



# Bulletin



July 2010

## CONTENTS

- 1 **IMS at 75**
- 2–3 **Members' News:** Stephen Stigler; Sally Morton; Jean Opsomer; Sastry Pantula; Robert Rodriguez
- 5 **2010 IMS Fellows**
- 6 **Wald lectures:** Jean-François Le Gall
- 7 **Medallion Preview:** Edward George
- 8 **Nominations for awards; IMS Treasurer**
- 9 **Obituary:** Samuel Kotz
- 10 **Tweedie lecture:** Harrison Zhou; **NISS grants**
- 11 **Charles Stein symposium**
- 12 **Terence's Stuff:** Where  $p$ -values fail
- 13 **IMS meetings**
- 21 **Other meetings**
- 22 **Employment Opportunities**
- 23 **International Calendar of Statistical Events**
- 27 **Information for Advertisers**

## IMS at 75: A Little History

Peter Hall, IMS President-Elect, writes about 75 years of the Institute of Mathematical Statistics:

The founding of the IMS in 1935 actually followed, by some five years, that of the journal that established its reputation, *The Annals of Mathematical Statistics*. That *Annals* was established by Harry Carver, with financial assistance from the American Statistical Association. Willford King, an economist at New York University's School of Commerce and an ASA member, wrote in the first issue in 1930 that:

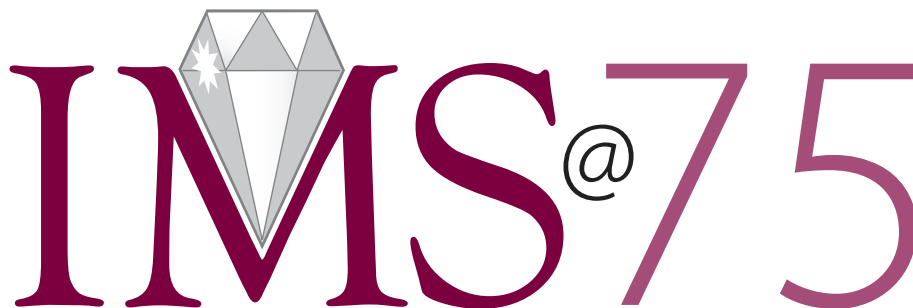
*For some time past ... it has been evident that the membership of our organization [the ASA] is tending to become divided into two groups—those familiar with advanced mathematics, and those who have not devoted themselves to this field. The mathematicians are, of course, interested in articles of a type which are not intelligible to the non-mathematical readers of our Journal. The Editor of our Journal has, then, found it a puzzling problem to satisfy both classes of readers. (King, 1930)*

I've heard avid, contemporary *JASA* readers, who have turned to the *Annals* for enlightenment, make similar remarks today. Clearly King, and those whose needs the new journal was intended to fill, faced a dichotomy that is still familiar to us.

By 1935 King was ASA President, and in the intervening years he and his Association had reassessed their commitment to the *Annals*. King was later to recall that "the ASA had been funding about half the cost of producing the [*Annals*] with money not coming from subscribers" (King, quoted in Hunter, 1996), and that ASA members found *Annals* papers not to their taste: "Members, most of whom are not specialists in mathematics, ... find the articles in the *Annals* not particularly adapted to their needs" (ibid.).

King himself was among the disenchanted. He wrote of the need to teach students to prepare tables and graphs, and to compute means and measures of dispersion, but "made no mention of statistical theory or of advanced mathematics" (Hunter, 1996). Henry Rietz and Arthur Crathorne, however, took an alternative view:

Continued on **page 4**



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# IMS members' news

## Belgian royal academy of sciences elects Stephen Stigler

The Academie Royale des Sciences, des Letters and des Beaux-Arts de Belgique has elected IMS Fellow **Stephen Stigler** to its Classe des Sciences, according to the University of Chicago website. The Classe des Sciences has 50 members who are Belgian scientists and 50 foreign members, including Stigler, the Ernest DeWitt Burton Distinguished Service Professor in Statistics at the University of Chicago. The Academie Royale was founded in 1772 by Maria Theresa, archduchess of Austria, while the territory that would become Belgium was under her rule.

"My work has the connection that an important figure in the Academie was a major focus of some of my historical work on the history of statistics—Adolphe Quetelet," Stigler said. Stigler has written about Quetelet (1796–1874), in his *History of Statistics: The Measurement of Uncertainty Before 1900* (1986), and other publications. Quetelet's works took the first steps toward the application of probability to the measurement of uncertainty in the social sciences, according to Stigler. "With his election in 1820 to the Académie Royale des Sciences at Belles-Lettres de Bruxelles, he began a half-century of domination of Belgian science," Stigler wrote in *History of Statistics*. "Quetelet's principal career within Belgium was as an astronomer and a meteorologist at the Royal Observatory in Brussels, but his international reputation was as a statistician and a sociologist."

## New IMS Treasurer

**Jean Opsomer** will be the next IMS Treasurer: see page 8 for details.

## Sally Morton to chair University of Pittsburgh Department of Biostatistics

**Sally C. Morton**, Ph.D., has been appointed by the University of Pittsburgh Graduate School of Public Health to head the school's Department of Biostatistics (<http://www.biostat.pitt.edu/>). Dr Morton's areas of expertise include comparative effectiveness and meta-analysis, which contribute to evidence-based decisions in health care.

Most recently, Dr Morton was vice president of statistics and epidemiology at RTI International where she led a department of 270 biostatisticians, statisticians and epidemiologists. She also served as an adjunct professor of biostatistics at the University of North Carolina. Prior to her position at RTI, she led the statistics group at the RAND Corporation and held the RAND endowed chair in statistics.

"Dr Morton is an outstanding biostatistician. As the immediate past-president of the American Statistical Association, she brings a deep understanding of the future of biostatistics," said Donald S. Burke, M.D., GSPH dean. "Dr Morton's special skills at analyzing, interpreting and explaining public health and policy data are extremely valuable during the current era of health care reform."

Dr Morton has authored more than 100 peer-reviewed articles, books and book



We apologise to **Dacheng Xiu**, IMS Laha Award recipient, whose name was spelled incorrectly in the last issue.

chapters on topics ranging from statistical and analytic methods to health care policy, evidence-based medicine and research on special populations. She received a master's degree in operations research and a doctoral degree in statistics from Stanford University, as well as a master's degree in statistics from the London School of Economics.

### Sastry Pantula appointed Director of NSF Division of Mathematical Sciences

The US National Science Foundation has announced the appointment of Dr **Sastry G. Pantula** as Division Director for Mathematical Sciences in the Mathematical and Physical Sciences Directorate, effective September 13, 2010. He will succeed **Peter Marsh**, who has been in that role for four years.

Sastry Pantula has worked at North Carolina State University (NCU), as Professor in the Department of Statistics since 1994, and Head of the Department since 2002. He is currently the ASA President. Dr Pantula received his doctoral degree in 1982 from Iowa State University, and his Bachelor and Master's degrees in Statistics from the ISI in Kolkata, India.

Dr Pantula became the Director of Graduate Programs (DGP) in the Department of Statistics at NCU in 1994. He worked with a number of companies, such as Becton Dickinson, GlaxoSmithKline and SAS Institute, to increase the number of Graduate Industrial Traineeships, and with companies like Eli Lilly, Merck and SAS to develop Graduate Fellowships. During a scholarly leave in 1990–91, he worked at SEMATECH, a semiconductor consortium in Austin, Texas, where he developed and taught various courses in quality control and experimental design, and collaborated with engineers from semiconductor industries in the USA and supplier companies in Mexico.

Dr Pantula's areas of research include time series analysis and linear and nonlinear models. His research ranges from applications of statistical methods to derivation of asymptotic theory. In addition to a number of publications in various journals, he co-authored a textbook, *Applied Regression Analysis: A Research Tool*.

During his years at NCU, Dr Pantula received an Outstanding Teacher award and became a member of NCU Academy of Outstanding Teachers. Also, the Department of Statistics received the Departmental Teaching and Learning Excellence award in 2004–05 from NCU. Dr Pantula also received the D.D. Mason Faculty award in 2001 and received SAA-PAMS Department Head Award in 2005 and 2008. He served as the Treasurer for ASA and for the National Institute of Statistical Sciences (NISS). In 2002, Dr Pantula was elected as a Fellow of ASA "for contributions to research in time series analysis, for exemplary service in graduate education as a teacher, researcher, mentor and recruiter of graduate students and industrial partners, and for contributions to the profession". During the same year, he also received the IISA Young Statistician Award.

H. Edward Seidel, Acting Assistant Director for Mathematical and Physical Sciences, said, "I look forward to working with Dr. Pantula in this important leadership role for Mathematical Sciences. At the same time, I would also like to thank Dr. Peter March for his leadership in Mathematical Sciences over the last four years. Dr. March has done a tremendous amount for the Division, Directorate, and community, leaving DMS in great shape for Dr. Pantula to begin his work in the coming year."



Sastry Pantula

### Robert Rodriguez elected as 107th ASA President

The American Statistical Association has announced that **Robert Rodriguez** will be its 107th President. He will be President-elect beginning January 1, 2011; his term as president begins January 1, 2012. Mary Mulry, U.S. Census Bureau, was selected as ASA vice-president.

## IMS Editors

### IMS Journals and Publications

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

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

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

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

*Statistical Science*: 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*: David Ruppert  
<http://imstat.org/ejs>

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

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

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

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

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

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

### IMS Supported Journals

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

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

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

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

### IMS Affiliated Journals

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

*Probability and Mathematical Statistics*: M. Musiela,  
 J. Rosiński, W. Szcotka, A. Weron &  
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# IMS at 75: continued from cover

... it is good educational policy to make the minimum mathematical background for technical training in statistics at least equal to that for the actuary, for the subject of statistics is mathematically somewhat more complex in its advanced aspects than actuarial theory. (Rietz and Crathorne, 1926)

Against this background, at a meeting in Michigan in September 1935, Carver, Rietz and Crathorne, with others including Walter Shewhart, Allen Craig, Burton Camp and Harold Hotelling, formally founded the IMS. They gave as their reasons the following:

*For some time there has been a feeling that the theory of statistics would be advanced in the United States by the formation of an organization of those persons especially interested in the mathematical aspects of the subject. As a consequence, a meeting of interested persons was arranged for September 12, 1935 at Ann Arbor, Michigan. At the meeting, it was decided to form an organization to be known as the Institute of Mathematical Statistics.* (Anon., 1935)

Carver, who had been *Annals* editor for the last five years, was joined in an Editorial Committee by A.L. O'Toole and T.E. Watford, and S.S. Wilks assumed the Editorship in 1938. At the meeting in 1935 Rietz was chosen as President, Shewhart as vice-president, and Craig as Secretary/Treasurer. Camp, Crathorne and Hotelling formed an early membership committee. In addition to those named above, 12 statistical scientists had responded positively to letters written by Craig, in the summer of 1935, asking whether they would join the new society. Thus, the IMS's initial membership was 22. The new IMS designated the *Annals of Mathematical Statistics* its official journal.

Robert Hogg, in his excellent history written for the IMS's fiftieth anniversary (Hogg, 1986), credits Carver, of Michigan, and Rietz, of Iowa, with the lion's share of the work behind the establishment of the Institute. Stephen Stigler (Stigler, 1996), in an address to the IMS Annual Meeting in 1996, argued engagingly "that Mathematical Statistics began in 1933," noting that that year, and those around it, were pivotal to the founding of the IMS and to the development of mathematical statistics across the globe.

In 1973 the *Annals of Mathematical Statistics* bifurcated into the *Annals of Statistics* and the *Annals of Probability*. The *Annals of Applied Probability* and the *Annals of Applied Statistics* began publication in 1991 and 2007, respectively, and the first issue of *Statistical Science* appeared 1986. The IMS also has series

of Monographs, Textbooks, Regional Conference publications and Collections, and co-sponsors the *Current Index to Statistics*, *Electronic Communications in Probability*, the *Electronic Journal of Probability*, the *Electronic Journal of Statistics*, the *Journal of Computational and Graphical Statistics*, *Probability Surveys* and *Statistics Surveys*. It publishes journals on behalf other statistical science societies. The *IMS Bulletin* provides authoritative news and information for our members. We confer a particularly wide variety of awards and honours, some directed specifically at younger members of our professional community. And of course, we actively organise, sponsor and in other ways support meetings around the world.

Today, as the IMS begins its fourth quarter century, it is as healthy and vibrant and internationally influential as ever. We are currently organising conferences more than four years into the future, on several continents, and we are shepherding our financial resources as the world moves on from the Global Financial Crisis. The professional community that we represent is in rapidly increasing demand, and in fact our members enjoy strategic skills and other attributes that are in short supply in most nations. New challenges in science, technology, social science and society, ranging from genomics to finance, international security and climate change, all require statistical expertise, and our members are constantly developing their skills to meet diverse new demands.

The next 25 years hold a great deal of promise for us, and with your support we can multiply our success and meet the future with confidence.

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# Introducing the new IMS Fellows



*Somnath Datta*, University of Louisville, for contributions to compound decision theory, bootstrap inference for Markov chains and time series, survival analysis and counting processes, and biostatistics and bioinformatics; and for editorial services to the profession.



*David Dunson*, Duke University, for theoretical contributions to latent variable research, non-parametric Bayesian methods, and isotonic inference; and for his editorial services and leadership in the practice of biostatistics.



*Marc G. Genton*, Texas A&M University, for contributions to spatial statistics with applications to environmental sciences, for construction of and inference from skew-elliptical distributions, and for editorial and leadership services.



*Tilmann Gneiting*, Universität Heidelberg, for elegant contributions to spatial statistics with applications in pure mathematics and atmospheric sciences, and for editorial services.



*PENG Shige*, Shandong University, for basic contributions to backward stochastic differential equations and their applications to stochastic control, partial differential equations, and mathematical finance; and for pioneering work on a non-linear theory of probability under model uncertainty.



*Peihua Qiu*, University of Minnesota, for theoretical and computational advances in jump detection in regression surfaces, and for a novel approach to process control using bootstrap methods and sequences of control limits.



*Timo Seppäläinen*, University of Wisconsin–Madison, for seminal contributions to the study of hydrodynamic limits of particle systems, for developing new tools for the study of random walks in random environments, and for editorial and organizational services.

*Gabor J. Szekely*, National Science Foundation, for his theorems on factorization of characteristic functions, for the deep stochastics underlying his empirical distance that tests independence, and for his organizational and administrative leadership.

*Ajit C. Tamhane*, Northwestern University, for the development of multiple comparison procedures, ranking and selection procedures, and their applications to pharmaceutical statistics, for his books disseminating statistics in engineering, and for his editorial contributions.

*David van Dyk*, University of California–Irvine, for contributions to EM type algorithms, MCMC methods, Bayesian computations, and applications in astrophysics, and for organizational and editorial leadership in astrostatistics.

*Jia-An Yan*, Chinese Academy of Sciences, for deep contributions to martingales, stochastic analysis, and mathematical finance; for his books disseminating probability theory; and for his editorial and international leadership in the probability community.

*Yuhong Yang*, University of Minnesota, for research on aggregation of estimators, non-parametric classification, and information theoretic derivation of minimax rates of convergence; and for editorial services.

*Donglin Zeng*, University of North Carolina–Chapel Hill, for research on survival analysis with dependent censoring, on asymptotic theory for joint modeling of longitudinal and survival data, and on haplotype-based analysis of genetic data.



The newly-elected Fellows will be welcomed and presented with a plaque at the IMS Annual Meeting in Gothenburg, Sweden (see [www.ims-gothenburg.com](http://www.ims-gothenburg.com)). The presentation and reception will take place at the IMS Presidential Address on Tuesday, August 10 at 6:00 p.m. See you there?

# 2010 Wald Lectures: Jean-François Le Gall



Jean-François Le Gall is Professor of Mathematics at University Paris-Sud and at the Institut universitaire de France. After studying at the Ecole normale supérieure de Paris (ENS), he received his PhD degree from University Paris 6 in 1982, under the supervision of Marc Yor. His main research interests are Brownian motion, spatial branching processes, random trees and random graphs. He has been awarded several honors including the Rollo Davidson Prize, the Loève Prize, the Fermat Prize, the Sophie Germain Prize of the French Academy of Science, and the Silver Medal of CNRS.

## Trees, Spatial Branching Processes and Random Graphs

Branching processes modelling the random evolution of a population were discussed by Galton and Watson in the nineteenth century, as a means to investigate the extinction of names in British aristocratic families. The idea of studying the random tree representing the genealogy of a population appeared around 1950 in the work of Otter and Harris in particular. The last 20 years have seen considerable progress in the understanding of large random trees and their continuous limits. This subject lies at the intersection of several domains of probability theory, and has strong connections with other areas such as combinatorics, computer science, mathematical biology and statistical physics.

**Lecture 1: Discrete and continuous random trees.** In a discrete Galton-Watson process, each individual has, independently of the others, a random number of offspring following a given probability distribution. Harris was probably the first to observe that the corresponding genealogical tree can be coded by the path of an associated random walk on the integers. This crucial observation has led to many subsequent developments connecting discrete or continuous random trees on one hand with random walk, Brownian motion or Lévy processes on the other hand. A major step was Aldous' construction of the so-called continuum random tree, or CRT, in the early nineties. The CRT is the universal limit of a variety of discrete random trees such as finite-variance critical Galton-Watson trees or uniformly distributed Cayley trees. As Aldous observed, the CRT is the tree coded by a Brownian excursion of duration 1 in the following informal sense: Given a particle that follows the contour of the CRT by moving up and down along its branches, the distance between the position of the particle and the root of the tree evolves like a Brownian excursion. This coding and the universal property of the CRT make it possible to derive a number of asymptotics for discrete random trees in terms of Brownian distributions. The more recent theory of Lévy trees aims to describe all continuous random trees that can arise as limits of rescaled Galton-Watson trees. The case when the offspring distribution is in the domain of attraction of a stable law leads to the so-called stable trees, which have found applications in fragmentation and coagulation models.

**Lecture 2: Spatial branching processes.** In the last 30 years, much work has been devoted to stochastic models that combine a branching phenomenon with spatial displacements. The so-called superprocesses, or measure-valued branching processes, describe the behavior of branching populations where individuals reproduce themselves and move in space independently of each other, in the limit where the mean lifetime and the mass of each individual tend to 0. After earlier work of Watanabe, superprocesses have been studied extensively by Dawson, Dynkin, Perkins and many others. Not surprisingly, the genealogical structure of superprocesses can be described by random continuous trees of the same type as the CRT. This description is intimately connected with the Brownian snake approach to (finite-variance) superprocesses. The Brownian snake is a path-valued Markov process, which in a sense generates the individual paths of the superprocess. Among other applications, the Brownian snake yields a simple concrete construction of the random measure known as ISE, for integrated super-Brownian excursion, which has appeared in the asymptotics of several models of statistical physics.

**Lecture 3: Large random planar graphs.** Following Chassaing and Schaeffer's pioneering 2004 paper, several recent papers have given evidence that CRTs are key to understanding the properties of large planar maps. A planar map is a graph drawn in the plane and viewed up to continuous deformation. Its faces are the regions delimited by the edges: The famous four color theorem asserts that four colors are sufficient to color all faces in such a way that two adjacent faces have different colors. In combinatorics, and also in the area of theoretical physics known as quantum gravity, it is of interest to study large random planar maps considered as metric spaces for the graph distance. Although planar maps are typically not trees, there is an underlying tree structure that plays a key role in these asymptotics. Recent work has shown that scaling limits of large planar maps chosen uniformly at random in a suitable class are described by the so-called Brownian map, which is a quotient space of the CRT for an equivalence relation defined in terms of Brownian labels assigned to vertices. As a typical application, the asymptotic distribution of the radius of a large random planar map is given by the range of one-dimensional ISE.

# Medallion Lecture preview: Edward I. George



Edward I. George is Chairperson of the Department of Statistics and the Universal Furniture Professor at the Wharton School of the University of Pennsylvania. He received his PhD from Stanford University in 1981, and is a fellow of both the IMS and ASA, and an elected member of the ISI. He has served as President of ISBA, as Executive Editor of *Statistical Science*, and on the editorial boards of numerous journals. An ISI Highly Cited Researcher, Ed George's current research interests include Bayesian nonparametrics, classification and regression tree modeling, model uncertainty, multiple shrinkage, predictive inference, statistical decision theory and variable selection. Ed will present his IMS Medallion Lecture at the JSM in Vancouver, on Wednesday August 4.

## Discovering Regression Structure with a Bayesian Ensemble

A Bayesian ensemble can be used to discover and learn about the regression relationship between a variable of interest  $y$ , and  $p$  potential predictor variables  $x_1, \dots, x_p$ . The basic idea is to model the conditional distribution of  $y$  given  $x$  by a sum of random basis elements plus a flexible noise distribution. In my Medallion lecture, I will focus on a Bayesian ensemble approach called BART (Bayesian Additive Regression Trees) that I have developed with my long time collaborators H. A. Chipman and R. E. McCulloch. Based on a basis of random regression trees, BART automatically produces a predictive distribution for  $y$  at any  $x$  (in or out of sample) which automatically adjusts for the uncertainty at each such  $x$ . It can do this for nonlinear relationships, even those hidden within a large number of irrelevant predictors. Further, BART opens up a novel approach for model free variable selection. Ultimately, the information provided such a Bayesian ensemble may be seen as a valuable first step towards model building for high dimensional data.

BART is motivated by ensemble methods in general, and boosting algorithms in particular. Essentially, BART approximates the unknown form of  $f(x_1, \dots, x_p) = E(Y | x_1, \dots, x_p)$  by a "sum-of-trees" model, which is coupled with a regularization prior that constrains each tree to be a weak learner. As in boosting, each weak learner (i.e., each weak tree) contributes a small amount to the overall model, and the training of a weak learner is conditional on the estimates for the other weak learners. Flexibility of the sum-of-trees model is enhanced by using a large number of trees, which allows BART to approximate a rich class of underlying conditional mean functions thereby enhancing its predictive effectiveness. However, in sharp contrast to boosting, BART is based on an underlying statistical model: a likelihood and a prior. And as opposed to algorithms such as boosting and random forests which sequentially add new trees to the mix, BART begins with a fixed number of trees which are then updated by repeated passes through an iterative backfitting MCMC algorithm. By using an essentially over-complete basis of trees, this algorithm exhibits fast burn-in and good mixing, converging quickly to a stable predictive distribution. A useful byproduct of the algorithm is the repeated generation

of posterior draws which can be used for model averaging and uncertainty assessment.

The BART modeling strategy can also be viewed in the context of Bayesian nonparametrics. The key idea there is to use a model rich enough to respond to a variety of signal types, but constrained by a prior from overreacting to noise. The Bayesian ensemble approach provides just such a rich model form, which can expand as needed via the MCMC mechanism, but is kept in check by strong regularization priors. To facilitate their implementation in BART, these priors have been formulated to be interpretable, easy to specify, and to provide results that are robust across a wide range of prior hyperparameter values. In particular, the use of simple regression trees as basis functions enables a stable automatic calibration of the prior which yields a ready-to-use default version of BART (publicly available as the R-package *BayesTree* on CRAN).

Beyond its predictive potential, BART also opens up a novel approach to model-free variable selection, an approach that avoids an a priori parametric assumption of a form for the relationship between  $y$  and every subset of  $x_1, \dots, x_p$  as is commonly made. By simply keeping track of the predictor usage frequencies as the MCMC algorithm moves through the model space, those predictors that enter the ensemble model most frequently become the candidates for selection. This strategy is seen to be particularly effective when the number of trees is kept small, creating a bottleneck which forces the variables to compete with each other for entry into the ensemble. Such a strategy is unavailable with other ensemble methods that rely on the sequential addition of trees. It will also be of interest for selection that BART provides an omnibus test: the absence of any relationship between  $y$  and any subset of  $x_1, \dots, x_p$  is suggested when BART posterior intervals for  $f$  reveal no signal. Going further, I look forward to illustrating the remarkable potential of Bayesian ensembles such as BART by the numerous applications and extensions by my collaborators and many others.

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Chipman, H. A., George, E. I. and McCulloch, R. E. (2010). BART: Bayesian Additive Regression Trees. *Ann. Appl. Stat.*, 4(1), 266–298

# Nominations for awards

## Nominate a statistician or probabilist for the Abel Prize

The Abel Prize 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 of extraordinary depth and influence to the mathematical sciences. Such work may have resolved fundamental problems, created powerful new techniques, introduced unifying principles or opened up major new fields of research. The intent is to award prizes over the course of time in a broad range of fields within the mathematical sciences.

## Nominations

The right to nominate is open to anyone. Nominations are confidential and a nomination should not be made known to the nominee. Self-nominations are not acceptable. The prize can be awarded to a single person or shared for closely related fundamental contributions. Deceased persons cannot be nominated. If an Abel Laureate passes away before receiving the prize, then the prize will be awarded post mortem.

The nomination letter should contain a CV and a description of the candidate's works, together with names of specialists who may be contacted. The letter of nomination should be mailed to:

*The Norwegian Academy of Science and Letters  
Drammensveien 78  
NO-0271 Oslo  
Norway*

The nomination letter should be postmarked no later than September 15th to be considered a nomination for the Abel Prize the following year. It is also possible to nominate candidates by using the online submission form at [http://www.abelprisen.no/en/abelprisen/nomination\\_form.html](http://www.abelprisen.no/en/abelprisen/nomination_form.html).

The name of the Abel Laureate will be announced in late March or early April next year.

## Nominations Sought for the Marvin Zelen Leadership Award in Statistical Science

The Department of Biostatistics at the Harvard School of Public Health named **Ingram Olkin** as the recipient of the 2010 Marvin Zelen Leadership Award in Statistical Science. Dr. Olkin, Professor of Statistics and of Education and CHP/PCOR Fellow of the Department of Statistics, Stanford University, delivered a lecture entitled "Measures of Heterogeneity. Diversity and Inequality" on May 21 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 awardee's 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 in May 2011, should be sent to the *Marvin Zelen Leadership Award Committee, Department of Biostatistics, Harvard School of Public Health, 655 Huntington Avenue, Boston, MA 02115* or via email to [vbeaulie@hsph.harvard.edu](mailto:vbeaulie@hsph.harvard.edu). 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 15, 2010**.

## New IMS Treasurer Jean Opsomer

The IMS has selected **Jean Opsomer** to be its next Treasurer, when **Rong Chen** steps down from the Executive Committee at the end of his three-year term this August.



Jean Opsomer is Professor in the Department of Statistics at Colorado State University. He has a PhD from Cornell University and an MBA from University of Chicago. His main research interests are in survey statistics, nonparametric methods and environmental statistics. He says he is looking forward to being able to put his business degree to good use as Treasurer of IMS.

# OBITUARY: Samuel Kotz

## 1930–2010

PROFESSOR SAMUEL KOTZ, who was born in Harbin, Peoples Republic of China on 30 August 1930, passed away in Silver Spring, Maryland, USA on 16 March 2010. He was a Professor and Research Scholar at George Washington University, USA. He is survived by his wife Raysal Kotz, three children and nine grand children. He lived his life to the full.

The statistics community will remember Professor Kotz for his encyclopedias, compendiums, many books and many more excellent papers covering a wide range of areas. I do not wish to elaborate on his personal life, academic credentials, publications or honors, as these are well known to most statisticians (for these details I refer the readers to my paper in *Statistical Science*, 'A conversation with Samuel Kotz,' Volume 17, Issue 2, 2002, pages 220–233. See also the Wikipedia entry at [http://en.wikipedia.org/wiki/Samuel\\_Kotz](http://en.wikipedia.org/wiki/Samuel_Kotz) and a web site dedicated to his memory at <http://www.seas.gwu.edu/~kotz/>)

I met Professor Kotz in 1999 while I was a lecturer at the University of Nottingham, UK. We collaborated on a monograph on extreme value distributions. Since then we wrote many joint papers, and one more monograph on multivariate  $t$  distributions, published by the Cambridge University Press. Many of our joint papers appeared in reputed journals, including the *European Journal of Operations Research*, *Comptes Rendus Mathématique*, *Theory of Probability and Its Applications* and the *International Statistical Review*. We also published papers in a variety of top-rated applied journals, including *Management Science*, *Hydrological Processes*, *Journal of Hydrology*, *Advances in Water Resources*, *Physica A*, *Reliability Engineering and System Safety*, *International Journal of Remote Sensing*, *Communications in Mathematical and in Computer Chemistry*, *IEEE Transactions on Aerospace and Electronic Systems*, *IEEE Transactions on Vehicular Technology* and the *IEEE Geoscience and Remote Sensing Letters*.

Professor Kotz collaborated with many scientists around the world, mostly in Europe and North America. A most notable collaborator is the late Professor Norman L. Johnson. They met at the University of North Carolina in Chapel Hill in 1962. Many of Professor Kotz's books and papers and all of his encyclopedias were joint work with Professor Johnson.

Although I knew Professor Kotz for a shorter period, I am proud and honored to have the highest number of joint publications among all his collaborators. Professor Kotz's other collaborators include Professor N. Balakrishnan (McMaster University), Professor J. Galambos (Temple University), Professor M. Pensky

(University of Central Florida), Professor R. van Dorp (George Washington University), Professor B. Vidakovic (Georgia Institute of Technology), Professor K. T. Fang (Hong Kong Baptist University) and the late Professor J. Wolfowitz.

Professor Kotz was a good human being. He helped people from all varieties of background, religions and races unselfishly and without any discrimination or expectation. He did not treat people just like a peer or an academic, but helped most people like a friend or a relative.

Since the day I met him, Professor Kotz was very kind and friendly. On many occasions, he helped me like a father would to a son. He was an inspiration for much of my research (including the work I have done with others) and also to my personal life. I am sure that these comments apply to many others affiliated with Professor Kotz.

Although Professor Kotz lived much of his life in the USA, his thoughts were much influenced by Eastern philosophies. For instance, his teaching was much influenced by the writings of the Chinese philosopher Confucius. He was also interested in the philosophies of Hinduism.

Professor Kotz did not judge people on their race, appearances, corrupt references or empty names. He did not do research for the sake of power, promotion, greed or some assessment exercise. He did not write books and papers to satisfy selfish needs. Professor Kotz worked tirelessly and unselfishly every day, including weekends and holidays — even in the months before his death — for the enjoyment of research and to inspire others to do research.

Professor Kotz was a man of principle. In spite of receiving numerous awards and honorary degrees from several universities, he was not motivated by money, fame, or recognition. He was only interested in service to the statistics community. He was genuinely interested in statistical research even during his last days. His dedication to statistical sciences can be hardly matched by anyone I know. He passing away is a great loss to the statistics community.

I salute you, Professor Kotz. May God bless your soul.



Samuel Kotz

Saralees Nadarajah  
University of Manchester, UK

# Tweedie Lecturer: Harrison Zhou

Harrison Zhou is the 2010 Richard L. Tweedie New Researcher Invited Lecturer. He will deliver his lecture at the IMS New Researchers' Conference, held this year in Vancouver, Canada, from July 27–30. Dr Zhou is an Associate Professor in the Department of Statistics at Yale University.

## Some recent work inspired by Le Cam's Theory

The key idea of Le Cam's theory is to approximate a complicated statistical problem by a more tractable one. In my lecture, I will describe some of my recent work which was directly inspired by Le Cam's theory. The lecture will attempt to shed light on how Le Cam's theory can be applied to high-dimensional models.

Firstly, I will discuss how Le Cam's theory has inspired me and my co-authors to propose new statistical procedures for models such as robust nonparametric regression (where the noise distribution is unknown and possibly heavy-tailed) and generalized nonparametric regression in exponential families (Poisson regression, binomial regression, and Gamma regression and so on). We took a unified approach of using a transformation to convert each of these problems into a standard homoskedastic Gaussian regression problem to which any good nonparametric Gaussian regression procedure can be applied.

Secondly, I will discuss minimax rates of convergence for estimating an infinite-dimensional parameter in functional regression for general exponential families. An estimator that achieves the minimax upper bound is constructed by maximum likelihood on finite-dimensional approximations with parameter dimension that grows with sample size. The Le Cam's distance provides the key technical tool for bounding the error of the approximations. Finally, I will discuss minimax rates of convergence for estimating the Toeplitz covariance matrix under the spectral norm. The minimax lower bound is derived by constructing a more informative and tractable model (in the Le Cam sense) for which it is easier to derive a minimax lower bound.



# NISS awarded grants for postdocs

The National Institute of Statistical Sciences (NISS), an independent institute that conducts cross-disciplinary and cross-sector statistical sciences research, has been awarded a \$750,209 grant from the National Science Foundation (NSF) to establish a postdoctoral research program in collaboration with NSF's Division of Science Resource Statistics (SRS). The two-year program will begin this June.

In support of the National Science Foundation Act legislative mandate to "provide a central clearinghouse for the collection, interpretation, and analysis of data on scientific and engineering resources, and to provide a source of information for policy formulation by other agencies of the Federal Government," SRS designs, supports, and directs about 11 periodic surveys as well as a variety of other data collections and research projects. These activities yield the materials for SRS staff to compile, analyze, and disseminate quantitative information about domestic and international resources devoted to science, engineering, and technology. Under the program, two postdoctoral fellows will be appointed for a term of two years, beginning in the summer of 2010. They will be located at NISS headquarters in Research Triangle Park, NC, and will conduct collaborative research with SRS on important problems with multiple dimensions, using SRS data sets. They will be mentored by Alan Karr, director of NISS and PI on the grant;

two distinguished survey researchers—Paul Biemer, Distinguished Fellow in Statistics, RTI International, and adjunct professor, Odum Institute for Research in Social Sciences at the University of North Carolina at Chapel Hill, and Jerome Reiter, Associate Professor of Statistical Sciences, Duke University; and SRS personnel.

"The research emphases—longitudinal surveys, model-based methods, capturing and coping with dynamics, creating research datasets and a set of persistent issues such as nonresponse and survey costs—are challenging from theoretical, methodological and implementation perspectives," notes Karr, "The continued vitality of the scientific workforce is essential to US competitiveness in a global economy. These studies will help us have more insight as to where that workforce is headed in the future."

One of several surveys on which the postdocs will work is the Survey of Doctoral Recipients. This longitudinal survey collects information on career trajectories of scientists and engineers from the awarding of their doctoral degree to age 76. They will develop methodology to increase usefulness of the survey, including the construction of weights that support longitudinal analyses using this data. In addition, the postdocs will work with the Survey of Earned Doctorates, the National Survey of Recent College Graduates and the National Survey of College Graduates.

# Charles Stein honored on 90th birthday

**Louis Chen and Wei-Liem Loh, National University of Singapore, report:** A symposium in honor of Charles Stein took place at Stanford University on his 90th birthday, March 22, 2010. It was jointly organized by the Department of Statistics, Stanford University, and the Institute for Mathematical Sciences, National University of Singapore.

Charles Stein is considered to be one of the most original thinkers who made fundamental contributions to probability and statistics. He has received many honors and awards and is a member of the US National Academy of Sciences. He has given many invited lectures, notably as plenary speaker of the International Congress of Mathematicians, and as the Institute of Mathematical Statistics Wald Lecturer, Rietz Lecturer and Neyman Lecturer. He is currently Emeritus Professor of Statistics at Stanford University.

There were over 100 registered symposium participants who came from at least three continents. Also present were Charles' family members: his wife Margaret, his son Charles Jr., his daughter Sarah and his grandson. In accordance with Margaret's and Charles' wishes, the symposium was a half-day event.

Monday, March 22 was a beautiful sunny day and the symposium began at 1:30 pm with the welcome and opening addresses by Wing Wong, the Chairman of the Stanford Statistics Department, and Louis Chen, the Organizing Committee Chair. Louis Chen presented Charles with a pewter plate as a birthday gift from his institute. Inscribed on the plate was a poem written jointly by Louis and his colleague Y.K. Leong:

*A thinker original and independent,  
In search of perfection invariant,  
Found admissible wisdom's counterexample,  
Made (fame, humility) exchangeable.*

This was followed by eight 25-minute talks presented in two consecutive sessions. The speakers and titles of the talks (in chronological order of presentation) were: **Larry Brown**, University of Pennsylvania: "Stein's research on fixed sample optimality, apart from multivariate normal minimax shrinkage"; **Morris Eaton**, University of Minnesota: "On some contributions of Charles Stein to applications of invariance in statistics"; **Carl Morris**, Harvard University: "Shrinkage estimation"; **Brad Efron**, Stanford University: "Stein's unbiased risk estimate"; **Peter Bickel**, University of California, Berkeley: "Charles Stein: Semiparametric models and nonparametric methods"; **David Siegmund**, Stanford University: "Charles Stein and fixed precision sequential estimation"; **Andrew Barbour**, University of Zurich: "Stein's (magic) method"; **Persi Diaconis**, Stanford University: "Few but ripe: 35 years of following Charles Stein."

A special brochure was printed and distributed during the

symposium to mark the occasion. The brochure contained pictures of Charles and statements about him from his colleagues:

**Persi Diaconis:** *Charles Stein is a quiet man but when he talks, we listen. When Markov chains started to become popular (about 1980), he seemed interested as well. I asked him why and he answered as if it is obvious: "Of course, a reversible Markov chain is the same thing as an exchangeable pair." I knew that exchangeable pairs were a mainstay of Stein's Method. His statement changed my research direction. Twenty five years later, he added another sentence: "I always thought it would be a good idea to go through Feller's Volume One using the method of exchangeable pairs". Susan Holmes and I had been going through Feller with Bayesian eyes (I doubt Charles approves). That extra statement should keep me going for another twenty five years.*

**Brad Efron:** *Gustav Elfving once told me, "After I met Doob I wondered why anyone else would do probability, and after I met Charles I wondered why anyone else did mathematical statistics."*

**Wing Wong:** *Among the great mathematical statisticians of the 20th century, some left their mark by developing new theories and techniques, and others by discovering surprising results that shattered long-held beliefs. Charles Stein is unique in his ability to do both. He is truly a giant among giants.*

The symposium ended with a dinner held at the Schwab Residential Center (Stanford University). During the dinner, a mathematics genealogy chart of Charles Stein was presented to Charles by Wing Wong. A number of people (including Persi Diaconis, Ted Anderson, Ken Arrow, Brad Efron, Margaret Stein, Charles Stein Jr., Susan Holmes) shared their reminiscences about Charles Stein. It was indeed a happy and memorable occasion for Charles, his family and his friends.

More details of the symposium (including the slides of each of the eight talks) can be found at: <http://www-stat.stanford.edu/~ckirby/charles/Symposium2010.html>. Pictures taken during the symposium and the dinner at: <http://www2.ims.nus.edu.sg/Programs/010CharlesStein90/visualbox/index.htm>.



This report appears in Issue 16 (June 2010) of *Imprints*, the newsletter of the Institute for Mathematical Sciences at the National University of Singapore; reprinted with consent of the editors.

# Terence's Stuff: Where $p$ -values fail

Terry Speed finds (once again) that  $p$ -values cannot always be supplied on demand...



I'd be a Bayesian if I had to be something, but I prefer not to be anything. I've never liked the idea of having to act in a predictable way, consistent with someone else's philosophy. Many years ago I enjoyed challenging my students with "counter-examples" to the Neyman-Pearson-Wald consensus on confidence intervals and hypothesis testing, all having a Bayesian flavor, of course. But I drew back from finding priors for everything I did, and objective priors never struck a chord with me. Furthermore, I saw the failure of Fisher's attempt to piece together an all-embracing inferential philosophy using  $p$ -values, fiducial probabilities, conditioning on suitable ancillaries, and so on. Bayes: *too neat to be usable*; Fisher: *too fragmented*; NPW: *right answers to wrong questions*. Better not be beholden to any philosophy, I reasoned, just do what seems sensible to me at any given time. Naturally this leaves me open to ridicule along the lines of Keynes' observation that,

*"Practical men, who believe themselves to be quite exempt from any intellectual influence, are usually the slaves of some defunct economist."*

All these thoughts came to mind recently when I got involved in a tricky consulting problem.

A research group was carrying out a screen of several hundred genes in the model organism *C. elegans* (a roundworm), to identify genes whose function was required for a neuronal response. Over a period of about two years, they grew up batches of worms each week, testing about

five genes with each batch. A test consisted of knocking down a gene's expression in 10–15 worms from one batch, and comparing their neuron measurements with those of 15–30 control worms from the same batch, or from another batch prepared around the same time. The comparison was based on a 2-sample  $t$ -test.

The difficulty came because the researchers did something entirely reasonable from the perspective of a scientist: they collected more data on a selected subset of the genes, in order to strengthen their conclusions for those genes. They repeated the test with worms from new batches if the  $p$ -value from the first test was small but not tiny (e.g.  $0.01 < p \leq 0.05$ ), or if the gene was "interesting" and  $0.05 < p \leq 0.1$ . If for some reason they "didn't trust" the controls on a particular day, e.g. the control was very low or high, or all experiments were low or high, they would be more likely to repeat an experiment. More testing was done for about 100 genes, with most of these being repeated just once, but others more often, and some up to 10 times. The precise details here don't matter here; I just want it to be clear that, (a) subjective, data-dependent judgments were made to decide whether or not to collect more data on any given gene, and (b) it is impossible to simulate the process under any statistical model, null or otherwise, for the data. My favorite statistics book *Statistics* by FPP has a saying, *No box model, no inference*. My paraphrase: *No simulation, no  $p$ -value*.

Is that all? Can we do nothing with these data? I won't explain here what we eventually recommended, but this experience brought me back to a little Methuen book on *The Foundations of Statistical Inference*, which I haven't looked at in 40 years, the record of L.J. Savage's seminar on *Subjective probability and statistical practice*. Given in London in late July 1959, to a

distinguished audience of non-believers, with one or two fellow believers, the book contains the first and perhaps the last friendly, wide-ranging discussion of the pros and cons of being a subjective Bayesian *in practice*. Why is it relevant here? Because the dependence of the analysis of data on stopping rules comes up a few times, and in that context Savage makes a delightful public confession which everyone who puzzles about statistical inference should read. In those days, it was felt that a Bayesian could *ignore* stopping rules, e.g. the difference between a positive and a negative binomial, and just analyze the data available at the end. Later, it was realized that some stopping rules could be *informative*, that is, reveal something about the value of the unknown parameters, and I believe that the received wisdom these days is that Bayesians can ignore *non-informative* stopping rules, where I will not attempt to define this term.


The relevance of this to my consulting problem should be clear, but are the scientists' stopping rules non-informative? If so, then we can (indeed *should*, if we are Bayesians) just collect up all the data on a given gene, ignoring the stop and start nature of the data collection, and just do... well...the Bayesian equivalent of a  $z$ - or  $t$ -test. One thing is clear in my mind: there's no  $p$ -value for *all* these data.

Stop-start: a vandalized sign in Denton, Texas



# IMS meetings around the world

IMS-sponsored meeting



## IMS 2010 Gothenburg

### Institute of Mathematical Statistics


73<sup>rd</sup> Annual Meeting, Aug 9-13, 2010, Gothenburg, Sweden  
Venue: Chalmers University of Technology

#### Probability and Statistics Sessions

- Statistical theory and methods
- Stochastic processes and analysis
- Computer modelling and computing
- Genetics, health and epidemiology
- Molecular biology and genomics
- Statistical physics and disordered systems
- Statistics, physics and the environment
- Probability, economics and social science
- Combinatorics and graph theory
- Probability in biology
- Neuroscience and imaging
- Risk and extreme values

Registration online on conference website:  
[www.ims-göteborg.com](http://www.ims-göteborg.com)

CHALMERS | UNIVERSITY OF GÖTEBORG



# www.ims-göteborg.com

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

## 2010

**JSM:** Vancouver,  
Canada, July 31–  
August 5, 2010

**IMS Annual Meeting:**  
Gothenburg,  
Sweden, August  
9–13, 2010

## 2011

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

## 2012

**IMS Annual Meeting**  
**@ World Congress:**  
İstanbul, Turkey,  
July 9–14, 2012

**JSM:** San Diego,  
CA, July 28–  
August 2, 2012

## 2013

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

## 2014

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

**JSM:** Boston, MA,  
August 2–7, 2014

Early bird deadline passed;  
still time to register!

# More IMS meetings around the world

## IMS sponsored meeting

### JSM2010

July 31 – August 5, 2010

Vancouver, British Columbia, Canada

[www.amstat.org/meetings/jsm/2010/](http://www.amstat.org/meetings/jsm/2010/)

The 2010 Joint Statistical Meetings will be held at the Vancouver Convention Center. Registration and hotel reservations open on April 29, 2010 at the website. Abstract submission is now closed.

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



## IMS sponsored meeting

### Thirteenth Meeting of New Researchers in Statistics and Probability

July 27–30, 2010

University of British Columbia, BC, Canada

<http://www.stat.tamu.edu/~sinha/nrc2010-ims.html>

The application deadline has passed.

The New Researchers' Committee of the IMS is organizing a meeting of recent PhD recipients in statistics and probability, to promote interaction among new researchers primarily by introducing them to each other's research in an informal setting. All participants are expected to give a short, expository talk or contribute a poster on their research. The meeting is to be held prior to the 2010 Joint Statistical Meetings in Vancouver, BC, Canada (see above).

Contact Samiran Sinha, Texas A&M University, [sinha@stat.tamu.edu](mailto:sinha@stat.tamu.edu)

## IMS co-sponsored meeting

### International Conference on Robust Statistics 2010

June 28 – July 2, 2010

Prague, Czech Republic

IMS Representative(s) on Program

Committees: Xuming He

<http://icors2010.karlin.mff.cuni.cz/index.html>

## IMS co-sponsored meeting

### IMS Asia Pacific Rim Meeting

July 3–6, 2011

Tokyo, Japan

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

The second IMS Asia Pacific Rim Meeting will take place in OMIYA Sonic City conference hall (<http://www.sonic-city.or.jp/modules/english/>), Tokyo, Japan during the period Sunday July 3 to Wednesday July 6, 2011. This conference is sponsored by IMS, The International Chinese Statistical Association (ICSA), The International Indian Statistical Association (IISA), The Japan Statistical Society (JSS), The Korean Statistical Society (KSS) and the Institute of Statistical Mathematics



(ISM). This meeting series provides an excellent forum for scientific communications and collaborations for the researchers in Asia and Pacific Rim. It also promotes communications and collaborations between the researchers in this area and those from other parts of the world. The program covers a wide range of topics in statistics and probability, presenting recent developments and the state of the art in a variety of modern research topics and in applications. Plenary speakers are Professor



Peter Hall (University of Melbourne, Australia), and Professor S.R.S. Varadhan (New York University, USA). A number of celebrated scholars will deliver distinguished lectures and invited talks in this conference. Details about distinguished lecture speakers, invited talk speakers and the key dates can be found in the website.

For more information, you may contact the program chairs: Byeong U. Park ([bupark@stats.snu.ac.kr](mailto:bupark@stats.snu.ac.kr)) and Runze Li ([rli@stat.psu.edu](mailto:rli@stat.psu.edu)).

## IMS co-sponsored meeting

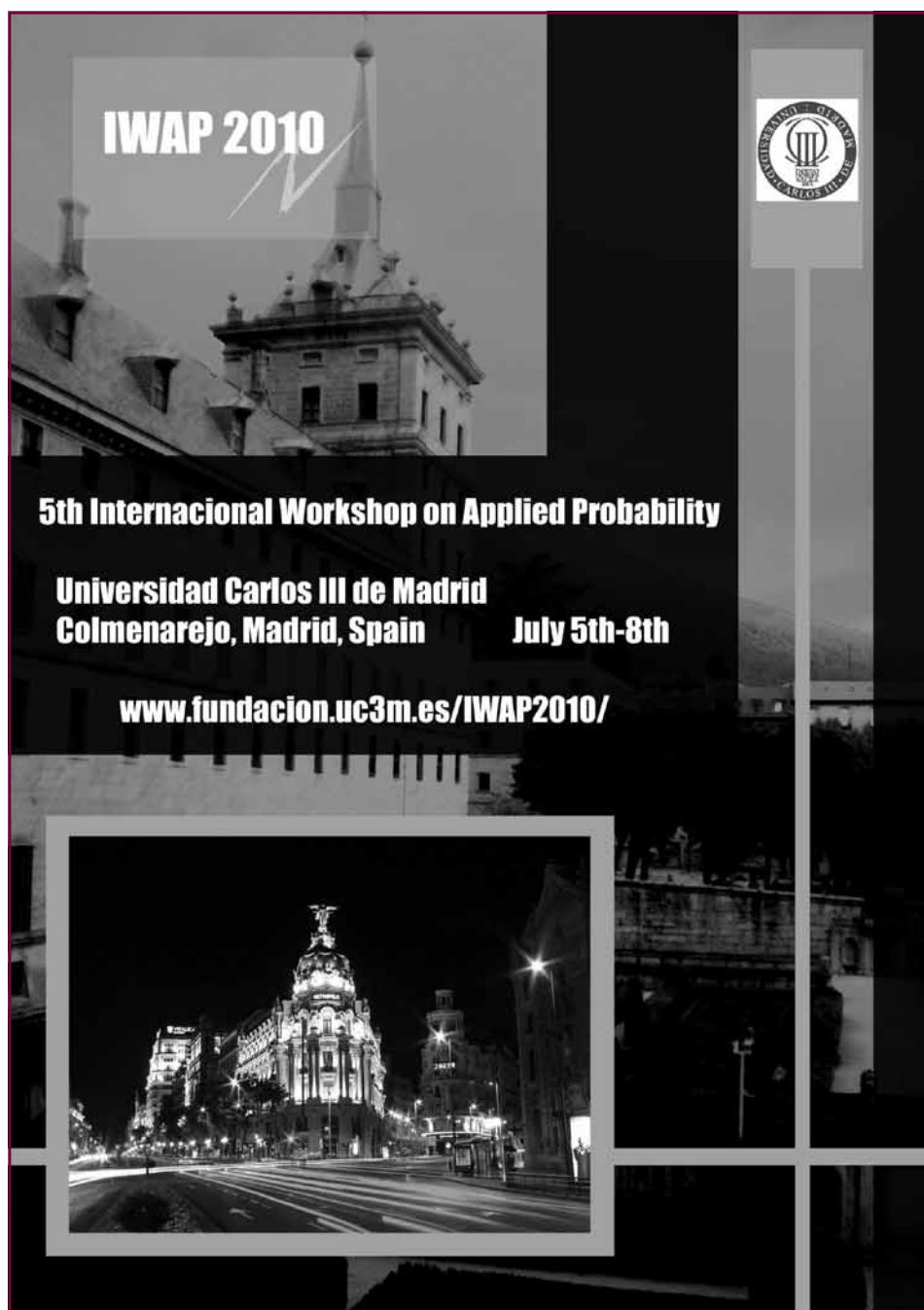
**International Workshop in Applied Probability 2010****July 5–8, 2010****Universidad Carlos III de Madrid, Colmenarejo Campus, Spain****w** <http://www.fundacion.uc3m.es/IWAP2010/Index.html>

The aim of this workshop is to bring together and to foster exchanges among scientists working in the applications of probability to any field. Participants are going to be encouraged to submit their contributions to the journal *Methodology and Computing in Applied Probability*, published by Springer. We are planning to publish a book of abstracts of presented articles at the workshop.

The plenary speakers include Paul Embrechts (ETH Zurich), Ricardo Fraiman (Universidad de San Andrés & Universidad de la República), Montse Fuentes (North Carolina State University), Robin Pemantle (University of Pennsylvania), Víctor de la Peña (Columbia University), Michael Steele (University of Pennsylvania) and Mihail Zervos (London School of Economics).

The Scientific Program Committee includes leading scientists in diverse areas of research in probability from all over the world, that will ensure a strong and a broad program and participation from scientists from all over the world. Workshop chairs are committed to encourage the participation of young scientists, women and minorities at IWAP and have made progress to achieve this goal.

This workshop will build on the successes of IWAP 2002 in Caracas, Venezuela; IWAP 2004 in Piraeus, Greece; IWAP 2006 at University of Connecticut, Storrs, USA; and IWAP 2008 in Compiègne, France. IWAP 2008 attracted about 320 researchers from all over the world. IWAP is co-sponsored by IMS, the Bernoulli Society, and Taylor and Francis Group. Universidad Carlos III de Madrid, Colmenarejo Campus, Spain, has a strong group of researchers with expertise in probability and its applications. It has fine facilities to hold the workshop and to house its participants. The local organizing committee includes faculty members of Universidad Carlos III de Madrid.



**IWAP 2010**

**5th Internacional Workshop on Applied Probability**

**Universidad Carlos III de Madrid**  
**Colmenarejo, Madrid, Spain**      **July 5th-8th**

**[www.fundacion.uc3m.es/IWAP2010/](http://www.fundacion.uc3m.es/IWAP2010/)**

# More IMS meetings around the world

## IMS sponsored meeting

### 2012 World Congress/IMS Annual Meeting

July 9–14, 2012. Istanbul, Turkey

W <http://home.ku.edu.tr/~worldcong2012/>

The eighth World Congress in Probability and Statistics will be organized by Koç University in Istanbul from July 9 to 14, 2012. This event is the 8th World Congress of the Bernoulli Society jointly organized with the 2012 Annual Meeting of the Institute of Mathematical Statistics. Scheduled every four years, this meeting is a major worldwide event in mathematical statistics, probability, stochastic processes and their applications. It features the latest scientific developments in these fields.

The program will cover a wide range of topics in mathematical statistics and probability, presenting recent developments and the state of the art in a variety of modern research topics and in applications, and featuring several special plenary lectures presented by leading specialists. In addition, there will be invited sessions highlighting topics of current research interests as well as a large number of contributed talks and posters.

The venue of the meeting is Koç University located in Istanbul, which is a vibrant, multi-cultural and cosmopolitan city bridging Europe and Asia. Istanbul has a unique cultural conglomeration of east and west, offering many cultural and touristic attractions, such as Hagia Sophia, Sultanahmet, Topkapı Palace and Maiden's Tower. On behalf of the Scientific Program and Local Organizing Committees, we invite you to join us in Istanbul for this exciting scientific event.

## IMS co-sponsored meeting

### Modeling High Frequency Data in Finance II

June 24–27, 2010

Stevens Institute of Technology, Hoboken, NJ, USA

IMS Representative(s) on Program Committees: Ionut Florescu, Frederi Viens

W <http://kolmogorov.math.stevens.edu/conference2010/>

This is a joint conference (Stevens Institute of Technology, University of Texas at El Paso and Purdue University) in high frequency data modeling.

The purpose of this conference is to improve the models used to analyze high-frequency financial data. Tools available from a variety of areas such as statistics, stochastic processes, statistical mechanics, clustering, and systems will be exposed. Academics, industry professionals, and government regulators will meet:

- to collaborate, with the goal of advancing the quality of research currently under development in the field,
- to exchange information about practical applications of data modeling to algorithmic trading and high frequency trading,
- to open doors for future collaboration and networking

Details on the website above.

## IMS sponsored meeting

### 2014 IMS Annual Meeting

July 7–11, 2014

Sydney, Australia

W TBC

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

*Sydney Opera House, one of the world's iconic buildings*



## IMS co-sponsored meeting

### Sixth Cornell Probability Summer School

July 19–30, 2010

Cornell University, Ithaca, NY

W <http://www.math.cornell.edu/~durrett/CPSS2010/index.html>

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**.

## 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**, **Geoffrey Grimmett**, and **Greg Lawler**.

**IMS co-sponsored meeting (NSF-CBMS)**  
**Bayesian Nonparametric Statistical Methods:**  
**Theory and Applications**  
**August 16–20, 2010**  
**Santa Cruz, CA, USA**

**w** [www.ams.ucsc.edu/CBMS-NPBayes](http://www.ams.ucsc.edu/CBMS-NPBayes)

Main lecturer: **Peter Müller** (MD Anderson Cancer Center). In addition to the ten lectures delivered by Dr. Muller, four invited speakers will deliver complementary two-hour lectures: **Michael Jordan** (UC Berkeley), **Peter Hoff** (University of Washington), **Wesley Johnson** (UC Irvine) and **Tim Hanson** (University of Minnesota). Local organizers are Abel Rodriguez and Athanasios Kottas.

**IMS co-sponsored meeting (NSF-CBMS)**  
**Recent Advances in the Numerical**  
**Approximation of Stochastic Partial**  
**Differential Equations**  
**August 9–13, 2010**  
**Chicago, IL, USA**

**w** <http://math.iit.edu/~spde2010/index.html>

**IMS co-sponsored meeting**  
**International Workshop on Emerging Issues**  
**and Challenges to Statistics**  
**December 17–18, 2010**

**Xiamen University, Fujian, P.R. China**

IMS Representative(s) on Program  
 Committees: Jiayang Sun

**w** <http://www.southalabama.edu/iweics/>

Important Dates:

May 15, 2010: early registration starts.

August 15, 2010: deadline for contributed  
 paper abstract submission

September 1, 2010: deadline for early  
 registration.

**IMS co-sponsored meeting**  
**35th Conference on Stochastic Processes**  
**and their Applications**  
**June 19–25, 2011**  
**Oaxaca, Mexico**

**w** TBC

**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 and Society**  
**July 10–12, 2010**

**Renmin University of China, Beijing, China**

**w** <http://stat.yale.edu/Conferences/ICSS2010/index.html>

IMS Rep: Harrison Zhou

We are pleased to announce the international conference on Statistics and Society at Renmin University of China in Beijing, China, in conjunction with biannual meeting series International Forum on Statistics from Renmin University of China and Frontiers of Statistics from Chinese Academy of Science.

Plenary speakers: Peter J. Bickel, Lawrence D. Brown, Stephen E. Fienberg, Peter G. Hall, Iain Johnstone (TBA), Zhiming Ma, Lawrence Shepp, David O. Siegmund, Bernard Silverman, Michael S. Waterman, Wing Hung Wong.

Scientific Committee co-chairs: Lawrence Brown, Jianqing Fan, Zhiming Ma, Wei Yuan.

All information, registration forms, accommodations, etc. is available online at the meeting website above. Online Registration Period: **March 1, 2010 - April 30, 2010**

If you live in China, contact Professor Wei Yuan ([wuyuan@ruc.edu.cn](mailto:wuyuan@ruc.edu.cn)) for more information. If you live in other countries, send your enquiries in English to Professor Harrison Zhou ([huibin.zhou@yale.edu](mailto:huibin.zhou@yale.edu)).

**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/>

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

Osaka Castle: photo by Joop Dorresteyn/Wikimedia



# More IMS meetings around the world

## IMS co-sponsored meeting

### CRISM-P@W Workshop: Orthogonal Polynomials, Applications in Statistics and Stochastic Processes

July 12–15, 2010

University of Warwick, UK

[w](http://www2.warwick.ac.uk/fac/sci/statistics/crism/workshops/orthogonal-polynomials) <http://www2.warwick.ac.uk/fac/sci/statistics/crism/workshops/orthogonal-polynomials>

The workshop aims to bring together a wide variety of scientists who have made important contributions to the theory and applications of Orthogonal Polynomials, with the purpose of investigating the frontiers of the theory and the possibilities of its extension and further applicability in Statistics and Probability.

Topics that are aimed to be covered include: Canonical correlation analysis for copulae, Spectral analysis of discrete and continuous Stochastic Processes and Hypergroups, Random Matrices and Random Covariance Functions.

Invited speakers who have already accepted our invitation include: Igor Borisov (Sobolev Inst.), Stephen Evans (Berkeley), Patrik Ferrari (Bonn), Mourad Ismail (UCF), Kshitij Khare (USF), Angelo Koudou (Nancy), Arno Kujilaars (Leuven), Rupert Lasser (Munich), Gerard Letac (Toulouse), Neil O'Connell (Warwick), Eric Rains (CalTech), Evgeny Strahov (Jerusalem), Pierre Van Moerbeke (Louvain), Michael Voit (Dortmund), Jacek Wesolowski (Warsaw), Ryszard Zsward (Wroclaw).

To participate, please complete the application form which can be found at the meeting website, where you can also submit a title and an abstract for a contributed talk/poster.

CRISM aims to provide financial support to encourage the participation of interested career-young academics, PhD students and Postdoctoral Fellows. See the website for more information.

Organisers of the workshop are:

Persi Diaconis [diaconis@math.stanford.edu](mailto:diaconis@math.stanford.edu)

Bob Griffiths [griff@stats.ox.ac.uk](mailto:griff@stats.ox.ac.uk)

Dario Spanò [d.spano@warwick.ac.uk](mailto:d.spano@warwick.ac.uk)

Jon Warren [j.warren@warwick.ac.uk](mailto:j.warren@warwick.ac.uk)

Nykos Zygouras [n.zygouras@warwick.ac.uk](mailto:n.zygouras@warwick.ac.uk)



*Wikipedia says: Warwick Castle is a medieval castle in Warwick, the county town of Warwickshire, England. It sits on a bend on the River Avon. The castle was built by William the Conqueror in 1068 within or adjacent to the Anglo-Saxon burh of Warwick. It was used as a fortification until the early 17th century, when Sir Fulke Greville converted it to a country house. It was owned by the Greville family, who became earls of Warwick in 1759, until 1978. In the 17th century the grounds were turned into a garden. It is now run by Tussauds as a tourist attraction.*



Photo: Gernot Keller [www.gernot-keller.com](http://www.gernot-keller.com)

## IMS co-sponsored meeting

### Stochastic Methods in Game Theory

September 8–16, 2010

Erice, Sicily, Italy

[w](http://space.luiss.it/stochastic-workshop/) <http://space.luiss.it/stochastic-workshop/>

IMS Representative on Program

Committees: Marco Scarsini

Many decision problems involve elements of uncertainty and of strategy. Most often the two elements cannot be easily disentangled. The aim of this workshop is to examine several aspects of the interaction between strategy and stochastics. Various game theoretic models will be presented, where stochastic elements are particularly relevant either in the formulation of the model itself or in the computation of its solutions.

For more information please send an email to [erice2010@luiss.it](mailto:erice2010@luiss.it)

## IMS co-sponsored meeting

### International Chinese Statistical

### Association 2010 Conference: Frontiers of Interdisciplinary and Methodological Statistical Research

December 19–22, 2010

Guangzhou University, Guangzhou, China

[w](http://www.icsa2.org/Intl_2010/) [http://www.icsa2.org/Intl\\_2010/](http://www.icsa2.org/Intl_2010/)

Program co-chairs: Bin Yu and Zhi-

Ming Ma. Contributed paper deadline:

September 1, 2010



## IMS co-sponsored meeting

**First Announcement: Fourth International IMS/ISBA Joint Meeting****“MCMSki III”: Markov Chain Monte Carlo in Statistical Science****January 5–7, 2011****The Canyons Resort, Park City, Utah, USA****w** <http://madison.byu.edu/mcmski/index.html>

Following the success of the first three joint international meetings of IMS and ISBA (the International Society for Bayesian Analysis) held in Isla Verde, Puerto Rico, and Bormio, Italy, the fourth such joint meeting will be held at The Canyons in Park City, Utah, USA on January 5–7, 2011. The unifying theme of the conference will be MCMC and its impact on the practice of statistical science in diverse areas, such as genetics, genomics, environmental health, epidemiology, and so on. However, since this is a joint meeting of two diverse organizations, talks on a wide variety of topics (both Bayesian and non-Bayesian) will be presented.

Each day will begin with a 50-minute talk by a plenary speaker, immediately followed by an invited session, then lunch, and then an afternoon break (where skiing/snowboarding will be among the options). Following the break will be another invited session, then dinner and posters; in short, “Valencia style” with ski/spa time replacing the usual beach time. There will also be a pre-conference “satellite” meeting on adaptive and other advanced MCMC methods on January 3–4, with Prof. Christian Robert again serving as lead organizer (see below).

We are very fortunate to have the following three outstanding plenary speakers: **Nicky Best**, Imperial College London and St. Mary’s Hospital; **Michael Newton**, University of Wisconsin; and **Jeffrey Rosenthal**, University of Toronto. In addition, the members of the program committee (see below) have assembled an invited program that is as attractive as the conference venue, with sessions on: *Modeling Dependence for High-Throughput Data*; *Advances in MCMC for Genomics*; *Bayesian versus Frequentist Approaches in Observational Studies*; *Environmental Health Statistics*; and *MCMC for Computationally-Intensive Inverse Problems*.

The meeting will take place at the conference center at The Canyons resort, located approximately 40 minutes from Salt Lake City airport and readily accessible by public transport. The airport is a hub for Delta Airlines.

We anticipate obtaining grant support from various federal sources to help subsidize the cost of attending MCMSki III for young investigators (persons within 5 years of receiving PhD) presenting talks or posters at the meeting. In addition, ISBA has committed support for young researchers, with preference to senior/advanced students active in research, and preferentially to students from economically disadvantaged countries.

Further details, including registration fees, hotel accommodation, and social events, are available from the official conference website. Conference registration will be available soon.

All papers presented at the conference (either invited or contributed) will be eligible for publication in the official journal of ISBA, *Bayesian Analysis*, following a refereeing process; see <http://ba.stat.cmu.edu> for details.

**Program Committee:**

*Conference co-chairs:* Brad Carlin, University of Minnesota, and Antonietta Mira, University of Insubria

*Local Arrangements Chair:* Shane Reese, Brigham Young University

*Other members:* Clelia DiSerio, Montserrat Fuentes, Sander

Greenland, David Higdon, Peter Müller, Giovanni Parmigiani



## IMS co-sponsored meeting

**AdapSki III, the satellite meeting to MCMSki III****January 3–4, 2011****The Canyons, Park City, Utah, USA****w** <http://www.maths.bris.ac.uk/~maxca/adapskiIII/>

IMS Reps: Christophe Andrieu, Christian Robert

This workshop is intended to provide an updated snapshot of the methodological and theoretical advances in Monte Carlo methods with an emphasis on adaptive Monte Carlo methods in the broad sense (adaptive MCMC, adaptive population Monte Carlo, and various breeds of adaptive importance sampling amongst others), that is, algorithms that attempt to automatically optimize their performance to a given task. The workshop will consist of 4 half-day sessions on 3rd and 4th January and one or two poster sessions and will be held at The Canyons. There will be breaks on both afternoons in order to allow both informal discussions and relaxation (skiing!). There will be one or two informal poster sessions. If you would like to present a poster, please submit a short abstract to Christian Robert [e xian@ceremade.dauphine.fr](mailto:xian@ceremade.dauphine.fr) or Christophe Andrieu [e c.andrieu@bris.ac.uk](mailto:c.andrieu@bris.ac.uk). Please note that registration to the workshop is mandatory if you are planning to present a poster.



*The Institute of Mathematical Statistics  
presents*

# *IMS COLLECTIONS*

Volume 4:

## **Markov Processes and Related Topics: A Festschrift for Thomas G. Kurtz**

Editors: Stewart N. Ethier, Jin Feng, Richard H. Stockbridge

A four-day conference, “Markov Processes and Related Topics,” was held at the University of Wisconsin–Madison from July 10–13, 2006, in celebration of Tom Kurtz’s 65th birthday and his many contributions to mathematics. Speakers were invited to submit a paper to this collection, and after a lengthy refereeing and editing process, the present “Festschrift” volume has emerged. Its diversity of topics is a reflection of the wide range of subjects to which Tom has contributed.



*Thomas G. Kurtz*

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t (216) 295-5661 f (301) 634-7099 e [staff@imstat.org](mailto:staff@imstat.org)

# Other meetings around the world

## Symposium in honor of Stephen Lagakos

October 22, 2010

Harvard Medical School, Boston, MA

Co-sponsored by The Department of Biostatistics (Harvard School of Public Health), The Center For AIDS Research (CFAR), and The New England Journal of Medicine

There will a one day symposium on Friday, October 22, 2010 in honor of our colleague Stephen Lagakos who died tragically in an accident in October of 2009. The symposium will be held in the Joseph B. Martin Conference Center at the Harvard Medical School, 77 Avenue Louis Pasteur, Boston, MA 02115. The topics to be discussed reflect Steve's interests and include: HIV Prevention, Biostatistical Education in the 21st Century, and Clinical Trials.

Robert Gallo (University of Maryland) will be the keynote speaker. A dinner will follow the symposium at which Harvey Fineberg (Institute of Medicine) will be the guest speaker.

The symposium will be free of charge, and all are invited. Please direct any inquiries to Leah Segal [lsegal@hsph.harvard.edu](mailto:lsegal@hsph.harvard.edu).

**NEW**

## 2011 International Conference on Probability, Statistics and Data Analysis (ICPSDA-2011)

April 21–24, 2011

Raleigh, NC, USA

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

The Department of Statistics at the North Carolina State University (NCSU) is jointly organizing the 2011 International Conference on Probability, Statistics and Data Analysis (ICPSDA-2011), with the International Indian Statistical Association (IISA), from April 21 to 24, 2011. The objective of the conference is to bring together both established and emerging young researchers from around the world who are actively pursuing theoretical and methodological research in statistics and their applications in various allied fields. The conference aims to provide a forum for leading experts and young researchers to discuss recent progress in statistical theory and applications, thereby provide new directions for statistical inference in various fields.

Program details at the conference website above, or from Sujit K Ghosh and Subhashis Ghoshal, co-chairs of the Local Organizing Committee: [iisa.conf@gmail.com](mailto:iisa.conf@gmail.com)

**NEW**

## Second Workshop on Stochastic Modeling

July 26–28, 2010

Universidade Federal do ABC, Santo André, Brazil

<http://cmcc.ufabc.edu.br/wsm2/>

This workshop intends to promote the collaboration of an emerging group based in the recently created Universidade Federal do ABC (UFABC), with well established centers in Brazil and abroad. The Workshop on Stochastic Modeling should be a forum to discuss new developments in probability theory and its applications. The workshop will take place at the Center for Mathematics, Computation and Cognition, at the UFABC campus in Santo Andre. Activities include plenary talks, a mini-course devoted to undergraduate students and a poster session. The topics of this meeting will include percolation, random walks, interacting particle systems, probabilistic cellular automatas, stochastic calculus and the application of these models in biology, finance, economy and physics.

**NEW**

## International Conference on Applied Statistics and Financial Mathematics (ASFM2010)

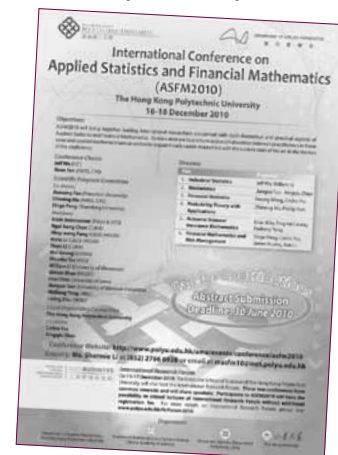
December 16–18, 2010

The Hong Kong Polytechnic University

<http://www.polyu.edu.hk/ama/events/conference/asfm2010/>

Conference Objective: ASFM2010 will bring together leading international researchers concerned with both theoretical and practical aspects of Applied Statistics and Financial Mathematics. Its main aims are to promote active collaboration between practitioners in these areas and applied mathematicians as well as to acquaint early career researchers with the current state of the art in the themes of the conference.

**NEW**



## Statistics Symposium

September 25, 2010

Washington, DC

[www.gwu.edu/~stat/75th](http://www.gwu.edu/~stat/75th)

This symposium will celebrate the 75th anniversary of the Department of Statistics at the George Washington University. The event will highlight a variety of theoretical and applied statistical research. For more information, visit [www.gwu.edu/~stat/75th](http://www.gwu.edu/~stat/75th) or contact Tapan Nayak, Department of Statistics, George Washington University, Washington, DC 20052; (202) 99406549; [tapan@gwu.edu](mailto:tapan@gwu.edu).

**NEW**

# Employment Opportunities around the world

## Mexico: Guanajuato

### Positions in Statistics at Centro de Investigación en Matemáticas (CIMAT), Guanajuato, Mexico

Centro de Investigación en Matemáticas (CIMAT), located in Guanajuato, Mexico ([www.cimat.mx](http://www.cimat.mx)), is a federally-funded CONACYT research center devoted to research, teaching and applications. It comprises departments in pure and applied mathematics, probability and statistics, and computer science. Undergraduate programs in mathematics, and graduate (master's and doctoral) programs in all represented branches are fostered. Some CIMAT signatures are: dynamic research groups in both theoretical and applied fields, recruitment of some of Mexico's finest mathematics students, a time-honored tradition in hosting numerous academic national and international meetings, consulting with scientists and industry and government, outreach programs for youngsters, and the promotion of mathematics and science in society.

The Department of Probability and Statistics ([www.cimat.mx/index.php?m=3](http://www.cimat.mx/index.php?m=3)) invites applications for one or more positions, to begin as early as August 2010. All areas of statistics are sought, with preference given to current challenging and important topics with potential of group development and multidisciplinary work.

Applicants are required to hold a PhD degree in statistics by the time of employment. Duties consist of research and graduate and undergraduate level quality teaching in a mathematically inclined curriculum, for which the Spanish language is an asset, yet not an absolute requirement. The Department offers a Master's and Doctoral program in Probability and Statistics.

Three types of positions are available:

**A) Postdoctoral, or young researcher position**, for a maximum of three years. Specific requirements:

- i. Demonstrate potential for important academic research in statistics.
- ii. Willingness to apply to the Sistema Nacional de Investigadores (SNI) ([www.conacyt.mx/SNI/Index\\_SNI.html](http://www.conacyt.mx/SNI/Index_SNI.html), in Spanish), a federal funded, peer reviewed research grant instrument.

**B) Experienced researcher**. Requirements:

- i. A noteworthy career in research, having productivity consistent with time since graduation.
- ii. A curriculum vitae that is agreeable for application to the SNI (see above), at a level consistent with time since graduation.
- iii. Potential for leadership.
- iv. Teaching experience in introductory and advanced subject-matter courses in undergraduate and graduate programs supported by the Department of Probability and Statistics at CIMAT.

**C) Sabbatical stay, or visitor position.**

In addition to the requirements described above for option (B), potential for the strengthening of academic programs and research at the Department of Probability and Statistics.

Interested applicants should send a letter of application to Dr. Daniel Hernández Hernández ([dher@ciimat.mx](mailto:dher@ciimat.mx)), before **September 30, 2010**, with the following materials attached:

- 1) Current Curriculum Vitae.
- 2) Brief description of research topics.
- 3) Work plan spanning the first year at CIMAT.
- 4) Two letters of reference.
- 5) Date of likely incorporation.



# International Calendar of Statistical Events

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

## July 2010

 July 5-8: Universidad Carlos III de Madrid, Colmenarejo Campus, Spain: **International Workshop in Applied Probability 2010**. **w** <http://www.fundacion.uc3m.es/IWAP2010/Index.html>


July 5-9: Slovenia. **ISBIS-2010, International Symposium for Business & Industrial Statistics**. Contact Milena Zeithamlova **e** [Milena@action-m.com](mailto:Milena@action-m.com) **w** [www.action-m.com/isbis2010](http://www.action-m.com/isbis2010)

July 6-8: Leeds, UK. **LASR 2010: High-Throughput Sequencing, Proteins and Statistics**. **e** [workshop@maths.leeds.ac.uk](mailto:workshop@maths.leeds.ac.uk) **w** <http://www.maths.leeds.ac.uk/lasr2010/>

 July 10-12: Renmin University of China, Beijing, China. **International Conference on Statistics and Society**. **w** <http://stat.yale.edu/Conferences/ICSS2010/index.html>

July 11-13: Zagazig, Egypt. **Ninth International Conference on Ordered Statistical Data and Their Applications**. **w** <http://www.stat.osu.edu/~hnn/osda2010.html>

July 11-16: Ljubljana, Slovenia. **ICOTSo8: Data and context in statistics education: towards an evidence-based society**. **w** <http://icots8.org/>

 July 12-15: University of Warwick, UK. **CRiSM-P@W Workshop: Orthogonal Polynomials, Applications in Statistics and Stochastic Processes**. **w** <http://www2.warwick.ac.uk/fac/sci/statistics/crisms/workshops/orthogonal-polynomials>


July 12-16: Edinburgh, Scotland. **11th International Meeting on Statistical Climatology**. **w** <http://cccma.seos.uvic.ca/imsc/11imsc.shtml>

July 12-23: SAMSI, Research Triangle Park, NC. **2010 Summer Program on Semiparametric Bayesian Inference: Applications in Pharmacokinetics and Pharmacodynamics** **w** <http://www.samsi.info/programs/2010bayes-summer-program.shtml>


 July 18-31: Ithaca, NY. **Sixth Cornell Probability Summer School**. **w** <http://www.math.cornell.edu/~durrett/CPSS2010/>

July 19-23: University of Warwick, UK. **Probability at Warwick: Young Researchers Workshop**. **w** [www.warwick.ac.uk/go/paw/paw2010](http://www.warwick.ac.uk/go/paw/paw2010)

July 20-23: Leicester, UK. **Accuracy 2010: Ninth International Symposium on Spatial Accuracy Assessment in Natural Resources and Environmental Sciences** **w** <http://www.accuracy2010.org/>

 July 26-28: Universidade Federal do ABC, Santo André, Brazil. **Second Workshop on Stochastic Modeling**. **w** <http://cmcc.ufabc.edu.br/wsm2/>

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

 July 27-30: Vancouver, Canada. **13th North American Meeting of New Researchers in Statistics and Probability**. Contact Samiran Sinha **e** [sinha@stat.tamu.edu](mailto:sinha@stat.tamu.edu) **w** <http://www.stat.tamu.edu/%7Esinha/nrc2010-ims.html>

July 27-31: Tomar, Portugal. **LinStat2010**. Francisco Carvalho: **t** +351 249 328 100; **f** +351 249 328 186; **e** [fpcarvalho@ipt.pt](mailto:fpcarvalho@ipt.pt) **w** [www.linstat2010.ipt.pt](http://www.linstat2010.ipt.pt)

July 28-30: Seattle, Washington. **From Probability to Statistics and Back: High-Dimensional Models and Processes Conference** **w** <http://www.stat.washington.edu/events/jaw-conf-2010/index.html>

 July 31-August 5: Vancouver, British Columbia, Canada. **JSM2010**. **w** [www.amstat.org/meetings/jsm/2010/](http://www.amstat.org/meetings/jsm/2010/)

## August 2010


August 1&4, 2010: Vancouver. **NISS/ASA Writing Workshop for Junior Researchers: apply by June 1** **w** <http://www.amstat.org/meetings/wwjr/index.cfm?fuseaction=main>

August 8-13: Maresias, Brazil. **7th Conference on Multivariate Distributions with Applications** **w** <http://www.ime.usp.br/~mda>


# International Calendar *continued*

## August 2010 continued

 August 9–13: Gothenburg, Sweden. **IMS Annual Meeting 2010.** **w** [www.ims-göteborg.com](http://www.ims-göteborg.com)

 August 9–13: Chicago, IL, USA. **Recent Advances in the Numerical Approximation of Stochastic Partial Differential Equations.** **w** <http://mypages.iit.edu/~duan/SPDE2010.html>

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 16–20: Santa Cruz, CA, USA. **Bayesian Nonparametric Statistical Methods: Theory and Applications.** **w** [www.ams.ucsc.edu/CBMS-NPBayes](http://www.ams.ucsc.edu/CBMS-NPBayes)

August 17–18: Hyderabad, India. **ICWM 2010: International Conference of Women Mathematicians [Satellite to ICM2010]** **w** <http://www.icm2010.org.in/icwm2010.php>

August 17–22: University of Piraeus, Greece. **European Meeting of Statisticians 2010.** **w** <http://stat.unipi.gr/ems2010>

August 19–27: Hyderabad, India. **International Congress of Mathematicians 2010.** Program Committee Chair: Prof. Hendrik W. Lenstra, Leiden University **w** <http://www.icm2010.org.in/>

August 22–27: Paris, France. **COMPSTAT 2010: 19th International Conference on Computational Statistics.** **w** <http://www.compstat2010.fr/>

August 25–28: Lefkada, Greece. **Greek Stochastics Meeting 2010** **w** <http://www.stochastics.gr/>

August 29 – September 1: SAMSI, Research Triangle Park, NC. **Program on Complex Networks: Tutorials and Opening**

**Workshop** **w** <http://www.samsi.info/>

August 30 – September 3: Prague, Czech Republic. **Prague Stochastics 2010.** **e** [pragstoch@utia.cas.cz](mailto:pragstoch@utia.cas.cz)  
**w** [www.utia.cas.cz/pragstoch2010](http://www.utia.cas.cz/pragstoch2010)

## September 2010

September 6–7: Karlsruhe Institute of Technology, Germany. **Workshop on ‘Fourier meets Wavelets in Statistics’** **w** [http://mspcdip.mathematik.uni-karlsruhe.de/Workshop\\_Fourlet10/](http://mspcdip.mathematik.uni-karlsruhe.de/Workshop_Fourlet10/)


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

September 7–11: Belarusian State University, Minsk, Belarus. **Computer Data Analysis and Modeling: Complex Stochastic Data and Systems** **w** <http://www.cdam.bsu.by>

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

September 12–15: SAMSI, Research Triangle Park, NC. **Tutorials and Opening Workshop Program on Analysis of Object Oriented Data.** **w** <http://www.samsi.info/programs/2010aoodprogram.shtml>

September 13–17: Brighton, UK. **RSS 2010 International Conference** **w** [www.rss.org.uk/rss2010](http://www.rss.org.uk/rss2010)

 September 25: Washington, DC. **Statistics Symposium.** **w** [www.gwu.edu/~stat/75th](http://www.gwu.edu/~stat/75th)

September 29 – October 2: São Pedro do Sul, Portugal. **XVIII Annual Congress of the Portuguese Statistical Society** **w** <http://www.mat.uc.pt/~spe2010>



**IMS 2010 Gothenburg**  
Institute of Mathematical Statistics  
73<sup>rd</sup> Annual Meeting, Aug 9-13, 2010, Gothenburg, Sweden

[www.ims-göteborg.com](http://www.ims-göteborg.com)

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**Registration & hotel booking still open: [www.ims-göteborg.com](http://www.ims-göteborg.com)**

## October 2010

**October 8:** Paris, France. **Second HEC Finance and Statistics Conference.** **w** <http://www.hec.fr/financeandstatistics2010>

**NEW** **October 22:** Harvard Medical School, Boston, MA. **Symposium in honor of Stephen Lagakos.** Leah Segal **e** [lsegal@hsph.harvard.edu](mailto:lsegal@hsph.harvard.edu)

## November 2010

**November 8–10:** Lodz, Poland. **Multivariate Statistical Analysis Conference.** **w** <http://www.msa.uni.lodz.pl>

## December 2010

**December 5–10:** Federal University of Santa Catarina, Florianópolis, SC, Brazil. **XXV International Biometric Conference (IBC)** **w** [www.ibc-floripa-2010.org](http://www.ibc-floripa-2010.org)

**December 5–10:** Atlantic City, NJ. **65th Annual Deming Conference on Applied Statistics** **w** [www.demingconference.com](http://www.demingconference.com)

**December 6–10:** Fremantle, Australia. **Australian Statistical Conference 2010** **w** <http://www.promaco.com.au/2010/asc>

**December 15–17:** University of Pennsylvania, Philadelphia, USA. **Borrowing Strength: Theory Powering Applications.** Conference in honor of Lawrence Brown's 70th birthday **w** <http://stat.wharton.upenn.edu/~zhangk/BS/index.htm>

**NEW** **December 16–18:** The Hong Kong Polytechnic University. **International Conference on Applied Statistics and Financial Mathematics (ASFM2010).** **w** <http://www.polyu.edu.hk/ama/events/conference/asfm2010/>

**ims** **December 17–18:** Xiamen University, Fujian, P.R. China. **International Workshop on Emerging Issues and Challenges to Statistics.** **w** <http://www.southalabama.edu/iweics/>

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

**December 26–28:** University of Dhaka, Bangladesh. **First International Conference on the Theory and Applications of Statistics** **w** <http://www.dusdaa.org/conference2010>

## January 2011

**ims** **January 3–4:** Park City, Utah, USA **AdapSki III, the satellite meeting to MCMSki III.** **w** <http://www.maths.bris.ac.uk/~maxca/adapskIII/>

**ims** **January 5–7:** Park City, UT. **MCMSki III: Markov Chain Monte Carlo in Theory and Practice** **w** <http://madison.byu.edu/mcmski/>

## March 2011

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

## April 2011

**NEW** **April 21–24:** Raleigh, NC, USA. **2011 International Conference on Probability, Statistics and Data Analysis (ICPSDA-2011).** **w** <http://www.iisaconference.info/>

## June 2011

**June 12–15:** Wolfville, Nova Scotia, Canada. **2011 SSC Annual Meeting** **w** TBC

**ims** **June 19–25:** Oaxaca, Mexico. **35th Conference on Stochastic Processes and their Applications.** **w** TBC

**June 20–24:** Beijing Institute of Technology, China. **Seventh International Conference on Mathematical Methods in Reliability.** **w** [www.mmr2011.cn](http://www.mmr2011.cn)

# International Calendar *continued*

## July 2011

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

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

 July 30 – August 4: Miami Beach, Florida. **IMS Annual Meeting at JSM2011.**



Miami, location of JSM 2011 and IMS Annual Meeting

## August 2011

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

## December 2011

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

## April 2012

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

## June 2012

June 3–6: Guelph, Ontario, Canada. **2012 SSC Annual Meeting** **w** TBC

## July 2012

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

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

## August 2013

 August 3–8: Montréal, Canada. **IMS Annual Meeting at JSM2013.** **w** TBC

## July 2014

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

## August 2014

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

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

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## Articles

- Large deviations of the front in a one-dimensional model of  $X + Y \rightarrow 2X$   
JEAN BÉRARD AND ALEJANDRO F. RAMÍREZ 955
- Quenched invariance principle for the Knudsen stochastic billiard  
in a random tube . . . . . FRANCIS COMETS, SERGUEI POPOV, GUNTER M. SCHÜTZ  
AND MARINA VACHKOVSKAYA 1019
- A Dirichlet process characterization of a class of reflected diffusions  
WEINING KANG AND KAVITA RAMANAN 1062
- Martin boundary of a killed random walk on a quadrant  
IRINA IGNATIOUK-ROBERT AND CHRISTOPHE LOREE 1106
- The obstacle problem for quasilinear stochastic PDE's  
ANIS MATOUSSI AND LUCRETIU STOICA 1143
- Optimal local Hölder index for density states of superprocesses with  $(1 + \beta)$ -branching  
mechanism . . . . . KLAUS FLEISCHMANN, LEONID MYTNIK AND VITALI WACHTEL 1180
- Askey–Wilson polynomials, quadratic harnesses and martingales  
WŁODEK BRYC AND JACEK WESOŁOWSKI 1221
- Large gaps between random eigenvalues . . . . . BENEDEK VALKÓ AND BÁLINT VIRÁG 1263
- Markov loops and renormalization . . . . . YVES LE JAN 1280
- Large faces in Poisson hyperplane mosaics . . . . . DANIEL HUG AND ROLF SCHNEIDER 1320