IMS Bulletin



July 2009

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Keep spreading the news: student membership is still FREE

Are you a student member of the IMS? If so, please tell your fellow students and collaborators that IMS membership is free for all students—and it includes one free print journal subscription. Similarly, if you teach or supervise students in statistics, probability, or related fields, please encourage your students to join the IMS, so we can continue to grow and increase opportunities for new researchers.

There are many benefits of being a member of the IMS, which will encourage and support your chosen career path. These include:

- free electronic access to current and past issues of *all* our journals (http://www. imstat.org/publications/eaccess.htm);
- a subscription to this newsletter, IMS Bulletin;
- 📠 reduced subscription rates to our print journals and co-sponsored journals—our journals are world leaders in their fields for research and review articles—and reduced rates on other publications (http://www.imstat.org/publications/);
- discounts at our sponsored meetings (http://www.imstat.org/meetings/). The IMS sponsors an Annual Meeting (this year in Washington DC), regional meetings, and special topics meetings. Many of these are held jointly with other societies. It is an excellent way to become part of the worldwide statistical scientific community. In addition, we have an active New Researchers Committee that sponsors an annual meeting of new researchers in North America.
- the opportunity to apply for the IMS Laha travel award (see http://www.imstat.org/ awards/laha.html), and, for recent PhDs, the Tweedie New Researcher Award (see http://www.imstat.org/awards/tweedie.html)

There's no catch! We simply seek students' participation in IMS's varied activities: students represent the future of our field.

If someone is interested in joining IMS they can do so online at https://www.imstat. org/secure/orders/IndMember.asp, or by contacting the Dues and Subscriptions office (see the address panel on page 2).

An invitation to students and new members

If you're planning to attend this year's JSM, or perhaps reading this article having met the friendly IMS staff team in the JSM Expo, then please do join us at the New

Member and Student Welcome Reception (on Monday August 3, 5:30-7:00pm, in the Convention Center, room 149A). There you can have a drink and chat with a genial crowd early on at the conference. It's a great opportunity to meet other student and new graduate members, as well as long-time IMS members. We hope to see you there!



Last year's reception at th Annual Meeting in Singapore

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IMS members' news

American Academy of Arts & Sciences announces 2009 Fellows

The American Academy of Arts & Sciences today announced the election of leaders in the sciences, the humanities and the arts, business, public affairs, and the nonprofit sector. The 212 new Fellows and 19 Foreign Honorary Members join one of the nation's most prestigious honorary societies and a center for independent policy research. Among the new Fellows are an IMS Fellow, Ruth J. Williams and an IMS member, Guido W. Imbens. Ruth is elected in the Mathematical and Physical Sciences (Mathematics) section; she is Professor of Statistics in the University of California, San Diego. Guido, who is Professor of Economics at Harvard University, was elected in the Social Sciences (Economics) section.

The scholars, scientists, jurists, writers, artists, civic, corporate and philanthropic leaders come from 28 states and 11 countries and range in age from 33 to 83. They represent universities, museums, national laboratories, private research institutes, businesses, and foundations. This year's group also includes Nobel laureates and recipients of the Pulitzer and Pritzker prizes, MacArthur Fellowships, Academy, Grammy, and Tony awards, and the National Medal of Arts.

The Academy, established in 1780 by founders of the nation, undertakes studies of complex and emerging problems. Current projects focus on science, technology and global security; social policy and American institutions; the humanities and culture; and education. The Academy's membership of scholars and practitioners from many disciplines and professions gives it a unique capacity to conduct a wide range of interdisciplinary, longterm policy research.

"These remarkable men and women have made singular contributions to their fields, and to the world," said Academy President Emilio Bizzi.

The new class will be inducted at a ceremony on October 10, at the Academy's headquarters in Cambridge, Massachusetts.

CRM-Fields-PIMS Prize Lecture

The CRM-Fields-PIMS Prize Lecture will be given on Thursday, October 1 by this year's recipient of the prize, Martin Barlow of the University of British Columbia. He is a leading



figure in probability and the leading international expert in diffusion on fractals and other disordered media.

The Centre de recherches mathématiques (CRM), the Fields Institute, and the Pacific Institute for the Mathematical Sciences (PIMS) invite nominations for the joint CRM-Fields-PIMS prize,

in recognition of exceptional research achievement in

the mathematical sciences. The candidate's research should have been conducted primarily in Canada or in affiliation with a Canadian university.

The prize was established as the CRM-Fields prize in 1994. Renamed in 2005, the 2006 and later prizes will be awarded jointly by all three institutes.

ASA Board of Directors

The American Statistical Association has elected Nancy Geller as President-Elect and Roderick Little as Vice-President. The Council of Sections Board Representative is Jessica Utts and the Council of Chapters Board Representative is Thomas H. Short Full results are published at http://www. amstat.org/news/2009electionresults.cfm

l IMS members' news

Richard A. Johnson wins 2009 Don Owen Award

The Don Owen Award for 2009 was presented to Richard A. Johnson on March 27, 2009 at the Conference of Texas Statisticians. The award was presented on behalf of the San Antonio Chapter of the American Statistical Association. Following the presentation, Dr Johnson presented a talk highlighting many issues related to starting and running a journal. He also shared his experiences from numerous trips he has taken around the world.



Professor Johnson is Professor Emeritus in the Department of Statistics at the University of Wisconsin–Madison. He joined this department in 1966 after receiving his PhD from the University of Minnesota, and retired in 2008 after 32 years of service. He is a fellow of both IMS and ASA, a member of the Royal Statistical Society and the International Statistical Institute. Professor Johnson is the founder of *Statistics and Probability Letters*, and was its Editor-in-Chief from its inception in 1982 until 2007. He has served the IMS and the ASA in various capacities. For the IMS, he was a member of the Council and the Executive Committee; he also served as the Program Secretary and Associate Program Secretary; he was awarded last year's Carver Medal in recognition of his service to the IMS.

Professor Johnson has served as an ambassador of statistics and has worked tirelessly in promoting this discipline all over the world. He symbolizes the qualities of Don Owen which this award embodies. The Don Owen Award is presented annually by the San Antonio Chapter of the American Statistical Association, and Taylor and Francis, a leading international academic publisher.

Samuel Kou inaugural recipient of Raymond J. Carroll Young Investigator Award

Samuel Kou, director of graduate studies in the Department of Statistics at Harvard University, has been selected as the inaugural recipient of the Raymond J. Carroll Young Investigator Award at Texas A&M University.

Kou was presented with the award on March 14 as part of "Statistical Methods for Complex Data," a day-long conference celebrating the 60th birthday of the award's name-sake, Raymond J. Carroll, a distinguished professor of statistics, nutrition, and toxicology at Texas A&M, and an international leader in many areas of statistical research and education. Kou is cited for his significant contributions to the area of statistical methodology and its applications. His methodological research focuses on nonparametric methods and model selection. In terms of applications, he has published papers on stochastic influence in single molecule biophysics. Kou says he is thrilled to be selected as the inaugural recipient and considers it an honor to be affiliated with the award's namesake.

Kou earned a bachelor's degree in computational mathematics from Peking University



in 1997 and both his master's degree (2000) and doctorate (2001) in statistics from Stanford University, where he also served as a teaching assistant and instructor. He joined the Harvard faculty in 2001 as an assistant professor of statistics, becoming full professor in 2008. Kou was a Medallion Lecturer at the ENAR/IMS meeting (see the report on page 7). For more information, visit www.stat. tamu.edu/carroll-conference-2009

IMS Editors

IMS Journals and Publications

Annals of Statistics: Susan Murphy & Bernard Silverman http://imstat.org/aos

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

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

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

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

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

IMS Collections: Anirban DasGupta http://imstat.org/publications/ imscollections.htm

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

IMS Co-sponsored Journals and Publications

Electronic Journal of Statistics: Larry Wasserman http://imstat.org/ejs

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

Electronic Communications in Probability:

Timo Seppäläinen http://www.math.washington.edu/~ejpecp /ECP/index.php

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

Journal of Computational and Graphical Statistics: David van Dyk

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

Statistics Surveys: Jon Wellner http://imstat.org/ss

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

IMS Supported Journals

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

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

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

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

IMS Affiliated Journals

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

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

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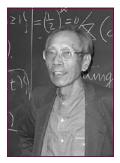
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More IMS members' news

Kai Lai Chung: 1917-2009

IMS Fellow Kai Lai Chung passed away on June 2 in the Philippines, aged 92. Kai Lai Chung was an eminent probabilist, and an emeritus professor of mathematics at Stanford. Born in Hangzhou, China, in 1917, he graduated in 1940 from Tsinghua University at Kunming, where he studied with Pao Lu Hsu (Xu Bao-lu). He moved



to the United States in 1945, and obtained his PhD at Princeton in 1947, under Bochner.

An obituary will appear in a future Bulletin issue.

Science in China issue celebrates IMS China

Science in China (Series A: Mathematics) has just published a special issue on statistics in honor of the establishment of IMS China (see http://www.imstat.org/imschina/). Xuming He is the guest editor for a collection of three discussion papers (by Professors David Brillinger, University of California at Berkeley, Jianqing Fan, Princeton University, and Howell Tong, London School of Economics) and four other research articles. More details can be found at http://math.scichina.com:8081/sciAe/EN/volumn/volumn_5706.shtml. The IMS Council approved the establishment of IMS China in 2008 to promote the development, dissemination, and application of statistics and probability in and between China and other nations.

Royal Statistical Society awards Guy Medal in Silver to Sylvia Richardson

The UK's Royal Statistical Society has announced it is awarding its Guy Medal in Silver to Sylvia Richardson, "for her influential work in Bayesian statistics, especially her paper *On Bayesian analysis of mixtures with an unknown number of components*, jointly authored with Peter J. Green, and



read to the Society in 1997. Her contributions to Bayesian methodology are typified by her principled and thorough engagement with structured datasets arising in the biomedical sciences, including her three recent papers in Series A and C as well as her many other high quality publications. In addition she has made many other important service contributions to the discipline, and to the Royal Statistical Society."

Sylvia holds the Chair of Biostatistics in the Department of Epidemiology and Public Health at Imperial College London, UK, since 2000 and heads the Biostatistics group, one of the largest groups of academics, postdoctoral students and PhD students working on biostatistics and statistical genetics in the UK. She was previously "Directeur de Recherches" at the French Research Institute for Medical Research (INSERM), where she held research positions for twenty years.

Clive Granger: 1934-2009

Sir Clive Granger, emeritus professor at the University of California, San Diego, has died on May 27 at age 74. Granger, a British economist, was awarded the 2003 Nobel Memorial Prize in Economic Sciences, jointly with Robert Engle, in recognition of their fundamental discoveries in the analysis of time series data, which changed the way economists analyze financial and macroeconomic data.

A *New York Times* obituary appears at http://www.nytimes.com/2009/05/31/business/31granger.html?_r=1.

An obituary will appear in a future *Bulletin* issue.

New mathematics award announced

The International Mathematical Union (IMU) and the Chern Medal Foundation (CMF) jointly launch a new mathematical prize, the Chern Medal Award, in memory of the outstanding mathematician Shiing-Shen Chern.

The medal is to be awarded to an individual whose lifelong outstanding achievements in the field of mathematics warrant the highest level of recognition. The award consists of a medal and a monetary award of US\$500,000. Half of the award shall be donated to organizations of the recipient's choice to support research, education, outreach or other activities to promote mathematics. Professor Chern was generous during his lifetime in his personal support of the field and it is hoped that this philanthropy requirement for the promotion of mathematics will set the stage and the standard for mathematicians to continue this generosity on a personal level. The laureate will be chosen by a Prize Committee appointed by the IMU and the CMF. For more information see the Press Release at http://www.mathunion.org/fileadmin/IMU/Prizes/Chern/Chern_MedalPress_Release_090601.pdf and the Chern Medal Program Guidelines at http://www.mathunion.org/fileadmin/IMU/Prizes/Chern/Chern_Medal_Program_Guidelines.pdf .

The Chern Medal will be awarded for the first time at the opening ceremony of ICM 2010 in Hyderabad, India on August 19, 2010.

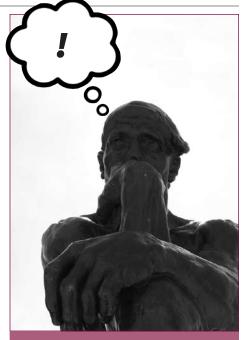
Members' Discovery: Fractional Cauchy Problems

Fractional derivatives were invented by Leibniz in 1695, as a natural extension of integer-order derivatives. They are limits of fractional difference quotients, using the fractional difference operator common in time series analysis. This paper develops stochastic methods for solving fractional Cauchy problems on bounded domains. A fractional Cauchy problem replaces the first order time derivative in the usual Cauchy problem by a fractional derivative of order less than one. The simplest Cauchy problem is the diffusion equation. Its point source solution is a family of mean zero Gaussian densities that govern the underlying Brownian motion. This connection between stochastic process and partial differential equation is an important theoretical technique, and a useful toolbox in practical applications.

Cauchy problems are abstract partial differential equations that govern the transition densities of Markov processes. They are useful for modeling complex particle motions, including the dispersion of pollutants in underground aquifers. The underlying Markov process forms the basis for particle tracking algorithms, where a Cauchy problem solution is approximated by a histogram of independent particle traces. This paper identifies the stochastic process that underlies a fractional Cauchy problem as the Markov process for the original Cauchy problem, subordinated to an inverse stable, and killed when it exits the domain. This facilitates particle tracking solutions for a broad class of fractional evolution equations on bounded domains. The proof involves eigenfunction expansions to reduce the fractional Cauchy problem to an infinite system of linear time-fractional ordinary differential equations in the eigenfunction coordinates. These are solved using Mittag-Leffler functions, the fractional analogue of the exponential. This is related to a result of Bingham, that stable subordinator hitting times have Mittag-Leffler distributions.

Iterated Brownian motion is another interesting class of processes, in which the time index of a Brownian motion is replaced by the absolute value of another independent Brownian motion. The densities of iterated Brownian motion solve a Cauchy problem that involves a fourth order derivative in space. Iterated Brownian motion has the same one dimensional distributions as Brownian motion subordinated to the inverse of an independent stable subordinator with index one half. Solutions to the one half order fractional diffusion equation also solve the fourth order Cauchy problem behind iterated Brownian motion. The paper identifies the boundary conditions that make the two differential equations equivalent on a bounded domain.

This line of research began by accident. A graduate student in Hydrology named David Benson approached Meerschaert in 1996, asking how to invert a certain Laplace transform. Meerschaert recognized the transform of a stable density, and Benson explained the connection to fractional diffusion. At this time, Benson knew nothing about heavy tails, infinite variance, or stable limits. Meerschaert was equally ignorant of fractional derivatives, partial differential equations, and ground water hydrology. Their first joint paper in 1999, in a physics journal, explained the fractional diffusion equation behind multivariable stable laws, and the connection to vector random walks with heavy tailed jumps. Applications since then have included models of ground water pollution, contaminant transport in rivers, and tick-by-tick financial data.



Discovered something interesting?

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

These results are published in the paper "Fractional Cauchy Problems on Bounded Domains" by Mark M. Meerschaert, Erkan Nane and Palaniappan Vellaisamy, in a forthcoming issue of the *Annals of Probability*: see http://www.e-publications.org/ims/submission/index.php/AOP/user/submissionFile/2786?confirm=2f04f086. Communicated by the Editor, with contributions from Mark Meerschaert (Michigan State University).

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Probability Surveys



Probability Surveys: an open-access, electronic journal



Probability Theory is increasingly viewed as a central component of all pure and applied sciences, and the associated literature is vast and complex. It has become harder for a graduate student to enter the field (although more and more do so), and for a probabilist to learn the essentials of a neighbouring topic. Well crafted and expertly written review articles are key to conveying a topic 'in a nutshell'.

We invite survey articles on topics in probability.

The essential requirements are a well specified topic and target audience, and a clear exposition. Authors are invited to keep in mind our question to reviewers: "If you had graduate students working in an adjacent topic, would you advise them to read this survey?" The best subjects will generally be those to which many people have contributed.

Otherwise, we are flexible:

- the subject may vary from the theoretical to the applied,
- articles may review recent research or graduate-level material,
- they may be long or short in length,
- and variable in scope.

Probability Surveys is a peer-reviewed open-access electronic journal, jointly sponsored by the Bernoulli Society and the Institute of Mathematical Statistics. It is available at http://www.i-journals.org/ps/, where guidance on the submission process may be found.

Please send us your work.

Geoffrey Grimmett, Managing Editor

Report: ENAR/IMS Meeting

Tianxi Cai reports on the 2009 ENAR/IMS meeting, which took place March 15–18 in San Antonio, Texas:

There were seven Invited IMS sessions along with the IMS Medallion Lecture at the ENAR 2009. Following are the titles of the sessions, along with the names and affiliations of the organizers: Analysis Challenges of Modern Longitudinal Biomedical Data (Yingye Zheng, Fred Hutchinson Cancer Research Center); Recent Advances on Feature Selection and its Applications (Runze Li, The Pennsylvania State University); Issues in Complicated Designs and Survival Analysis (Bin Nan, University of Michigan); Analysis of High-Dimensional Data with Biological Applications (Jianqing Fan, Princeton University); Statistical Methods for Genome-

Wide Association Studies (Jinbo Chen, University of Pennsylvania); Evaluating Markers for Risk Prediction (Holly Janes, Fred Hutchinson Cancer Research Center); and Advances in Functional Data Analysis (Hans Mueller, University of California at Davis). The topics covered a wide range of important areas including longitudinal and survival data analysis, biomarker evaluation, risk assessment and analysis of high dimensional data.

This year's ENAR meeting featured an IMS Medallion Lecture from Professor Samuel Kou of Harvard University. His talk, entitled "Statistical Challenges in Nanoscale Biophysics", focused on the challenges in stochastic modeling and statistical inference problems that arise from understanding

biological processes on a single-molecule basis. By zooming in on single molecules, recent nanoscale experiments reveal that many classical stochastic models derived from oversimplified assumptions are no longer valid. The stochastic nature of the experimental data and the presence of latent processes significantly complicate the statistical inference. He discussed novel approaches to the modeling of enzymatic reaction and the inference of biochemical kinetics and illustrated the statistical and probabilistic challenges in the field of single-molecule biophysics.

The organizers reported that their sessions were well received with excellent presentations from the speakers and interesting discussions by the audiences.

Report: Workshop on Infinitely-Divisible Processes

Organizing Committee members Victor Pérez-Abreu, Jan Rosinski, and Gennady Samorodnitsky report:

This international workshop was held in Guanajuato, Mexico, March 16–20, 2009, as part of the celebration of the XX Anniversary of the Probability and Statistics Program of the Center for Research in Mathematics (CIMAT) in Guanajuato. There were 22 invited talks and 45 participants (pictured below).

The goal of the workshop was to bring together a group of researchers working on theoretical and applied aspects of infinitely-divisible (ID) processes (Markovian and non Markovian) from different perspectives. The program included talks on different aspects of generalized Ornstein-Uhlenbeck processes, generalizations of Dynkin's isomorphism theorem and the related infinite divisibility



of Gaussian squares, central limit theorems in the Malliavin calculus framework, normal approximation on the Poisson space, random operators and ID laws, path and fractal properties of stable random fields, long range dependence and extremal behavior of stable point processes, statistical analysis and applications of Lévybased models to finance, risk and telecommunications, ergodic theory for ID dynamical systems, large deviations for stationary ID processes, infinite divisibility on cones, Markovian bridges, stochastic heat equations with Lévy Laplacian, among other topics.

The variety of perspectives on ID processes and laws represented at the meeting stimulated vigorous discussions and opened several new collaborations. Interesting new topics for future research were identified, in particular related to non-Markovian ID processes, and other new related areas, such as free infinite divisibility, were discussed.

The workshop was well attended by young researchers and graduate students. Financial support was provided by CIMAT, Statistics Laboratory of CIMAT, the Guanajuato State Council for Science and Technology, the Mexican Mathematical Society and Tequila Sauza.

The full program, name of speakers, talks or abstracts and some pictures can be found at http://www.cimat.mx/Eventos/workshopIDP

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Unsubmitted: Thoughts on refereeing

Bertrand Clarke and Jennifer Clarke, both of University of Miami, Florida, share some thoughts on the peer review process, and propose a new model.

Subject Your manuscript has been unsubmitted

"Have things got this bad? Have I got this bad? I need more coffee before I read this..." These were our thoughts upon receiving this email from a journal to which we had electronically submitted a manuscript. It turned out to be a computer glitch, but the fact that our first thought was that someone deemed our research too awful even to submit speaks volumes about the current state of refereeing.

It wasn't always this way. Scientific journals started as a way for researchers to establish precedence and communicate with others. As explained in Boorstin's The Discoverers (1983) if you had a scientific idea you wanted to express in the mid-seventeenth century, you would probably have had to have learned Latin, found out from someone nearby—assuming there was someone—about people who might be interested in your idea, and written him (mostly it was 'him') a letter. Indeed, communication between intellectually close, but geographically distant, researchers was part of the motivation for the formation of the Royal Society in 1660. Communication was greatly improved when, under Henry Oldenburg, the bundling of letters together for central publication and distribution began. Thus were founded the Philosophical Transactions of the Royal Society. Since the Transactions received far more submissions than it could publish and had to select among them—not unlike journals today—it is credited with the first recorded peer-review process.

A second step in the development of peer review is credited to the Royal Society of Edinburgh. Their publication, *Medical Essays and Observations*, began a process of peer review in 1731 more similar to what we use now than that of the *Philosophical Transactions*. This type of peer review gradually became an accepted and central feature in medicine. This probably has a practical motivation: Legitimate physicians have an abiding interest in eliminating incompetence in their peers and there is a corporate interest in limiting liability. By the middle of the twentieth century, peer review had become a fixture for the sciences and academia more generally, and has since been treated as the central criterion by which research contributions are assessed. Few people alive today know any different system.

Praise and criticism of peer review is often worded quite sharply. Consider the following six quotes:

"...biased, unjust, unaccountable, incomplete, easily fixed, often insulting, usually ignorant, occasionally foolish and frequently wrong."

Richard Horton of the *The Lancet* on peer review (2000) www. mja.com.au/public/issues/172_04_210200/horton/horton.html "What a privilege to contribute ... to the best environment for scientific discovery in the world!" Marye Anne Fox (2002) www.

"Peer review is like the little girl with the curl right in the middle of her forehead: When it is good, it is very, very good, but when it is bad, it is horrid." Ann M. Little (2008) www.historiann. com/2008/05/02/peer-review-or-smear-review-reflections-on-arigged-system/

americanscientist.org/issues/pub/in-praise-of-peer-review/1

"Let them eat cake." Philip Davis, apropos of critics of the hegemony of elite journals (IMS Bulletin, Jan/Feb 2009).

"Referees' reports can be critical in the extreme. In a time of tight budgets ... our willingness to criticize is hampering our progress."

Nancy Reid and Charmaine Dean (IMS Bulletin, July 2008)
[Indeed a whole Bulletin issue, March 2008, was devoted to good refereeing practices, much of it directed at junior researchers who are provided with little guidance.]

"...declining standards and the growing, built-in tendency toward corruption of the peer-review and refereeing processes..." H.F. Judson (1994, JAMA, 272:92–94).

Judson describes the increase in rivalries and plain exhaustion of researchers as undermining the referee process. This is borne out in the frequent validation failures of many branches of science; see Ransohoff's 2005 paper in the *Journal of the National Cancer Institute* [97(4):315–319], for instance. It would be naïve to think Statistics immune from these trends. Riffling through the pages of any of the 'elite' journals reveals numerous papers that are far from elite, while riffling through the pages of secondary sources reveals much that is more intellectually intriguing than the typical papers in elite journals. To an extent, the elite journals are politically elite more than intellectually elite.

This is not to say all referees are negligent crypto-sadists, nor that there are no aggregate differences in quality across journals. We have received some incredibly detailed and thoughtful referees' reports over the years—though not commonly from the elite journals. And the fact is that the elite journals are probably overall better than the others, just not by as much as many think, and certainly not with any uniformity.

One reason for the diversity of perspectives on refereeing is the diversity of interests. Researchers want their ideas recognized and seen as meritorious. Conference organizers and granting agencies answer to political masters. Departments and

universities know the public relations value of being seen in the company of the mostly highly respected. Journals want to maintain their prestige. And, it must be admitted, people generally support a system when it serves their interests.

Here, we focus on how to do intellectual evaluation apart from writing good referees' reports. So, it is important to note that genuinely new ideas are often rough and ill-formed, rarely appearing in top journals first. Usually they appear first in rudimentary forms in lesser places, and it is useful to read these earlier forms to understand and evaluate the later publication. That is, elite journals often serve a more archival and reference function rather than an initial dissemination, development, or priority establishment function. Once an idea is accepted in the elite journals it is easier to publish follow-up papers there, but that means other new ideas, probably equally good, are neglected.

Taking all this to heart, we present our proposal for an improved system. It differs from the existing system in that it is fully open to contributions and is not anonymous.

Consider a multi-level 'vat' of papers. Level Zero is uncontrolled. Anyone can post anything, apart from requirements of being on topic, avoiding defamation, and so forth. Level One is finished papers. Anyone can post anything that they and a moderator agree is a full paper with enough detail that it can be evaluated. A paper passes from Level One to Level Two once at least two people, at arm's length from the author, have independently verified the central claims of the paper. These people write non-anonymous statements to that effect. If a paper has serious errors it is removed entirely. However, the author may correct the errors and begin the process again.

Level Three papers are where referees play a role. We suggest two sorts of referees' reports: Advocates and Critics. The Advocates give arguments for why the paper is novel, important, deep and so forth. They generally emphasize its merits. The Critics do the reverse, arguing the lack of novelty, the dependence on existing work, and so forth—generally, they find fault with it (though not with the correctness *per se*). We suggest two Advocates and two Critics. The author can then respond to the reports. All of this is done openly. Both of the Critics for an author's paper understand that the author in question gets first right of refusal to be a critic for the next paper written by them. A paper has completed Level Three when it has been verified, debated, and the author has rewrit-

ten the paper as needed to account for the discussion.

The next phase is the importance of the material. A good paper should be cited and have intellectual substance. Thus, Level Four

has two criteria, one based on use and one on importance, and they are equally valued. Criterion I is like the citation index but categorizes the nature of the citation as either a usage of the contribution of the paper or a further result it motivated. Given, say, five meaningful citations, this criterion is satisfied. Criterion II attests to the intellectual achievement. This can be argued if a certain number of people, again, say five, are willing to write reports asserting the intellectual depth and merit of the contribution. Again, conflicts of interest must be avoided and the process is not anonymous. Once these criteria have been met, the paper is Level Four.

The Level Five category remains to be defined but is a measure of how 'classic' the paper has become, perhaps being used or cited for a period of time such as ten years. These are the stellar papers, whose influence goes beyond the confines of their topic, and is subjective, though the subjectivity is mitigated by the high standard.

Admittedly this kind of process is still open to abuse, but at least it permits more freedom. The possibility of a journal rejecting a paper because an AE just doesn't like support vector machines or a paper "isn't Bayesian enough" will be things of the past. Reducing the distance between authors and readers by eliminating anonymity may be a key way to ensure responsible, serious refereeing. After all, we should really only take into consideration statements that people are not ashamed of admitting they made.

Note that this system leaves it open that readers can login at any stage and express opinions, so that at Levels Three and Four a blog can be maintained discussing the paper. This blog could also serve as a means of communication between the author and users of this method, people of similar interests, and so on. We also suggest this would be better for making important details and information about a paper available in spite of space limitations.

This multi-level 'vat' system would also cut down on delays in publication—once a paper was finished it would be instantly available to everyone, much like an author's webpage, but centralized. This is an important feature for making science more accessible and leveling the ground a little for junior researchers.

Finally, we suggest that this kind of system can evolve from electronic publishing via CiteSeer, JSTOR or other archives. Most journals run by societies already have an online version and manage referees' reports electronically, and a *de facto* blog on papers is already done on a limited basis. These kinds of systems could be expanded to reflect the levels and remove anonymity.

As to our "unsubmitted" manuscript... we did get referee's reports and they were uncommonly thoughtful. Overall, the system we have is not dreadful, but it could use some revisions. Just like our paper.



IMS Presidential Address

When?

Monday, August 3, 2009 8:00-9:30 PM

Where?

CC-Ballroom A

IMS President 2008–09, Nanny Wermuth, will deliver the 2009 Presidential Address, "On the development of insight: some examples in the statistical sciences".

Also this evening:

- Presentation of the 2009 H.C. Carver Award Medal
- Presentation of New IMS Fellows
- Announcement of the 2010 Special Invited Lectures
- Announcement of Laha Award Recipients

Reception immediately following: everyone is welcome



Nanny Wermuth

JSM 2009

When?

Monday, August 3, 2009 5:30-7:00 PM

Where?

CC-149A

IMS Welcome Reception

Mixer for New Members, New Graduates and Students

All members who have joined the IMS during the past two years, all IMS New Graduate members and all IMS student members are encouraged to attend. Appetizers and an open bar will be available.

If you wish to join the IMS but haven't done so yet, please come along to the reception where we will have application forms available, or you can join online at www.imstat.org





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Wald Lectures: Jerome Friedman

This year's IMS Wald Lecturer, Jerome H. Friedman, is Professor Emeritus of Statistics, Stanford University. He received both bachelor's and PhD degrees in physics from the University of California, Berkeley. He was leader of the Computation Research Group at the Stanford Linear Accelerator Center from 1972 through 2006. He was Professor of Statistics, Stanford University, from 1982 through 2006, and served as Department Chair from 1988 through 1991. His primary interests center on machine learning and data mining. He has authored or coauthored over 80 papers in major statistical journals as well as two books on data mining, and has invented or co-invented several widely used data mining procedures. He has been awarded several honors including Fellow of the American Academy of Arts and Sciences, Fellow of American Statistical Association, American Statistical Association Statistician of the year (1999), Association for Computing Machinery Data Mining Lifetime Innovation Award, and the Emanuel and Carol Parzen Prize for Statistical Innovation.



*Wald Lecture I*Tuesday, August 4: 4:00–5:50pm
Convention Center 202A

Fast Sparse Regression and Classification

Linear models are among the most used for statistical prediction. The accuracy of such models suffers when the number of observations is not large compared to the number of predictors. Regularization methods have been proposed to mitigate this problem. These methods fit a linear model to data, based on some loss criterion, subject to a constraint on the coefficient values. For large problems the general choice of loss/ constraint combinations is limited by the computation required to obtain the corresponding solution estimates. This is especially the case when non-convex constraints are used to induce very sparse solutions. A fast algorithm is presented that produces solutions that closely approximate those for any convex loss, and a wide variety of convex and non-convex constraints, permitting application to very large problems.

The benefits of this generality are illustrated by examples.

Wald Lecture II

Wednesday, August 5: 10:30am–12:20pm Convention Center 207B

Decision Trees and Gradient Boosting

Boosted decision tree models have emerged as being among the most useful tools for predictive data mining (classification and regression). They are fast to compute allowing application to very large data sets. Their accuracy is competitive with the best customized problem specific approaches, while being fairly automatic to use (little tuning), and highly robust especially when applied to less than clean data. They also offer some interpretability of the resulting predictive model.

This lecture will start with a brief description of (CART) decision trees, followed by an introduction to the basic concepts of gradient boosting. Issues specific to boosting decision trees are then discussed. Finally, tools are presented for interpreting and visualizing these multiple additive regression tree (MART) models.

Wald Lecture III
Thursday, August 6: 10:30am-12:20pm
Convention Center 202A

Predictive Learning via Rule Ensembles

General regression and classification models are constructed as linear combinations of simple rules derived from the data. These rule ensembles are shown to produce predictive accuracy comparable to the best methods. However their principal advantage lies in interpretation. Because of its simple form, each rule is easy to understand, as is its influence on individual predictions. Similarly, the relevance of the respective input variables can be assessed globally, locally in different regions of the input space, or at individual prediction points.

Techniques are presented for automatically identifying those variables that are involved in interactions with other variables, the strength and degree of those interactions, as well as the identities of the other variables with which they interact. Graphical representations are used to visualize both main and interaction effects.

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Le Cam lecture preview: Aad van der Vaart



Aad van der Vaart is Professor of Stochastics at VU University of Amsterdam. He has published on topics in semiparametric models, likelihood theory, empirical processes, Bayesian asymptotics, genomics and statistical genetics, finance, imaging, and historical demography. He has written four books and has several ongoing book projects.

The IMS Le Cam Lecture, delivered every three years in memory of Lucien Le Cam, will take place at JSM on Sunday, August 2, in room 207A of the Convention Center, from 4:00–5:50pm. Its title is "Some Frequentist Results on Posterior Distributions on Infinite-Dimensional Parameter Spaces."

Imagine estimating a curve or surface (e.g. regression function, density) by modelling this curve *a priori* as the sample path of a Gaussian process, and next letting Bayes' rule do the work and come up with the resulting posterior distribution. There is a great variety of Gaussian processes. Each is, of course, characterized by its covariance function, but often more insight in the prior modelling can be gained from visualizing the sample paths of the process. There are very rough processes, like Brownian motion, but also infinitely smooth ones. Not surprisingly the regularity of the prior influences the posterior. Perhaps it is surprising that this influence does not disappear if the informativeness of the observations increases indefinitely: the prior does not wash out.

The influence concerns not so much the regularity of the sample paths of the posterior, but rather the concentration of the posterior near the true curve. We would not care too much if the posterior sample paths were "too" smooth, as long as they follow the true curve closely. It is hard to study this for finite samples, but we now do have asymptotic results on rates of concentration of posterior distributions. Such rates can be defined as the radii of the smallest balls that contain almost all posterior mass. Consistency entails that these radii tend to zero (e.g. as the number of observations tends to infinity); the rate of contraction measures how fast this happens.

For the case of Gaussian priors the rate of contraction depends on two quantities. First a Gaussian distribution has a certain concentration near its mean, measured in a small ball probability. For instance, for uniform balls in the one-dimensional case this is the probability that the process remains within bands at heights plus and minus epsilon, for epsilon small, of course. If the small ball probability is small, then the rate of contraction of the posterior will be small as well. This is not necessarily bad, as the true curve may be intrinsically hard to estimate. However, the small ball probability is a property of the prior only, not of the true curve, and hence is one property through which the prior may express itself in the posterior. For instance, Brownian motion will never give contraction rates faster than the inverse of a quarter root of the

number of observations, because its sample paths rarely stay close to zero. The second quantity that determines the rate of contraction is the position of the true curve relative to the prior. Clearly if it is outside the support of the prior, then the posterior will not even be consistent. A position inside the support can be measured by its position relative to the Reproducing kernel Hilbert space (RKHS) of the prior. Being inside the RKHS gives the fastest rate, but other positions give some rate, which can be computed from the RKHS-norm. Small ball probabilities and RKHSs are somewhat complicated objects, but there is a big literature that permits obtaining contraction rates for many examples.

Unless one is a true Bayesian, and believes strongly in the fine properties of the prior, the dependence of the contraction rate on the prior is not good news. It is possible to alleviate this dependence by combining priors. The weights to be given to the various priors (often of very different "dimensionalities") are then the big issue.

An elegant way of combining Gaussian priors is to rescale the sample paths of a given process. Running a process for a longer time and mapping its time domain to a shorter interval creates more variability, whereas rescaling time in the other direction smooths the sample paths. The scaling variable can be viewed as a bandwidth, and the obvious Bayesian approach is to choose this from a prior. This works. The smoothing operation is only partially successful, because it will never produce anything smoother than in the RKHS, but the roughing operation is able to decrease the regularity by any desired amount. For instance, it is possible to roughen an analytic Gaussian process by a Gamma variable to match any true curve. This procedure is fully Bayesian and hence completely automatic.

Proofs of these results were obtained, jointly with Harry van Zanten, using general results on posterior contraction rates due to Subhashis Ghosal and the author. The talk will recall the general setting, and also investigate its relationship to the work of Lucien Le Cam.

IMS Sessions at JSM 2009

We list below the 53 sessions for which IMS is the sponsoring society at this year's JSM. For details of the sessions (you can use the session number, listed first, to look them up), and the rest of the program, see http://www.amstat.org/meetings/jsm/2009/onlineprogram/

Sur	ıday,	August 2		200		10 20 12 20	Tanks to Figure dal Continting (IMC)
10	I	2:00-3:50	Inference for Orderings: Far-reaching	299 347	•	10:30–12:20 2:00–3:50	Topics in Financial Statistics [IMS] Geosciences and SAMSI [IMS, Section on Bayesian
11		2:00-3:50	Extensions of Kendall's Tau [IMS] IMS Medallion Lecture I [IMS]	J-7	'	2.00 3.50	Statistical Science]
11 30	C	2:00-3:50	Miscellaneous Theory I [IMS]	352	I	2:00-3:50	Bayes-frequentist Reconciliation in Large
41	_	4:00-5:50	Largely About Largeness: Models And				Parameter Spaces [IMS, Section on Bayesian Statistical Science, IISA]
			Views For High-Dimensional Data [ASA, ENAR,	376	C	2:00-3:50	Variable Selection and Model Selection[IMS]
			IMS, SSC, WNAR, ICSA, IISA]	386		4:00-5:50	Wald Lecture I [IMS]
53	1	4:00-5:50	Imaging Analysis [IMS]	Wa	dnos	day, Augus	15
54	I	4:00–5:50	Le Cam Lecture [IMS, Section on Bayesian Statistical Science]	393		8:30–10:20	Late Breaker #2 [ASA, ENAR, IMS, SSC, WNAR, ICSA, IISA]
67	C	4:00-5:50	Miscellaneous Theory II [IMS]	402		8:30–10:20	Flexible Statistical Machine Learning for
B.4			·	702	'	0.30-10.20	Complex Data [IMS, Interface Foundation of North America]
1 VIO		8:30–10:20	Spatial Data Analysis [ASA, ENAR, IMS, SSC, WNAR,	403	I	8:30-10:20	IMS Medallion Lecture V [IMS]
	IOL		ICSA, IISA]	404	I	8:30–10:20	Memorial Session for David Freedman [ASA, ENAR, WNAR, IMS, SSC, ICSA, IISA]
94 95	ı	8:30–10:20 8:30–10:20	Threshold Estimation [IMS] Semiparametric Model Estimation and	432	Р	8:30-10:20	Topic Contributed Oral Poster Presentations
))	'	0.50 10.20	Selection [IMS, ICSA, ICSA]	422		0.20 10.20	[IMS]
96	I	8:30-10:20	IMS Medallion Lecture II [IMS, Section on Bayesian	433 453	P	8:30–10:20 10:30–12:20	Contributed Oral Poster Presentations [IMS] Cautionary Tales of Modern Statistical
	_		Statistical Science]	433	1	10:30-12:20	Methods [IMS, Section on Bayesian Statistical Science]
122	C	8:30–10:20	Miscellaneous Methodology I [IMS]	454	Ι	10:30-12:20	Wald Lecture II [IMS]
147	I	10:30–12:20	Semiparametric Methods with High- Dimensional Data [IMS, ICSA, Biometrics Section,	476	C	10:30-12:20	Test (yes this is the title) [IMS]
			Biopharmaceutical Section, Interface Foundation of North America]	492	IOL	2:00-3:50	Causal Inference in Statistics [ASA, ENAR, IMS, SSC,
148	I	10:30–12:20	IMS Medallion Lecture III [IMS, Section on Government Statistics]	495	I	2:00-3:50	WNAR, ICSA, IISA] Challenges in Statistical Learning and
188	LB	2:00-3:50	Late Breaker #1 [ASA, ENAR, IMS, SSC, WNAR, ICSA, IISA]				Variable Selection for High Dimensional Data [IMS]
198	I	2:00-3:50	Recent Advances and the Future of	502	ı	2:00-3:50	Regression Models with Functional
200		200 250	Statistics [IMS]	302	•	2.00 3.50	Predictors [IMS]
200	ı	2:00-3:50	Cosmology and Astrophysics [IMS, Section on Bayesian Statistical Science, Section on Government Statistics]	503	I	2:00-3:50	IMS Medallion Lecture VI [IMS]
202	C	2:00-3:50	Algebraic Methods [IMS]	528	C	2:00-3:50	Time Series [IMS]
224	C	2:00-3:50	Statistical Genetics and Computational	Thu	ırsda	ay, August 6	
			Biology [IMS]			8:30–10:20	Statistical Learning and Data Mining [ASA,
236	I	8:00–9:30	IMS Presidential Address and Awards [IMS]				ENAR, IMS, SSC, WNAR, ICSA, IISA]
Tue	sday	, August 4		545	I	8:30–10:20	Bayesian Methods for Model Uncertainty [IMS, Section on Bayesian Statistical Science]
242	IOL	8:30–10:20	Designing Longitudinal Studies [ASA, ENAR, IMS, SSC, WNAR, ICSA, IISA]	546	I	8:30-10:20	Inference for Parameters of Biological and Biochemical Processes Modeled via
243	-	8:30–10:20	ASA College Stat Bowl I [ASA, ENAR, IMS, SSC, WNAR, ICSA, IISA]	559	C	8:30–10:20	Branching Processes and Their Variants [IMS] Bayesian Methods [IMS, Section on Bayesian Statistical
251	1	8:30-10:20	High Dimensional Genetic Data [IMS]	337		0.50 10.20	Science]
252		8:30-10:20	IMS Medallion Lecture IV [IMS]	583	I	10:30-12:20	Bayesian Methods [IMS, Section on Bayesian Statistical
280		8:30–10:20	Miscellaneous Methodology II [IMS]	F0.4		10.20 42.20	Science]
289	-	10:30–12:20	ASA College Stat Bowl II [ASA, ENAR, IMS, SSC, WNAR, ICSA, IISA]	584 609		10:30–12:20 10:30–12:20	Wald Lecture III [IMS] Miscellaneous Methodology III [IMS]
297	I	10:30–12:20	New Applications of Statistics in Genetics/ Genomics [IMS, Section on Bayesian Statistical Science, Biopharmaceutical Section]	509		10.50 12.20	secilaricous metrodology in [imb]

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Terence's Stuff: Gender still on the agenda

Twenty years ago Terry Speed calculated how far away achieving gender equality was—and now realizes it was further away than he thought. A new report sheds some light.



re you are working in a department within a science or engineering faculty in a US university that has four-year bachelor's and graduate programs. If so, please look around you and estimate the percentage of women in your workplace at your level? Do you see about fifty percent women? Then your department is either unusual or very unusual—or you are a graduate student! That is one finding of a recently completed book issued by the National Research Council, Gender Differences at Critical Transitions in the Careers of Science, Engineering, and Mathematics Faculty. The 'critical transitions' are hiring, tenure and promotion, and also covered are professional activities, institutional resources, climate and outcomes. This book will interest many of our members. Much of its prepublication version is already available free online, and the rest can be purchased.

Addressing gender differences has been on the US academic agenda for over thirty years. I remember attending a meeting of department chairs on my campus twenty years ago. We looked at the gender imbalance as it was then, and assessed the modest progress that had taken place in the previous few years. I can't recall the exact figures, but let's say that the percentage of women in a science, engineering or math (SEM) department had increased from five to ten percent over the previous decade. I estimated how long it would take at that rate to achieve a rough equality, and was shocked to realize that the answer was *more*

than twenty years! My reaction was, "This is far too slow; we have to do something different to make that rate higher." I did what I could, in due course was replaced as chair, and here we are now, twenty years later. What's changed? In a word, much; in three words, not very much. I now realize how ludicrously optimistic my 'more than twenty years' was.

Let me tell you a little about the book mentioned above. It is the report of a committee set up in response to a congressional directive to assess the differences described in its title. Principally a statistical report, we were fortunate that one of our members, Alicia Carriquiry was on the committee preparing it. The report's main findings are summaries of cross-sectional data from two specially commissioned surveys, stratified by gender and discipline (Biology, Chemistry, Civil Engineering, Electrical Engineering Mathematics, Physics). In addition, there are logistic regressions relating outcomes such as grants/no grants to institutional and personal covariates, and even some Cox proportional hazards modeling for time in the ranks. One survey went to 492 chairs from SEM departments from 86 Research Intensive universities (85% response), and the other to about 1,800 faculty from the same universities (73% response), both in 2004-05, and these were supplemented by data from the biennial Survey of Doctoral Recipients (SDR).

The surveys cover a wide range of topics, and naturally there is a lot of heterogeneity among SEM departments, but let's forget that for a minute. Here are some figures from the SDR. In 1995 women comprised about twenty percent of the SEM full-time academic workforce; by 2003 this had increased to twenty-five. My simplistic calculation tells me that we still have *about*

thirty years to go, assuming nothing much changes, to get to fifty percent.

Of course much has to change, but what? Here the report gets interesting, but ultimately disappointing. The publisher's press release almost says it all: "Women Faring Well in Hiring and Tenure Processes...But Still Under-represented In

Applicant Pool," while the review in Science emphasizes the positive: "Report Finds No Gender Bias in Faculty Hiring, Resources." In several departmental categories, the percentage of women among applicants for tenure-track positions is lower than the percentage of women among PhD graduates, sometimes substantially lower. Further,

the higher the proportion of women PhDs, the larger the gap between the two figures. Frustratingly, we don't have data for Statistics, but as our percent women among PhDs awarded is pretty high, we must wonder whether our disparity is also high.

Similarly, it seems likely (the absence of longitudinal data makes it hard to be sure) that attrition between initial appointment and tenure review, and between tenure and promotion to full professor, is greater for women. We are not blatantly discriminating against women, but subtly: they seem to be dropping out more between career stages, or choosing not to drop in. What's going on? The report doesn't tell us, as these issues lay outside its brief, and the survey design precludes serious study of them. Obviously more research is needed, but equally obviously, much could be done right now, including better child-care arrangements, greater employment flexibility, and more encouragement of women to enter, stay in, and return to academia. If equality is to be achieved in your lifetime, keep gender on the agenda!

IMS meetings around the world

IMS sponsored meeting

JSM2009 August 1–6, 2009 Washington DC

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

The IMS Invited Program Chairs are Michael Kosorok (kosorok@unc.edu) and Xiaotong Shen (xshen@stat.umn.edu). The

IMS Contributed Program Chair is Ji Zhu (jizhu@umich.edu).

August in Washington DC can be hot and humid (average high 88°F/31°C; average low: 70°F/21°C). Dress in lightweight business or casual clothes and comfortable shoes when walking around the city. The convention center and hotels are air-conditioned, so be prepared with a lightweight jacket or sweater when attending sessions and meetings.





The Walter E. Washington Convention Center

For the list of which airlines fly to which airport, check the meeting website. The Super Shuttle discount code is HF57W. Public transportation information is also on the website.

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

Important dates for JSM2009

Now: preliminary PDF program online Now: JSM registration and housing open June 29: Early Bird Registration deadline June 30–July 16: Advance Registration (increased fees apply)

July 8: Hotel reservation deadline
July 13: Final program posted online

Twelfth North American Meeting of New Researchers in Statistics and Probability July 28–31, 2009 Baltimore, MD

w www.biostat.umn.edu/~tracyb/nrc.html Tracy Bergemann **e** berge319@umn.edu The application deadline has passed.

This meeting of recent PhD recipients in statistics and probability promotes interaction primarily by introducing other new researchers' research in an informal setting. The meeting is held immediately prior to JSM (see above).

At a glance:

forthcoming IMS Annual Meeting and JSM dates

2009

IMS Annual Meeting

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

2010

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

IMS Annual Meeting:

Gothenburg, Sweden, **August** 9–13, 2010

20II

IMS Annual Meeting @ JSM: Miami Beach,

FL, July 30– August 4, 2011

2012

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

IMS Annual Meeting @ World Congress:

İstanbul, Turkey, Date TBA

2013

IMS Annual Meeting

@ JSM: Montréal,Canada, August3–8, 2013

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More IMS meetings around the world

IMS co-sponsored meeting

Fifth Cornell Probability Summer School July 6–17, 2009

Cornell University, Ithaca NY

w http://www.math.cornell.edu/~durrett/CPSS2009/

The Fifth Cornell Probability Summer School will feature three six-lecture series:

Ander Holroyd, "Matching, coupling, and point processes"; Robin Pemantle, "Probability from generating functions"; and Yuval Peres, "Aspects of Markov chains".

Co-starring will be Rick Kenyon, Scott Sheffield, and Balint Virag, who will each give two lectures.

Registration is now closed.

Over 110 people applied to attend and 85 were accepted. If you were not able to attend then you can visit the conference web page at the time of the meeting to learn more about this exciting research area.

This meeting is supported by a Research Training Group grant from the National Science Foundation.

IMS co-sponsored meeting

Sixth Cornell Probability Summer School July 18–31, 2010

Cornell University, Ithaca, NY

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

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

IMS co-sponsored meeting

Seventh Cornell Probability Summer School July 11–22, 2011

Cornell University, Ithaca, NY

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

IMS co-sponsored meeting

Statistical Science—Making a Difference June 3–4, 2010



University of Wisconsin, Madison

w under construction

IMS Representative(s) on Program Committees: Kjell Doksum, Johnson, Grace Wahba

IMS co-sponsored meeting

33rd Conference on Stochastic Processes and their Applications July 27–31, 2009

Berlin, Germany

w http://www.math.tu-berlin.de/SPA2009/

Registration open now: IMS members get €20 discount

Featuring IMS Medallion Lectures from Claudia Klüppelberg and Gordon Slade, a Lévy Lecture from Amir Dembo, and a Doob Lecture from Ed Perkins. Also a special event celebrating the contributions of Wolfgang Döblin.

Organizing committee chair: Jochen Blath; co-chair: Peter Imkeller.

IMS Reps to Program Committee: David Aldous, Martin Barlow, Gérard Ben Arous, Mu-Fa Chen, Anna de Masi, Hans Föllmer, Luis Gorostiza, Dmitry Kramkov, Russ Lyons, Claudia Neuhauser, Ed Waymire, and Ofer Zeitouni.

IMS co-sponsored meeting

International Symposium in Statistics (ISS) on
Inferences in Generalized Linear Longitudinal Mixed Models (GLLMM)
July 20–22, 2009

Memorial University, St John's, Canada

w www.iss-2009-stjohns.ca

The objective of this ISS is to bring together speakers and discussants to describe the latest research such as parametric and nonparametric inferences in this emerging area with applications to biostatistics, econometrics, and ecological and environmental studies, among others.

Keynote speakers:

Raymond J. Carroll, Texas A & M University, USA: Nonparametric and semi-parametric inferences for longitudinal data

Noel A. Cressie, The Ohio State University, USA: *Using Temporal Variability to Improve Spatial Mapping*

William Dunsmuir, The University of New South Wales, Australia:

Inference and Computational Methods for Count Time Series
Regression Modelling

Brajendra Sutradhar, Memorial University, Canada: Inferences for stationary versus non-stationary familial longitudinal data

Mary E. Thompson, University of Waterloo, Canada: *Inferences for longitudinal survey data*

IMS sponsored meeting

Second IMS China Conference on Statistics and Probability

July 3–6, 2009. Weihai, China

w http://www.stat.cmu.edu/~jiashun/ imschina/index.html The plenary speakers will be: Peter Bickel, University of California, Berkeley; Stephen Fienberg, Carnegie Mellon University; Zhiming Ma, Chinese Academy of Math and Systems Science; Michael Steele,

IMS co-sponsored meeting

University of Pennsylvania

International Conference on Experimental Designs

July 17-19, 2009. Guangzhou, China

w http://maths.gzhu.edu.cn/iced/ IMS Rep: Jianqing Fan. Topics of the conference include: designs for non-linear models; factorial designs; mixture designs; optimal designs; response surface designs; uniform designs.

IMS co-sponsored meeting

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

IMS co-sponsored meeting

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

IMS Program Chairs: Marie Davidian and Hao Helen Zhang

w http://www.enar.org/meetings.cfm

IMS co-sponsored meeting

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

IMS co-sponsored meeting

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

w http://www.hec.fr/statsinthechateau

e statsinthechateau@ensae.fr





International conference on Frontiers of Interface between Statistics and Sciences: in honor of C.R. Rao's 90th birthday

December 31, 2009 – January 2, 2010. Hyderabad, India

w http://www.stat.osu.edu/~hnn/hydstatconf2010.html IMS Reps: S. Rao Jammalamadaka, S. Pantula, S. Ghosh

International conference on Frontiers of Interface between Statistics and Sciences at Hyderabad, India, organized by C R Rao Advanced Institute of Mathematics, Statistics and Computer Science with the sponsorship of Dept of Science and Technology, Govt. of India, ASA and IISA. The conference is in honor of C.R. Rao who will be attaining the age of 90 in 2010. The topics will include, biometrics, bioinformatics, cryptology, signal processing, data mining, econometrics and statistical inference.

IMS co-sponsored meeting

International Conference on

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

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

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

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



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Other Meetings Around the World: Announcements and Calls for Papers

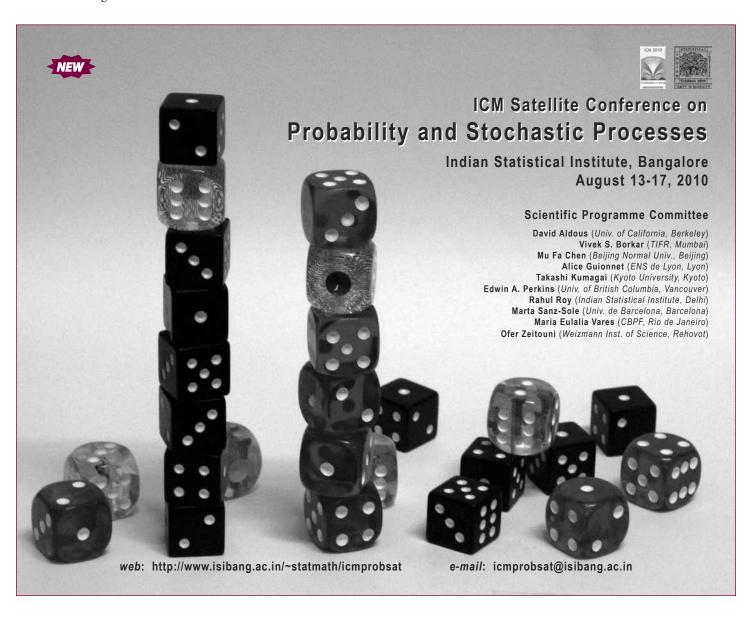
Financial Support for Participation in ICM2010 (August 19–27, 2010, Hyderabad, India)

w www.icm2010.org.in

The International Mathematical Union (IMU) and the ICM2010 Local Organizing Committee are currently making efforts to obtain financial support to enable as many mathematicians as possible from developing and economically disadvantaged countries to participate in ICM2010. There are three different support categories (travel, registration, living support can be applied for):

- 1) Young mathematicians from developing and economically disadvantaged countries
- 2) Senior mathematicians from developing and economically disadvantaged countries
- 3) Mathematicians from developing countries in Asia with emphasis on countries neighboring India

All mathematicians who wish to apply for support are kindly asked to complete the corresponding Application Form at the ICM2010 website (the same form is used for all three categories). Applications may be submitted from 1 July 2009 – 1 January 2010. Queries may be sent to the organization of the ICM2010 at the address icm-aid@math.tifr.res.in



Case Studies in Bayesian Statistics and Machine Learning October 16-17, 2009 Pittsburgh, PA

w http://bayesml1.stat.cmu.edu/

w http://www.ndns.nl/workshops/sls

High-dimensional Inference and Complex Data: Statistics and the Life Sciences November 23–25, 2009, Groningen, The Netherlands

Complex data and high-dimensional inference have almost become a staple diet for the modern statistician. For example, in the life sciences, novel measurement techniques generate huge amount of data ("large p") on a relatively small number of units ("small n"). Sometimes interesting structures, such as spatial information is also known, which makes inference not only high-dimensional, but frequently also very complex. This workshop presents the coolest heads in the field, such as Luigi Auguliaro, Keith Baggerly, Michael Biehl, Cajo ter Braak, Peter Diggle, Paul Eilers, Ritsert Jansen, Siem Heisterkamp, Hans van Houwelingen, Goeran Kauermann, John Nerbonne, Stephen Senn and Tom Snijders. The workshop starts with a short course on Generalized Additive Models by Prof Simon Wood (Bath, UK).

The workshop is sponsored by the NDNS+ Cluster and the Royal Statistical Society. Early registration fees, which include lunches and conference dinner: 100 euro (academic), 50 euro (students, NDNS+ members), 200 euro (industry). For information, please contact: Tini Roek (t.g.roek@rug.nl) for registration and accommodation, or Ernst Wit (e.c.wit@rug.nl) for the scientific programme.

Seventh International Triennial Calcutta Symposium on Probability and Statistics December 28-31, 2009 Kolkata, India

w http://triennial.calcuttastatistical association.org/SympBrochure.php The Calcutta Statistical Association and the Department of Statistics, Calcutta University, will jointly host the Seventh Triennial Symposium between December 28-31, 2009 at the Department of Statistics, University of Calcutta, India. The symposium will feature Special Sessions; invited and contributed sessions on theoretical and applied statistics and probability; and poster sessions for students and young researchers. The best posters will be awarded. Sponsored posters from industries will also be entertained.

The previous six symposia have been highly successful with a large number of Indian and foreign participants. It now features among the most prestigious statistical events of India.

The city of Calcutta (Kolkata), on the bank of the river Ganga in eastern India, is known as the cultural capital of India and is also famous for its period architecture besides local art, literature, cinema and cuisine.

Submission Deadline: July 31, 2009. Communication of decision by: August 31, 2009. Registration Deadline: September 30, 2009.

Convenor: Gaurangadeb Chattopadhyay e caltri7@gmail.com

International Workshop on Multivariate Risks and Copulas April 14–17, 2010, Biskra, Algeria

w http://www.univ-biskra.dz/manifestations/math/stat_2010

The workshop will serve as a forum for discussing different issues of risks, copulas and related topics. The main goal of this scientific event is to gather researchers and practitioners from universities, institutions, industries and Government, working in these fields. Special invited speakers are Paul Deheuvels (Paris VI), Christian Genest (U Laval), David Rios Insua. Contact Prof. Abdelhakim Necir e necirabdelhakim@yahoo.fr

Conference on Applied Statistics and Probability for Africa Development (ASPAD II) May 26–28, 2010, Dakar, Sénégal

and Constitutive Assembly of the Statistical Pan African Society (SPAS)

May 26, 2010, Saint-Louis, Sénégal

w http://www.statpas.org/ang/spada2.php This meeting is to be the major event in Probability and Statistics held every two years in Africa, under the aegis of the new Statistical Pan African Society (SPAS) to be launched alongside the meeting. Contact Professor Gane Samb Lo e ganesamblo@ ufrsat.org

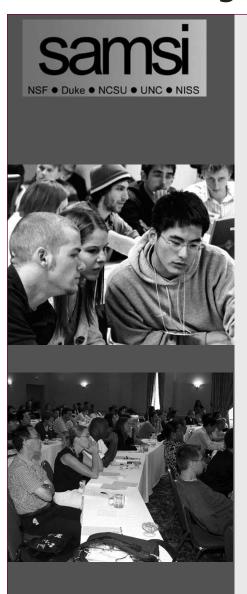


Dakar's 'Dawn of the Third Millennium' monument, designed by architect Pierre Goudiaby Atepa

http://www.imstat.org/meetings

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I More meetings around the world



UPCOMING SAMSI PROGRAMS

Stochastic Dynamics 8/30/2009 - 8/31/2010

- •Tutorials and Opening Workshop: Aug. 30-Sept. 2, 2009
- Ongoing workshops throughout the year

Space-Time Anaylsis for Environmental Mapping, Epidemiology and Climate Change 9/1/2009 - 8/31/2010

- •Tutorials and Opening Workshop: September 13-16, 2009
- Ongoing workshops throughout the year

Education & Outreach Program 2009-2010

- •Two-Day Undergraduate Workshop: Oct. 31-Nov.1, 2008
- •Two-Day Undergraduate Workshop: Feb. 27-28, 2009
- •SAMSI/CRSC Undergraduate Workshop

(at NC State): May 18-22, 2009

• CRSC/SAMSI Industrial Mathematical & Statistical Modeling

Workshop for Graduate Students (at NC State): July 20-28, 2009

OPPORTUNITIES TO PARTICIPATE

- Research Fellows lead and participate in the research on a long-term basis
- ♦ New Researcher Fellows are fully engaged in the program for one semester to one year
- ◆ Postdoctoral Fellows are typically appointed for two years and play major roles in pursuing the research
- ♦ *Workshop Attendees* inform the course of the research
- ♦ *Graduate Students* have visiting opportunities

Members of underrepresented groups are especially encouraged to apply.

www.samsi.info/programs

Employment Opportunities around the world

Our online job boards allow employers and job seekers to have the most up-to-date information at their fingertips. The service is free to job seekers. To search job openings online, log on to http://jobs.imstat.org and click on "View Jobs"

If you have a job to advertise, go to the same webpage and click on "Post a Job". A single 30-day online job posting costs just \$175.00, and we also include the basic information about your job ad here in the *IMS Bulletin* at no extra charge. The advertising service is open to all employers in the area of statistics and probability, both academic and non-academic.



Canada: St. John's, Newfoundland

Memorial University of Newfoundland, Department of Mathematics and Statistics

Tenure Track Assistant Professor in Statistics http://jobs.imstat.org/c/job.cfm?site_ id=1847&jb=5500668

United States: Columbia, MO

University of Missouri

Teaching Assistant Professor/Instructor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=5538368

Sweden: Lund

Lund University

Tenure track position in Statistics, with specialisation in statistical methods and models in biology and medicine, at Lund University

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=5449891

Lund University is one of Europe's leading universities, combining centuries of tradition with dynamic development and cutting-edge competence. Areas of education and research include technology, science, law, social sciences, economics, medicine, humanities, theology and performing arts. The university has around 38,000 students and 5,300 employees.

The appointment is initially limited to four years, but can be made permanent following an evaluation procedure; this is thus a tenure track arrangement.



The successful candidate will do research in statistical methods and models in biology and/or medicine, and teaching in mainly the same areas. Examples of such research areas include development and analysis of stochastic models with applications in biology and/or medicine; biostatistics; bioinformatics; medical statistical signal processing.

Qualifications are a PhD degree in statistics or a related area with substantial content in mathematics and statistics. Priority will be given to candidates who have completed their degree no more than five years before the last date for applications.

Last date for application is July 31, 2009. Full advertisement is available at http://www.science.lu.se/upload/LUPDF/natvet/Utlysningar/090731_1148E.pdf

Meeting announcement

ICORS 2010, the International Conference on Robust Statistics, will be held in Prague, Czech Republic, from June 28 to July 2, 2010. Previous ICORS meetings were held in Vorau (2001), Vancouver (2002), Antwerp (2003), Beijing (2004), Jyväskylä (2005), Lisbon (2006), Buenos Aires (2007), Antalya (2008) and Parma (2009).

E-mail: icors2010@karlin.mff.cuni.cz

Website: http://icors2010.karlin.mff.cuni.cz/

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International Calendar of Statistical Events

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

July 2009

July 1–4: Technical University of Denmark (DTU), Copenhagen, Denmark. European Workshop on Challenges in Modern Massive Data Sets (EMMDS 2009) e mmds-organizers@imm.dtu.dk w http://mmds.imm.dtu.dk

July 3–6: Weihai, China. 2nd IMS China Conference on Statistics and Probability. w http://www.stat.cmu.edu/~jiashun/imschina/index.html

July 5–10: Mathematical Research and Conference Center, Będlewo, Poland. ESF-EMS-ERCOM 2nd European Set Theory Meeting: in Honour of Ronald Jensen. Chair: Jouko Väänänen, Helsinki/Amsterdam. Grants available. w www.esf.org/conferences/09306

July 6–17: Cornell, Ithaca, NY. Fifth Cornell Probability
Summer School. w http://www.math.cornell.edu/~durrett/CPSS2009/

July 7–9: Leeds, UK. LASR 2009: Statistical Tools for Challenges in Bioinformatics. Contact Arief Gusnanto **e** workshop@maths. leeds.ac.uk/wwww.maths.leeds.ac.uk/lasr2009

July 10–12: Stevens Institute of Technology, Hoboken, NJ, USA. Modeling High Frequency Data in Finance w http://bergenbier.math.stevens.edu/conference2009/

July 12–15: Cornell University, Ithaca. 2009 INFORMS Applied Probability Society Conference. Shane Henderson/Mark Lewis. w http://appliedprob.society.informs.org/apsconf09/APS09.html

July 13–15: Beijing, China. 1st International Conference on the Interface between Statistics and Engineering. Kwok Tsui **e** ktsui@ isye.gatech.edu **w** http://icise.bjut.edu.cn/index.htm

July 13–17: EPFL, Switzerland. Workshop on Spatial Extremes and Applications [Research program on Risk, Rare Events and Extremes]. w http://extremes.epfl.ch/

July 15–17: Eurandom, Eindhoven, The Netherlands. Workshop on Statistical Inference for Lévy Processes with Applications to Finance w http://www.eurandom.tue.nl/events/workshops/2009/

Levy_processes/index.htm

July 17–19: Guangzhou, China. International Conference on Experimental Designs. IMS Rep on Program Committees: Jianqing Fan. w http://maths.qzhu.edu.cn/iced/

July 20–22: St John's, Canada. International Symposium in Statistics (ISS) on GLLMM. Brajendra Sutradhar e bsutradh@ math.mun.ca w www.iss-2009-stjohns.ca

July 20–24: Toulouse, France. European Meeting of Statisticians (EMS 2009). w www.math.univ-toulouse.fr/EMS2009/

July 20–24: Warwick University, UK. Probability at Warwick Young Researchers Workshop www.warwick.ac.uk/go/paw

July 20–24: Angers, France. Conference on Self-similar Processes and their Applications. w http://angers2009.math.univ-angers.fr/

July 20–24: Cornell, Ithaca, NY. 24th International Workshop on Statistical Modeling. w www.stat.cornell.edu/IWSM2009

July 26–31: Ascona, Switzerland. CosmoStatso9 and GREATo8 Challenge final workshop. w http://www.itp.uzh.ch/cosmostats

July 27–31: Berlin, Germany. 33rd Conference on Stochastic Processes and their Applications. Organising committee co-chairs: Jochen Blath & Peter Imkeller. w www.math.tu-berlin.de/SPA2009/

July 28–31: Baltimore, MD. 12th IMS North American Meeting of New Researchers in Statistics and Probability.

w www.biostat.umn.edu/~tracyb/nrc.html

July 28 – August 1: SAMSI, Research Triangle Park, NC. Summer School on Spatial Statistics e spatial-summer200907@samsi.info w http://www.samsi.info/workshops/2009spatial-summer200907.shtml

July 29–31: Singapore. 4th International Conference on Queueing Theory and Network Applications. w http://www.qtna2009.org/

August 2009

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

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

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

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

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

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

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

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

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

August 24–29: Paris, France. Second European Summer School in Financial Mathematics w http://www.cmap.polytechnique. fr/~euroschoolmathfi09/

August 30–31: Microsoft Research, Redmond, WA. Oded Schramm Memorial Conference in Probability and Geometry **w** http://research.microsoft.com/~schramm/workshop/

August 31: Lahore Chamber of Commerce & Industries, Pakistan.

One-day international seminar on Twenty Years of ISOSS &

Beyond and National Policy on Statistics. e secretary@isoss.com.pk

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

September 2009

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

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

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

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

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

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

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International Calendar continued

October 2009

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

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

November 2009

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

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



Please send your meeting announcement to erg@imstat.org November 12–13: EPFL, Switzerland. Risk, Rare Events and Extremes Final Conference [Research program on Risk, Rare Events and Extremes]. w http://extremes.epfl.ch/

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

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

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

December 2009

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

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

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

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

January 2010

Meetings and International Conference on Statistics, Probability and Related Areas. S. Rao Jammalamadaka e rao@pstat.ucsb.edu, N. Balakrishnan e bala@mcmaster.ca, K. Srinivasa Rao e ksraoau@yahoo.co.in w www.stat.osu.edu/~hnn/llSA.html

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

February 2010

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

March 2010

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

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

April 2010

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

May 2010

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

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

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

June 2010

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

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

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

July 2010

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

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

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International Calendar continued

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

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

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

August 2010

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

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

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

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

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

September 2010

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

December 2010

China. 2010 ICSA International Conference. w tba

March 2011

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

July 2011

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

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

July 2012

July 29 - August 2: San Diego, California. JSM2012.

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

August 2013

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

August 2014

August 3-7: Boston, MA. JSM2014.

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

Membership and Subscription Information

Journals:

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

Individual and Organizational Memberships:

Each individual member receives the *IMS Bulletin* and may elect to receive one or more of the five scientific journals. Members pay annual dues of \$95. An additional amount is added to the dues of members depending on the scientific journal selected as follows: *The Annals of Applied Probability* (\$45), *The Annals of Applied Statistics* (\$35), *The Annals of Probability* (\$45), *The Annals of Statistics* (\$45), and *Statistical Science* (\$30). Of the total dues paid, \$28 is allocated to the *Bulletin* and the remaining amount is allocated among the scientific journals received. **Reduced membership** dues are available to full-time students, new graduates, permanent residents of countries designated by the IMS Council, and retired members. **Organizational memberships** are available to departments, corporations, government agencies and other similar research institutions at \$150 per year. Organizational members may subscribe to the journals at an additional cost.

Individual and General Subscriptions:

Subscriptions are available on a calendar-year basis. Individual subscriptions are for the personal use of the subscriber and must be in the name of, paid directly by, and mailed to an individual. Individual subscriptions for 2009 are available to *The Annals of Applied Probability* (\$150), *The Annals of Applied Statistics* (\$140), *The Annals of Probability* (\$150), *The Annals of Statistics* (\$150), *Statistical Science* (\$135), and *IMS Bulletin* (\$90). General subscriptions are for libraries, institutions, and any multiple-readership use. General subscriptions for 2009 are available to *The Annals of Applied Probability* (\$302), *The Annals of Applied Statistics* (\$214), *The Annals of Probability* (\$325), *The Annals of Statistics* (\$325), *Statistical Science* (\$180), and *IMS Bulletin* (\$90). Airmail rates for delivery outside North America are \$95 per title.

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

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Information for Advertisers

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Advertising job vacancies

A single 30-day online job posting costs \$175.00. We will also include the basic information about your job ad (position title, location, company name, job function and a link to the full ad) in the *IMS Bulletin* at no extra charge. See http://jobs.imstat.org

Advertising meetings, workshops and conferences

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

Rates and requirements for display advertising

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

	size: width x height	rate
1/3 page	4.93" X 4" (125.2 X 102 mm)	\$195
1/2 page	7.5" x 4" (190 x 102 mm)	\$245
2/3 page	4.93" x 8" (125.2 x 203 mm)	\$295
Full page	7.5" x 9.4" (190 mm x 239 mm)	\$345

Deadlines and Mail Dates for IMS Bulletin

Issue		Deadline for advertisement	Usually online by	Scheduled mail date	
1:	January/February	December 1	December 15	January 1	
2:	March	February 1	February 15	March 1	
3:	April	March 1	March 15	April 1	
4:	May	April 1	April 15	Мау 1	
5:	June	May 1	May 15	June 1	
6:	July	June 1	June 15	July 1	
7:	August/September	July 1	July 15	August 1	
8:	October	September 1	September 15	October 1	
9:	November	October 1	October 15	November 1	
10: December		November 1	November 15	December 1	

next issue is

August/ September 2009

IMS election results, news of members, announcements and information about meetings and jobs around the world.

Send in your ideas, articles, letters...

DEADLINES submissions July 1, then September 1

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

Journal alerts

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



Kakuro corner

How to play: Place single digits (1 to 9 inclusive) in the white boxes in the grid. The row or column of digits which make up a sequence must add up to the black box to the left or at the top. Each digit in a sequence must be different. In the example below, the first row sequence is to make 8:



No repeated digits in a sequence.



This row sequence doesn't add up to 8.



...this one does! (So does 1,2,5 and 3,1,4 and so on)

Solution 35 from last issue							
	16	45		8	7	45	24
\3	2	1	14	1	3	2	7
37	1	3	5	7	4	8	9
22	6	7	9	20	114	6	8
/13	4	9	56	3	2	1	34
42	3	6	4	8	9	5	7
	9 15	5	1	9	417	9	8
7	3	4	16	128	1	3	4
\Z8	1	2	7	5	3	4	6
\ 29	5	8	9	7	/16	7	9

Puzzle 36						3 0	3 1
	5	45\		29\	4	45	
6			17				15
31							
	\23 3				34\		
21							9
12				7 10			
	\38 12\						
13			16 16				7
\32							
	21				10		

Puzzle by www.yoogi.com