IMS Bulletin



August/September 2009

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Election results announced



The results are announced for the 2009 IMS Elections. The next President-Elect will be **Peter Hall**. Peter is Professor of Statistics in the Department of Mathematics and Statistics, University of Melbourne; and Professor of Statistics, Department of Statistics, UC Davis (a fractional appointment). He will serve

on the IMS Executive Committee for three years, as President-Elect (2009–10), President (2010–2011) and Past President (2011–2012).

Five Council members have been elected for a three-year term, to serve from August 2009 to August 2012. In alphabetical order, they are:

Marie Davidian (William Neal Reynolds Professor of Statistics in the Department of Statistics at North Carolina State University)

Edward George (Universal Furniture Professor and Chairman of the Department of Statistics, Wharton School, University of Pennsylvania)

Robert Tibshirani (Professor in the Departments of Health Research & Policy and Statistics, Stanford University)

Michael Titterington (Professor in the Department of Statistics at the University of Glasgow, UK), and

Zhiliang Ying (Professor in the Department of Statistics at Columbia University).

In addition, this year another Council member has been elected for a two-year term, to finish an unexpired term on a vacated Council position. Davar Khoshnevisan (Professor in the Department of Mathematics, The University of Utah) will serve on Council from August 2009 to August 2011.

The outgoing members of council this year are Martin Barlow, Frank Den Hollander, Iain Johnstone, Karen Kafadar and Xiao-Li Meng. Thanks to all of you for your work! The newly-elected members join Montse Fuentes, Geoffrey Grimmett, Maria Eulalia Vares, Jon Wellner, Alan Welsh, Bruce Lindsay, Michael Newton, Jane-Ling Wang and Bin Yu, and several *ex officios* on the Council.

> From above right top to bottom, the newly-elected members of Council are: Marie Davidian, Edward George, Davar Khoshnevisan, Robert Tibshirani, Michael Titterington, and Zhiliang Ying.













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IMS members' news

Jean Opsomer receives Gertrude M Cox Award

The Washington Statistical Society (WSS) and RTI International have announced that Jean Opsomer, professor in the Department of Statistics at Colorado State University in Fort Collins, has been chosen as this year's recipient of its Gertrude M. Cox Award. Since receiving his PhD from Cornell University in 1995, Opsomer has made noteworthy contributions to the field of statistics in several areas, including survey research, environmental statistics, and nonparametric regression. He received the award at the WSS annual dinner meeting on June 18, and gave the keynote address, *"Aspects of Sampling Design: A Tale of Two Natural Resource Surveys.*" The Gertrude M. Cox Award was established in 2003 through a joint agreement between WSS and RTI to recognize statisticians in early to midcareer who have made significant contributions to statistical practice. It is given in memory of Gertrude M. Cox (1900–1978), who in the 1950s played a key role in establishing Mathematical Statistics and Biostatistics departments at The University of North Carolina at Chapel Hill, and a Statistical Division at the then newly-founded not-for-profit RTI. Past recipients of the award include Sharon Lohr, Alan Zaslavsky, Tom Belin, Vance Berger, Francesca Domenici, and Thomas Lumley.

Len Stefanski named NC State Drexel Professor

Dr Leonard (Len) Stefanski has been named Drexel Professor of Statistics at NC State. Stefanski is known internationally for his work in measurement error models. His method of simulation extrapolation (SIMEX) is widely used, and he is one of the authors of *Measurement Error in Nonlinear Models*, published in 1995. A second edition, titled *Measurement Error in Nonlinear Models: A Modern Perspective*, was released in 2005. He is a fellow of the American Statistical Association and editor of the *Journal of the American Statistical Association, Theory and Methods Section.* Stefanski, who joined NC State 1986, is associate department head. He served as co-director of the graduate program and is a key member of the department's NSF Vertical Integration of Research and Education (VIGRE) program, a national model for educating statisticians and future problem solvers.

Klaus Krickeberg receives Vietnamese Medal of Merit

Klaus Krickeberg, retired professor at the University of Paris V, received the Medal of Merit of the Vietnamese Ministry of Health for contributions to the health of the population.



Ruth J. Williams,

Correction

who was elected to fellowship in the American Academy of Arts and Sciences (see July *Bulletin*, page 2) is Professor of **Mathematics** at the University of California at San Diego, and not a Professor of Statistics, as stated. Apologies for any confusion!

AOAS Associate Editor elected to National Academy of Sciences

Someone else who was elected as a member of the National Academy of Sciences this year is Charles F. Manski, an economist and statistician who is a member of the *Annals of Applied Statistics* editorial board. Charles Manski has been Board of Trustees Professor in Economics at Northwestern University since 1997. His research spans econometrics, judgement and decision, and the analysis of social policy.

Nominations sought

Nominations sought for Marvin Zelen Leadership Award in Statistical Science

The Department of Biostatistics at the Harvard School of Public Health, named David L. DeMets, Department of Biostatistics and Medical Information, University of Wisconsin, as the recipient of the 2009 Marvin Zelen Leadership Award in Statistical Science. Dr. DeMets delivered a lecture entitled *"Challenges in Clinical Trials; Some Old and Some New"* on May 29 at Harvard University.

This annual award, supported by colleagues, friends and family, was established to honor Dr. Marvin Zelen's long and distinguished career as a statistician and his major role in shaping the field of biostatistics.

The award recognizes an individual in government, industry, or academia, who by virtue of his/her outstanding leadership has greatly impacted the theory and practice of statistical science. While individual accomplishments are considered, the most distinguishing criterion is the awardees contribution to the creation of an environment in which statistical science and its applications have flourished. The award recipient will deliver a public lecture on statistical science at the Harvard School of Public Health and will be presented with a citation and an honorarium.

Nominations for next year's award, to be given on May 21, 2010, should be sent to the *Marvin Zelen Leadership Award Committee, Department of Biostatistics, Harvard School of Public Health, 655 Huntington Avenue, Boston, MA 02115*. Nominations should include a letter describing the contributions of the candidate, specifically highlighting the criteria for the award, and a curriculum vitae. Supporting letters and materials would be extremely helpful to the committee.

All nominations must be received by November 1, 2009.

Abel prize nominations

There is still time to nominate a colleague for the 2010 Abel Prize. The deadline for nominations is 15 September 2009.

The Abel Prize, which amounts to NOK

6 million (approximately EUR 750,000 or USD 1 million), is an international prize for outstanding scientific work in the field of mathematics, including mathematical aspects of computer science, mathematical physics, probability, numerical analysis and scientific computing, statistics, and also applications of mathematics in the sciences. The prize is meant to recognize contributions to mathematics and its applications of extraordinary depth and influence. Such work may have resolved fundamental problems, created powerful new techniques, introduced unifying principles or opened up major new areas. The intent is to award prizes over the course of time in a wide range of areas of mathematics and its applications. The prize can be awarded to a single person or shared for closely related fundamental contributions.

Your nomination should be accompanied by a description of the work and impact of the nominee/nominees, together with names of distinguished specialists in the field of the nominee/nominees who can be contacted for an independent opinion.

Your nomination letter should be sent to abelprisen@dnva.no or *The Norwegian* Academy of Science and Letters, Drammensveien 78, NO-0271 Oslo, Norway.

For further information, see http://www.abelprisen.no/en/abelprisen/retningslinjer.html

IMS Editors

IMS Journals and Publications

Annals of Statistics: Susan Murphy & Bernard Silverman

http://imstat.org/aos

Annals of Applied Statistics: Bradley Efron, Stephen Fienberg, Michael Newton & Michael Stein http://imstat.org/aoas

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

Annals of Applied Probability: Yuval Peres http://imstat.org/aap

Statistical Science: David Madigan http://imstat.org/sts

IMS Lecture Notes – Monograph Series: Anirban DasGupta http://imstat.org/publications/lecnotes.htm

IMS Collections: Anirban DasGupta 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: Larry Wasserman 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: David van Dyk

http://www.amstat.org/publications/jcgs

Statistics Surveys: Jon Wellner 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/aihp

Bayesian Analysis: Brad Carlin http://ba.stat.cmu.edu

Bernoulli: Holger Rootzén http://isi.cbs.nl/bernoulli

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

MS Affiliated Journals

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

Probability and Mathematical Statistics: W. Szczotka, A. Weron & W.A. Woyczyński http://www.math.uni.wroc.pl/~pms

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Medallion lecture preview: Gábor Lugosi



Gábor Lugosi, born in 1964 in Hungary, graduated in Electrical Engineering from the Technical University of Budapest in 1987, and received his PhD from the Hungarian Academy of Sciences in 1991. In September 1996, he joined Pompeu Fabra University in Barcelona, Spain, where he became an ICREA Research Professor in 2006. His research has been principally motivated by problems in the mathematical theory of machine learning and sequential prediction, but he has also worked in problems of nonparametric statistics, game theory, and information theory. This IMS Medallion Lecture, *Combinatorial bandits: sequential prediction with limited feedback*, will be delivered at JSM on Wednesday, August 5.

In this lecture we discuss problems of sequential (or on-line) prediction. In such problems statistical modeling of the sequence to be predicted is often difficult or even meaningless. Since the pioneering work of Blackwell³ and Hannan⁷, a rich theory of prediction of individual sequences has been developed and today we have a deep understanding of the possibilities and limitations of such a framework.

The main principle behind the theory is that, instead of minimizing statistical risk, it is more meaningful to require that a forecaster perform, on the long run, almost as well as the best of a class of N reference predictors. These reference forecasters are often called experts. The difference between the accumulated loss of the forecaster and that of the best expert is called regret. The goal of the forecaster is to keep the regret as small as possible for all possible sequences of outcomes. The prediction problem may be formalized as a repeated game between the forecaster and the environment, played during nrounds. The classical results of Blackwell and Hannan imply that the forecaster has a randomized strategy that guarantees that the regret becomes negligible compared to n under the only condition that the loss function is bounded and the number of experts N is finite.

Numerous variants of this sequential prediction problem have been investigated in areas as diverse as the theory of repeated games, data compression, the theory of sequential investments, and on-line learning. We refer the interested reader to the book⁴ for a survey of many of these variants, techniques, and results.

A large body of recent research has focused on problems in which the reference forecasters (or experts) form a large but structured set. A prototypical example is the so-called path planning problem in which, at each time instance, the forecaster chooses a path between two designated nodes of a given network. The loss associated with the path is the sum of the losses of each edge on the path. The edge losses may change from time to time in an arbitrary way (between some fixed bounds) and the goal of the forecaster is to predict as well as the best fixed path that an oracle could have chosen by knowing all losses in advance. In another interesting example the forecaster chooses, at every round of the game, a spanning tree of a given graph and suffers a loss that is the sum of the losses over the edges included in the chosen spanning tree.

The common theme in these, and many other, applications, is that the class of actions (or experts) is very large (i.e., has size exponential in the size of the underlying graph) and have a nontrivial combinatorial structure. In spite of many interesting partial results, the best achievable regret is still not entirely understood in some of these cases. Another important and often challenging issue is the construction of efficiently computable forecasting strategies.

An intriguing twist on the basic model is the case when the forecaster has access to limited information about the past losses only. Perhaps the most studied version is the multi-armed bandit problem in which, after making his prediction and taking a corresponding action, the forecaster observes the loss he suffers but cannot observe the loss he would have suffered had he chosen a different action. Perhaps surprisingly, it is still possible to construct small-regret strategies even in the arbitrary-loss framework studied here. This may be achieved by a clever use of randomization and a carefully balanced combination of exploration and exploitation, see Auer et al.².

In the multi-armed bandit model, the problem of handling very large but structured classes of experts becomes even more interesting as estimating unobserved losses raises some nontrivial problems. Good estimates are bound to be constructed by a careful design of the exploration phase and should depend, in a subtle way, on the geometry of the class of experts the forecaster competes against. For recent progress in this direction we refer to Dani, Hayes, and Kakade⁶, Abernethy, Hazan, and Rakhlin¹, and Cesa-Bianchi and Lugosi⁵. The ultimate goal in this direction is to design forecaster strategies that achieve a regret that vanished at an optimal rate and are efficiently computable. We believe there are still many exciting questions in this area and the methodology has many interesting potential applications to be explored.

2 P. Auer, N. Cesa-Bianchi, Y. Freund, and R.E. Schapire. The nonstochastic multi-armed bandit problem. *SIAM Journal on Computing*, **32**:48–77, 2002. 3 D. Blackwell. An analog of the minimax theorem for vector payoffs. *Pacific Journal of Mathematics*, **6**:1–8, 1956.

4 N. Cesa-Bianchi and G. Lugosi. *Prediction, Learning, and Games*. Cambridge Univ. Press, New York, 2006.
5 N. Cesa-Bianchi and G. Lugosi. Combinatorial bandits. In *Proceedings of the 22nd Annual Conference*

on Learning Theory, Montreal, Canada, 2009. 6 V. Dani, T. Hayes, and S.M. Kakade. The price of bandit information for online optimization. In *Proceedings of NIPS 2008*, 2008.

¹ J. Abernethy, E. Hazan, and A. Rakhlin. Competing in the dark: An efficient algorithm for bandit linear optimization. In *Proceedings of the 21st Annual Conference on Learning Theory*, 263–274, 2008.

⁷ J. Hannan. Approximation to Bayes risk in repeated play. *Contributions to the theory of games*, **3**: 97–139, 1957.

Members' Discovery: Extending the Scope of Empirical Likelihood

Statisticians have exploited to great effect the notion of likelihood and its associated inferential procedures, since it was invented by Fisher around 1920. Maximization of the likelihood provides an intuitively appealing estimator with various excellent properties. Moreover, a set of parameter values suitably close to the maximizer yields a confidence region. Subsequent to Fisher's work, various extensions and modifications have been invented and investigated for a variety of purposes, so many in fact that we could be reminded of Shakespeare's, *"Many likelihoods informed me of this before, which hung so tottering in the balance that I could neither believe nor misdoubt."* Yet whether all's well that ends well—from the perspective of large-sample approximations and asymptotic optimality—is debatable.

A list of the most prominent notions of likelihood would certainly have to include the variations of conditional, profile, marginal, robustified, partial, pseudo, quasi, composite, penalized, and rank. Generally speaking, however, all of these likelihoods have been essentially parametric in nature. It was therefore a landmark achievement when a graduate student, Art Owen, presented what was arguably the first nonparametric likelihood, which he named empirical likelihood (EL) and introduced at a Stanford statistics seminar in the fall of 1985 (an occasion that one of us, Nils, still remembers vividly). The essential idea is to maximize the multinomial likelihood associated with the nonparametric cumulative distribution function when constrained to take the aim of the inference into account. Owen was able to show that "EL works" in the precise sense that minus twice the logarithm of the empirical likelihood function evaluated at the true value of the feature of the unknown nonparametric distribution under study tends to a chi-squared in distribution, where the degrees of freedom correspond to the dimensionality of the feature. Thus EL gives a vehicle for "just the right" nonparametric inference without having to specify a parametric family for the data. Later work has been able to extend EL and its properties to more general models and estimation procedures in a variety of ways; MathSciNet currently lists 339 journal articles containing the phrase "empirical likelihood."

In our 2009 Annals of Statistics paper, we have nevertheless been able to extend the scope of EL in three new directions. These relate to (i) plug-in versions of EL, useful for semiparametric models that contain a nonparametric component; (ii) situations where convergence is slower than the usual root-n rate; and (iii) occasions where the number of focus parameters increases with sample size. We also make a pedagogical effort to distill the essence of what "EL works" means into a few bare conditions. To illustrate our results for (i) and (ii), we consider a range of examples from active research areas in survival analysis and nonparametric statistics. In particular, we look at functionals of survival distributions with right censored data, the error distribution in nonparametric regression, density estimation, and survival function estimation from current status data. For (iii), we consider Poisson and polynomial regression, among other examples.

Like many other research projects, this one started partly by coincidence. Each of us had been interested in EL and its properties for some time, when Ian and Nils found ourselves visiting Ingrid at Louvain-la-Neuve for somewhat unrelated reasons. We started some blackboard discussions, and some coffees and dinners later it became clear that we had a project on our hands. This *Annals of Statistics* paper is a fruit of this collaboration.



Discovered something *interesting*?

We welcome IMS members' short news items regarding their discoveries, through publication or invention. The *Bulletin* will publish selected items to share the discoveries. These items can be as short as just one or two paragraphs, and are subject to editing.

These results are published in the paper "Extending the scope of empirical likelihood" by Nils Lid Hjort, Ian W. McKeague, and Ingrid Van Keilegom, in Volume 37, number 3 (June 2009 issue), of the *Annals of Statistics*: see http://projecteuclid.org/ handle/euclid.aos.

Contributed by the authors of the paper, and communicated by the Editor.

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Report: WNAR/IMS Spring Meeting

Antje Hoering reports on the 2009 WNAR/ IMS Spring Meeting:

The 2009 Annual Meeting of the WNAR/ IMS was held at Portland State University, Portland, Oregon, from 14–17 June, with approximately 160 participants.

The meeting began with a short course on Generalized Linear Models by Charles McCulloch from the University of California, San Francisco. Peter Diggle from Lancaster University gave a stimulating presentation entitled, "Geostatistical Inference Under Preferential Sampling", for the WNAR Presidential Invited Address. David Madigan from Columbia University, gave an exciting presentation on "High Dimensional Bayesian Classifiers."

Excellent presentations were given by invited speakers: John Boscardin from University of California, San Francisco, Jack Lee from the University of Texas M.D. Anderson Cancer Center, Jane Fridlyand

from Genentech, Karen Messer from the University of California, San Diego in the session "Statistical Challenges in Design and Analysis of Clinical Trials"; Mei-Ling Ting from the University of Maryland, Lihui Zhao from Simon Fraser University, Ning Li from the University of Florida, Peter Gilbert from the Fred Hutchinson Cancer Research Center in the session "Analysis of Event History Data: New Developments and Applications"; David Dahl from Texas A&M University, Chris Hans from Ohio State University, David van Dyk from the University of California, Irvine, Vale Johnson from the University of Texas M.D. Anderson Cancer Center in the session "Applied Bayesian Modeling"; Geert Verbeke from I-Biostat, Jeremy Taylor from the University of Michigan, Erning Li from the Texas A&M University, Roseanne McNamee from the University of Manchester in the session "Joint Modeling of Longitudinal and Survival Data or GLM Data"; Andrada Ivanescu from the East Carolina University, Debashis Paul from The University of California, Davis, Jeff Morris from the University of Texas M.D. Anderson Cancer Center in the session "New Frontiers in Functional Data Analysis"; Scott Schmidler from Duke University, Ingo Ruczinski from the Johns Hopkins University, Mark Segal from the University of California, San Francisco in the session "Statistical Issues in Protein Folding"; Caixia Li from the



WNAR participants at the banquet: Jong-Sung Kim, Ken Kopecky, Todd Alonzo and John Neuhaus

University of California, San Francisco, Heping Zhang from Yale University, Ilya Lipkovich from Eli Lilly in the session "Regression Tree and Its Application"; Dev Chakraborty from the University of Pittsburgh, Kumar Rajan from the Rush University, Andriy Bandos from the University of Pittsburgh, Liansheng Tang from George Mason University in the session "Statistical Methods for Diagnostic Medical Imaging Data"; Rob Tibshirani from Stanford University, Jinchi Lv from the University of Southern California, Xinwei Deng from the Georgia Institute of Technology in the session "Variable Selection and High Dimensional Data Analysis"; Su Yeon Kim from UC Berkeley, Paul Joyce from the University of Idaho, Yun Song from the University of California, Berkeley in the session "Population Genetics."

2009 WNAR Student Paper Competition

Congratulations to Daniela Witten from Stanford University for winning the 2009 WNAR Best Student Paper Competition for her paper entitled "Sparse Canonical Correlation Analysis, with Application to Genomic Data". Congratulations also to the following two students winning the 2009 WNAR Best Oral Presentation: Siobhan Everson-Stewart from the University of Washington for winning the for her talk entitled "A Flexible Margin Approach for Non-Inferiority Clinical Trials" and to Vinh Nguyen from the University of California, Irvine for his talk entitled "Robust Inference in the Discrete Time Proportional Hazard Model." Congratulations also to Erik Bloomquist from the University of California, the runner-up for the written paper, and to Joseph Koopmeiners from the University of Washington, the runner-up for the oral presentation. The students received their award at the conference banquet.

We are indebted to the team of student paper reviewers and judges for the students' oral presentations and papers: Sandra Catlin from the University of Nevada, Joan Hu from Simon Fraser University, Todd Alonzo from the University of Southern California and Thomas Lumley from the University of Washington.

Students and recent graduates are encouraged to submit their manuscripts for the 2010 WNAR/IMS Student Paper Competition. Details on the submission process can be found as they become available at the WNAR website at www.wnar.org under the link, Student Paper Competition. Students are encouraged to plan to submit their papers early.

Special thanks go out to our Local Organizer, Jong Sung Kim from Portland State University; Program Chairs Gang Li from the University of California, Los Angeles (WNAR) and Haiyan Huang from the University of California, Berkeley (IMS); the invited session organizers: Kate Crespi from the University of California, Los Angeles, Rhonda Rosychuk from the University of Alberta, Feng Liang from Yale University, Keming Yu from Brunel University, Robert Weiss from the University of California, Los Angeles, Sandrine Dudoit from the University of California, Berkeley, Mark Segal from the University of California, San Francisco, Ying Lu from the University of California, San Francisco, Debashis Paul from the University of California, Davis, Gareth James from the University of Southern California, Rasmus Nielsen from the University of California, Berkeley, and all our contributed session organizers, chairs and discussants. Thanks to the entire faculty volunteer staff and the conference center staff of Portland State University.

Next year's WNAR/IMS meeting will be at the University of Washington, WA, from June 20–23, 2010. Check the WNAR website for details as the date comes nearer.



[Below] Conference participants enjoying the banquet

[Right] Student paper competition winner Daniela Witten (left) with WNAR president Todd Alonzo (right) [Below right] Student written paper runner-up, Erik Bloomquist (right) with WNAR president Todd Alonzo (left)





Probability and statistics in Africa

Professor Gane Samb LO, the coordinator of the Statistical Pan African Society, writes: How many statisticians and specialists in probability theory do we have in Africa? In which research or consultancy fields do they work? What is their distribution over the different regions and countries of Africa, with respect to gender? Where are they trained? Is it possible to have high-level training in these fields in Africa? These are some of the questions we ask ourselves regarding the situation of statistics and probability in Africa. In order to be able to respond to them, we conducted a simple survey and addressed a questionnaire form to some specialists in almost every African country. (Because South Africa is not comparable to any other countries, it is not addressed in this document.)

Amazingly, we only received eight filled forms back (from Senegal, Côte-d'Ivoire, Algeria, Burkina-Faso, Tunisia, Mali, Congo and Togo). If statisticians themselves do not respond to survey questions, what would do others who are less aware of the importance of data? Nevertheless, we made inferences from this very incomplete data set by using other sources and common facts. We give some responses to the questions, and propose strategies for a definitive take on these beautiful, and useful, subjects in the oldest yet most underdeveloped continent.

Africa has been divided, since colonial times, into mostly French-speaking (francophone) and English-speaking (Anglophone) countries, with some Arabic-speaking countries. In the francophone zone, official statisticians are trained in five international statistics schools (see www.ensae.fr/capesa/) after a competitive examination, while the researchers are trained in universities mainly in France. In the Anglophone zone, statisticians as well as probabilists come from the universities.

Official statistics are generally well-

organized in Africa, through the African Centre for Statistics (see www.uneca.org/ statistics/) of the Economic Commission for Africa of the United Nations.

On the research side, specialists are very isolated, especially in the Anglophone zone. From our quick survey results, we determined that there is an average of five to ten holders of PhD degrees per country, with some higher peaks in countries like Morocco, Algeria and Nigeria. But the number of active researchers remains low, around an average of five. In most countries, there is at least one Master's training program in statistics and/or probability.

Yet Africa has a few renowned statisticians and probability theory specialists living, working and teaching in Africa, like Professor Youssef Ouknine (www.ufrsat. org/spas/fr/spas_pw_membres.php?cle=19). Most of our specialists are trained in the best universities in the (rest of the) world.

Africa is a young continent in the sense that the 75th percentile of Africans' ages is relatively low, and young people in Africa are attracted to fundamental sciences and mathematics, as shown by data in many of our universities.

It is in this context that the initiative of launching the Statistical Pan African Society (SPAS) was born. It has been enthusiastically welcomed by our 90 founding members in all Africa (with the exception of South Africa). A list of these people, as well as some information about them, may be found at http://univi.net/spas/ang/ spas_cherche_membres.php?premlet= The website of SPAS (www.statpas.net), via its database, gives information on the specialization fields of the members, their training, activities and publications. We hope that in due course all the specialists will register in these databases so that the above mentioned questions may be responded to in time.

The society may help give more visibility

to research and use of statistics and probability in Africa. We are working on some applications that would permit for example IMS or ISI members to know everything about the situation in Africa regarding these fields with updated information. This program, called the African Visibility Program in Statistics and Probability (AVPSP) provides an automatic personal page to SPAS members, and information about the publications of African scholars (peer-reviewed papers, working documents, textbooks, books), the different masters programs in statistics and/or probability in Africa, and the regional research projects and training programs. This program will be a tool for mutual collaborations inside Africa and for outside exchange between Africa and the rest of the world.

Our international journal, named Afrika Statistika (www.jafristat.net) is already online. A biannual meeting that will be a great scientific event, to be held in Africa with attendance by renowned scientists, is in the works. This meeting will be an opportunity to exchange ideas among our members.

SPAS links together African scholars working in Africa and outside Africa. Specifically, African statisticians who teach and work in Western countries (Europe, USA, and Canada) are now able to contribute to African statistical development though the SPAS programs, in the form of graduate teaching, research programs and thesis supervision. SPAS is also expected to concentrate on applied research programs about the major challenges faced by Africa: HIV/AIDS and other epidemics, water policies, the H1N1 flu pandemic and poverty, among others.

We believe that in the coming years, our determination will help paint a better picture of statistics in Africa and present a success story.

National Academies induction

Tom Liggett, UCLA, writes: At the end of April 2009, my wife Chris and I participated in the annual meeting of the National Academy of Sciences in Washington DC. It was my first NAS meeting, but I would guess that it was one of the more interesting meetings in recent years. I say that not because it was the one in which I was inducted as a new member, but because it was the first such meeting during the new Obama Administration. I found it to be a fascinating mix of science, science policy, and social events.

The meeting began Saturday afternoon with an orientation for new members, followed by an elegant dinner in the Great Hall of the NAS building and the induction ceremony. Prior to the orientation, I had only the vaguest idea of what the NAS does (aside from electing new members), and of its connection with the National Research Council. I learned that the NRC is the operational branch of the NAS. It conducts studies for various branches of the government. A recent example related to mathematics is NSF's VIGRE program. VIGRE is now about ten years old. About two years ago, NSF commissioned the NRC to evaluate the success of the program, and to make recommendations for its future. The NRC established a high level panel to conduct the study. Members of the panel are not necessarily members of the NAS, but the panel reports to the NAS. Before the report becomes final, it is circulated to a few NAS members, who are asked to evaluate the report, to ensure that its conclusions are well reasoned, and well supported by the data. Other presentations at the orientation dealt with the Proceedings of the NAS, and with plans to refurbish the NAS building. On the latter issue, we learned that the current economic situation may force a postponement of the project.

Sunday highlights included a panel discussion on science policy, the garden party, and a concert. I was very impressed with



the panel, which included the President's Advisor on Science and Technology, the Director of the National Oceanic and Atmospheric Administration, the Secretary of Energy, and the Science Advisor to the Secretary of State. The panel spent about two hours discussing the science policy of the new Administration. The panelists were very positive, optimistic, and forward-looking. I found one question asked by an NAS member to be particularly interesting. He started by saying that he was very impressed by the four members of the panel. However, he continued, since the



offices and departments that they head are still staffed primarily by career people who were there during the previous Administration, how can we expect the positive attitudes and new priorities evident at the top to be reflected and implemented by these same people who served in their positions during the past eight years. The answer was that we should not be concerned about this—already, in the short time they had been in office, the leadership has seen real enthusiasm in the ranks and a desire to move forward, following the new directions set by the Obama administration.

Monday's highlight was certainly President Obama's address to the Academy. There was high security and some waiting involved, but we were privileged to witness only the fourth presidential address to the Academy in "modern times". (The other three: John Kennedy, Jimmy Carter, and the senior George Bush.) It was a great speech. The only disappointment for me was that it was hardly covered at all by the media. It is, however, available online at http://www8.nationalacademies.org/onpinews/newsitem. aspx?RecordID=20090427

The day ended with dinner and dancing at the National Portrait Gallery.

On Tuesday, we elected new members, completing a process that had begun almost a year earlier. We also had a first-hand report by the President of the Institute of Medicine on the H1N1 flu, which was just becoming a major news story.

[Above right] Tom Liggett, after signing "the book" [Left] Tom with Ralph Cicerone, the NAS President

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IMS Monographs will be concise research monographs of high quality on any branch of statistics or probability of sufficient interest to warrant publication as books. Some will concern relatively traditional topics in need of up-to-date assessment. Others will be on emerging themes. In all cases the objective will be to provide a balanced view of the field.

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If you are interested in publishing a book in the IMS Monographs or IMS Textbooks series, please write to one of the editors listed above, or to Lauren Cowles: lcowles@cambridge.org or Diana Gillooly: dgillooly@cambridge.org at Cambridge University Press.

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OBITUARY: Kai Lai Chung

KAI LAI CHUNG, one of the leading probabilists of the second half of the twentieth century and Professor Emeritus of Mathematics at Stanford University, passed away on June 1, 2009, at the age of 91. He is survived by his wife, Lilia, three children, Daniel, Marilda, and Corinna, and four grandchildren, Alex, Adam, Davison, and Vanessa.

Kai Lai Chung was born in 1917 in Shanghai, China, to a family with roots in Hangzhou in Zhejiang Province. He entered Tsinghua University in 1936 and graduated in Mathematics in 1940. During the war with Japan, major universities in the Beijing-Tianjin region moved to the southwest city of Kunming and regrouped as the National Southwestern Associated University where Chung worked in a position analogous to that of assistant professor. During this period, he first studied number theory with Lo-Keng Hua and then probability theory with Pao-Lu Hsu. In 1944 he won a highly competitive Boxer Rebellion Indemnity scholarship for study in the United States and arrived at Princeton University in December 1945. He completed his PhD at Princeton in 1947 with Harald Cramér as advisor (Cramér was visiting Princeton from Sweden at the time-Samuel Wilks and John Tukey were the other members of the dissertation committee). Chung's thesis was titled "On the maximum partial sum of sequences of independent random variables." Subsequently he held academic appointments at the University of Chicago, Columbia University, University of California at Berkeley, Cornell University, and Syracuse University. He joined Stanford University in 1961 and remained there until his retirement in 1988. Over the years, he held extended visiting appointments at

several institutions: University of Strasbourg (France), University of Pisa (Italy), and ETH Zürich (Switzerland). He held the George A. Miller Visiting Professorship at the University of Illinois at Urbana-Champaign in 1970–71, he was a Fellow of the Institute of Mathematical Statistics, and in 1976 he was made an Overseas Fellow of Churchill College, Cambridge, UK.

Kai Lai Chung was a great innovator and his research had a major influence on several areas in probability: sums of independent random variables, Markov chains in continuous time, time reversal of Markov processes, probabilistic potential theory, Brownian excursions, and gauge theorems for the Schrödinger equation. He authored 133 journal articles spanning a period of 70 years. A selection of his works was recently published by World Scientific in celebration of his 90th birthday. In addition to his research articles, Kai Lai Chung's eleven books have influenced generations of students of probability, both graduate and undergraduate. He was well known for his elegant style, his clarity and precision in exposition, and his lively prose. His widely used graduate text, A Course in Probability Theory, is now in its third edition, and his popular undergraduate text, *Elementary* Probability and Stochastic Processes (with Farid AitSahlia as coauthor for the current fourth edition), has appeared in English, Chinese, German, Persian, Russian and Spanish.

Kai Lai Chung taught probability for nearly 40 years and supervised 14 PhD students: Warren Hirsch, Rafael Chacon, William Pruitt, Norman Pullman, Naresh Jain, Arthur Pittenger, Robert Smythe, Michael Chamberlain, Christopher Nevison, Michael Steele, Ruth Williams, Elton Hsu, Ming Liao, and Vassilis



Kai Lai Chung

Papanicolaou. The Mathematics Genealogy project currently lists a total of 119 academic descendants for Kai Lai Chung. His enthusiasm for mathematics was evident in his energetic classroom and research presentations and in his lively one-on-one discussions. He had a spirited and candid delivery style. He is particularly remembered by collaborators and colleagues for his stimulating questions, delivered in person, or by letter and phone, and in later years by fax.

In 1981, Kai Lai Chung, along with Erhan Cinlar and Ronald Getoor, initiated the Seminars on Stochastic Processes. These conferences, with their innovative structure of just a few formal talks, allowing plenty of time for informal discussions and research problem sessions, continue as highly successful annual meetings to this day. The 1987 Seminar, held at Princeton University, honored Kai Lai Chung and Gilbert Hunt around the time of their retirements. Among the other participants were Claude Dellacherie, Paul-André Meyer, and Jacques Neveu, who came from France to honor Chung and Hunt, and also to tell of their respective important influences on the French probability school. The 2010 Seminar, to be hosted by the University of Central Florida, will have a session to commemorate Kai Lai Chung's contributions to probability.

Kai Lai Chung also played an influential role in the development of probability

theory in his native China immediately after the chaotic years of the Cultural Revolution (1966–1976). His visit to China in 1978 (together with Joseph Doob and Jacques Neveu) was the starting point for renewed contact of Chinese probabilists with the West. He visited China many times after that, giving numerous lectures and short courses, and helped young Chinese students gain opportunities to study in the United States. He also served as an external examiner for several universities in the Asian region, including the National University of Singapore.

Kai Lai's zest for life, combined with his energetic curiosity, was apparent to all who knew him, both within and outside of the community of mathematics. Besides his pursuit of mathematics, he had broad cultural interests. Educated in a classical Chinese tradition, he was deeply familiar with literary traditions and forms of the Chinese language. His family recalls how, in his many travels to China from 1978 onwards, he sought out and helped re-establish the stature of writers, poets, painters, and calligraphers he counted as old friends. His passion for culture was not restricted to that of his homeland. In his extensive travels, he always made sure to see important historical, cultural, or natural sites. He surprised many people with his wide-ranging and intimate knowledge of literature and music, especially opera. He spoke several languages, and particularly delighted in practicing Italian, which he

taught himself in his retirement.

We are grateful for having known Kai Lai, for his inspiration and guidance, and his many engaging conversations over the years. He was unique and highly memorable; he will be missed.

A memorial service, to be held at Stanford University, is being planned for the Fall. The family requests that charitable donations in memory of Kai Lai Chung be made to the Kai Lai Chung memorial fund at Stanford University, Mathematics Department.

> Farid AitSahlia, University of Florida Erhan Çinlar, Princeton University Elton P. Hsu, Northwestern University Ruth J. Williams, University of California, San Diego

NISS launches new website

The National Institute of Statistical Sciences (NISS), an independent research institute through which the statistics community serves the nation, is pleased to announce a major redesign and improvement of its website, www.niss.org.

Along with an attractive new design and layout, the new website is easier to navigate and features ,news and updates about the organization, a calendar of events with online registration, profiles of NISS affiliates and postdoctoral fellows, and much more. The new website

also functions as a comprehensive source for information and resources for the statistical community. In addition, the web site provides clear paths for statistical scientists and others to become engaged in the programs and activities of NISS.

"We were pleased to work with Design Hammer Inc, a web design firm based in Durham, NC, whose experience matched our needs perfectly." commented Alan Karr, director of NISS, "We are very happy to have a website that uses an open-source content management database system. This will make it much easier to add new content to the website, and we will be able to add new features as they are needed in the future. And none of this could have happened without the efforts of three NISS staff—communications director Jamie Nunnelly, webmaster Katherine Kantner and computer systems manager James Thomas."

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Markov Chains and Mixing Times

David A. Levin, University of Oregon, Eugene, OR, Yuval Peres, Microsoft Research, Redmond, WA, and University of California, Berkeley, CA, and Elizabeth L. Wilmer, Oberlin College, OH

Markov Chains and Mixing Times is a magical book, managing to be both friendly and deep. It gently introduces probabilistic techniques so that an outsider can follow. At the same time, it is the first book covering the geometric theory of Markov chains and has much that will be new to experts. It is certainly THE book that I will use to teach from. I recommend it to all comers, an amazing achievement.

—Persi Diaconis, Mary V. Sunseri Professor of Statistics and Mathematics, Stanford University

2009; 371 pages; Hardcover; ISBN: 978-0-8218-4739-8; List US\$65; AMS members US\$52; Order code MBK/58

Introduction to Probability

Second Revised Edition

Charles M. Grinstead, Swarthmore College, PA, and J. Laurie Snell, Dartmouth College, Hanover, NH

The book is a beautiful introduction to probability theory at the beginning level. The book contains a lot of examples and an easy development of theory without any sacrifice of rigor, keeping the abstraction to a minimal level. It is indeed a valuable addition to the study of probability theory.

—Zentralblatt MATH

1997; 510 pages; Hardcover; ISBN: 978-0-8218-0749-1; List US\$57; AMS members US\$46; Order code IPROB

Stochastic Processes

S. R. S. Varadhan, Courant Institute of Mathematical Sciences, New York, NY

Amazingly, almost all of the proofs are given explicitly. In fact the author provides only eight references in the bibliography. This reflects the fact that, as a whole, this book is written in a totally self-contained manner. ...I can say that this book is a set of very well-written lecture notes, and it is organized as a clear synthesis of the theory of continuous-time stochastic processes with many examples and with plenty of exercises...

-Mathematical Reviews

Titles in this series are co-published with the Courant Institute of Mathematical Sciences at New York University.

Courant Lecture Notes, Volume 16; 2007; 126 pages; Softcover; ISBN: 978-0-8218-4085-6; List US\$29; AMS members US\$23; Order code CLN/16



Filtering and Prediction: A Primer

B. Fristedt, **N. Jain**, and **N. Krylov**, University of Minnesota, Minneapolis, MN

The book is written in an elementary way but it is still mathematically rigorous. The book can be recommended to all students interested in stochastic models.

-EMS Newsletter

Student Mathematical Library, Volume 38; 2007; 252 pages; Softcover; ISBN: 978-0-8218-4333-8; List US\$39; AMS members US\$31; Order code STML/38

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Rick's Ramblings: Coming soon: the Fourth Edition

After almost two decades of an often unhappy marriage I have finally gotten divorced... from my publisher, Duxbury Press. To be precise, *Probability: Theory and Examples* was signed by John Kimmel at Wadsworth, sent to Duxbury when some bean-counter decided that all of their statistics book should be in one place, and recently sold to Cengage, when mother company ITP decided that print books were passé. As you can tell from this thumbnail sketch, the history of P:T & E is a long and complicated story, but rather than dwell on the past, I want to move forward.

Essentials of Probability, which went out of print two years ago, has been thoroughly rewritten and will be published late summer or early fall, by Cambridge University Press, under the title *Elementary Probability for Applications*. Work is now underway on the fourth edition of *P:T&E*, which will also be published by Cambridge.

During the 2008–2009 academic year, I taught from the book and converted it to LaTeX. That may not sound significant, but it allows the use of labels to get rid of the cross-referencing errors that were the source of many of the typos, and the reintroduction of figures that were lost from the third edition, and are useful for illustrating things like the reflection principle and the upcrossing inequality.

The current version can be found on my web page. The plan is to submit the finished version for publication in January 2010, and have the book appear during the summer of 2010, so for next year the book is available for free. One substantial change, which has not been implemented as I write this, but might be when you read it, is to have a chapter on measure theory at the beginning that expands the material in the first four sections, in order to allow the book to be used by students who do not have this prerequisite. Since this is a radical change, I am eager to have some people try out the new version and tell me about their experience.

I also welcome comments and corrections on, and contributions to the content of the current version, e.g., your favorite problems or variants of traditional proofs. A list of typos from the third edition can be found on my web page, which includes all of the ones that have been sent to me, but do not include all the ones I found while teaching from it and revising the text. The typo list does not include misspelled words, punctuation corrections, or the location of bad page headings. [These result from the fact that TeX waits until it has what it estimates to be about 130% of page before it makes one, and if the section changes within this material one gets the heading from the next section.]

One minor change that will make a number of people happy is that I have finally given up on using P(T=t) for the density function of the random variable T. Personally, I don't see why the less expressive $f_T(t)$ is an improvement, but a number of people are unhappy about this notation, so I have mostly given in. In a couple of places I slip and write something like $P_r(T_0 < t, B_t = x)$ since I don't know of a good alternative.

Being a brilliant academician who has written eight books, I feel a sense of *noblesse oblige* to give my wisdom to others who want to embark on writing a book :-)

The first and most important thing is to write a realistic outline, and stick to a time

Contributing Editor Rick Durrett shares his experience of writing (and rewriting) a book, in the latest *Rick's Ramblings*



table for finishing the book. It is no good to have plans for the ultimate book on Markov chains or to describe the wonder of life on trees, if the opus never gets finished.

A second important point is that if your book has exercises, then you should write the solutions when you write the problems. *Like duh*, many of you are saying, but I learned this the hard way when I wrote the solutions manual to *P:T&E*, and had to delete twenty problems that I couldn't do. On a technical level, it is convenient to write the answer inside \ans{...} and then make it disappear by flipping the definition between \def\ans#1{\medskip Ans. #1} and \def\ans#1{}, or if you prefer the verbose syntax of LaTeX replace the first ten characters by \newcommand{\ans}[1].

Last, but not least, it is important to explain the ideas behind the proofs rather than just carry them out efficiently. As Einstein should have said, "Intuition is more important than details." Many people miss this point when they write papers, but (i) the error is much less excusable in a 300 page book than in a 40 page paper, and (ii) people are more forgiving of incoherence when they print something for free from the ArXiv than when pay \$80 for a book. If you don't believe me go online and read some of the reviews of my books at amazon. com...

Terence's Stuff: "The Flu and I"

Terry Speed does not have H1N1 (swine) flu. But spending five days in quarantine—just in case—focused his mind on epidemiology and related matters...



don't know about you, but initially I didn't pay close attention to the current epidemic of H1N1 (swine) flu. I was aware of its origin and rapid spread in Mexico, and its quick move to the US, but was lulled into a sense of complacency by the description of it as mild, the definitional nit-picking that seemed to precede the WHO chief's declaration of a flu pandemic, and a general feeling that it was all more politics than science.

What's changed my mind? Well, let me tell you, several days in quarantine in Singapore concentrates the mind wonderfully on epidemics. (For further details of this experience, see the August issue of *Amstat News.*) I want to say a little about what I've learned since getting out, including the results of my search for the reason I was locked up.

Like many people in our trade, I've absorbed the basics of epidemic modelling, and am aware of the elegant threshold theorem of Kermack and McKendrick. Is it possible, I wonder, that the authorities of Singapore thought they could keep the infectivity rate low enough to prevent the epidemic from taking hold there? Given Singapore's role as a international air hub, this seems an unlikely prospect. The first confirmed case of H1N1 flu in Singapore was reported on May 27th. However, on May 11th Science Express posted the first major report on the outbreak. Figure 1B of that paper (Fraser et al, Science 324, p.1557) relates the number of confirmed cases at April 30 in travellers returning to a country

from Mexico, to the estimated average number of foreign travellers in Mexico from that country on any given day in March or April. The relationship is striking, and suggest that by the end of April, it was only a matter of time before countries quite distant from Mexico such as Australia and Singapore started to catch up with the US, Canada and Spain. And so it happened. On April 29 Australia had no confirmed cases, on May 29 there were 168, and on June 29 there were 3,912. It was much the same in Singapore.

Perhaps isolating me served some useful purpose, but I have to say I'm not sure. Of course if it had helped prevent the epidemic from taking hold, that would have been a fine justification, but it now seems that the futility of that hope should have been apparent by early–mid-May. Fraser *et al* comment that "the key trade-off remains the balancing of the economic and societal cost of interventions, such as school closure, against the numbers of lives saved," and go on to say that their "estimates of disease severity are insufficiently robust to allow these trade-offs to be properly evaluated."

On the day after I was released from quarantine, Singapore changed its strategy, and stopped contact tracing and quarantining the likes of me, someone sitting on a plane within three rows of a confirmed case. In the words of their Health Minister, "Life must go on. The Asian Youth Games will continue, and schools will reopen next month as scheduled. Events like the National Day Parade and the F1 race will go ahead as planned."

Let's set aside the reactions of countries, cities, schools and other bodies, and individuals, to what—it is now clear—was just the initial stage of a pandemic. Where is it all going, and how should we now feel about it? Should we be having flu parties to get infected? *No!* Should we relax because it is still just a mild flu? *No!* Should we disregard the advice regarding hygienic behaviour? *No!* Flu can be a nasty illness, one that kills people, and even if this is a very small fraction of cases, when the number of cases gets large, so will the number of deaths. Furthermore, this virus affects the young disproportionately.

The paper Fraser et al cited above presents an impressive amount of statistical analysis, although they concede that on many points they need more data. Based on the Mexican data they give several different estimates of the basic reproduction number R_0 , the number of cases one case generates over the course of their infectious period (≈ 1.5) , providing posterior distributions of some estimates and confidence intervals for others, they estimate the sensitivity of children relative to adults (≈ 2), and they fit a variety of age-stratified mathematical models to the outbreak data. But on several key issues they are silent. "The future evolution of the transmissibility, antigenicity, virulence, and antiviral resistance profile of this or any influenza virus is difficult to predict," they say, and it seems that most other experts feel similarly.

I've come to terms with my incarceration, and look forward to learning more about the pandemic...

and avoiding the flu. Linda Godfrey's take on "swine" flu: see her blog at http://lindagodfrey. wordpress.com/2009/04/29/ swine-flu-name-gamegettin-piggy-with-it/

IMS meetings around the world

IMS sponsored meeting

JSM2009 August 1-6, 2009 Washington DC

www.amstat.org/meetings/jsm/2009/

The next IMS Annual Meeting will take place as part of the 2009 Joint Statistical Meetings, which will be held in Washington DC. The theme of the JSM is "Statistics: From Evidence to Policy".

The IMS Invited Program Chairs are Michael Kosorok (kosorok@unc.edu) and Xiaotong Shen (xshen@stat.umn.edu). The IMS Contributed Program Chair is Ji Zhu (jizhu@umich.edu). August in Washington DC can be hot and humid (average high 88°F/31°C; average low: 70°F/21°C). Dress in lightweight business or casual clothes and comfortable shoes when walking around the city. The convention center and hotels are airconditioned, so be prepared with a lightweight jacket or sweater when attending sessions and meetings. Washington DC is in the Eastern Daylight

Time (EDT) Zone (which is GMT-4).

> Airports and Airlines: DC has three airports: Baltimore Washington



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The Walter E. Washington Convention Center is accessible to people with disabilities. For more information, visit http:// www.dcconvention.com/disabilities.aspx. Disabled conference attendees may also check the information at http://www. amstat.org/meetings/jsm/2009/index. cfm?fuseaction=accessibility

IMS sponsored meeting JSM2010

July 31 – August 5, 2010 Vancouver, British Columbia, Canada

www.amstat.org/meetings/jsm/2010/ [not yet online]

To be held at the Vancouver Convention Center.

The IMS program chairs are Regina Liu, Rutgers (rliu@stat.rutgers.edu), for invited sessions, and Mu Zhu, University of Waterloo, Canada (mzhu@post.harvard. edu), for contributed sessions. If you have any questions about the JSM 2010 program, please contact them.

See http://www.amstat.org/committees/ commdetails.cfm?txtComm=SBJORG10 for details of all the members of the program committee.

IMS co-sponsored meeting

Stats in the Chateau: A Summer School in **Econometrics and Statistics** August 31 – September 4, 2009 Jouy-en-Josas (near Paris), France

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This summer school will bring together people from the statistics and economics communities, and to stimulate interactions between participants. The themes are inverse problems, high dimensional statistical estimation, and their applications in econometrics. Two mini-courses, by Laurent Cavalier (Aix-Marseilles 1) and Victor Chernozhukov (MIT). Invited speakers: Felix Abramovich (Tel-Aviv University), Peter Bickel (Berkeley), Xiaohong Chen (Yale), Rama Cont (CNRS/Columbia), Jean-Pierre Florens (Université Toulouse I), Emmanuel Guerre (Queen Mary, University of London), Joel Horowitz (Northwestern Univ.), Yuichi Kitamura (Yale), Jean-Michel Loubes (Toulouse 3), Ya'acov Ritov (Hebrew University of Jerusalem) and Jean-Marc Robin (Université Paris Panthéon Sorbonne/University College London).



At a glance:

forthcoming IMS Annual Meeting and JSM dates

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IMS Annual Meeting

@ JSM: Washington DC, August 1-6, 2009

2010

JSM: Vancouver, Canada, July 31-August 5, 2010

IMS Annual Meeting:

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2011

IMS Annual Meeting @ JSM: Miami Beach, FL, July 30-August 4, 2011

2012

JSM: San Diego, CA, July 28-August 2, 2012

IMS Annual Meeting @ World Congress: İstanbul, Turkey, Date TBA

2013

IMS Annual Meeting @ JSM: Montréal, Canada, August 3-8, 2013

More IMS meetings around the world

IMS co-sponsored meeting

International Conference on Statistics, Probability, **Operations Research, Computer Science and Allied Areas** January 4-8, 2010 Visakhapatnam, India



Abstract Deadline: August 31, 2009

w http://www.stat.osu.edu/~hnn/IISA.html

The objective of this conference is to assess recent developments in the fields of statistics, probability and computer science to discuss future directions in terms of theory, practice and education. One of the primary goals is to foster international collaboration in these related areas through the exchange of ideas and experiences to enhance other technology transfer activities. Reforms needed in statistical education and training in order to meet the changing needs of the industry and government which receive special attention. The program of the conference will include several invited sessions, and contributed sessions as well as workshops. English is the official language for all conference materials and presentations. The conference will be held at Andhra University in Visakhapatnam.

The conference will feature topics including: applied probability; random walks; Bayes inference; biostatistics and bioinformatics; communication networks and security; data mining; design of experiments; directional data analysis; distribution theory; econometrics; marko; processes and marko; decision theory; mathematical finance; multivariate analysis; nonparametric inference; operations research, queues and inventories; pattern recognition and image processing; probability theory; limit theorems; statistical education; statistical quality control and reliability; stochastic modeling; stochastic processes, stochastic calculus and control; survey sampling; survival analysis; time series analysis; and related areas.

Workshop: on January 3, 2010, at the beginning of the conference there will be a one day satellite workshop on Distribution Theory and Directional Data Analysis.

Plenary Sessions and Speakers: Statistics: Prof. B.L.S. Prakasa Rao (University of Hyderabad, India); Probability: Prof. Srinivasa Varadhan (Courant Institute of Mathematical Sciences, USA); Biostatistics: Dr. Joseph Heyse (Vice President-Biostatistics, Merck Research Labs, USA). Special Session: A special session will be organized to honor Prof C.R. Rao, Prof S. Rao Jammalamadaka and Prof. J. Lakshminarayana, for services rendered to Andhra University.

Registration: All participants are encouraged to pre-register to secure a guaranteed place at the Conference. See the website for details.



IMS co-sponsored meeting

Stochastic Methods in Game Theory September 8–16, 2010 Erice, Sicily, Italy w http://space.luiss.it/stochastic-workshop/ IMS Representative on Program Committees: Marco Scarsini

IMS co-sponsored meeting

MEV

MCMSki III: Markov Chain Monte Carlo in Theory and Practice January 5–7, 2011 Snowbird, UT

w website under construction

Program Chairs: Bradley P. Carlin (University of Minnesota) & Antonietta Mira (University of Insubria)

IMS co-sponsored meeting

34th Conference on Stochastic Processes and their Applications September 6–10, 2010 Osaka, Japan

w http://stokhos.shinshu-u.ac.jp/SPA2010/index.html

To be held in Osaka, Senri life center, from 6–10 September, 2010. The conference is organized under the auspices of the Bernoulli Society for Mathematical Statistics and Probability and co-sponsored by the Institute of Mathematical Statistics. It is the major annual meeting for researchers working in the field of Stochastic Processes.

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, and contributed sessions.





IMS co-sponsored meeting

Statistical Science—Making a Difference June 3–4, 2010 University of Wisconsin, Madison w under construction IMS Representative(s) on Program Committees: Kjell Doksum, Johnson, Grace Wahba

IMS co-sponsored meeting

International conference on Frontiers of Interface between Statistics and Sciences: in honor of C.R. Rao's 90th birthday December 31, 2009 – January 2, 2010. Hyderabad, India

w http://www.stat.osu.edu/~hnn/hydstatconf2010.html IMS Reps: S. Rao Jammalamadaka, S. Pantula, S. Ghosh This international conference on the Frontiers of Interface between Statistics and Sciences at Hyderabad, India, is organized by the C. R. Rao Advanced Institute of Mathematics, Statistics and



Computer Science with the sponsorship of the Department of Science and Technology, Government of India, ASA and IISA.

The conference is in honor of C.R. Rao who will be attaining the age of 90 in 2010.

The topics will include, biometrics, bioinformatics, cryptology, signal processing, data mining, econometrics and statistical inference.

IMS co-sponsored meeting

Sixth Cornell Probability Summer School July 18–31, 2010 Cornell University, Ithaca, NY

The scientific program is organized by Laurent Saloff-Coste. The theme is heat kernels. The main speakers, who will give six lectures each, are Martin Barlow, Bruce Driver, and Alexander Grigoryan. Two lecture series will be given by Sasha Bendikov, Z.Q. Chen, Masha Gordina, and Takashi Kumagai.

As in the past, all accepted participants will have their dorm rooms paid for. US citizens can apply for \$400 of support for local expenses.

IMS co-sponsored meeting Seventh Cornell Probability Summer School July 11–22, 2011 Cornell University, Ithaca, NY

The school will be concerned with probability problems that arise from statistical physics. The main speakers are Marek Biskup, Geoff Grimmett, and Greg Lawler.

IMS co-sponsored meeting

International Chinese Statistical Association's 2010 International Conference December 19–22, 2010 Guangzhou University, Guang-Zhou, China w tba

IMS co-sponsored meeting

2010 ENAR/IMS Spring Meetings March 21–24, 2010 Hilton New Orleans Riverside, New Orleans, Louisiana, USA

IMS Program Chairs: Marie Davidian and Hao Helen Zhang w http://www.enar.org/meetings.cfm

IMS co-sponsored meeting

2011 ENAR/IMS Spring Meetings March 20–23, 2011 Hyatt Regency Miami, Florida, USA w http://www.enar.org/meetings.cfm

IMS co-sponsored meeting

International Conference on

Statistics, Probability, Operations Research, Computer Science and Allied Areas January 4–8, 2010. Visakhapatnam, Andhra Pradesh, India

w http://www.stat.osu.edu/~hnn/IISA.html

IMS Representatives on Program Committees: N. Balakrishnan (Chair), Canada; Hira Koul, USA; Soumendra Nath Lahiri, USA

The objective of this conference is to assess recent developments in the fields of Statistics, Probability and Computer Science to discuss future directions in terms of theory, practice and education. One of the primary goals is to foster international collaboration in these related areas through the exchange of ideas and experiences to enhance other technology transfer activities. Reforms needed in statistical education and training in order to meet the changing needs of the industry and government which receive special attention. The program of the conference will include several invited sessions, contributed sessions as well as workshops. English is the official language for all conference materials and presentations. The conference will be held at Andhra University in Visakhapatnam.

Other Meetings Around the World: Announcements and Calls for Papers

Thirty-first Midwest Probability Colloquium October 15–17, 2009



Northwestern University, Evanston, Illinois

w http://www.math.northwestern.edu/mwp/

The Thirty-First Midwest Probability Colloquium will be held at Northwestern University on October 15–17, 2009. The program was organized by the local organizers, Elton Hsu, Greg Lawler and Mark Pinsky, together with a committee consisting of Robert Neel, Krishna Athreya and Robert Anderson (chair).

MPC31 will begin on Thursday with a set of tutorial lectures by Terry Lyons (Oxford) and Tom Cass (Cambridge) on the topic "Rough Path Theory". The titles are *Rough Paths and Their Signatures, I and II* (Lyons), and *Applications of Rough Path Theory to Hormander's Theorem and Mathematical Models for Evolving Communities* (Cass).

On Friday the research program will begin at 3:00 with the first of a series of two talks by Joel Spencer of the Courant Institute, as follows:

I. 78 years (and Counting) of Ramsey R(3,k)

II. Sieving a Needle from Lovasz's Exponential Haystack

The second speaker on Friday is Maury Bramson of the University of Minnesota, speaking on the title, *Stability Criteria and Applications for Load Balancing in Many-Server Queues*.

On Saturday morning the program will begin at 9:30 with Spencer's second talk. The final talk will be presented by Sunder Sethuraman will be at 1:30 with the title *Nonequilibrium Behavior of a Tagged Particle in an Interacting System.*

The Research Program of MPC31 will begin with a registration period at 2:30 pm, Friday. There will be a hotel reception for all participants from 5:30-7:15 pm.

On Saturday morning the first talk (Spencer) will begin at 9:30 am, followed by a coffee break and the regular annual business meeting. The conference will conclude with Sethuraman's talk from 1:30 pm to 2:30 pm.

Abstracts of the talks and other useful information, including accommodation options, can be found at our website.

As in the past, we expect to have NSF funds to offset the expenses of graduate students and other younger investigators. According to NSF guidelines, the term "younger investigator" refers to individuals who received the PhD after June 30, 2002. All such requests should be received by the conference organizer on or before September 20, in order to be eligible for consideration. In every case, first consideration will be given to chronological priority.

Local information about Evanston and Chicago is available from the website of the Mathematics Department, by typing www.math.northwestern.edu/conferences

3rd Annual Conference hosted by the Program in Quantitative Genomics (PQG): "Human Genetic Variation, Health and Disease: New Knowledge, New Quantitative Challenges" NEW

November 11–13, 2009 Harvard Medical School, Boston, Mass

w http://www.hsph.harvard.edu/research/ pqg-conference-2009/index.html Please join us for the 3rd Annual Conference in Quantitative Genomics on November 11–13, 2009. The annual conference is hosted by the Program in Quantitative Genomics (PQG) at the Harvard School of Public Health, and is supported with a grant from the NCI and NHLBI.

The goal of the 2009 conference, Human Genetic Variation, Health and Disease: New Knowledge, New Quantitative Challenges, will be to bring together researchers from multiple disciplines (including geneticists, epidemiologists, statisticians and bioinformaticians) to discuss what we have learned and what we have yet to learn from genome-wide association studies, as well as emerging techniques for studying different types of genetic variation.

The conference will focus on three important areas: *Copy Number Variants*; *Genome Wide Association Studies*; and *Nextgeneration Sequencing in Medical Genetics*.

The conference consists of keynote and session presentations, along with panel discussions, round-table discussions, and a technology forum.

A draft list of speakers, abstract submission and registration information, can be found on our website.

Workshop on Subjective Bayes 2009 December 14–16, 2009 University of Warwick, UK

w http://www2.warwick.ac.uk/fac/sci/statistics/crism/workshops/subjective_bayes *Registration is now open for the Subjective Bayes 2009 workshop*

Subjective Bayes 2009 is one of a series of CRiSM Workshops at Warwick University on exciting, important and fast developing areas of statistical inference. It will draw together researchers active in the philosophy, practice or psychology of subjective probabilistic inference.

Keynote speakers who have already accepted our invitation include Jim Berger (Statistics Dept, Duke) Nick Chater (Psychology Dept, UCL) Roger Cooke (Resources for the Future and TU Delft) Lawrence Phillips (Operations Research Group, LSE) Jonathan Rougier (Statistics Dept, Bristol) Teddy Seidenfelt (Philosophy Dept, Carnegie Mellon) Glenn Shafer (Business School, Rutgers) Robert Winkler (Fuqua School of Business, Duke)

To participate, please complete the application form which can be found at the address above. Also please submit a title and abstract (of up to 400 words) of a proposed 25 minute talk or poster by 29th September 2009. These will be refereed and decisions made by October 16th.

In order to also give young researchers the opportunity to come into contact and to interact with internationally well known academics working in the specific areas of the workshop, financial support both for travel and accommodation at the university is available to interested young academics, PhD students and Postdoctoral Fellows. Young academics are encouraged to present posters on the first evening of the workshop, helping them to introduce themselves to other participants. There will be a prize for the best poster.

Places are necessarily limited so please book early to avoid disappointment. Organisers: Jim Smith, Warwick; Tony O'Hagan, Sheffield; John Aston, Warwick

23rd Nordic Conference on Mathematical Statistics (NORDSTAT 2010) June 14–17, 2010 Voss, Norway w www.nordstat2010.org e mail@kongress.no



University of Florida Twelfth Annual Winter Workshop: Categorical Data Analysis January 15–16, 2010 NEW Gainesville, Florida

w http://www.stat.ufl.edu

The workshop will focus on recent developments in methodology for categorical data analysis, such as analyzing high-dimensional data, Bayesian inference, dealing with clustering and missing data, and applications to rapidly-developing disciplines such as statistical

genetics. A major purpose of the workshop is to discuss many recent significant developments and to identify important problems and new research directions. All sessions are plenary, and the invited speakers include Alan Agresti, Jim Albert, Jon Forster, Diane Lambert, Joseph Lang, Xihong Lin, Stuart Lipsitz, Peter McCullagh, Art Owen, and Nancy Reid. The workshop will also include a contributed poster session. Funding is expected, to support a limited number of young researchers to attend the workshop.

The organizing committee is soliciting applications from senior graduate students (fourth year or higher) and researchers who received their PhD in or after 2005. Applications should include a one-page curriculum vitae, a one-page abstract, and two reference letters, including a major professor who is supervising (or has supervised) the applicant's research. Researchers receiving support are expected to present their work at the poster session. Applications should be e-mailed by November 13, 2009. Women and under-represented groups are encouraged to apply. Funding applications and workshop registration link are found on the Workshop web page. E-mails should be sent to robyn@stat.ufl.edu.

Employment Opportunities around the world

Hong Kong: Kowloon



THE HONG KONG UNIVERSITY OF SCIENCE AND TECHNOLOGY

Department of Mathematics Faculty Position(s)

The Department of Mathematics invites applications for tenure-track faculty positions at the rank of Assistant Professor in all areas of mathematics, including one position in Risk Management. Other things being equal, preference will be given to areas consistent with the Department's strategic planning.

A PhD degree with strong experience in research and teaching is required. Applicants with exceptionally strong qualifications and experience in research and teaching may be considered for positions above the Assistant Professor rank.

Starting rank and salary will depend on qualifications and experience. Fringe benefits include medical/dental benefits and annual leave. Housing will also be provided where applicable. Initial appointment will be on a three-year contract, renewable subject to mutual agreement. A gratuity will be payable upon successful completion of contract.

Applications received on or before 31 December 2009 will be given full consideration for appointment in 2010. Applications received afterwards will be considered subject to availability of positions. Applicants should send a curriculum vitae and at least three research references and one teaching reference to the Human Resources Office, HKUST, Clear Water Bay, Kowloon, Hong Kong, (Fax (852) 2358 0700). Applicants for positions above the Assistant Professor rank should send a curriculum vitae and the names of at least three research referees to the Human Resources Office. More information about the University is available on the University's homepage at http://www.ust.hk.

(Information provided by applicants will be used for recruitment and other employment related purposes.)

USA: University Park, PA

Penn State Faculty Appointments in Infectious Disease

The PSU colleges of Science, Agricultural Sciences, Earth and Mineral Sciences, Huck Institutes of Life Sciences and Institutes of Energy & Environment seek innovative, interdisciplinary applied mathematicians and statisticians working on infectious diseases (e.g. parasite-host dynamics; pathogen epidemiology, genomics and evolution; climate-disease interactions) for several open-rank faculty positions. Appointments may involve several PSU departments and centers of excellence. Details and application procedures at http://www.huck.psu. edu/about/news-archive/vacancy-facultyappointment-in-infectious-disease/view. Penn State is committed to affirmative action, equal opportunity and the diversity of its workforce.

Italy: Milano

Bocconi University

Full Professor, Statistics or Probability http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=5638131

United States: Los Angeles, CA

University of California, Los Angeles

Academic Personnel http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=5654536

USA: South Carolina

University of South Carolina, Department of Statistics: Assistant Professor Positions

The Department of Statistics at the University of South Carolina invites applications for three tenure-track assistant professor positions. Applicants must show strong potential for excellence in research and instruction.

The department currently consists of ten tenure-track faculty and three full time instructors. We encourage applications in any specialty area of statistics which will enhance or complement our current expertise (see www.stat.sc.edu/research/). Individuals having a PhD in statistics with research focus in econometrics / actuarial science or in areas applicable to the University's research initiatives in bioinformatics or nanotechnology are also encouraged to apply.

Appointments will commence August 2010. Review of applications will begin December 1, 2009. Curriculum vita, at least three letters of reference, and a copy of graduate transcripts are required. If applying by conventional mail, materials should be sent to

Faculty Search Committee, c/o Ms. Tina Ormenisan, Department of Statistics, University of South Carolina, Columbia, SC 29208, USA Applications may also be sent electronically using email address ormenisan@stat.sc.edu with a subject heading "Faculty Application". Inquiries about these positions should be sent to Professor Edsel A. Peña, Chair of the Faculty Search Committee, using the e-mail address pena@stat.sc.edu.

The University of South Carolina is an affirmative action, equal opportunity employer. Women and minorities are encouraged to apply. The University of South Carolina does not discriminate in educational or employment opportunities or decisions for qualified persons on the basis of race, color, religion, sex, national origin, age, disability, sexual orientation or veteran status.



International Calendar of Statistical Events

IMS meetings are highlighted in maroon with the lims logo, and new or updated entries have the week or week 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

August 2009

August 1: George Washington University, Washington DC. Conference to Honor Joseph L. Gastwirth. Gang Zheng e zhengg@nhlbi. nih.gov w http://www.gwu.edu/~stat/festschrift_jg.htm

August 1: Washington DC. Fostering Diversity in Statistics: First Pre-JSM Diversity Workshop. w http://jsmdiversity.statfest.com/

JSM2009. IMS Program Chairs: Michael Kosorok kosorok@unc.edu Xiaotong Shen xshen@stat.umn.edu and Ji Zhu jizhu@umich.edu w www.amstat.org/meetings/jsm/2009/

August 2 and 5: Washington DC (at JSM). NISS/ASA Writing Workshop for Junior Researchers. Keith Crank **e** keith@amstat.org w http://www.amstat.org/meetings/wwjr/

August 3–6: UTIA, Prague, Czech Republic. Limit Theorems for Dependent Random Variables (SPA satellite meeting) w http:// simu0292.utia.cas.cz/workshop09/

August 3–8: Yamoussoukro, Côte d'Ivoire. 7th PACOM (Pan African Congress of Mathematicians). Secretariat: Prof. Etienne Desquith, African Mathematical Union (AMU) Vice-President, West African Region **e** desquith@hotmail.com

August 16–22: Durban, South Africa. 57th Session of the International Statistical Institute. **w** www.statssa.gov.za/isi2009/

August 17-19: Boston, MA. Measurement, Design, and Analysis Methods for Health Outcomes Research. **w** http://www.hsph. harvard.edu/ccpe/programs/MDA.html

August 24–28: Bucharest, Romania. 16th European Young Statistician Meeting (EYSM 2009). Organizers: Roxana Ciumara e Roxana_ciumara@yahoo.com or Luiza Badin e luizabadin@yahoo. com w http://www.eysm2009.ase.ro/

August 24–29: Paris, France. Second European Summer School in Financial Mathematics w http://www.cmap.polytechnique. fr/~euroschoolmathfi09/ August 30–31: Microsoft Research, Redmond, WA. Oded Schramm Memorial Conference in Probability and Geometry w http://research.microsoft.com/~schramm/workshop/

August 31: Lahore Chamber of Commerce & Industries, Pakistan. One-day international seminar on Twenty Years of ISOSS & Beyond and National Policy on Statistics. **e** secretary@isoss.com.pk

Lims August 31 – September 4: Jouy-en-Josas (near Paris), France. Stats in the Chateau: A Summer School in Econometrics and Statistics. w http://www.hec.fr/statsinthechateau

September 2009

September 14–16: Politecnico di Milano. Complex Models and Computational Methods for Estimation and Prediction (S.Co.2009). w http://mox.polimi.it/sco2009

September 14–18: EPFL, Switzerland. Workshop on Highdimensional Extremes [Research program on Risk, Rare Events and Extremes]. w http://extremes.epfl.ch/

September 15–18: Jaca, Spain. Pyrenees International workshop on Statistics, Probability and Operations Research (SPO 2009). w http://metodosestadisticos.unizar.es/~jaca2009

September 17–18: Santiago de Compostela, Spain. Fifth International Conference on the History of Statistics and Probability. w http://www.neventia.es/vcongreso/

September 21–22: Paris, France. The 6th International Meeting on Statistical Methods on Biopharmacy. w http://www. biopharma2009-sfds.fr/

September 26: Harvard University Science Center, Cambridge, Massachusetts. 2009 New England Symposium on Statistics in Sports w www.amstat.org/chapters/boston/nessis09.html

International Calendar continued

October 2009

October 14–17: Columbia, Missouri. Design and Analysis of Experiments Conference: DAE 2009. Contact Min Yang e yangmi@missouri.edu w http://dae.stat.missouri.edu

October 15–17: Northwestern University, Evanston, IL. Thirty-first Midwest Probability Colloquium. w http://www.math. northwestern.edu/mwp/

October 16–17: Pittsburgh, PA. Case Studies in Bayesian Statistics and Machine Learning w http://bayesml1.stat.cmu.edu/

November 2009

November 1–6: Naiguatá, Venezuela. XI CLAPEM. e xiclapem@ gmail.com w http://www.cesma.usb.ve/xiclapem/

November 9–11: EPFL, Switzerland. Workshop on Spatio-temporal Extremes and Applications [Research program on Risk, Rare Events and Extremes]. w http://extremes.epfl.ch/

November 11–13: Harvard Medical School, Boston, Mass. 3rd Annual Conference hosted by the Program in Quantitative Genomics (PQG): "Human Genetic Variation, Health and Disease: New Knowledge, New Quantitative Challenges". w http://www.hsph. harvard.edu/research/pqq-conference-2009/index.html

November 12–13: EPFL, Switzerland. Risk, Rare Events and Extremes Final Conference [Research program on Risk, Rare Events and Extremes]. w http://extremes.epfl.ch/

November 16–18: Lodz, Poland. 28th Annual Conference on Multivariate Statistical Analysis (MSA'09). w http://www.msa.uni. lodz.pl

November 20–24: Indian Statistical Institute, New Delhi, India. Lectures on Probability and Stochastic Processes IV w http://www. isid.ac.in/~antar/Conferences/LPS/4th/index.html

November 23–25: Groningen, The Netherlands. High-dimensional Inference and Complex Data: Statistics and the Life Sciences w http://www.ndns.nl/workshops/sls

December 2009

December 7–11: Atlantic City, NJ. 65th Annual Deming Conference on Applied Statistics. Walter R. Young e demingchair@ gmail.com w www.demingconference.com

December 14–16: University of Warwick, UK. Subjective Bayes 2009 Workshop. w http://www2.warwick.ac.uk/fac/sci/ statistics/crism/workshops/subjective_bayes

December 20–23: The American University in Cairo, Egypt. ICCS-X: 10th Biennial Islamic Countries Conference on Statistical Sciences. Zeinab Amin e iccs-x@aucegypt.edu w http://www.iccs-x. org.eg

December 28–31: Kolkata, India. Seventh International Triennial Calcutta Symposium on Probability and Statistics w http:// triennial.calcuttastatisticalassociation.org/SympBrochure.php

December 31 – January 2: Hyderabad, India. **International conference on Frontiers of Interface between Statistics and Sciences: in honor of C.R. Rao's 90th birthday**. IMS Reps: S. Rao Jammalamadaka, S. Pantula, S. Ghosh. **w** http://www.stat.osu. edu/~hnn/hydstatconf2010.html

January 2010

January 4–8: Andhra University, India. **IISA Joint Statistical Meetings and International Conference on Statistics, Probability and Related Areas**. S. Rao Jammalamadaka **e** rao@pstat.ucsb.edu, N. Balakrishnan **e** bala@mcmaster.ca, K. Srinivasa Rao **e** ksraoau@ yahoo.co.in **w** www.stat.osu.edu/~hnn/IISA.html

January 11–13: Loyola College, Chennai, India. International Conference on Statistics and Information Analytics (ICSIA 2010). Convenor: Dr. T. Leo Alexander e leo_a98@hotmail.com w www. loyolacollege.edu/icsia2010/statistics.html

Twelfth Annual Winter Workshop: Categorical Data Analysis. w http://www.stat.ufl.edu

February 2010

February 8–11: Beer Sheva, Israel. SMRLO'10: International Symposium on Stochastic Models in Reliability Engineering, Life Sciences and Operations Management. w http://info.sce.ac.il/i/ SMRLO10

March 2010

March 17–20: University of Texas at San Antonio. Frontier of Statistical Decision Making and Bayesian Analysis: in honor of James O. Berger. IMS Rep on Program Committees: Dipak K. Dey. w http://bergerconference2010.utsa.edu/

March 21–24: Hyatt Regency New Orleans, Louisiana. **2010 ENAR/IMS Spring Meetings.** IMS Program Chairs: Marie Davidian and Hao Helen Zhang **w** www.enar.org/meetings.cfm

April 2010

April 14–17: Biskra, Algeria. International Workshop on Multivariate Risks and Copulas w http://www.univ-biskra.dz/manifestations/ math/stat_2010

May 2010

May 19–22: Columbus, Ohio. Conference on Nonparametric Statistics and Statistical Learning. **w** www.stat.osu.edu/~nssl2010/

May 23–26: Québec City, Canada. 2010 SSC Annual Meeting. Local Arrangements: Thierry Duchesne (Laval); Program: Christian Léger (Montréal) **w** www.ssc.ca/main/meetings_e.html

May 26–28: Dakar, Sénégal. Conference on Applied Statistics and Probability for Africa Development (ASPAD II) and Constitutive Assembly of the Statistical Pan African Society (May 26, 2010, Saint-Louis, Sénégal) w http://www.statpas.org/ang/spada2.php

June 2010

Lims June 3–4: University of Wisconsin, Madison. **Statistical** Science—Making a Difference w under construction

June 3–6: Samos, Greece. 6th Conference in Actuarial Science & Finance. w http://www.actuar.aegean.gr/samos2010/

June 14–17: Voss, Norway. 23rd Nordic Conference on Mathematical Statistics (NORDSTAT 2010). e mail@kongress.no w www.nordstat2010.org

June 29 – July 1: Palmerston North, New Zealand. International Conference on Probability Distributions and Related Topics in conjunction with NZSA Conference. w http://nzsa_cdl_2010. massey.ac.nz/

July 2010

July 5–9: Croatia. ISBIS-2010, International Symposium for Business & Industrial Statistics. Contact Milena Zeithamlova e Milena@action-m.com w www.action-m.com/isbis2010

July 11–16: Ljubljana, Slovenia. ICOTS08: Data and context in statistics education: towards an evidence-based society. w http://icots8.org/

ims July 18–31: Ithaca, NY. 6th Cornell Probability Summer School. **w** tba

July 26–30: Dresden, Germany. 6th International Conference on Lévy Processes: Theory and Applications. **w** www.math.tu-dresden. de/levy2010

July 27–31: Tomar, Portugal. LinStat2010. Francisco Carvalho: t +351 249 328 100; f +351 249 328 186; e fpcarvalho@ipt.pt w www.linstat2010.ipt.pt

International Calendar continued

August 2010

August 1–5: Vancouver, British Columbia, Canada. JSM2010.

Lims August 9–13: Gothenburg, Sweden. IMS Annual Meeting 2010. **w** tba

August 13–17: Indian Statistical Institute, Bangalore, India. Conference on Probability and Stochastic Processes [Satellite to ICM2010] w http://www.isibang.ac.in/~statmath/icmprobsat/

August 19–27: Hyderabad, India. International Congress of Mathematicians 2010. Program Committee Chair: Prof. Hendrik W. Lenstra, Leiden University **e** hwlicm@math.leidenuniv.nl

August 30 – September 3: Prague, Czech Republic. Prague Stochastics 2010. e pragstoch@utia.cas.cz w www.utia.cas.cz/pragstoch2010

September 2010

Lims September 6–10: Osaka, Japan. 34th Stochastic Processes and their Applications. w http://stokhos.shinshu-u.ac.jp/SPA2010/

New Lims September 8–16: Erice, Sicily, Italy. Stochastic Methods in Game Theory. w http://space.luiss.it/stochastic-workshop/

December 2010

Lims December 19–22: Guangzhou University, Guang-Zhou, China. 2010 ICSA International Conference. w tba

January 2011

Chain Monte Carlo in Theory and Practice w website tbc

March 2011

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

July 2011

July 11–22: Ithaca, NY. 7th Cornell Probability Summer School. w tba

Lims July 31 – August 4: Miami Beach, Florida. IMS Annual Meeting at JSM2011.

July 2012

July 29 – August 2: San Diego, California. **JSM2012**.

Ims July/August [dates TBA]: İstanbul, Turkey. IMS Annual Meeting 2012 in conjunction with 8th World Congress in Probability and Statistics.

August 2013

Lims August 3–8: Montréal, Canada. IMS Annual Meeting at JSM2013.

August 2014

Manual August 3-7: Boston, MA. JSM2014.

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:

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Kakuro corner

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