses and design of new experiments for discovering new immune-based therapies and vaccines against infectious agents. The collaboration and interaction among multi-disciplinary investigators, in particular between quantitative modelers and experimental scientists, has been and will continue to be crucial for the success of this project.

The University of Rochester is one of the four institutes selected to establish Centers for Modeling Immunity for Biodefense by NIH. The University of Rochester's CBIM project, led by Drs. Wu and Zand, consists of five cores: Mathematical Modeling Core, led by Drs. Alan Perelson and **Hongyu Miao**; Statistics Core, led by Dr. Wu; a Bioinformatics Core, led by Drs. Gregory Warnes and Jingming Ma; Immunology Core, led by Dr. Zand; and an Education Program, led by Drs. **Hua Liang** and Tim Mosmann. Dr. Alan Perelson, a senior fellow at the Los Alamos National Lab and a world leader in immune modeling, is the subcontract PI of the UR-CBIM project.

Statisticians, like Dr. Wu, play critical roles in successful biomedical research, but rarely do they lead the large multidisciplinary research projects their work supports. This award demonstrates the importance of equally using statistical and mathematical modeling approaches, and not solely experimental methods, to make scientific discoveries. Dr. Wu joined the University of Rochester in 2003 and founded the interdisciplinary Division of Biomedical Modeling and Informatics at the Department of Biostatistics and Computational Biology with a goal of integrating multi-disciplinary quantitative and computational sciences for biomedical research.

Besides this Biodefense Center project, the Division, led by Dr. Wu, also provides statistics, mathematical modeling and bioinformatics support to several large centers or program projects at the University of Rochester Medical Center.

Dhaka University conference report

Dhaka University Statistics Department Alumni Association (DUSDAA) held its First International Conference on Theory and Applications of Statistics. The three-day conference, organized by the newly-created DUSDAA, was held at the University of Dhaka, Bangladesh, on December 26–28, 2010, to celebrate the sixtieth year of the founding of the Department of Statistics and to honor its founder, the late National Professor Qazi Motahar Husain.

The conference was formally opened by the Honorable Mr. Abul Kalam Azad, Minister of Information and Cultural Affairs of the Government of the Peoples' Republic of Bangladesh. At the opening ceremony, Professor M. Atahaul Islam, Chairman of the Conference Convening Committee, Distinguished Professor Emeritus Mir Masoom Ali, Chairman of the International Committee, Professor Arefin Siddique, Vice Chancellor of Dhaka University, Professor Kazi Saleh Ahmed, Chairman of the Conference Organizing Committee and the Honorable Minister Mr. Abul Kalam Azad addressed the participants.

There were 56 sessions, which ran in five parallel sessions each day. The



Inauguration ceremony. From left: convener M. Ataharul Islam; conference chair Kazi Saleh Ahmed; guest Hon. Minister Abul Kalam Azad; Vice Chancellor A. A. M. S. Arefin Siddique; and international committee chair Mir Masoom Ali.

sessions included keynote speeches, plenary speeches, and invited and contributed papers, including a memorial lecture and another special session in honor of Professor Qazi Motahar Husain. More than 220 papers were presented at the conference. The speakers, including many eminent statisticians, came from India, USA, Canada, UK, Saudi Arabia, Malaysia, Kuwait, Pakistan, Oman, Fiji, Egypt, and Australia, in addition to Bangladesh. The presentations covered a wide range of important and current topics which included clinical trials, generalized linear models, failure time data analysis, data mining and modeling, socio-demographic analysis, epidemiology/public health, statistical inference, linear models,

modeling in demography, biostatistics, robust statistics, networking, health informatics, socio-economic statistical analysis, sampling techniques, design of experiments, Bayesian analysis, probability distributions, statistics in business/economics, statistical models, multivariate analysis, time series, and other miscellaneous topics. The number of registrants at the conference was in the vicinity of 300. The conference was preceded by short courses and workshops on the day before the start of the conference.

The conference included a cultural event with songs and dances in the evening of the second day, followed by a banquet. At the conclusion of the conference the Vice Chancellor of Dhaka University hosted

a dinner at his residence garden in honor of the participants. The conference got wide coverage in local newspapers and television. The conference was a great success and ended on a high note.



Left: Some of the conference participants

Après-MCMSki III: Fourth IMS-ISBA meeting

MCMSki III organizers, Antonietta Mira and Brad Carlin, report:

The fourth joint meeting between IMS and ISBA, the International Society for Bayesian Analysis, was hosted at The Canyons in Park City, Utah, from January 5–7, 2011. This was the third meeting held at a ski resort, and so was more colloquially known as “MCMSki III”. A prequel, satellite meeting on adaptive MCMC methods, called “AdapSki III,” was also held the two days prior to the main conference. The meeting attracted close to 160 participants who came from five continents; NSF, NIEHS, NSA, and ISBA support helped roughly 40 junior investigators from the US, Canada, Europe and elsewhere cover their travel expenses. We also thank the IUSS (Institute for Advanced Studies in Pavia <http://www.iusspavia.it/eng/>) for financial support for this and the previous editions of the conference. The Brigham Young University Statistics Department helped with local organization under the careful guidance of Shane Reese, and we thank him for selecting such a nice location: it was only about 200 meters from the chairs in the conference room to the chairlift! This certainly helped continue the MCMSki discussions on the ski slopes (which, we can assure you, really happened) and was stimulating and fun at the same time.

Intellectually, the meeting featured outstanding MCMC-related plenary addresses by Professors Nicky Best, Mike Newton, and Jeff Rosenthal, as well as six invited sessions on a wide variety of topics (not all of them MCMC-related and certainly not all Bayesian). Following the tradition of ISBA meetings, the

poster sessions were very well-attended, with over 50 presented posters. Chapman and Hall/CRC publishers attended the meeting and donated books to be used as prizes for the best poster presentations: these were awarded to 10 outstanding student poster winners, as judged by a blue-ribbon panel of senior researchers.

For the closing banquet, participants were taken by gondola to the Red Pine Lodge, a chalet high on the slopes, at an elevation of roughly 8000 feet. After a fine dinner, attendees rode the gondola back down to the main hotel for the cabaret, hosted (as in Valencia 9) by Shane Reese. Acts included juggler extraordinaire Mike Newton, a magic trick starring Daniele Cerliani (assisted by Francesca Dominici and Nicky Best), and the by now almost-classic “Pennypacker Sketch” originally written by Larry Wasserman and superbly played by Shane Reese, Antonietta Mira and Dave Higdon. Of course, the ever-popular Bayesian band, “IMSI-SBA”, led as usual by conference co-organizer Brad Carlin on keyboards and vocals, entertained the assembled crowd. Several new songs (including two Katy Perry parodies) were included; see the lyrics to “Bayes Train”, a spoof of the 1973 U.S. #1 hit “Love Train” by the O’Jays on page 9. There videos of many of the acts in the MCMSki III Cabaret at <http://www.youtube.com/user/ISBA2008>. After the cabaret, the band enjoyed a special guest appearance by Stuart Cameron, guitarist for the Canadian rock band Crash Test Dummies, who jammed with IMSISBA for three numbers.

Unfortunately, insurance issues precluded a formal ski race this year, so we cannot provide real data to prove the skiing improvements of professors Jeff Rosenthal and Jun Liu, but having trained both of them over the past editions of the conference, we can confirm they are both nearly

ready to compete for the next Tweedie Ski Cup at MCMSki IV, tentatively planned for January 2014. We may alter the title of the conference to broaden its focus somewhat, but certainly not the requirement that it occur at a ski resort within an hour of a major airport! If you didn’t make it to the conference you can see the slides of the presentations and related pictures at <http://madison.byu.edu/mcmski/program.html>

Below: Laura Hatfield and Jeff Rosenthal by Red Pines Lodge, venue for the closing banquet; middle: organizers Brad Carlin, Antonietta Mira and Shane Reese; bottom: Radu Craiu, Galin Jones, and James Flegal on the ski lift





"Bayes Train"

Music: 1973 Number 1 hit by
The O'Jays (Kenny Gamble and Leon Huff)
Words: Brad Carlin

People all over the world (everybody) / Join hands (join)

Start a Bayes train, Bayes train!

People all over the world (all the world, now) / Join hands (Bayes ride)

Start a Bayes train (Bayes ride), Bayes train

The first stop that we made was in England,
Then we told all the folks in Spain, and Italy too,
Don't you know that it's time to get on board,
And let this train bring all statisticians Bayes' Rule
Well, well:

People all over the world (you don't need no money) / Join hands (come on)

Start a Bayes train, Bayes train (don't need no ticket, come on)

People all over the world (ride this train) / Join hands (ride it, y'all)

Start a Bayes train (come on, train), Bayes train

All of you frequentists here in America,
Tell all the folks in Finland, and Canada, too
Please don't miss this ski train at the station,
'Cause if you miss it, there'll be just incoherence for you -- Well

People all over the world (sisters and brothers) / Join hands (join, come on)

Start a Bayes train (ride this train, y'all), Bayes train (come on)

People all over the world (Don't need no p -values) / Join hands (right down the bunny hill, now)

Start a Bayes train, Bayes train!

Ride, let it ride / let it ride / let it ride! (People, you just need a prior ...)

People all over the world (and a likelihood) / Join hands (and a sampler, now)

Start a Bayes train, Bayes train (just try WinBUGS, y'all)

People all over the world (come on) / Join hands (you can be adaptive, yeah)

Start a Bayes train, Bayes train (Chris Robert can help you)

People all over the world (or maybe Jeff Rosenthal) / Join hands (but not Galin Jones, no, no)

People all over the world!

International Congress of Mathematicians 2010

Antar Bandyopadhyay (Indian Statistical Institute, New Delhi) reports on 2010's ICM:

The biggest event for the mathematics community, the International Congress of Mathematicians (ICM), hosted by the International Mathematical Union (IMU), happens once every four years. In 2010 the meeting was held in India. The nine-day gala event celebrating achievements in various branches of mathematics was held in one of India's up-and-coming "IT hubs," the city of Hyderabad, from August 19 to 27, 2010.

Following the tradition, the conference was opened by the honorable President of India, Mrs. Pratibha D. Patil as the head



Photo: ICM

The honorable President of India, Mrs. Pratibha D. Patil, giving the opening speech to the congress

of state. She gave a welcome speech to the gathering of more than 3,000 mathematicians from about 100 countries. IMU prizes are always the integral part of the opening

ceremony of ICM. The Fields Medal, first awarded in 1936, recognizes outstanding mathematical achievement by a person not older than 40. It is often described as math's equivalent to the Nobel Prize. The medals, which are gold-minted, are named after the Canadian mathematician John Charles Fields (1863–1932). As in 2006, probability received recognition as an important field of mathematics when Stanislav Smirnov from University of Geneva, Switzerland, received a Fields Award "for the proof of conformal invariance of percolation and the planar Ising model in statistical physics."

The Carl Friedrich Gauss Prize, first awarded in 2006, recognizes outstanding mathematical contributions that have found significant applications outside of mathematics. It was given to Yves Meyer,

Professor Emeritus at Ecole Normale Supérieure de Cachan "for fundamental contributions to number theory, operator theory and harmonic analysis, and his pivotal role in the development of wavelets and multiresolution analysis." Needless to say, Meyer's work on wavelets has tons of applications in image processing, data compression and statistical data analysis. The other recipients of the Field awards were Elon Lindenstrauss, Hebrew University, Jerusalem "for his results on measure rigidity in ergodic theory, and their applications to number theory," Ngo Bao Chau, Faculté des Sciences at Orsay, Paris "for his proof of the Fundamental Lemma in the theory of automorphic forms through the introduction of new algebro-geometric methods," and Cedric Villani, Institut Henri Poincaré, Paris, "for his proofs of nonlinear Landau damping and convergence to equilibrium for the Boltzmann equation." Details of all the IMU awards can be found at <http://www.icm2010.in/imu-prizes>

The program featured 21 plenary lectures, including the first Abel Lecture which was given by a past IMS president, S. R. S. Varadhan (Courant Institute of Mathematics, New York University, USA). He talked on the theory of large deviations. Among others, David Aldous of University of California, Berkeley, gave his plenary talk on "Exchangeability and Continuum, Limits of Discrete Random Structures." There were five invited sessions on Probability and

Statistics which included twelve talks by Itai Benjamini (Weizmann Institute, Israel), Alexei Borodin (Caltech, USA), Arup Bose (Indian Statistical Institute, India), David Brydges (University of British Columbia, Canada), Probal Chaudhuri (Indian Statistical Institute, India), Frank den Hollander (Leiden University, The Netherlands), Steven N. Evans (University of California, Berkeley, USA), Claudia Neuhauser (University of Minnesota, Rochester, USA), Jeremy Quastel (University of Toronto, Canada), Qi-Man Shao (Hong Kong University of Science and Technology, Hong Kong, China), Sara van de Geer (ETH Zurich, Switzerland), and Aad van der Vaart (VU University Amsterdam, The Netherlands). There were also 31 short communications in the section on Probability and Statistics which featured several members of IMS.

It was generally observed that probability and statistical techniques are now a major part of mathematics and various probabilistic arguments were presented in sessions other than the one listed under Probability and Statistics. In particular importance of probabilistic techniques

S. R. S. Varadhan giving the inaugural Abel Lecture



Photo: ICM

was featured in several invited and short communications in Combinatorics, Mathematical Physics and Analysis.

In addition to talks there were several poster sessions, some which had posters presented by researchers in probability and statistics.

The meeting featured several mathematics-related discussions. In particular there was a panel discussion one on “Use of metrics in evaluating research,” where several delegates as well as the panelists discussed the problems of using citation indices and impact factor for evaluating researchers in mathematics and statistics. IMU president Lázló Lovász reported that a committee has been formed under the Chairmanship of Douglas N. Arnold, University of Minnesota, USA, which will come up with a better index for use by the mathematics community.

One another attraction of the meeting was a grand exhibition of books by various publishers including Cambridge University Press, Hindustan Book Agency, Springer Verlag and World Scientific. Some institutes and mathematics societies, such as the Indian Statistical Institute, European Mathematical Society, and American Mathematical Society, hosted stalls in the book exhibition center.

A variety of social events were organized during the congress. The organizers managed to host a conference dinner for all the 3000 participants in the evening of August 20. Before the dinner there was a dance performance by the celebrated artist Prof. C. V. Chandrasekhar of Chennai, India, who with his group performed Bharat Natyam, one of India's most difficult ancient classical dance forms. The participants also got a chance to listen to Ustad Rasid Khan of Kolkata, India, who performed with his group on August 25, 2010. His spectacular performance of vocal recital of Hindustani

classical music left everyone spell-bound. But perhaps the most significant event was the simultaneous chess competition with the Grand Master and World Number One Viswanathan Anand, which was organized in the afternoon of August 24, 2010. Thirty-five participants from twelve different countries were lucky enough to get the chance of their lives to play with Mr. Anand. All except one young player lost to the World Number One.

The ICM 2010 official web-page, <http://www.icm2010.in>, has several pictures from the congress, and an excellent archive of almost all the activities through streaming videos.

A number of excellent satellite meetings with a more focused group of researchers on various topics of mathematics were also organized in the context of ICM 2010. In particular a satellite meeting was organized at the Bangalore Centre of Indian Statistical Institute on Probability and Stochastic Process from August 13–17, 2010. This meeting gathered a large number of probabilists around the world, most of whom were IMS members.

The eight plenary talks were given by Maury Bramson (University of Minnesota, Minneapolis, USA), Erwin Bolthausen (University of Zurich, Switzerland), Louis Chen (National University of Singapore), Alison Etheridge (University of Oxford, UK), Andrea Montanari (Stanford University, USA), Alain-Sol Sznitman (ETH, Zurich, Switzerland),



Grand Master Viswanath Anand playing simultaneous chess with 35 participants (one of whom beat him!)

Photo: ICM

S. R. S. Varadhan (Courant Institute of Mathematics, New York University, USA), Gábor Lugosi (ICREA and Pompeu Fabra University, Brazil). There were also 11 invited sessions featuring 33 speakers and over 30 contributed talks, many of which were given by young researchers and students from India and abroad. This meeting was sponsored by Indian Statistical Institute, National Board of Higher Mathematics, Department of Atomic Energy, Government of India and the Bernoulli Society. More information about this meeting can be found from <http://www.isibang.ac.in/~statmath/icmprobsat/>.

Fields medalist Stanislav Smirnov (left) with percolation guru Harry Kesten



Photo: Farkhondeh Sajadi

Statistical Societies: history and future

Jef L. Teugels is President of the International Statistical Institute. At the IMS Annual Meeting in Gothenburg, he spoke in a session about the history and future of statistical societies, including ISI, whose 125th anniversary was last summer. He reports:

On the 24th of June 2010, it was exactly 125 years since the International Statistical Institute (ISI) was founded. It was the culmination of a series of International Statistical Congresses that had started at the initiative of Adolphe Quetelet. In these 125 years, the ISI has prospered and proven itself as an influential and truly international scientific organisation. With its elected members and members of seven Sections, the ISI is comprised of more than 5,000 professional statisticians. ISI and Section members come from a variety of backgrounds: affiliated with all major universities, research institutes, governments, international and commercial organisations. One of our ISI's goals is to promote the use and better understanding of statistics. We therefore accepted the invitation of Peter Jagers, organizer of the 73rd Annual Meeting of the IMS in Gothenburg, Sweden, August 9–13, 2010, to organize a session on “ISI 125 Years: History and Future of Statistical Societies”.

The first presentation was given by Gerrit J. Stemerdink, a devoted voluntary worker at the ISI Permanent Office in Den Hague in The Netherlands. Under the title “*ISI, 125 Years of Scientific Cooperation*”, Gerrit showed that, although already 125 years old, the ISI remained an active worldwide network of statisticians. Founded in 1885, after a series of preliminary Statistical Congresses that started in 1853, ISI has a rich history, a blossoming present and a prosperous future. During his lecture, the speaker presented a number of historical facts and illustrated them with a fine set of photographs.

As our second speaker we had asked Sir David Cox, Professor Emeritus, Nuffield

College, Oxford, UK, to speak on behalf of the Institute of Mathematical Statistics (IMS) for which he has served in important leading functions. Nanny Wermuth collaborated with the presentation “*Statistical Societies: Past, Present and Especially Future*”. David dealt with various objectives that could be identified for societies in our field and the achievement of these objectives in a rapidly changing world. He placed special emphasis on the role of training, publications, congresses and statistical societies, if we want to advance our discipline.

Due to unforeseen circumstances, our third speaker Ronald Wasserstein, Director of ASA, Alexandria, VA, USA, could not take part in the session. On his behalf I presented his slides that dealt with “*Advancing the Profession through Society Partnership*”. As the American Statistical Association (ASA) anticipates its 175th anniversary celebration in 2014, the society seeks not only to acknowledge and reflect on its history but also to envision and prepare for its future. That vision for the future focuses in no small part on the importance of collaboration with other statistical societies to advance the profession and the discipline. The ASA's relationship with the ISI, and its relationships with the other societies represented in this session, is a cornerstone for the future.

As our last speaker we listened to Sheila M. Bird, MRC Biostatistics Unit, Cambridge University, UK who spoke on “*The Royal Statistical Society and External Relations*”. The Royal Statistical Society (RSS) celebrated its 175th anniversary in 2009. Sheila went through a random historical sample, present-day, and future vision. It was enlightening to look back at seven



Jef Teugels, President of ISI

quarter-centuries of public engagement. Thus, the RSS's future vision includes some re-learning of lessons familiar to the founders of RSS and engagement with a ‘posse of peers’ to promote statistical literacy.

We then tried to pin down elements in which statistical societies could work together. Among them is interaction with international bodies when they are dealing with statistically-relevant issues. Through international cooperation we can reach common standards for statistical practice, education, training, accreditation, and so on. Further possibilities are the writing of white papers on statistical issues, training activities in and for developing countries, joint meetings, publications, and even the archiving of historical material.

The night before the session, ISI and IMS together offered a dinner to all the speakers, who on this occasion were joined by Willem van Zwet, University of Leiden, The Netherlands. Apart from the classic dinner conversations, we spoke about the comparison of strategic plans, joint activities for young statisticians, exchange of conference manuals and obligations of statistical societies with respect to education.

Statistics encyclopedia's Nobel nomination

A remarkable scientific venture has been nominated for the 2011 Nobel Peace prize. The *International Encyclopedia of Statistical Science*, published in three volumes in December by Springer, was initiated by three statisticians from Balkan countries that not so long ago were at war with each other. The statisticians—Miodrag Lovric from Serbia, Jasmin Komić from Bosnia and Ksenija Dumičić from Croatia—joined forces to collaborate with over 600 other statisticians around the world, many of whom are IMS members, to produce the encyclopedia.

The project has now been nominated for the Nobel Peace Prize by the Government of the Republika Srpska (RS), one of three autonomous entities within Bosnia and Herzegovina.

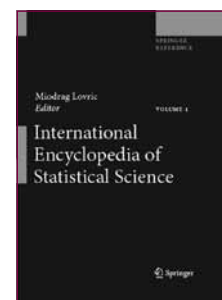
A statement from the Office of Government Relations praised their work: “No-one in history has managed to unite people as brothers and sisters under the auspices of pacifist and scientific ideas, as successfully as Lovric, Komić and Dumičić have done ... their many years of outstanding efforts could unite scientists from countries that account for 90 percent of the world’s population.” It is hoped that the award of the prize will provide a signal that a political solution to the problems of the region can only come

through joint work and concessions, rather than war and violence.

Miodrag Lovric writes at <http://www.ekfak.kg.ac.rs/mlovric/encyclopedia.htm> about the evolution of the project—which started as a reaction to the “very unfortunate state of statistics education in some countries that were part of former Yugoslavia (Macedonia, Serbia, Monte Negro and Bosnia)” —from dictionary to lexicon to encyclopedia, and ultimately into “one of the largest international scientific projects ever conducted, not only in statistics, but in other branches of science as well.”

The encyclopedia is devoted to the memory of three of its “great contributors”: Hirotugu Akaike, Clive Granger and Erich Lehmann, who died before it was completed.

The list of contributors is available at http://www.ekfak.kg.ac.rs/mlovric/mira-ap/Contributors_IJESS.pdf.



The encyclopedia, “one of the largest international scientific projects ever conducted,” with 619 contributors from 105 countries.

Mathematics on Planet Earth: an invitation

The International Mathematical Union issues this notice:

An invitation is sent to the world mathematical community including the institutes in mathematical sciences, the learned societies and the scientific journals, to join this initiative and hold activities around the theme of Mathematics of Planet Earth in 2013 all over the world.

The kind of activities that will take place around Mathematics of Planet Earth in 2013:

- Thematic programs at research institutes in mathematical sciences
- Workshops
- Summer schools
- Activities for the public and the media
- Activities in schools and for teachers
- Special issues in scientific journals

Several institutes will organize part of their thematic programs on Mathematics of Planet Earth. It is hoped that many activities will be joint activities organized in partnership with more than one institute. A joint North American Scientific Committee has been formed, chaired by Christiane Rousseau. Contact: Christiane Rousseau, rousseac@dms.umontreal.ca

For more information, see Mathematics of Planet Earth 2013 (MPE 2013): www.mpe2013.org



Terence's Stuff: Books, now and then

Terry Speed, you may have noticed, is a bibliophile. He looks back with fondness for bookseller James Thin, and the great bookstores of the past.



My parents must have decided early on that I should love books, for they gave me two booksellers as godfathers. My earliest experiences with books were with those given to me for birthdays or Christmas, usually from one of my godfathers' stores, or which belonged to other family members. Later I met stores and warehouses full of books, and spent hours leafing through them, Saturdays selling them, and summer vacations helping deliver truckloads of them to schools. Along the way I became interested in science and maths, and quickly realized that books on these topics were much less common than novels, or books on history, art or culture. A major discovery while I was in high school was a technical bookshop which stocked Dover paperbacks. There I began a habit which lasted half a lifetime, of going to the store, looking carefully at every book on the science and maths shelves, and agonizing over which I might buy. Once I'd finished my first degree and stayed in the same place for graduate study, I needed a new strategy. The books I then wanted to read were never going to land on local shelves by chance. If I knew what I wanted, I could put in a special order, but there was no opportunity for graduate-level browsing. Someone told me that James Thin of Edinburgh had a mail-order service, and I immediately joined it. Browsing bookstore shelves was replaced by browsing a James Thin catalogue, and writing off to request my chosen books. I quickly became hooked, and by then I even had an income.

Five joyous years later, I left my home city, and saw (a bit of) the world. James Thin's catalogues were set aside, and I browsed once more, but this time in the great bookstores of London (Dillon's), Oxford (Blackwell's), Cambridge (Bowes and Bowes, Heffers) and Edinburgh (James Thin!), and later Berkeley (Cody's, Black Oak), and elsewhere. Looking through all the science and maths books in a store to decide which I might buy was an exhilarating experience, but one that left me feeling drained, emotionally as well as financially. I discovered antiquarian booksellers, including S. Linden of Charing Cross. I read mail-order catalogues from all over the world, and sought to fill gaps in my library with books such as the second (1738), and later first (1718) edition of De Moivre's *The Doctrine of Chances*. I visited rooms full of books, including one with a good part of G. H. Hardy's personal library, and rooms with special cupboards containing books hundreds of years old. My shelves at home filled up, and I enjoyed shocking people who asked, "Have you read all of them?" by replying, "Of course not!" Some books got a lot of attention, but most were there for the rainy day when they were needed.

One day I moved to another country and didn't take my books with me. That was the beginning of the end, not just of my collecting books, but also—though I didn't see it at the time—of the book culture I'd experienced since childhood. Although I still bought books, they were mainly ones I needed to consult frequently, or lend to students. Amazon appeared, and although I felt a little disloyal to my local bookstores, I quickly became addicted to 1-click. After all, it wasn't so different from when I was ordering by mail from James Thin, 30 years earlier.

I got a rude shock about eight years ago. A graduate student from another

department was thinking of transferring to our Statistics PhD program, and I was discussing his prospects with him. He must know some statistics, I thought, so in an effort to work out what he knew, I asked him what statistics texts he owned or had studied. He replied "None. I use Wikipedia." Of course I knew things were changing, but even so...

Wikipedia is now ten years old, Amazon is flourishing, and Google Books has digital copies of many thousands of books freely available online, including my beloved first edition of *The Doctrine of Chances* (not my actual copy; my University's, in fact.) I use all three a lot, and certainly don't want to turn the clock back. And yet, I felt sad last summer when I walked through the Old Quadrangle of Edinburgh University and sat down on a bench placed there by his staff, "In Memory of Jimmy Thin, Bookseller." His store has now gone, after 150 years, as are most of the others named above. But my student got his PhD and is now a fine statistician, and I still leaf through my first edition of De Moivre...

À la recherche du temps perdu.

In just under 300 years: from De Moivre's first edition to Google's digitized version!



THE DOCTRINE OF CHANCES.

THE INTRODUCTION.



1. THE Probability of an Event is greater or less, according to the number of Chances by which it may happen, compared with the whole number of Chances by which it may either happen or fail.

2. Wherefore, if we constitute a Fraction whereof the Numerator be the number of Chances whereby an Event may happen, and the Denominator the number of all the Chances whereby it may either happen or fail, that Fraction will be a proper designation of the Probability.

IMS meetings around the world

IMS co-sponsored meeting

Statistical Challenges in Modern Astronomy V

June 13–17, 2011

Center for Astrostatistics, Penn State University

<http://astrostatistics.psu.edu/su11scma5/>

The Statistical Challenges in Modern Astronomy (SCMA) conferences, held every five years since 1991, are the premiere forum for research statisticians and astronomers to discuss methodological issues of mutual interest. Astronomers face an incredible range of problems in statistical inference, including mega-datasets, modeling data with nonlinear astrophysical models, time series analysis from irregularly spaced observations, spatial analysis of clustering processes, treatment of censoring and truncation, heteroscedastic measurement errors, and more. The issues arise in all fields of astronomy—planetary, stellar, extragalactic and cosmological—and with observations at all wavebands of light. Major investments in new telescopes require advanced statistical methodologies to attain their scientific goals. Statistics serves many research communities and is constantly enriching its methodology and capabilities. Astrostatistics today is a vibrant and growing cross-disciplinary enterprise.

SCMA meetings are unusual in emphasizing cross-disciplinary interactions between statisticians and astronomers. The Invited Speaker in one field is followed by a Commentator from the other field.

SCMA V is preceded by weekend Tutorials on advanced topics, and the 7th annual Summer School on Statistics for Astronomers. The latter provides an intensive introduction to statistical inference and the *R* programming environment.

The SCMA V Scientific Program is divided into nine sessions with approximately 30 confirmed invited speakers: Statistical Modeling in Astronomy; Bayesian Analysis Across Astronomy; Bayesian Cosmology; Data Mining and Informatics; Sparsity; Interpreting Astrophysical Simulations; Time Domain Astronomy; Spatial and Image Analysis; and Future Directions for Astrostatistics.

The weekend pre-conference Tutorials presented by S.O.C. members are on Bayesian Computation: MCMC and All That; Data Mining; *R* for Astronomers; and Wavelets for Image Analysis.

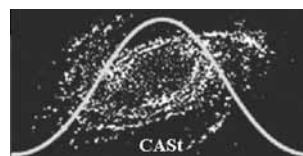
The conference welcomes contributed papers from statisticians and astronomers. Registration Deadline: May 6, 2011. Registration may close earlier for the summer school if the enrollment limit is reached. To register visit <http://astrostatistics.psu.edu/su11scma5/reg.html>

Confirmed invited speakers (both astronomers and statisticians) for SCMA V include: Ethan Anderes (UCD), David Banks (Duke), Richard Baraniuk (Rice), Othman Benomar (Paris-Sud), Alexander Blocker (Harvard), Joshua Bloom (UCB), Kirk Borne (GMU), Tamas Budavari (JHU), Andrew Connolly (UWashington), David Donoho (Stanford), David Higdon (LANL), Joseph Hilbe (ASU), Raul Jimenez (Barcelona), Vinay Kashyap (CfA), Brandon Kelly (CfA), Ann Lee (CMU), Kaisey Mandel (CfA), Domenico Marinucci (Roma), Pavlos Protopapas (Harvard), Erik Rosolowsky (UBC), Sanat Sarkar (Temple), Chad Schafer (CMU), Jean-Luc Starck (CEA), Eric Switzer (U Chicago), Luke Tierney (UIowa), Roberto Trotta (UCL), Benjamin Wandelt (IAP), Martin Weinberg (UMass)

Contacts:

Eric Feigelson, Dept. of Astronomy & Astrophysics, Penn State University [e edf@astro.psu.edu](mailto:edf@astro.psu.edu)

G. Jogesh Babu, Dept. of Statistics, Penn State University [e babu@psu.edu](mailto:babu@psu.edu)



*At a glance:
forthcoming
IMS Annual
Meeting and
JSM dates*

2011

IMS Annual Meeting @

JSM: Miami Beach, FL, July 30–

August 4, 2011

2012

IMS Annual Meeting

@ World Congress:

Istanbul, Turkey, July 9–14, 2012

JSM: San Diego, CA, July 28–

August 2, 2012

2013

IMS Annual Meeting

@ JSM: Montréal, Canada, August 3–8, 2013

2014

IMS Annual Meeting:

Sydney, Australia, July 7–11, 2014

JSM: Boston, MA, August 2–7, 2014

2015

IMS Annual Meeting

@ JSM: Seattle, WA, August 8–13, 2015

More IMS meetings around the world

IMS sponsored meeting

2012 World Congress/IMS Annual Meeting

July 9–14, 2012, Grand Cevahir Hotel & Convention Center, Istanbul, Turkey

w <http://www.worldcong2012.org/>

The eighth World Congress in Probability and Statistics will be held in Istanbul from July 9 to 14, 2012. It is jointly organized by the Bernoulli Society and the Institute of Mathematical Statistics. Scheduled every four years, this meeting is a major worldwide event for statistics and probability, covering all its branches, including theoretical, methodological, applied and computational statistics and probability, and stochastic processes. It features the latest scientific developments in these fields.

The program will cover a wide range of topics in statistics and probability, presenting recent developments and the state of the art in a variety of modern research topics, with in-depth sessions on applications of these disciplines to other sciences, industrial innovation and society. It will feature several special plenary lectures presented by leading specialists. In addition, there will be many invited sessions highlighting topics of current research interests, as well as a large number of contributed sessions and posters.

The venue of the meeting is Grand Cevahir Hotel & Convention Center located in Istanbul, which is a vibrant, multi-cultural and cosmopolitan city bridging Europe and Asia. Istanbul is a unique cultural conglomeration of east and west, offering many attractions such as Hagia Sophia, Sultanahmet, Topkapı Palace and Maiden's Tower (Kız Kulesi).

On behalf of the Program Committee and the Local Organizing Committee, we invite you to join us in Istanbul for this exciting scientific event. Your participation will ensure that the 2012 World Congress will be a memorable meeting.

Elvan Ceyhan and Mine Çağlar, Co-chairs of the Local Organizing Committee
Arnoldo Frigessi, Chair of the Program Committee

IMS co-sponsored meeting

2nd International Workshop on

Integer-Valued Time Series (WINTS 2011)

June 18–21, 2011

Protaras, Cyprus

w <http://www2.ucy.ac.cy/~wints2011/>

IMS Rep: Konstantinos Fokianos

The aim of this meeting is to bring researchers together to discuss their recent contributions to this area. The workshop will cover topics such as integer autoregressive models and their generalizations; generalized linear models for time series; applications and case studies.

IMS co-sponsored meeting

International Statistics Conference 2011

December 28–30, 2011

Colombo, Sri Lanka

w TBC

Organized by the Applied Statistics Association of Sri Lanka (ASASL). IMS Rep: Peter Hall. The meeting location is at the water's edge in the capital city of Sri Lanka. The website is under construction.

IMS co-sponsored meeting

16th INFORMS Applied Probability Society Conference

July 6–8, 2011, Royal Institute of Technology (KTH), Stockholm, Sweden

w <http://meetings.informs.org/APS2011>



The conference focuses on the theory and applications of probability to stochastic systems arising in operations research, computer networks, biology and finance, and also draws specialists in related fields such as statistics and physics. There will be sessions related to operations research, random graphs, random algorithms, stochastic networks, stochastic control and games, mathematical finance, stochastic optimization, call centers, health care, simulation, etc. On behalf of the INFORMS APS 2011 Organizing Committee, we invite you to submit a contributed session or a contributed talk. The submission deadline is **March 1**. Authors will be notified of acceptance of their talk or session abstracts by April 1. All submissions must be submitted by email to: abstractaps2011@math.kth.se using the appropriate LaTeX templates available at <http://www.informs.org/Community/Conferences/APS2011/Abstract-submission>

Submission of Contributed Sessions: A contributed session consists of three 25-minute talks, in a 90-minute session. A contributed session submission must include: a title of the session, a brief description of the topic, the names of the three speakers and titles and abstracts of the three talks. *Submission of Contributed Talks:* A contributed talk consists of a 25-minute presentation, held within a 90-minute session. Presenting authors are expected to register before May 1, 2011. Failure to register by May 1 may lead to cancellation of the talk.

We welcome your submission!

Henrik Hult, Kavita Ramanan, Marty Reiman (co-chairs program committee)

Tom Britton, Henrik Hult, Ingemar Kaj, Filip Lindskog (local organizers)

IMS sponsored meeting

IMS Annual Meeting @**2011 Joint Statistical Meetings****July 30 – August 4, 2011, Miami Beach, FL****w** <http://amstat.org/meetings/jsm/2011/>*Miami beach*

IMS sponsored meeting

2012 Joint Statistical Meetings**July 28 – August 2, 2012, San Diego, CA****w** <http://amstat.org/meetings/jsm/2012/>

IMS co-sponsored meeting

Seventh Cornell Probability Summer School**July 11–22, 2011. Cornell University, Ithaca, NY****NEW WEBSITE** <http://www.math.duke.edu/~rtd/CPSS2011/index.html>

The 7th Cornell Probability Summer School will feature six lecture series by Marek Biskup (UCLA), Geoffrey Grimmett (Cambridge) and Greg Lawler (Chicago). In addition Omer Angel (UBC), Julien Dubedat (Columbia), Dmitry Ioffe (Technion), and Alan Sly (Microsoft) will each give two lectures. The conference web page has more information, and a registration form (deadline **April 1**). Accepted participants will have their dorm room paid for. US participants can apply for \$400 toward the cost of meals. This meeting is supported by an NSF Research Training Group grant to the probability group at Cornell.

IMS co-sponsored meeting

35th Conference on Stochastic Processes and their Applications**June 19–25, 2011****Oaxaca, Mexico****w** <http://www.matem.unam.mx/SPA2011/>

The 35th Conference on Stochastic Processes and their Applications is organized under the auspices of the Bernoulli Society for Mathematical Statistics and Probability and co-sponsored by the Institute of Mathematical Statistics. It will take place in the city of Oaxaca, Mexico from the 19th to the 24th of June 2011. It is the major annual meeting for researchers working in the field of Stochastic Processes and their Applications.

The conference covers a wide range of active research areas, in particular featuring 20 invited plenary lectures presented by leading specialists. In addition, there will be a large variety of special sessions (consisting of three talks each), contributed sessions, contributed talks and posters.

For further information, please see the webpage: <http://www.matem.unam.mx/SPA2011/> or email: spa2011@matem.unam.mx

IMS sponsored meeting

IMS Annual Meeting @**2013 Joint Statistical Meetings****August 3–8, 2013, Montréal, Quebec, Canada****w** <http://amstat.org/meetings/jsm.cfm>

IMS sponsored meeting

2014 Joint Statistical Meetings**August 2–7, 2014****Boston, Massachusetts, USA****w** <http://amstat.org/meetings/jsm.cfm>

IMS sponsored meeting

IMS Annual Meeting @**2015 Joint Statistical Meetings****August 8–13, 2015****Seattle, Washington, USA****w** <http://amstat.org/meetings/jsm.cfm>

IMS sponsored meeting

2014 IMS Annual Meeting**July 7–11, 2014****Sydney, Australia****w** TBC

The location for the 2014 IMS Annual Meeting has been selected as Sydney, Australia. Details will follow, but you can mark your calendars now!

IMS sponsored meeting

2012 ENAR/IMS Spring Meeting**April 1–4, 2012****Washington DC, USA****w** <http://www.enar.org/meetings.cfm>

IMS sponsored meeting

2013 ENAR/IMS Spring Meeting**March 10–13, 2013****Orlando, Florida, USA****w** <http://www.enar.org/meetings.cfm>

IMS sponsored meeting

2014 ENAR/IMS Spring Meeting**March 16–19, 2014****Baltimore, Maryland, USA****w** <http://www.enar.org/meetings.cfm>

IMS co-sponsored meeting

International Symposium in Statistics (ISS)
on Longitudinal Data Analysis Subject
to Outliers, Measurement Errors, and/or
Missing Values

July 16–18, 2012**Memorial University, St. John's, Canada****w** www.iss-2012-stjohns.ca

IMS Rep: Brajendra Sutradhar

IMS co-sponsored meeting

Patient-Reported Outcomes and
Quality of Life

July 4–5, 2011**Université Pierre et Marie Curie,**
Paris, France

IMS Rep: Mounir Mesbah

w <http://www.lsta.upmc.fr/PROQOL/>**NEW**

More IMS meetings around the world

IMS co-sponsored meeting

NSF-CBMS Regional Research Conference:

NEW

Mathematical Epidemiology with Applications

July 25–29, 2011

East Tennessee State University, Johnson City, TN

w <http://www.etsu.edu/cas/math/cbms.aspx>

Carlos Castillo-Chavez and Fred Brauer will give ten keynote lectures, and there will be breakout sessions and formation of working research groups. A poster session will also be held for participants to display their work. Full support will be offered to between 35 and 40 participants. See website for more details.

IMS co-sponsored meeting

2011 IISA Conference on Probability, Statistics and Data Analysis

April 21–24, 2011

NC State University, Raleigh, NC, USA

w <http://www.iisaconference.info>

IMS co-sponsored meeting

WNAR/IMS Meeting

June 19–22, 2011, San Luis Obispo, California

w <http://www.wnar.org/>

IMS Program Chair: Jay Bartroff **e** bartroff@usc.edu

The 2011 WNAR/IMS meeting will be held on the campus of Cal Poly San Luis Obispo, located halfway between San Francisco and Los Angeles. See <http://www.calpoly.edu/visitors/visitors.html> for local information, and visit <http://www.wnar.org> for meeting information. Local Organizer: Jimmy Doi **e** jdoi@calpoly.edu

IMS sponsored meeting

IMS-China International Conference on Statistics and Probability

July 8–11, 2011

XiAn, China

IMS Organizing Chair: Heping Zhang, Yale University

w <http://www.stat.umn.edu/~statconf/imschina2011/index.html>

We are pleased to announce the 3rd IMS-China International Conference on Statistics and Probability 2011 in XiAn, China. The first two meetings in this series were held in Hangzhou (2008) and WeiHai (2009), China.

The registration deadline is **April 15**.

The meeting is open to all current and prospective IMS members by registration, until the maximum of 150 non-local participants is reached. Local participants are defined as those who reside in mainland China. It will feature plenary lectures, and invited and contributed talks in all areas of probability and statistics. The official languages of the meeting are English and Chinese.

If you live in China, contact Professor Geng Zhi (zhigeng@pku.edu.cn) and Gong Fuzhou (fzgong@mail.amt.ac.cn) for more information. If you live in other countries, send your enquiries in English to Professor Heping Zhang (heping.zhang@yale.edu).

IMS co-sponsored meeting

8th Workshop on Bayesian Nonparametrics

June 26–30, 2011

Veracruz, Mexico

w <http://www.bnpworkshop.org/>

IMS co-sponsored meeting

IMS Asia Pacific Rim Meeting

July 3–6, 2011

Tokyo, Japan

w <http://www.ims-aprm2011.org/>

The second IMS Asia Pacific Rim Meeting will take place in OMIYA Sonic City conference hall, Tokyo, Japan from July 3–6, 2011. This conference is sponsored by IMS, International Chinese Statistical Association (ICSA), International Indian Statistical Association (IISA), Japan Statistical Society (JSS), Korean Statistical Society (KSS) and the Institute of



Statistical Mathematics (ISM). This meeting series provides an excellent forum for scientific communications and collaborations for researchers in Asia and Pacific Rim. It also promotes communication and collaboration between researchers in this area and those from other parts of the world. The program covers a wide range of topics in statistics and probability, presenting recent developments and the state of the



art in a variety of modern research topics and in applications. Plenary speakers are **Peter Hall** (University of Melbourne), and **S.R.S. Varadhan** (New York University). A number of celebrated scholars will deliver distinguished lectures and invited talks in this conference. Details on the website.

Contact the program chairs: Byeong U. Park (bupark@stats.snu.ac.kr) and Runze Li (rli@stat.psu.edu).

Other meetings around the world

International Conference on Malliavin Calculus and Stochastic Analysis: An event in honor of Professor David Nualart March 19–21, 2011, University of Kansas

NEW

w <http://www.math.ku.edu/conferences/2011Malliavin/>

This conference is sponsored by a grant from the National Science Foundation awarded to Purdue University, with additional support from the University of Kansas.

A list of invited speakers is given on the website. The conference will cover topics in Malliavin Calculus and Stochastic Analysis, including the following: Analysis on Wiener space; Stochastic equations and regularity of probability laws; Fractional Brownian motion and related processes; Variations, limit theorems, and statistical estimators; Malliavin calculus connection to Stein's method; and Mathematical finance. Please see the website for more information about travel, accommodation and the program.

2011 Conference of Texas Statisticians March 25–26, 2011

Rudder Tower, Room 301, Texas A&M University Campus

w <http://www.stat.tamu.edu/cots2011/index.html>

The Conference of Texas Statisticians (COTS) offers Texas statisticians the opportunity for social and intellectual exchange on a yearly basis. These meetings also stimulate increased chapter membership as well as visibility of the statistical profession in the state of Texas. Need more information? Please email Elaine Washington at elaine@stat.tamu.edu or call 979-845-3141.

The Fourth Lehmann Symposium May 8–12, 2011, Houston, Texas

NEW

w www.stat.rice.edu/~jrojo/4th-Lehmann

This is the fourth of a series of Symposia on theoretical statistics with emphasis on optimality. The Symposium consists of a series of plenary lectures and invited sessions. Contributed papers are also welcome. The series started to honor Erich Lehmann's work and impact on the discipline. Those interested in presenting in a contributed session can email a title and an abstract, by **April 15**, to jrojo@rice.edu. There will be partial travel support for young investigators and advanced graduate students. A volume of refereed papers will be published.

Plenary speakers: Victor Perez-Abreu (CIMAT); Robert Serfling (University of Texas at Dallas); T. Toni Cai (The Wharton School, University of Pennsylvania); Jane-Ling Wang (University of California, Davis); Bin Yu (University of California, Berkeley); George Casella (University of Florida); Peter J. Bickel (University of California, Berkeley)

Graduate Student Probability Conference April 29 – May 1, 2011 Georgia Institute of Technology, Atlanta, GA

NEW

w <http://gspc.math.gatech.edu/>

Registration is now open at the website above. Deadline for registration is March 29, 2011. We are very excited to announce our two keynote speakers: Professor Nathalie Eisenbaum (Université Pierre et Marie Curie) and Professor Philip Protter (Columbia University). They will each give talks daily about areas of interest within their research. This year, we are expecting over 100 participants from all over the country to join the conference. This conference is a great opportunity to give a talk in a friendly environment, so we encourage you to register to speak if you are interested.

High Dimensional Statistics: Advances and Challenges May 24–27, 2011

NEW

Nanyang Technological University, Singapore

w <http://www1.spms.ntu.edu.sg/~stats>

Conference topics will include high dimensional analysis, survival analysis, and biostatistics. Plenary speakers: Tony Cai, University of Pennsylvania; Michael Kosorok, University of North Carolina-Chapel Hill; Xiaotong Shen, University of Minnesota; Terry Speed, Walter and Eliza Hall Institute of Medical Research, Melbourne; Matt Wand, University of Technology, Sydney.

International Symposium on Recent Advances in Statistics and Probability May 19–20, 2011 Hasselt University, Belgium

NEW

w www.uhasselt.be/ISRASP

The main scientific theme of the symposium is mathematical statistics, in particular survival analysis, nonparametric methods, and probability and stochastic processes. The goal is to disseminate recent developments, to build bridges between the sub-field, and to allow for stimulating interaction between the theoretical developments and some areas of application. The scientific meeting will be followed by a session in honor of the contributions made by Professor Noel Veraverbeke. The meeting will bring together the top researchers in the aforementioned areas, from all over the globe.

Other meetings around the world

Fourth La Pietra week in

Probability at Finaly

June 13–17, 2011

Firenze (Florence), Italy

<http://php.math.unifi.it/users/paf/LaPietra2011>
GNAMPA-PIRE School conference on
Percolation and Particle Systems.

Minicourses:

Vincent Beffara, CNRS, UMPA ENS Lyon,
& Hugo Duminil-Copin, Geneva:

Percolation

Ivan Corwin, NYU: *The Kardar-Parisi-
Zhang equation and universality class.*

Eyal Lubetsky, Microsoft Research: *Cutoff
for the Ising model on lattices*

Preliminary list of other participants:

Gerard Ben Arous, NYU (New York); Jacob
van den Berg, CWI (Amsterdam); Amir
Dembo, Stanford Univ. (Stanford); Remco
van der Hofstad EUT (Eindhoven). To
be confirmed: Alberto Gandolfi, Univ. di
Firenze (Firenze); Fabio Martinelli, Univ. di
Roma 3 (Roma); Charles Newman NYU
(New York); Vidas Sidoravicius CWI
(Amsterdam)

Support: Some limited funds are available
to support young participants at the school-
conference. Support includes lodging (in
shared room) and some meals and does
not include travel and remaining meals.
Applications for support by **March 31st,
2011** can be submitted to organizers at
LaPietraMeeting@gmail.com

Deadlines: Applications for support:
March 31; Awarding of support: April 15;
Registration: April 30

Scientific committee: Alberto Gandolfi,
Fabio Martinelli, Charles Newman, Vidas
Sidoravicius

Location: Villa Finaly, Via Bolognese, 134
R, 50139 Firenze. **t** +39 055 46 31 01
w [http://www.villafinaly.sorbonne.fr/](http://www.villafinaly.sorbonne.fr/infopratiques.html?lang=en_GB&partie=1)
[infopratiques.html?lang=en_GB&partie=1](http://www.villafinaly.sorbonne.fr/infopratiques.html?lang=en_GB&partie=1)

NEW

Statistics 2011 Canada / IMST-2011-FIM XX

July 1–4, 2011

Montreal, Canada

w <http://www.stat2011.ca>

The Department of Mathematics and Statistics, Department of Decision Sciences & MIS
of Concordia University and Forum for Interdisciplinary Mathematics (FIM), will be host-
ing a joint conference, *Statistics 2011 Canada: 5th Canadian Conference in Applied Statistics*
together with the 20th conference of the Forum for Interdisciplinary Mathematics titled,
“Interdisciplinary Mathematical & Statistical Techniques” from Friday, July 1 to Monday, July
4, 2011.

In keeping with the long tradition of previous conferences, this convention is dedicated
to all areas of mathematical and statistical sciences. In addition to traditional theoretical/
applied areas, interdisciplinary research would be encouraged and promoted. Historically
these meetings have concentrated in the following areas of scholarship: applied and theo-
retical statistics, Bayesian statistics, bioinformatics, biostatistics, combinatorics, computer
and information sciences, design and analysis of experiments, ergodic theory, functional
analysis, graph theory, multivariate analysis, number theory, partial differential equations
and topology.

Please direct all queries to stat2011@mathstat.concordia.ca

NEW

Third Baltic-Nordic Conference on Survey Statistics (BaNoCoSS)

June 13–17, 2011

Norrållsviken, Sweden

w [http://www.mathstat.helsinki.fi/msm/](http://www.mathstat.helsinki.fi/msm/banocoss/2011/)
[banocoss/2011/](http://www.mathstat.helsinki.fi/msm/banocoss/2011/)

NEW

Conference in Genetics, Probability and Statistics, in Honor of David Siegmund

June 17-18, 2011

Stanford, CA, USA

w <http://stat.stanford.edu/gps11>

NEW

Journées de Probabilités 2011

June 20–24, 2011

Institut Elie Cartan, Nancy, France

w <http://jp2011.iecn.u-nancy.fr/> (in French)
Scope: probability and statistics

NEW

Applied Stochastic Models and Data Analysis (ASMDA2011)

The 14th Conference of the ASMDA International Society

June 7–10, 2011, Rome, Italy

w <http://www.asmda.eu/>

Please see the “Special and Invited Sessions” page at the website above, and send your
proposals and abstracts to: secretariat@asmda.eu. This conference celebrates 30 years from
the first meeting in Brussels, Belgium 1981. Invited Speakers: N. Balakrishnan, McMaster
University; Pierre Devolder, Université Catholique de Louvaine; Domenico Marinucci,
University of Rome “Tor Vergata”; Fabio Maccheroni, Università Bocconi; Yosi Rinott,
The Hebrew University of Jerusalem; Dmitrii Silvestrov, University of Stockholm; Larry
Wasserman, Carnegie Mellon University.

UPDATED

The Third International Workshop in Sequential Methodologies

June 14–16, 2011

Stanford University, California

w <http://iws2011.stanford.edu>

The International Workshop in Sequential Methodologies (IWSM) is organized every two years which covers all aspects of sequential methodologies including statistical inference, information theory, optimal stopping, change detection, multiple comparisons, selection and ranking, and surveillance. Areas of applications include mathematical finance, quality control, reliability, clinical trials, and signal and image processing. The goal of the Workshop is to bring together researchers and practitioners from varied areas within sequential methodologies including teaching.

The first Workshop, IWSM 2007, was held at Auburn University in Alabama, USA. The second Workshop, IWSM 2009, took place at the University of Technology in Troyes, France.

The third and present Workshop, IWSM 2011, will be held at Stanford University, June 14–16. It is Co-Chaired by Tze L. Lai (Stanford University, California, USA), Nitis Mukhopadhyay (University of Connecticut-Storrs, Connecticut, USA), and Alex Tartakovsky (University of Southern California-Los Angeles, California, USA).

This IWSM will include three plenary presentations by the distinguished colleagues, David Siegmund (Stanford University, California, USA), Gary Lorden (California Institute of Technology, California, USA), and T. N. Sriram (University of Georgia-Athens, Georgia, USA). Additionally, this IWSM will highlight three main themes:

- (i) sequential and adaptive design of clinical trials and other sequential methods in biostatistics;
- (ii) sequential change-point detection, quality control and surveillance, sequential methods in signal processing and sensor networks;
- (iii) sequential estimation, testing, ranking and selection, optimal stopping and stochastic control, applications to finance and economics, and related topics in statistics and probability.

At the IWSM, we will celebrate the 70th birthdays of both Gary Lorden and David Siegmund.

An additional attraction of IWSM 2011 is the Conference in Genetics, Probability, and Statistics at Stanford University on June 17–18, immediately followed by the IMS-WNAR Western Regional Meeting which will take place in the scenic city of San Luis Obispo on the central coast of California, midway between San Francisco and Los Angeles.

Please follow the link <http://iws2011.stanford.edu> to learn more about the IWSM activities, its plenary speakers, and other satellite conferences. Then complete your registration for everything online! Local contact: Tze L. Lai [e lait@stanford.edu](mailto:lait@stanford.edu)



Statistics, Probability and Operations Research (SPO 2011)

September 13–16, 2011

Jaca, Spain

w <http://metodosestadisticos.unizar.es/~jaca2011>

The next edition of the Pyrenees International workshop on Statistics, Probability and Operations Research (SPO 2011) will be held in Jaca (Spain) from September 13 to September 16, 2011, giving established researchers, young specialists and graduate students the opportunity to discuss and work together. The meeting is held every two years, and features a summer school and a workshop in the fields of statistics, probability and operations research, introducing relevant topics and some of the most recent advances and prospective challenges in these fields with special emphasis on applications.

A limited number of scholarships for young researchers, PhD students and advanced undergraduate students that may cover partial or totally the expenses will be provided by the organization.

The school will feature two advanced short-courses, each taught by a leading specialist. Besides, there will be some invited talks and contributed sessions. The short courses will be developed by N. Balakrishnan (McMaster University, Canada) on “*Precedence-type testing and applications*” and J. López Fidalgo (University of Castilla La Mancha, Spain) on “*Design of experiments for non-linear models*.” These are two interesting topics with good applications.

For registration and information, including scholarships, see the website.

The city of Jaca is located in the heart of the Pyrenees, 30km from the French border. Jaca is a key point in the Way of Saint James. Its surroundings offer exceptional views and richness in natural resources as well as historic and artistic heritage.



Employment Opportunities around the world

Canada: Scarborough, ON

University of Toronto @ Scarborough, Department of Computer & Mathematical Sciences

Lecturer in Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=7259531

France: Malakoff, Hauts de Seine

ENSAE ParisTech – CREST

Assistant/Associate Professor positions in Statistics and Finance

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=7643788

New Zealand: Dunedin, Otago

AgResearch Ltd

Statistician

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=7626640

Switzerland: Lausanne, Canton Vaud

Swiss Federal Institute of Technology, Lausanne (EPFL)

Postdoctoral Position(s) in Statistics/Applied Probability at EPFL

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=7644990

United States: Fresno, CA

State Center Community College District

Mathematics Instructor

[Http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=7509375](http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=7509375)

United States: Miami, FL

University of Miami

Associate Professor & Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=7608231

United States: Gainesville, FL

University of Florida, IFAS Statistics

Assistant/Associate Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=7592848

United States: College Park, MD

University of Maryland, Department of Mathematics

Assistant, Associate, or Full Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=7502849

United States: Ithaca, NY

Cornell University, Statistical Science

Postdoctoral Associate

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=7564901

United States: Pittsburgh, PA

Carnegie Mellon University

Applications are invited for possible tenure-track, lecturer, and visiting positions. Carnegie Mellon offers a collegial faculty environment, emphasizing a combination of disciplinary and cross-disciplinary research and teaching. All areas of statistics are welcome, and joint appointments with other units in the Pittsburgh area are possible. We especially encourage women and minorities to apply. Details at <http://www.stat.cmu.edu> (email: hiring@stat.cmu.edu).

Application screening begins immediately and continues until positions closed. Send CV, research papers, relevant transcripts and three letters of recommendation to: *Chair, Faculty Search Committee, Department of Statistics, Carnegie Mellon University, Pittsburgh, PA 15213, USA*. AA/EOE.

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=7469023

United States: Houston, TX

University of Texas School of Public Health


Non-Tenure Track Faculty

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=7475611

International Calendar of Statistical Events

IMS meetings are highlighted in maroon with the  logo, and new or updated entries have the  or  symbol. **t** means telephone, **f** fax, **e** email and **w** website. Please submit your meeting details and any corrections to Elyse Gustafson at erg@imstat.org

March 2011

 March 19–21: University of Kansas. International Conference on Malliavin Calculus and Stochastic Analysis: in honor of David Nualart **w** <http://www.math.ku.edu/conferences/2011Malliavin/>

 March 20–23: Hyatt Regency Miami, FL. 2011 ENAR/IMS Spring Meetings. **w** <http://www.enar.org/meetings.cfm>

23–25 March: The Netherlands. Spatial Statistics 2011 Conference **w** <http://www.spatialstatisticsconference.com/>

 March 24–26: University of California, Irvine. Seminar on Stochastic Processes. IMS rep: Davar Khoshnevisan **w** <http://math.uci.edu/~mcransto/ssp2011a.html>


 March 25–26: Texas A&M University. 2011 Conference of Texas Statisticians **w** <http://www.stat.tamu.edu/cots2011/index.html>

April 2011


April 11–13: Bordeaux, France. 3rd International Biometrics Society Channel Network Conference. **e** ibschannel@isped.u-bordeaux2.fr **w** <http://www.ibs-channel-bordeaux2011.fr>

April 16: Storrs, Connecticut. 25th New England Statistics Symposium **w** www.stat.uconn.edu/ness11


 April 21–24: NC State University, Raleigh, NC, USA. 2011 IISA Conference on Probability, Statistics and Data Analysis. IMS Reps: Soumendra Nath Lahiri (Chair of International Organization Committee), Subhashis Ghoshal (Co-Chair of Local Organization Committee). **w** <http://www.iisaconference.info>


 April 29 – May 1: Georgia Institute of Technology, Atlanta, GA. Graduate Student Probability Conference **w** <http://gspc.math.gatech.edu/>

May 2011

 May 8–12: Houston, Texas. 4th Lehmann Symposium **w** www.stat.rice.edu/~jrojo/4th-Lehmann

May 16–20: SAMSI, Research Triangle Park, NC. Education and Outreach Program: Interdisciplinary Workshop for Graduates **w** <http://www.samsi.info>

 May 19–20: Hasselt University, Belgium. International Symposium on Recent Advances in Statistics and Probability **w** www.uhasselt.be/ISRASP

 May 24–27: Nanyang Technological University, Singapore. High Dimensional Statistics: Advances and Challenges **w** <http://www1.spms.ntu.edu.sg/~stats>

May 31 – June 3: Agios Nikolaos, Crete, Greece. 4th Chaotic Modeling and Simulation International Conference: CHAOS2011 **w** www.cmsim.org

June 2011

June 5–10: Ascona, Switzerland. Workshop on Statistical Challenges and Biomedical Applications of Deep Sequencing Data **w** <http://www.cbg.ethz.ch/news/ascona2011>


June 7–10: Università La Sapienza, Rome, Italy. ASMDA 2011: XIV International Conference on Applied Stochastic Models and Data Analysis **w** www.asmda.eu


June 12–15: Wolfville, Nova Scotia, Canada. 2011 SSC Annual Meeting **w** <http://www.ssc.ca/en/meetings/2011>


 June 13–17: Penn State University, USA. Statistical Challenges in Modern Astronomy V. **w** <http://astrostatistics.psu.edu>


International Calendar *continued*

June 2011 continued

 **June 13–17:** Firenze (Florence), Italy.
4th La Pietra week in Probability at Finaly.
w <http://php.math.unifi.it/users/paf/LaPietra2011>


 **June 13–17:** Norrfällsviken, Sweden. 3rd Baltic-Nordic
Conference on Survey Statistics (BaNoCoSS)
w <http://www.mathstat.helsinki.fi/msm/banocoss/2011/>

 **June 14–16:** Stanford University, CA. 3rd International
Workshop in Sequential Methodologies (IWSM)
w <http://iws2011.stanford.edu>

 **June 17–18:** Stanford, CA. Conference in Genetics,
Probability and Statistics, in Honor of David Siegmund
w <http://stat.stanford.edu/gps11>

 **June 18–21:** Protaras, Cyprus. WINTS2011: 2nd
International Workshop on Integer-Valued Time Series **w** <http://www2.ucy.ac.cy/~wints2011/>

 **June 19–22:** San Luis Obispo, California. WNAR/IMS Meet-
ing. IMS Program Chair: Jay Bartroff. **w** <http://www.wnar.org/>

 **June 19–25:** Oaxaca, Mexico. 35th Conference on Stochastic
Processes and their Applications. **w** <http://www.matem.unam.mx/SPA2011/>

June 20–24: Beijing Institute of Technology, China. Seventh Inter-
national Conference on Mathematical Methods in Reliability
w www.mmr2011.cn

 **June 20–24:** Institut Elie Cartan, Nancy, France. Journées de
Probabilités 2011 **w** <http://jp2011.iecn.u-nancy.fr/> (in French)

June 26–29: New York City, NY, USA. ICSA 2011 Applied
Statistics Symposium. **w** <http://www.icsa.org/2011/>

 **June 26–30:** Veracruz, Mexico. 8th Workshop on Bayesian
Nonparametrics. **w** <http://www.bnppworkshop.org/>

June 27 – July 1: University of Lyon, France. 7th Conference on
Extreme Value Analysis, Probabilistic and Statistical Models and
their Applications (EVA 2011) **w** <http://eva2011.univ-lyon1.fr/>

June 27 – July 1: Valladolid, Spain. ICORS 2011: International
Conference on Robust Statistics **e** congreso.icors2011@uva.es
w <http://www.icors11.uva.es>

July 2011

 **July 1–4:** Montreal, Canada. Statistics 2011 Canada / IMST-
2011-FIM XX **w** <http://www.stat2011.ca>

 **July 3–6:** Tokyo, Japan. IMS Asia Pacific Rim Meetings. **w**
<http://www.ims-aprm2011.org/>

 **July 4–5:** Université Pierre et Marie Curie, Paris, France.
Patient-Reported Outcomes and Quality of Life. IMS Rep:
Mounir Mesbah. **w** <http://www.lsta.upmc.fr/PROQOL/>

 **July 6–8:** Stockholm, Sweden. INFORMS Applied Prob-
ability Society Conference **w** <http://www.informs.org/Community/Conferences/APS2011>

 **July 8–11:** XiAn, China. IMS-China International Confer-
ence on Statistics and Probability. IMS Organizing Chair: Heping
Zhang. **w** <http://www.stat.umn.edu/~statconf/imschina2011/index.html>


 **July 11–22:** Ithaca, NY. 7th Cornell Probability Summer
School. **w** <http://www.duke.cornell.edu/~rtd/CPSS2011/>


July 18–19: Vancouver, Canada. ICIAM 2011: AWM Workshop
for Women Graduate Students and Recent PhDs. **Deadline**
has passed **w** <https://sites.google.com/site/awmmath/programs/workshops/ICIAM-workshop>

July 18–22: Vancouver, Canada. ICIAM 2011: 7th International
Congress on Industrial and Applied Mathematics
w <http://www.iciam2011.com/>

July 18–26: SAMSI, Research Triangle Park, NC. **Education and Outreach Program: Industrial Math/Stat Modeling Workshop for Graduate Students** **w** <http://www.samsi.info>

July 21–23: Bangkok, Thailand. **7th IMT-GT International Conference on Mathematics, Statistics and its Application (ICMSA 2011)** **w** <http://icmsa2011.nida.ac.th>

NEW  **July 25–29:** East Tennessee State University, Johnson City, TN. **NSF-CBMS Regional Research Conference: Mathematical Epidemiology with Applications** **w** <http://www.etsu.edu/cas/math/cbms.aspx>

 **July 30 – August 4:** Miami Beach, Florida. **IMS Annual Meeting at JSM2011.** **w** <http://amstat.org/meetings/jsm/2011/>



Miami, location of JSM 2011 and IMS Annual Meeting

August 2011

August 1–4: Boulder, Colorado, USA. **Uncertainty Quantification in Scientific Computing.** **w** <http://www.nist.gov/itl/math/ifip-woco-10.cfm>

August 1–5: Sandbjerg Estate, Sønderborg, Denmark. **Conference in Honour of Søren Asmussen: New Frontiers in Applied Probability** **w** www.thiele.au.dk/asmussen

August 11–13: University of Connecticut, Storrs, USA. **46th Actuarial Research Conference.** **w** <http://www.math.uconn.edu/~valdez/46arc/46arc-storrs.php>

August 17–19: Copenhagen, Denmark. **Dynamic Statistical Models [ISI Satellite Meeting]** **w** <http://statistics.ku.dk/isi-satellite/>

August 21–26: Dublin, Ireland. **ISI Dublin: 58th World Statistics Congress** **w** www.isi2011.ie

August 29 – September 1: Washington DC, USA. **7th International Conference on Multiple Comparison Procedures** **w** <http://www.mcp-conference.org>

September 2011

September 5–9: Lisbon, Portugal. **17th European Young Statisticians Meeting** **w** <http://www.fct.unl.pt/17eysm>

September 12 – December 16: Institute for Pure and Applied Mathematics, Los Angeles, USA. **Mathematical and Computational Approaches in High-Throughput Genomics** **w** www.ipam.ucla.edu/programs/gen2011/

NEW **September 13–16:** Jaca, Spain. **Statistics, Probability and Operations Research (SPO 2011)** **w** <http://metodosestadisticos.unizar.es/~jaca2011>

October 2011

NEW **October 18–20:** Harvard Medical School, Cambridge, Mass. **2011 Non-clinical Biostatistics Conference** **w** <http://www.hsph.harvard.edu/ncb2011/>

November 2011

November 7–9: Łódź, Poland. **Multivariate Statistical Analysis Conference** **w** <http://www.msa.uni.lodz.pl>

November 25–27: Lahore, Pakistan. **3rd International Conference on Statistical Sciences** **w** <http://www.icss3.co.nr/>

December 2011

 **December 28–30:** Colombo, Sri Lanka. **International Statistics Conference 2011.** **w** TBC

International Calendar *continued*

December 2011 continued

December 28–31: Hong Kong, China. **International Conference on Advances in Probability and Statistics Theory and Applications: A celebration of N. Balakrishnan's 30 years of contributions to statistics.** e icaps2011@gmail.com w <http://faculty.smu.edu/ngh/icaps2011.html>

April 2012

 April 1–4: Washington DC, USA. **2012 ENAR/IMS Spring Meetings.** w <http://www.enar.org/meetings.cfm>


April 18–20: Poznań, Poland. **International Congress of Polish Statistics** to celebrate the 100th anniversary of the Polish Statistical Association w <http://www.stat.gov.pl/pts/>



June 2012

June 3–6: Guelph, Ontario, Canada. **SSC Annual Meeting** w TBC

June 23–26: Boston, MA, USA. **ICSA 2012 Applied Statistics Symposium.** w TBC


July 2012

 July 9–14: Istanbul, Turkey. **IMS Annual Meeting 2012 in conjunction with 8th World Congress in Probability and Statistics.** w <http://www.worldcong2012.org/>

  July 16–18: Memorial University, St. John's, Canada. **International Symposium in Statistics (ISS) on Longitudinal Data Analysis Subject to Outliers, Measurement Errors, and/or Missing Values** w www.iss-2012-stjohns.ca

 July 28 – August 2: San Diego, California. **JSM2012.** w <http://amstat.org/meetings/jsm/2012/index.cfm>

March 2013

 March 10–13: Orlando, Florida. **2013 ENAR/IMS Spring Meeting.** w <http://www.enar.org/meetings.cfm>

August 2013

 August 3–8: Montréal, Canada. **IMS Annual Meeting at JSM2013.** w <http://amstat.org/meetings/jsm/>

March 2014

 March 16–19: Baltimore, Maryland. **2014 ENAR/IMS Spring Meeting.** w <http://www.enar.org/meetings.cfm>

July 2014

 July 7–11: Sydney, Australia. **2014 IMS Annual Meeting.** w TBC

August 2014

 August 2–7: Boston, MA. **JSM2014.** w TBC

August 2015

 August 8–13: Seattle, WA. **JSM2015.** w TBC

Are we missing something? If you know of any statistics or probability meetings which aren't listed here, please let us know. Email the details to Elyse Gustafson at erg@imstat.org. We'll list them here in the *Bulletin*, and online too, at www.imstat.org/meetings

Membership and Subscription Information

Journals

The scientific journals of the Institute of Mathematical Statistics are *The Annals of Statistics*, *The Annals of Probability*, *The Annals of Applied Statistics*, *The Annals of Applied Probability*, and *Statistical Science*. The *IMS Bulletin* is the news organ of the Institute.

Individual and Organizational Memberships

Each individual member receives the *IMS Bulletin* (print and/or electronic) and may elect to receive one or more of the five scientific journals. Members pay annual dues of \$103. An additional \$53 is added to the dues of members for each scientific journal selected.

Reduced membership dues are available to full-time students, new graduates, permanent residents of countries designated by the IMS Council, and retired members. **Organizational memberships** are available to departments, corporations, government agencies and other similar research institutions at \$155 per year.

Individual and General Subscriptions

Subscriptions are available on a calendar-year basis. **Individual subscriptions** are for the personal use of the subscriber and must be in the name of, paid directly by, and mailed to an individual. Individual subscriptions for 2011 are available to *The Annals of Applied Probability* (\$166), *The Annals of Applied Statistics* (\$166), *The Annals of Probability* (\$166), *The Annals of Statistics* (\$166), *Statistical Science* (\$146), and *IMS Bulletin* (\$113). **General subscriptions** are for libraries, institutions, and any multiple-readership use. General subscriptions for 2011 are available to *The Annals of Applied Probability* (\$360), *The Annals of Applied Statistics* (\$320), *The Annals of Probability* (\$360), *The Annals of Statistics* (\$390), *Statistical Science* (\$210), and *IMS Bulletin* (\$95). Airmail rates for delivery outside North America are \$109 per title.

IMS Bulletin

The *IMS Bulletin* publishes articles and news of interest to IMS members and to statisticians and probabilists in general, as well as details of IMS meetings and an international calendar of statistical events. Views and opinions in editorials and articles are not to be understood as official expressions of the Institute's policy unless so stated; publication does not necessarily imply endorsement in any way of the opinions expressed therein, and the *IMS Bulletin* and its publisher do not accept any responsibility for them. The *IMS Bulletin* is copyrighted and authors of individual articles may be asked to sign a copyright transfer to the IMS before publication.

The *IMS Bulletin* (ISSN 1544-1881) is published eight times per year in January/February, March, April/May, June/July, August, September, October/November and December, by the Institute of Mathematical Statistics, 3163 Somerset Dr, Cleveland, Ohio 44122, USA. Periodicals postage paid at Cleveland, Ohio, and at additional mailing offices. Postmaster: Send address changes to Institute of Mathematical Statistics, 9650 Rockville Pike, Suite L3503A, Bethesda, MD 20814-3998.

Copyright © 2011 by the Institute of Mathematical Statistics.

Printed by The Sheridan Press, 450 Fame Avenue, Hanover, PA 17331, USA.

Information for Advertisers

General information: The *IMS Bulletin* and webpages are the official news organs of the Institute of Mathematical Statistics. The *IMS Bulletin*, established in 1972, is published 10 times per year. Circulation is over 5,000 paper copies. The *Bulletin* is also available free online in PDF format at <http://bulletin.imstat.org>, usually posted online about two weeks before mailout. Subscription to the *IMS Bulletin* costs \$90. To subscribe, call 877-557-4674 (US toll-free) or +1 216 295 2340 (international), or email staff@imstat.org. The IMS website, <http://imstat.org>, established in 1996, receives over 30,000 visits per month. Public access is free.

Advertising job vacancies

A single 45-day online job posting costs **\$215.00**. We will also include the basic information about your job ad (position title, location, company name, job function and a link to the full ad) in the *IMS Bulletin* at no extra charge. See <http://jobs.imstat.org>

Advertising meetings, workshops and conferences

Meeting announcements in the *Bulletin* and on the IMS website at <http://imstat.org/meetings> are free. Send them to Elyse Gustafson; see http://www.imstat.org/program/prog_announce.htm

Rates and requirements for display advertising

Display advertising allows for placement of camera-ready ads for journals, books, software, etc. A camera-ready ad should be sent as a grayscale PDF/EPS with all fonts embedded. Email your advert to Audrey Weiss, IMS Advertising Coordinator admin@imstat.org or see <http://bulletin.imstat.org/advertise>

	Dimensions: width x height	Rate
1/3 page	4.93" x 4" (125.2 x 102 mm)	\$215
1/2 page	7.5" x 4" (190 x 102 mm)	\$270
2/3 page	4.93" x 8" (125.2 x 203 mm)	\$325
Full page (to edge, including 1/8" bleed)	8.75" x 11.25" (222 mm x 285.8 mm)	\$380
Full page (within usual <i>Bulletin</i> margins)	7.5" x 9.42" (190 mm x 239.3 mm)	\$380

Deadlines and Mail Dates for *IMS Bulletin*

Issue	Deadline	Online by	Mailed
1: January/February	December 1	December 15	January 1
2: March	February 1	February 15	March 1
3: April/May	March 15	April 1	April 15
4: June/July	May 1	May 15	June 1
5: August	July 1	July 15	August 1
6: September	August 15	September 1	September 15
7: Oct/Nov	September 15	October 1	October 15
8: December	November 1	November 15	December 1

the
next
issue is

**April/May
2011**

Meeting reports, news
of members, information
and announcements
about conferences, and
jobs around the world.

Send in your ideas,
articles, and letters...
We love to hear from you!

DEADLINES
for
submissions

**March 15,
then May 1**

Please see inside
the back cover for
subscription details
and information for
advertisers, including
all our **deadlines and
requirements**

**Journal
alerts**

For alerts and special
information on all the
IMS journals, sign up
at the IMS Lists site
<http://lists.imstat.org>



THE ANNALS
of
APPLIED
STATISTICS

AN OFFICIAL JOURNAL OF THE
INSTITUTE OF MATHEMATICAL STATISTICS

AOAS December 2010
<http://projecteuclid.org/aoas>

Leo Breiman Memorial Section

Remembering Leo Breiman.....	ADELE CUTLER	1621
Leo Breiman: An important intellectual and personal force in statistics, my life and that of many others	PETER J. BICKEL	1634
Remembrance of Leo Breiman	PETER BÜHLMANN	1638
Leo Breiman	MICHAEL I. JORDAN	1642
Remembering Leo Breiman	RICHARD A. OLSHEN	1644
Remembering Leo	JEROME H. FRIEDMAN	1649
Selected recollections of my relationship with Leo Breiman	CHARLES J. STONE	1652
Leo and me	JACOB FELDMAN	1656
Remembering Leo	BIN YU	1657

Articles

Subsampling methods for genomic inference	PETER J. BICKEL, NATHAN BOLEY, JAMES B. BROWN, HAIYAN HUANG AND NANCY R. ZHANG	1660
Multicategory vertex discriminant analysis for high-dimensional data	TONG TONG WU AND KENNETH LANGE	1698
Reuse, recycle, reweigh: Combating influenza through efficient sequential Bayesian computation for massive data	JENNIFER A. TOM, JANET S. SINSHEIMER AND MARC A. SUCHARD	1722
Reconstructing DNA copy number by penalized estimation and imputation	ZHONGYANG ZHANG, KENNETH LANGE, ROEL OPHOFF AND CHIARA SABATTI	1749
Exit polling and racial bloc voting: Combining individual-level and $R \times C$ ecological data	D. JAMES GREINER AND KEVIN M. QUINN	1774
Liquid chromatography mass spectrometry-based proteomics: Biological and technological aspects	YULIYA V. KARPIEVITCH, ASHOKA D. POLPITIYA, GORDON A. ANDERSON, RICHARD D. SMITH AND ALAN R. DABNEY	1797
Zero-inflated truncated generalized Pareto distribution for the analysis of radio audience data	DOMINIQUE-LAURENT COUTURIER AND MARIA-PIA VICTORIA-FESER	1824
Modeling the dynamics of biomarkers during primary HIV infection taking into account the uncertainty of infection date	J. DRYLEWICZ, J. GUEDEJ, D. COMMENGES AND R. THIÉBAUT	1847
Improving PSF calibration in confocal microscopic imaging—estimating and exploiting bilateral symmetry	NICOLAI BISSANTZ, HAJO HOLZMANN AND MIROSLAW PAWLAK	1871
A nonlinear mixed effects directional model for the estimation of the rotation axes of the human ankle	MOHAMMED HADDOU, LOUIS-PAUL RIVEST AND MICHAEL PIERRYNOWSKI	1892
Nonparametric inference of doubly stochastic Poisson process data via the kernel method	TINGTING ZHANG AND S. C. KOU	1913

Continued on back cover