

April 2009

CONTENTS

- 1 **Tweedie Award:** Jiashun Jin
- 2 **Members' News:** Keith Worsley; Mathias Drton; Patrik Guggenberger
- 3 **The Statistics Debutante's Dilemma**
- 4 **Obituary:** Kiyosi Itô
- 6 **Obituary:** Wilfrid J. Dixon
- 7 **Rick's Ramblings:** Fun with 528,491,311
- 8 **Rediscovered proof:** Wolfgang Döblin
- 10 **Meeting:** Recent Developments in Statistical Sciences
- 11 **Discoveries; Judging impact**
- 12 **Terence's Stuff:** Grants and Socrates
- 13 **IMS meetings**
- 19 **Other meetings**
- 25 **Employment Opportunities**
- 26 **International Calendar of Statistical Events**
- 31 **Information for Advertisers**
- 32 **Kakuro corner**

Tweedie Award to Jiashun Jin

The Institute of Mathematical Statistics has selected **Jiashun Jin** as the winner of this year's Tweedie New Researcher Award. Dr Jin received his PhD in 2003 from Stanford University, and is currently an Associate Professor at Carnegie Mellon University.

The IMS Travel Awards Committee selected Jiashun for "*fundamental theoretical advances in understanding 'Needle-in-a-Haystack' problems, where among many z-scores or p-values, only a few can be expected to be truly significant. He developed practical false discovery rate controlling procedures and higher criticism procedures for use in such problems. He has made applications to cosmological data analysis, genomics and network traffic analysis.*"



Jiashun Jin

The IMS Tweedie New Researcher Award will fund Jiashun's travel to present the Tweedie New Researcher Invited Lecture at the IMS New Researchers' Conference, held this year in Baltimore, Maryland, from July 28 to 31, 2009.

Jiashun said, "I felt honored and humbled at the same time when I heard that I was selected for the Tweedie New Researcher Award. I am also very glad that the Tweedie Award Committee invited me to speak at the New Researcher Conference. This is a great opportunity for me to learn from the new researchers, and to make new friends."

He is planning to speak on *Higher Criticism thresholding: optimal feature selection when useful features are rare and weak*. He elaborated: "Motivated by many modern applications—genomics and proteomics are examples—we consider a two-class linear classification in high-dimensional, low-sample size setting. We consider the case where among a large number of features, only a small fraction of them is useful, and each of these unknown features contributes weakly to the classification decision. Surprisingly, the optimal feature selection rule is intimately connected to the recent statistic of Higher Criticism (HC). HC is a notion that goes back to John Tukey in 1976. In 2002, David Donoho and I developed a more formal notion of HC, and used it for a seemingly very different setting from that of feature selection: to detect a signal that may be both sparse and faint. HC ideas have applications to signal detection in non-independent, non-Gaussian settings (the work of Peter Hall and his collaborators), estimating the proportion of non-null effects (Nicolai Meinshausen and John Rice, Tony Cai, Mark Low, and me), developing goodness-of-fit measures (Jon Wellner and his collaborators), non-Gaussian signature detection in cosmology (Laura Cayon, Jean-Luc Starck, and their collaborators)."

The IMS Tweedie New Researcher Award is in honor of Richard Lewis Tweedie (1947–2001), who played a significant role in mentoring young colleagues at work and through professional society activities.

Contact information

IMS Bulletin Editor: Xuming He
Assistant Editor: Tati Howell
Contributing Editors: Peter Bickel, Louis Chen,
Rick Durrett, Nicole Lazar, Terry Speed

To contact the *IMS Bulletin*:

✉ IMS Bulletin
20 Shadwell, Uley, Dursley
GL11 5BW
UK

e bulletin@imstat.org

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

✉ IMS Dues and Subscriptions Office
9650 Rockville Pike, Suite L2407A
Bethesda
MD 20814-3998
USA

t 301.634.7029

f 301.634.7099

e staff@imstat.org

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

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

t 216.295.2340

f 216.295.5661

e erg@imstat.org

Executive Committee

President: Nanny Wermuth
president@imstat.org
President-Elect: J. Michael Steele
president-elect@imstat.org
Past President: Jianqing Fan
president-past@imstat.org
Treasurer: Rong Chen
rongchen@stat.rutgers.edu
Program Secretary: Guenther Walther
walther@stat.stanford.edu
Executive Secretary: Marten Wegkamp
wegkamp@stat.fsu.edu

IMS members' news

Keith Worsley dies at 57

Keith Worsley passed away in Chicago on Friday 27 February, 2009, after a relatively brief battle with pancreatic cancer. Keith was Professor in the Department of Statistics at the University of Chicago, having moved there last fall, shortly before his cancer diagnosis. According to the University of Chicago website, http://news.uchicago.edu/news.php?asset_id=1564, Keith “innovatively applied statistics and mathematics to brain mapping and imaging neuroscience.” An obituary will follow in a forthcoming *Bulletin* issue.

Mathias Drton and Patrik Guggenberger receive Sloan Fellowship



above: Mathias Drton
below: Patrik Guggenberger



Two IMS members have been named as recipients of the prestigious 2009 Alfred P. Sloan Foundation Research Fellowships: **Mathias Drton**, associate professor in the statistics department at the University of Chicago, and **Patrik Guggenberger**, assistant professor in the Department of Economics at the University of California, Los Angeles. Mathias's research focuses on graphical models and algebraic statistics. He says, “Graphical models are multivariate statistical models in which observed variables are constrained to exhibit dependence patterns associated with a graph. Connections to algebraic geometry arise in particular since many graphical models have parameter spaces with polynomial structure.” Patrik says the main theme of his research is “inference in situations where the limit distribution of the test statistic is discontinuous in nuisance parameters or the parameter of interest.”

Sloan Research Fellows are selected for being outstanding early-career researchers who show exceptional promise. The Sloan

Foundation has been supporting such research and academic talent for over 50 years; Mathias and Patrik are among 118 faculty members, at 61 colleges in USA and Canada, selected this year.

Speak up!

Is there some news you'd like to share? Have you, or a colleague, received an award, prize or honor?

Tell us and we'll tell everyone else!

Email your news to the *IMS Bulletin*:
bulletin@imstat.org



The Statistics Debutante's Dilemma

Radu V. Craiu, University of Toronto, has made a resolution... My New Year Resolution is to make statistics more popular. I know it sounds more ambitious than swimming with the sharks or getting taller but I recognize and embrace a mighty challenge when I see one. Don't get me wrong, I am convinced that stats is *the* buzz word in certain circles, but I just think that those circles are few and far between. One must wonder why.

As a non-North-American citizen, I frequently encounter the probing eyes of vigilant customs officers, and more often than not I am asked about my profession and travel purposes. After I lay out the truth without any embellishment, we go through the mandatory, "Oh. That's really hard, you know", after which an eerie silence descends upon the proceedings and one can clearly see that nothing could make me *less* of a suspect than my profession. In the public eye, a more mysterious—yet boring—craft is hard to come by, so one hooked by it must thoroughly lack the required imagination for misdeeds. If I had, say, mentioned that I am a car repairman, or even a physicist, a more playful ("What's the best mini-van to buy?," or "How about those black holes?") or suspicious ("Can you build a bomb from a cupcake?") dialogue may have ensued. As we all struggle to recruit good students and pique the interest of the society at large for what we do (see Efron's 2004 article in *Amstat News*, 4, p2, to learn what statisticians do) we also must face the parameters of our struggle.

Oh, I know what you will say—such sweeping summary of our plight cannot come from a relatively green shoot, but must be the coronation of experience and internal growth coupled with a dash of celebrity and a squeeze of genius. I agree, and yet I cannot stop.

Maybe because I feel that, caught in our search for better models and niftier ways to fit and interpret them, we forgot to promote our findings to The Others. When was the last time you read about statistics in the news? Even in those (many) cases when extraordinary scientific finds rely heavily on the anonymous work of statisticians and on the power of our methods, the discipline is merely mentioned as a common noun, bringing to mind pie charts and horse betting, rather than its fundamental contributions. To add insult to injury, in those (few) cases where a statistical model *is* mentioned in the news, you will find it under pseudonyms such as "mathematical model", "computer model" or simply "algorithm" so that the statistics connection is lost to all but the frustrated few.

Why is that?

The battles for the hearts and minds of people are won and lost in high-school

Continued on **Page 5**

Are you seeing this expression too often when you talk about your work?



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: Gregory Lawler
<http://imstat.org/aop>

Annals of Applied Probability: Edward Waymire
<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/aihpb>

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. Szczołka,
 A. Weron & W.A. Woyczyński
<http://www.math.uni.wroc.pl/~pms>

Other IMS contacts

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

Managing Editor: Michael Phelan
phelanm@uci.edu

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

OBITUARY: Kiyosi Itô

1915–2008

KIYOSI ITÔ, a professor emeritus of Kyoto University and a member of The Japan Academy, died on November 10, 2008, in Kyoto, Japan, aged 93. He was an eminent Japanese mathematician, known worldwide as the founder of the modern theory of stochastic analysis, often called Itô's stochastic analysis or Itô's stochastic calculus.

Itô was born in 1915, in Mie Prefecture, Japan. He graduated from University of Tokyo in 1938 and decided to devote his future life to the study of the modern theory of probability and stochastic processes, the theory which had then just begun to be developed by such great pioneers as Kolmogorov, Lévy and Wiener, among others.

In 1942, he published two papers: "On stochastic processes (infinitely divisible laws of probability)" in *Japan Journ. Math.* XVIII and "Differential equations determining a Markov process" (in Japanese) in *Journ. Pan-Japan Math. Coll.* 1077, which are now appreciated as the origin of Itô's stochastic analysis. In the first work, he gave a rigorous proof of what is now called Lévy-Itô's theorem for the structure of sample functions of Lévy processes, through which we have a complete understanding of Lévy-Khinchin's formula for canonical forms of infinitely divisible distributions. In the second work, he developed a complete theory of stochastic differential equations, determining sample functions of diffusion processes associated with Kolmogorov's differential equations which describe their law. In this work, he introduced the important notion of stochastic integrals and the basic formula now known as Itô's formula or Itô's lemma, and thus founded a kind of Newton-Leibniz differential and integral calculus for a class of random functions (now called often Itô processes).

Unfortunately, this work was written in Japanese during the second world war, so it did not attract any attention in foreign countries. When the war ended, Itô sent a more expanded and refined English version to Joe Doob, asking him for its possible publication in United States, and Doob was kind enough to arrange its publication as Volume 4 (1951) in the *Memoirs* series of AMS with the title "On stochastic differential equations".

Itô visited the Institute for Advanced Study, Princeton University, from 1954 to 1956, where he started the study of one-dimensional diffusion processes jointly with Henry P. McKean. This joint work continued for nearly ten years and finally succeeded in describing completely the sample functions of one-dimensional diffusions of which an analytical theory was already established by W. Feller. This work was published in a book, *Diffusion Processes and their Sample Functions* by Springer in 1965, reissued in the Springer *Classics in Mathematics* series in 1996.

Meanwhile, Itô's stochastic analysis, founded in 1942, was being reorganized and expanded in the frame of Doob's theory of martingales by the works of P. A. Meyer in France and H. Kunita and S. Watanabe in Japan, among others; it has grown into a differential and integral calculus for sample functions of a class of stochastic processes called semi-martingales. At the same time, in the mid-sixties, Itô's theory of stochastic differential equations began to attract more attention; it was providing basic tools in stochastic theory of such fields as engineering, statistics and biology, as stochastic control, stochastic filtering, gene-frequencies in population genetics.

Also focusing worldwide attention on Itô's theory was the appearance of McKean's



Kiyosi Itô

book, *Stochastic Integrals* (Academic Press, 1969). By now Itô resumed the study of stochastic calculus and stochastic differential equations. In his paper in *Appl. Math. Optim.* 1 (1974), "Stochastic differentials", he related his stochastic integral to Stratonovich's one and developed a stochastic calculus in terms of stochastic differentials. In particular, he introduced an operation on stochastic differentials, often called Itô's circle operation, which provides us with an important basis in stochastic calculus for random motion on a differentiable manifold. Since then, many interesting and important applications of probabilistic methods based on this Itô calculus have been made in geometric problems on manifolds.

Perhaps the most celebrated application of Itô's calculus is to mathematical finance. Itô himself seemed to find this quite unexpected. Indeed, in his acceptance speech for the Gauss prize in 2006, he said, "Because my own research on stochastic analysis is in pure mathematics, the fact that my own work has been chosen for the Gauss prize for applications of mathematics is truly unexpected and deeply gratifying. I hope therefore to share this great honor and joy with my family, teachers, colleagues, and

The Statistics Debutante's Dilemma

Continued from Page 3

students in mathematics as well as all those who took my work on stochastic analysis and extended it to areas far beyond my imagination.”

So far, we have reviewed Itô's important contributions particularly in the area of stochastic analysis. We would add his important contributions in somewhat different areas: Itô's theory of excursions and excursion point processes; the Wiener-Itô theory of homogeneous chaos decomposition of square-integrable Wiener functionals (the theory of multiple Wiener integrals); the Itô-Nisio theorem on the almost-sure convergence of orthogonal expansions on an abstract Wiener space; Itô's theory of random current and random distributions; and many others.

For such significant contributions, Itô was awarded many prizes and honors: the Asahi Prize, Japan (1987), The Imperial Prize and Japan Academy Prize, Japan (1987), The Wolf Prize, Israel (1987), Kyoto Prize, Japan (1998), the first Gauss Prize of the International Mathematical Union (2006), and The Culture Prize, Japan (2008). He was elected an associate foreign member of the French Académie des Sciences; a foreign member of the US National Academy of Sciences; member of the Japan Academy. He also was awarded Docteur Honoris Causa, Université Pierre et Marie Curie (Paris 6); Honorary Doctor of Mathematics, ETH, Zürich; and Doctor Honoris Causa, The University of Warwick, UK.

He is survived by his three daughters: Keiko Kojima of Otsu, Japan; Kazuko Sorensen of London, UK; and Junko Itô of Santa Cruz, Calif., USA. His wife, Shizue, died in 2000.

*Shinzo Watanabe
Kyoto University, Japan*

and University. How well are we faring in either one?

I went to a couple of school and high school science fairs where statistics is used in order to get big prizes. But again, not surprisingly, it is used to support findings in more eye-catching experiments (dog training, levitation, chocolate consumption). In colleges and universities, statistics is merely a means to an end: students take stats courses the way I used to take penicillin, with a grimace.

A few years ago I applied for a considerable grant designed for young science researchers. The grant is awarded across disciplines, the board considering statisticians but also people who create artificial limbs or build robots that walk on Mars. So, inevitably, I did not get it. And frankly, how could I? One important component of the grant proposal was an initiative to promote the researcher's area in high schools across the province. I am still wondering how to beat the guy with the Mars robot using the EM algorithm...

It is true that Statistics is powerful and glamorous when it goes to the Great Ball arm in arm with its cousins, Medicine, Genetics, Astronomy, Economics—in fact, it has so many cousins I cannot enumerate them all. But alone, for many people, it loses much of its shine, like a magic-free Cinderella who is good at scrubbing and tidying up but not so adroit at drawing attention to herself. So is there any hope, besides the magic wand? I believe there is.

We probably could do a better job popularizing the grand successes of statistics. As I keep reading page-turners about prime numbers and the Poincaré conjecture (I am now perfectly aware of the difference between a donut and a tennis ball), I cannot stop thinking that there must be something *cool* about the last hundred years of statistics that can be put out there for all to see. Maybe we cannot win many battles in high school but we surely should be able to win in colleges and universities (and who wants to remember high school anyway?). Whether or not we like to admit it, only the most astute and interested minds will warm up to the intricacies of statistics in their more rarefied form. For others, we need to unwrap the goodies and present them on a silver platter. Courses such as Harvard's, with the catchy title *Real-Life Statistics: Your chance for Happiness (or Misery)*, which “demonstrate the use of statistics without students actually learning lots of formulas” (see Xiao-Li Meng's 2008 *Amstat News* article, 4, pp18–19) are excellent vehicles to capture the interests of our students. While computers cannot be used to prove theorems, they certainly can be used to awe. A bag of tricks like that of Gelman and Nolan (*Teaching Statistics: A Bag of Tricks*, OUP, 2002) can make the teaching experience a more diverse and interesting one. We all have our little secret devices we use in our classrooms—maybe an online repository of such gems would be useful.

My colleague Jeffrey Rosenthal recently published a book, *Struck by Lightning*, in which probability takes center stage. Among other things, we are gently guided through various instances where simple probabilistic calculations make events in our life easier to understand and deal with. Jeff's talent for writing notwithstanding, I am still pleasantly surprised and cheered by the warm reception the book has had from the general public. Maybe similar efforts, with statistics at the center of the plot, will also receive standing ovations.

One can only dream of a day when the red carpet of Science will be rolled out for Statistics and its humble servants. Until then, I will stick to my New Year Resolution, and I invite you to do the same.

OBITUARY: Wilfrid J. Dixon

1915–2008

WILFRID J. DIXON, a pioneer in statistics education and statistical software, died of heart disease on September 20, 2008, at his home. He was 92.

Dixon's ground-breaking introductory statistics textbook, his founding role in the Division of Biostatistics in UCLA's School of Public Health and the Department of Biomathematics in UCLA's School of Medicine, and his pioneering development of statistical software led to the awarding of the 1992 Samuel S. Wilks Award from the American Statistical Association.

Born on December 13, 1915, in Portland, Oregon, Dixon recognized early in his childhood that numbers fascinated him, and he realized a solid education would enable him to pursue his interests. Dixon earned his BA in mathematics from Oregon State College in 1938, his MA in mathematics from the University of Wisconsin in 1939, and his PhD in mathematical statistics, under Samuel S. Wilks, from Princeton in 1944. He was on the faculty at the University of Oklahoma (1942–1943), the University of Oregon (1946–1955), and UCLA (1955–Emeritus since 1986). During the second World War, he was an operations analyst at Princeton University and on Guam.

While at the University of Oregon in 1951, Dixon, together with Frank Massey, published a first-of-its-kind statistical textbook for non-mathematicians—its clear brevity and extensive tables made it a popular desk reference, as well—which went through four editions; the text was one of the most-cited works from 1961–1982.

At UCLA, Dixon initiated the Biostatistics Division in the School of Public Health and organized and chaired the Department of Biomathematics in the School of Medicine.

As a member of the US–USSR Joint Working Group on Computer Software (1974–1980), Dixon served as liaison to the Kolmogorov Laboratory at the University of Moscow.

Dixon made major contributions to nonparametric statistics, serial correlation, adaptive (up and down) experimental designs, robust statistics, and the analysis of incomplete data. He was a Fellow of the American Statistical Association, the Institute of Mathematical Statistics, the Royal Statistical Society, and the American Association for the Advancement of Science.

Many of his more than 120 publications resulted from long-term collaborations in pharmacology, physiology, surgery, neurology, cytology, and psychiatry. He was a major contributor to statistical consulting, pioneering the development of statistical software by obtaining NIH funding to create the Health Sciences Computing Facility in the UCLA School of Medicine and by producing general parameterized statistical software, first released in the 1960s as the Biomedical Computer Programs, and later evolving into BMDP Statistical Software. He organized the Statistical Computing sections of both the American Statistical Association and the International Statistical Institute.

Dixon had strong opinions about the importance of statistical consulting. In his 1993 interview with Nancy Flournoy, now chair of the Department of Statistics at the University of Missouri–Columbia, he elaborated on these opinions, saying that statistics “is a science in itself, not a branch of mathematics.” Statistical consulting “can be as imaginative and creative as any artistic endeavor.” Consulting statisticians should be rewarded for the “...demonstrated art



Wilfrid J. Dixon

of bringing deep insight and truly creative contributions to applied research projects.” He was opposed to having statistics divisions in mathematics departments and in having separate statistics departments; he thought it tended to pull statisticians away from being “thoroughly immersed in fields of application.”

Dixon and his wife, Glorya, shared a love for traveling the world, enjoying good friends, playing duplicate bridge, and dancing the night away. Known for his dry, ironic wit, he was also a master of puns.

Preceding him in death was Eva M. Dixon, his first wife and daughter of numerical analyst William Edmund Milne. In addition to Glorya, his wife of 25 years, he is survived by his daughters, Janet D. Elashoff and Kathleen Dixon. Dixon and Glorya shared 14 grandchildren (two are biostatisticians) and five great-grandchildren.

This obituary first appeared in the December issue of Amstat News, and is reprinted by permission of Megan Murphy

Rick's Ramblings: *Fun with 528,491,311*

There is no end of bad news these days. Year-end statements for my investments have rolled in showing losses of 25 to 40%. The Cornell administration has recently increased its target for budget cuts from 10% over the next two years to 18% over the next three. Surrounded by doom and gloom, it is natural to seek escape. No, I am not talking about turning to alcohol or drugs, but G.H. Hardy's second favorite pursuit: number theory.

This semester one of the students in my class invited me to talk to the Math Club. I didn't think that these twenty-year-old math geeks would be interested the population genetics questions that arise in cancer modeling, so I decided to talk about the Erdős-Kac central limit theorem for the number of prime divisors. As a teaser, the poster advertising the talk asked, "How many prime divisors do we expect 528,491,311 to have?" This number is the integer part of $\exp(\exp(3))$, so as you will see in a moment, the expected number of prime factors is $\log(\log(n)) = 3$. Quite remarkably, our not-so-randomly-chosen number factors as $73 \cdot 691 \cdot 10477$.

G.H. Hardy (1877–1947)



Where does $\log(\log n)$ come from? Well, by the prime number theorem, the number of primes up to n is asymptotically $n/(\log n)$, or m has a probability $1/(\log m)$ to be prime. For the concrete example above, this probability is $\exp(-3)$ or about 0.05. Each prime p will divide n with probability $1/p$, so the expected number of prime factors can be found by summing $1/(m \log m)$ from 2 to n , or, what is almost the same, integrating $1/(x \log x)$ from e to n , which gives $\log(\log n)$. A proper analysis of the sum of $1/p$ can be found in Chapter XXII of Hardy and Wright's classic book.

In order to compute the variance of the number of prime factors, we need to sum $(1/p)(1-1/p)$ over the primes, but the second factor tends to 1, so we get $\log(\log n)$ for this as well. Erdős and Kac showed that if we pick an integer M at random from 1 up to n then the number of prime factors of M minus the mean, and then divided by the standard deviation, converges to the standard normal. The proof is done by the method of moments because the events that p divides M are not independent unless all of the primes involved divide n . The details can be found on pages 119–124 of my favorite graduate probability book.

As the author of that book observed on page 120, "Since $\exp(\exp(4)) = 5.15 \cdot 10^{23}$, the Erdős-Kac result does not apply to numbers we encounter in everyday life." More to the point, we can't expect a good approximation by the normal when we have an integer valued random variable with mean 4 and standard deviation 2. If we wanted a result that applied to a randomly chosen social security number, it would be natural to think of using the Poisson with mean $\log(\log n)$. The approximate probability of no prime factors—i.e., the number is prime—would then be $1/\log n$, in agreement with the prime number theorem.

Join Contributing Editor Rick Durrett for a ramble, this time through the intriguing world of number theory



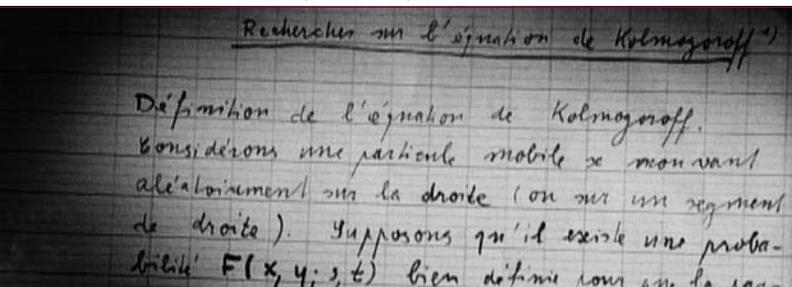
Unfortunately I don't think that the Poisson gives a good approximation. The expected number of prime factors from $\{2, 3, 5\}$ is already 1.0333, and the sum of three independent Bernoullis with $p = 1/2, 1/3$, and $1/5$ does not look much like the Poisson with mean 1.033, since the probability of 0 is $8/30 = 0.2666$ and the probability of 1 is $14/30 = 0.4666$, while the Poisson probabilities are 0.3559 and 0.3677. Does the fit to the Poisson get better as the number of Bernoullis increases? Certainly in the limit the bad terms at the beginning are overwhelmed by the bulk of the sum, but remember, my question is, does the approximation work well when $\log(\log n) = 3$?

As a research problem, this is probably a lousy one, which is why it is here rather than in one of the other IMS publications. What was fun for me in giving the talk was a chance to look at an old problem from a new point of view. This time it doesn't seem to have led to anything new and interesting, but it is my philosophy that the real world, while often depressing, is a good source of problems that are more interesting than ones found by starting with the answer and then figuring out the question.

On the other hand, in the midst of economic chaos, ivory tower probabilists can, like Hardy, can be happy that their work has never been useful for anything practical... like selling bundles of sub-prime mortgages.

The Remarkable Case of the Rediscovered Proof

At the IMS co-sponsored 33rd Conference on Stochastic Processes and their Applications, to be held in Berlin from 27–31 July, 2009, there will be a special event to mark the extraordinary story of Wolfgang Döblin, aka Vincent Doeblin, a mathematician ahead of his time whose remarkable work was rediscovered after 60 years. Peter Imkeller and Sylvie Roelly report.



The sealed envelope and its contents

Considérons une particule mobile se mouvant aléatoirement sur la droite [We consider a moving particle, traveling randomly on the line] These are the first words of one of the most famous mathematical manuscripts of the last century. It was written by the soldier Wolfgang Döblin, son of the German writer Alfred Döblin, and is entitled *Sur l'équation de Kolmogoroff*. He wrote it in the winter of 1939–40 at the front in Eastern France, aged 24.

The manuscript's publication is linked to an amazing story. Wolfgang Döblin, based in the Ardennes mountains with his French military unit, worked on this manuscript during the "phony war" after the German invasion of Poland. He decided to send it as a sealed envelope (*pli cacheté*) to the archive of the Académie des Sciences in Paris. It was not the first one he deposited in this way. Obviously he wanted to continue working on it and to publish it after returning from a war he expected to be short. Whether he was aware of the significance of his findings, or only jealously guarding them from possible competitors, has to be left to speculation. Döblin never returned. His unit in disarray and the Nazis upon them, he took his life on June 21, 1940. His manuscript was shut away in the archive for 60 years, and made accessible only in 2000 after his brother Stephan had given his agreement.

How far Döblin was ahead of his time became known after his notes were edited by Bernard Bru and Marc Yor (*Comptes Rendus de l'Académie des Sciences*, December 2000). The program of the manuscript, already contained in its first sentence, was to lay the foundations of an area we now know as stochastic analysis. Döblin discovered a version of its fundamental theorem known today as Itô's formula, and proved by Kiyosi Itô about 5 years later. This formula can be seen as the central result of stochastic analysis, generalizing the fundamental theorem of classical calculus due to

Leibniz-Newton to the realm of trajectories of stochastic processes. Without it there would, for instance, be no elegant martingale approach leading to the stochastic solution of the Merton-Scholes problem of mathematical finance. The *pli cacheté* constitutes a milestone in stochastic analysis, that strangely remained insignificant for the development of the area, since it was hidden for 60 years.

The publication of the story

This amazing story has moved and touched not only mathematicians but also the general public. First in France, and later in Germany, it was picked up by journalists mostly in editorial departments involved with science, in the press, and in broadcasting media. Jürgen Ellinghaus' and Hubert Ferry's film *Der versiegelte Brief des Soldaten Döblin* is a joint production of ARTE and RBB. In another documentary, Agnes Handwerk and Harrie Willems illustrate very well the extraordinary conditions under which Wolfgang Döblin created his ingenious mathematical work. Indeed, their film exceeds this brief: background topics include the relationship between father and son; literature and mathematics; racist politics and science, war and death. We were fortunate enough to meet the filmmakers, and inquire of the origins of their documentary.

In 2000 the two journalists learned some facts from an article in the local press: the French probabilists Bernard Bru and Marc Yor recently opened a letter by Wolfgang Döblin entitled *Sur l'équation de Kolmogoroff* that had been sealed for 60 years; they had decoded the manuscript to find out that the author in 1939 had initiated a trailblazing theory of differential and integral calculus for random processes, which had been developed independently years later by the Japanese mathematician Kiyosi Itô—a sensation for the mathematical world!

The archives in the Académie des Sciences in Paris, where Döblin's work lay hidden



The genesis of the film

Spontaneously caught by this extraordinary story, the two journalists started to collect information. The first decisive meeting with Bernard Bru, professor at Université Paris V, took place. He reported how, in 1991 at the Académie des Sciences in Paris, he came to know of the existence of a sealed envelope, while preparing for a meeting in the US in memory of Wolfgang Döblin, organized by the mathematicians Kai Lai Chung and Joe Doob. He spoke of how difficult the road was that ended with the opening of the *pli cacheté*. Bernard Bru encouraged Agnes Handwerk and Harrie Willems to work on a documentary about the story, and generously provided a lot of material. At first they produced a radio presentation, followed by a video film. A DVD, *Wolfgang Doeblin. A mathematician rediscovered* (ASIN: 3540719601) is available, edited by Springer. Since neither a German nor a French institution had agreed to finance the project wholly or partially, the journalists were bound to proceed by simple means.

Concept of the documentary

They succeeded in interviewing several contemporary witnesses and Wolfgang's brothers, thereby the viewer makes the acquaintance of Claude and Stephan Doblin [after their naturalization in France, Wolfgang, Klaus and Stefan Döblin changed their names to Vincent Doeblin, Claude and Stephan Doblin], and of Mme Piron-Lévy, daughter of the mathematician Paul Lévy. All these are moving encounters, especially because these older persons are able to recollect very precisely events that took place before World War II. Wolfgang Döblin is presented not only as a scientist but also as a human being. The social and intellectual environments in which he lived in Berlin and Paris were very lively, and his commitment unequivocal. In the course of the film the viewer comes to understand how his mathematical activity in the war helped him to survive to a certain point. As a simple telegrapher at the French front in 1939–40 he felt extremely isolated. Despite the hostility of the environment he never became discouraged, and he did not stop working on his fascinating mathematical problems. In this way he was able to escape cruel reality, upheld by the beauty of the abstract equation of Kolmogorov.

Implementation of the film

During the production of the film, Agnes Handwerk and Harrie Willems were helped

by the support and cooperation of many individuals: Claude and Stephan Doblin gave extensive interviews; the inhabitants of Housseras, the village in the Vosges mountains where Wolfgang's life ended in June 1940, were open and showed willingness to communicate. The mayor was happy about the project, proud to have members of the famous Döblin family find their rest in his cemetery, and to find the name of Vincent Doeblin engraved on his village's monument for soldiers killed in action. One could almost have forgotten that the Döblins were Germans, and that formerly the family had to accept a quite different public response...

The difficult post-war period and its consequences

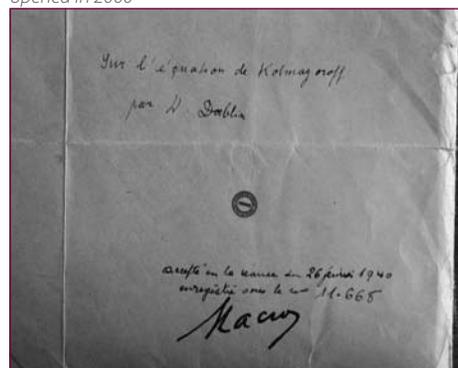
When the German-Jewish Döblins were hurriedly forced to emigrate in 1933 from Berlin to Paris, they found it hard to settle. This applied especially to Alfred, who was barely fluent in French. At least they received support from influential people. In Paris at the Sorbonne, Wolfgang met a big group of mathematicians—Fréchet, Lévy, Darmois, Hadamard, Loève—who recognized his exceptional talent. He was respected and accepted. (He retained a strong accent in spoken French. In the French army he explained it to his companions by claiming he was originally from Alsace!)

After the war, however, French society was very distrustful of Germans, even of emigrants who had suffered directly from the Nazis, such as the Döblins. Wolfgang's brothers had to experience this, as well as his mother Erna Döblin who annually visited the cemetery of Housseras, and was treated with hostility.

And the mathematical legacy of Wolfgang? This negative post-war atmosphere towards Germans contributed to the oblivion of the *pli cacheté*.

The sealed envelope of Wolfgang Döblin with its revolutionary mathematical contents took 60 years to be rediscovered, and almost another decade to be made public. The production of the film occupied further years. The fact that Döblin's work is available to the French and German public and arouses so much interest is an encouraging sign that witnesses the reconciliation of France and Germany. Wolfgang Döblin loved both countries, and added to their mathematical cultures in his own way.

The sealed envelope, or *pli cacheté*, sent in 1940 but only opened in 2000



With grateful thanks to Agnes Handwerk for her kind permission to use stills from her film as photographs in this article.

Meeting: Recent Developments in Statistical Sciences

Shahjahan Khan chaired the scientific committee for this meeting, and reports: The North South University (NSU), Bangladesh, and Carleton University, Canada, jointly organized an international conference on ‘Recent Development in Statistical Sciences’ at the Bangladesh–China Friendship Conference Centre, Dhaka, Bangladesh, from 26–27 December 2008. The conference honoured A K Md Ehsanes Saleh, Distinguished Research Professor & Professor Emeritus, Carleton University, for his contributions in the development of statistical sciences through his pioneering research, outstanding supervision of PhD students and postdoctoral fellows, and exceptional professional services in organizing international symposia and editing special volumes, books and journals, over the last four decades. Professor Saleh is a Fellow of the ASA, IMS, RSS and Bangladesh Academy of Science; an elected member of ISI; and an honorary member of the Statistical Society of Canada.

The Governor of Bangladesh Bank (Central bank), Dr Salehuddin Ahmed (chief guest); President of Bangladesh Academy of Science, Professor M Shamsheer Ali (special guest) and Chair of Board of Governors of NSU, Mr Abdul Awal, spoke in the inaugural session and thanked Professor Saleh for participating in the conference. The Chair of the Steering Committee and Vice Chancellor of NSU, Professor Hafiz G A Siddiqi; Chair, International Scientific Committee, Dr Shahjahan Khan from the University of Southern Queensland, Australia; and Chair, Executive Committee, Dr Abdul Hannan Chowdhury of NSU, welcomed the international and local participants of the conference. Before Professor Saleh welcomed all the participants, a video about his career was shown to the audience. At the concluding part of the inaugural session, Dr Salehuddin Ahmed presented a crest of honor to Professor Saleh, while his wife Shahidara Saleh and granddaughter Sarah Alam watched it with pride from the audience.

The conference presentations covered many areas of current statistical research and applications, such as statistical inference, distribution theory, probability models, stochastic process, survival analysis, biostatistics, bioinformatics, epidemiology, reliability theory, quality control, sampling methods, statistical computing, Bayesian analysis, time series, econometrics, demography, robust methods, Monte-Carlo methods, statistical education, financial mathematics, forecasting, actuarial science, environmental statistics, economic statistics, official statistics, multivariate analysis, operations research, and spatial analysis.

Eighty-five papers were accepted for presentation in the conference. About

200 delegates, from 15 different countries including Australia, Bangladesh, Canada, Indonesia, Malaysia, Iran, Kuwait, Pakistan, Libya, Singapore, UK, and USA, participated in the conference. Most of the contributed papers were presented by young academics and researchers from various universities in Bangladesh. The proceedings of the conference have been published. Some selected papers presented in the conference will be considered for publication in the *Journal of Applied Probability and Statistics* after peer-review.

The event received significant attention from the local print and electronic media in spite of the national election on 29 December, 2008. A full-page coverage of the conference was published in a national daily, the *News Today* on 26 December, highlighting the importance of the event and its scientific and national benefits. The wide-ranging role and applications of statistics in many different aspects of life were focused in a popular article on “Statistics: From Data to Decision and Development” published in the *News Today* as well as in the conference booklet. Several national dailies also published pre- and post-event news on the conference. Some TV channels also covered the conference.

The closing session of the conference was held in the Sarina Hotel with a Bangladesh-style dinner for the participants and guests. The chief guest of the session, Professor Nazrul Islam, Chairman of University Grants Commission, provided some statistics on the current state of the higher education sector in Bangladesh. He also shared his memories of Professor Saleh while both were PhD students at the University of Western Ontario, Canada. Professor Munir Ahmed, founding President of ISOSS, spoke in the session on behalf of the international participants.

The conference paid deepest respect to the late National Professor Qazi Motahar Hosain and Shaheed Professor Moniruzzaman for introducing the discipline of statistics in the then East Pakistan (now Bangladesh) in the early fifties. Other pioneering Bangladeshi statisticians who participated and were recognized in the conference are M. Obaidullah, M.G. Mustafa, Anwar H. Talukder, Kazi S. Ahmed, and Sultan Ahmed.



Some participants of the conference (from left): A K Md Ehsanes Saleh (Canada), M Obaidullah (Bangladesh), Shahjahan Khan (Australia), Munir Ahmad (Pakistan), Abdunanabi Ali (Libya), and Emad-Eldin Aly (Kuwait).

Discoveries: You aren't what your mother eats, after all

Stanley Young, the Assistant Director of the National Institute of Statistical Sciences, has been in the news with a paper that refutes the notion, claimed in an earlier paper, that eating certain foods for breakfast will result in more male babies.

Researchers S. Stanley Young, PhD, Assistant Director of the National Institute of Statistical Sciences, Heejung Bang, PhD, of Cornell University and Kutluk Oktay, MD, FACOG, Professor of Obstetrics & Gynecology and Director, Division of Reproductive Medicine & Infertility Department of Obstetrics & Gynecology from New York Medical College, wrote a paper, "Cereal-Induced Gender Selection? Most Likely a Multiple Testing False Positive," which has been published in the January 14, 2009 online issue of the *Proceedings of the Royal Society B*. The paper questions the claims

made by Mathews, Johnson and Neil (2008) in their article "You are What your Mother Eats" that was published in the April 22, 2008 *Proceedings of the Royal Society B*, and generated over 50,000 Google hits due to media interest.

Young, Bang & Oktay note that the original research by Mathews, Johnson & Neil implied that children of women who eat breakfast cereal are more likely to be boys than girls. Young, Bang & Oktay assert that the result of the original study is easily explained as chance. Young, Bang & Oktay examined the data sets from the original study and noted that 132 food items were tested for two time periods, totaling 264 statistical tests. With this many tests, it is quite likely that some apparent statistical significance will occur simply by chance.

At the standard significance level of 5% (that is, there is 5% chance that the data will show an effect even when there is none), the 264 tests will yield approximately 13 false positives unless the analysis is adjusted to account for multiple testing. Young, Bang & Oktay argue that this is precisely what happened.

"This paper comes across as well-intended, but it is hard to believe that women can increase the likelihood of having a baby boy instead of a baby girl by eating more bananas, cereal or salt. Nominal statistical significance, unadjusted for multiple testing, is often used to lend plausibility to a research finding; with an arguably implausible result, it is essential that multiple testing be taken into account with transparent methods for claims to have any level of credibility," note Young, Bang & Oktay.



Photo: United States Department of Agriculture/Scott Bauer

Judging scientific impact: a complex beast

A new paper posted in the arXiv makes a comparison of a variety of new scientific impact measures. The authors of *A principal component analysis of 39 scientific impact measures*, Johan Bollen, Herbert Van de Sompel, Aric Hagberg, Ryan Chute, find that "the notion of scientific impact is a multi-dimensional construct that can not be adequately measured by any single indicator". Furthermore, the commonly-used citation *Impact Factor* "is not positioned at the core of this construct, but at its periphery, and should thus be used with caution".

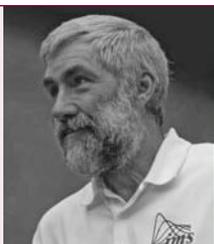
In a blog post at <http://scholarlykitchen.sspnet.org/2009/02/17/scientific-impact-measures-compared/>, Philip Davis comments on the authors' use of the term "consensus measures", using the analogy of blind men touching an elephant, "each reporting a different experience of what 'elephant'

means. Some of these blind men are in close agreement with each other, say a group of men touching the trunk and another group touching a leg. One single man may be touching the elephant's tail. Picking the middle point—the belly—as a consensus among all of these points does not really represent a 'consensus'. It represents a distinct body part. While this manuscript represents phenomenal empirical work, 'scientific impact' on philosophical grounds will always remain a complex construct; and because of its complexity, it will resist a single measure. We may all agree for practical purposes that it be redefined with a new counting tool. But that new tool is simply a different view of an enormous and complex beast."

The original paper is at <http://arxiv.org/abs/0902.2183>

Terence's Stuff: *Grants and Socrates*

Terry Speed believes that a little Socratic self-examination goes a long way, especially when it comes to writing grant proposals.



I am taking a short break from participating in the production of what seems like a never-ending series of grant applications. The only thing that's worse than helping write them is the thought that too many might be successful. But that's in the future; I'm complaining about the present, although I know that I really have very little to complain about. After all, I already have my salary. By contrast, the future of the people I'm working with at the moment depends on the outcome of these applications. So what's my beef? Who could object to being asked to summarize the research he has done recently, and say what he would like to do next? To explain why it is important, and who benefits? To describe how it will be done, step by step. To provide milestones. To itemize the deliverables. To demonstrate that everything will be done ethically, that there are no conflicts of interest. To document reasons why he is a good, perhaps the best, person to do this research? All of this seems perfectly reasonable to the people with their hands on the public purse strings, and yet...

When I began my career, grants were for people who needed money to do their research—to buy equipment or reagents for experiments, or to carry out specialized studies. Statisticians needed very little—perhaps some money for computer time—and off they would go to prove their theorems, develop their methodology, or analyze their data. My first US job gave me a nine-month salary, and I was encouraged to apply for grants to cover the remaining

three months. I remember wondering for a microsecond what was so bad about living for twelve months on my already quite reasonable nine-month salary. However, it was quickly explained to me that I needed grants to pay the graduate students who might work with me, and that bringing in grants was viewed by the university as a highly desirable activity, one analogous to publishing; it was expected. And so I wrote my first grant. To say I have never looked back would be wrong. I look back all the time, wishing there was a way to support grad students, and to survive, even prosper, without having to write grants. Yet I do it.

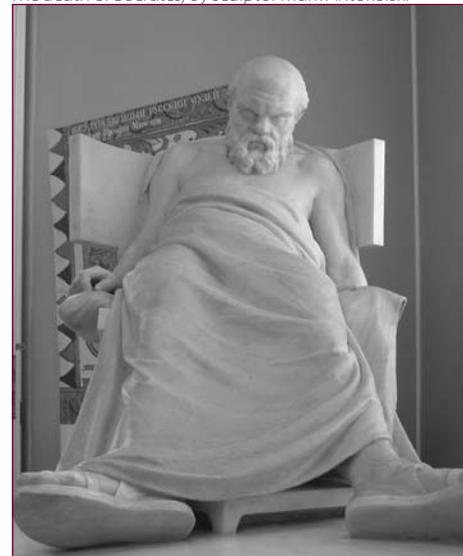
Plato tells us that Socrates said 'Ο δ' ἀνεξέταστος βίος οὐ βιωτὸς ἀνθρώπων. I can't help thinking of this when I write grants. Where have I come from? Where am I going? Why should I be supported to fulfil my research plans? How do they fit into the big picture? What are the strengths and weaknesses of my approach? How do I intend to overcome the obstacles? What are my back-up plans? What are the consequences of my research not being carried out? It goes without saying that writing a grant requires that we read the literature more carefully, and relate our work to others' more fully, than we might otherwise. After all, we are writing about what we would like to do, not what we have done, and the proposal will be read by our peers. A touch of modesty, even humility, might be in order.

I know I am idealizing. I know that many begin their grants with stock phrases from their field, repeating high-minded boilerplate that is used to justify their research. As I am working more and more in the field of cancer, I find myself doing the same thing. I know that others write their grants about research that is well under way, if not largely completed, secure in the knowledge that they will succeed. I

know that grant-writing advice abounds, that workshops exist to assist the would-be grant-writer, indeed that there is a noun, *grantsmanship*. Perhaps most people take a hard-nosed view of the activity, but I see it as a unique opportunity to conduct a public self-examination. There are few other times when we are asked to explain our professional selves, to state—and answer—the question, “Why?” The personal statements of applicants for grad school come closest to what I'm talking about, and a good autobiography would contain much of it. Sometimes the discussion at a job interview might go in this direction, but rarely as deeply as one might expect in a thorough grant application.

I like to think I'm a very long way from the politicians and others who focus on particular government-funded research grants, and hold them up to public ridicule. (Health research on fruit flies or roundworms?). But it does seem to me reasonable to ask researchers to explain themselves, and we do it all too rarely. I find it odd that it is mainly when I'm writing a research grant that I think about these matters. What would Socrates say?

The death of Socrates, by sculptor Mark Antokolski



IMS meetings around the world

IMS sponsored meeting

JSM2009

August 1–6, 2009

Washington DC

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

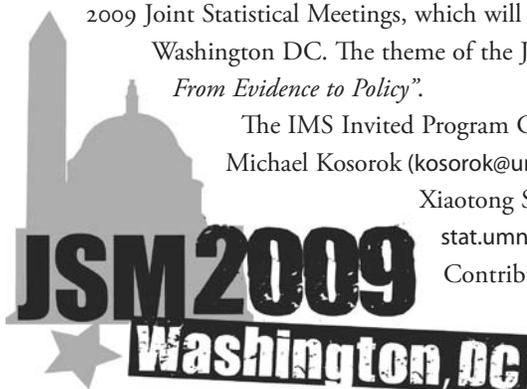
The next IMS Annual Meeting will take place as part of the 2009 Joint Statistical Meetings, which will be held in Washington DC. The theme of the JSM is “Statistics: From Evidence to Policy”.

The IMS Invited Program Chairs are Michael Kosorok (kosorok@unc.edu) and

Xiaotong Shen (xshen@stat.umn.edu). The IMS

Contributed Program

Chair is Ji Zhu (jizhu@umich.edu).



The Walter E. Washington Convention Center.

Important dates for JSM2009

March 30: preliminary PDF program

May 1: JSM registration and housing opens

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

IMS co-sponsored meeting

Frontier of Statistical Decision Making and Bayesian Analysis: in honor of James O. Berger

NEW

March 17–20, 2010

University of Texas at San Antonio, Texas, USA

IMS Rep on Program Committees: Dipak K. Dey

<http://bergerconference2010.utsa.edu/>

Plenary session speakers: **Donald A. Berry**, The University of Texas MD Anderson Cancer Center; **Lawrence D. Brown**, University of Pennsylvania; **Persi Diaconis**, Stanford University; **Stephen Fienberg**, Carnegie Mellon University; **Alan E. Gelfand**, Duke University.

IMS co-sponsored meeting

2009 Spring Research Conference on Statistics in Industry and Technology

May 27–29, 2009

Vancouver, Canada

<http://www.stat.sfu.ca/~boxint/src2009/>

Please email questions to Boxin Tang boxint@stat.sfu.ca.

The goal of the conference is to promote cross-disciplinary research in statistical methods in engineering, science and technology. This covers a wide range of application areas including environment, information and manufacturing sciences. The conference will provide a forum where participants can describe current research, identify important problems and areas of application, and formulate future research directions.

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

Johns Hopkins University, Baltimore, MD

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

Tracy L Bergemann [e berge319@umn.edu](mailto:berge319@umn.edu)

The application deadline has passed.

The New Researchers' Committee of the IMS is organizing a meeting of recent PhD recipients in statistics and probability, to promote interaction among new researchers primarily by introducing them to each other's research in an informal setting. The meeting is to be held prior to the 2009 JSM (see above). All participants give a short, expository talk or contribute a poster on their research.

IMS co-sponsored meeting

The 75th Anniversary of the Statistical Laboratory Conference

June 3–5, 2009

Iowa State University, Ames

IMS Rep to Program Committee:

Song X. Chen

<http://www.stat.iastate.edu/ISUStatistics75thAnniversary/>

*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

2011

IMS Annual Meeting @

JSM: Miami Beach, FL, July 30–August 4, 2011

2012

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

IMS Annual Meeting

@ World Congress: İstanbul, Turkey, Date TBA

2013

IMS Annual Meeting

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

More IMS meetings around the world

IMS co-sponsored meeting

Fifth Cornell Probability Summer School

July 6–17, 2009

Cornell University, Ithaca NY

[w http://www.math.cornell.edu/~durrett/CPSS2009/](http://www.math.cornell.edu/~durrett/CPSS2009/)

The Fifth Cornell Probability Summer School will feature six lecture series by **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.

The conference web page has more information, and a registration form for people who would like to participate. All accepted participants will have their dorm room paid for. US participants can apply for **support for travel** and \$200 toward the cost of meals. This meeting is supported by a Research Training Group grant from the National Science Foundation to the probability group at Cornell.

An extra incentive for attending this year’s summer school is that the INFORMS Applied Probability Society Conference will be held in Ithaca from July 12–15, 2009.

IMS co-sponsored meeting

Sixth Cornell Probability Summer School

July 18–31, 2010. Ithaca, NY

IMS co-sponsored meeting

Seventh Cornell Probability Summer School

Dates TBA, July 2011. Ithaca, NY

IMS co-sponsored meeting

2010 ENAR/IMS Spring Meetings

March 21–24, 2010

Hyatt Regency New Orleans, New Orleans, LA

IMS Program Chairs: Marie Davidian and Hao Helen Zhang

[w http://www.enar.org/meetings.cfm](http://www.enar.org/meetings.cfm)

IMS co-sponsored meeting:

IMS Asia Pacific Rim Meeting

June 28 – July 1, 2009. Seoul, Korea

[w http://ims-aprm.org/](http://ims-aprm.org/)

The first IMS Asia Pacific Rim Meetings will take place in Seoul, Korea during the period June 28–July 1, 2009. The new meeting series will provide an excellent forum for scientific communications and collaborations for researchers in Asia and the Pacific Rim. It will also promote communications and collaborations between researchers in this area and those from other parts of the world. The program covers a wide range of topics in statistics and probability, presenting recent developments and the state of the art in a variety of modern research topics and in applications. For more information, visit <http://ims-aprm.org/> or contact the program chairs: Feifang Hu (fh6e@virginia.edu) or Runze Li (fh6e@virginia.edu); the Local Chair is Byeong U. Park (bupark@stats.snu.ac.kr)

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/](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

Seventh Workshop on Bayesian Nonparametrics

June 21–25, 2009

Collegio Carlo Alberto, Moncalieri, Italy

[w http://bnpworkshop.carloalberto.org/](http://bnpworkshop.carloalberto.org/)

The aim of the Workshop is to highlight the latest developments in Bayesian Nonparametrics covering a wide variety of both theoretical and applied topics. The meeting will be held at the Collegio Carlo Alberto, a research institution housed in an historical building located in Moncalieri on the outskirts of Turin, Italy.

Contact [e bnp@carloalberto.org](mailto:bnp@carloalberto.org)

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](http://www.iss-2009-stjohns.ca)

The objective of this ISS is to bring together a set of speakers and discussants to describe the latest research such as parametric and non-parametric inferences in this emerging area with applications to Biostatistics, Econometrics, and Ecological and Environmental studies, among others.

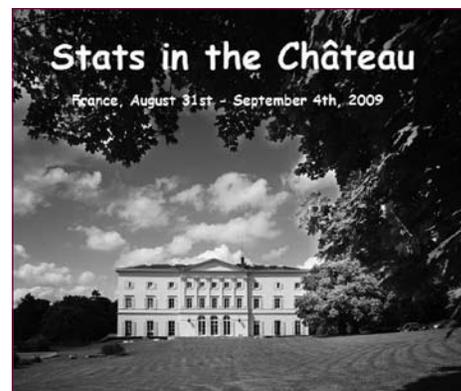
IMS co-sponsored meeting**Statistical Methods for the Analysis of Network Data in Practice****June 15–17, 2009****University College, Dublin, Ireland****w** <http://mathsci.ucd.ie/~brendan/networks.html>**Call for papers: see website. Deadline for abstracts April 3**

Many modern data analysis problems involve large data sets from social, biological and other networks. In these settings, traditional modeling assumptions are inappropriate; the analysis of these data must take into account the structure of relationships between the entities being measured. In fact, in many applications, the relationships between entities is the subject of primary interest. As a result, there has been increasing research developing techniques for incorporating network structures in statistics and more widely.

Network modeling is an active area of research in several domains including computer science, statistics and physics. This workshop focuses on probabilistic methods for network analysis, paying special attention to model design and computational issues of model fitting and inference. We are bringing together statistical network modeling researchers from different communities, thereby fostering collaborations and intellectual exchange. Our hope is that this will result in novel modeling approaches, diverse applications, and new research directions.

IMS co-sponsored meeting**2011 ENAR/IMS Spring Meetings****March 20–23, 2011****Hyatt Regency Miami, Florida****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>

This summer school will bring together people from the statistics and economics communities, and to stimulate interactions between participants. The themes are inverse problems, high dimensional statistical estimation, and their applications in econometrics.



There will be two mini-courses, by **Laurent Cavalier** (Aix-Marseilles 1) and **Victor Chernozhukov** (MIT). The invited speakers will be **Felix Abramovich** (Tel-Aviv University), **Peter Bickel** (University of California, Berkeley), **Xiaohong Chen** (Yale University), **Rama Cont** (CNRS / Columbia University), **Jean-Pierre Florens** (Université Toulouse I), **Emmanuel Guerre** (Queen Mary, University of London), **Joel Horowitz** (Northwestern University), **Yuichi Kitamura** (Yale University), **Jean-Michel Loubes** (Toulouse 3), **Ya'acov Ritov** (Hebrew University of Jerusalem) and **Jean-Marc Robin** (Université Paris Panthéon Sorbonne / University College London).

For details, visit the website or **e** statsinthechateau@ensae.fr

**IMS co-sponsored meeting****International conference on Frontiers of Interface between Statistics and Sciences: in honor of C.R. Rao's 90th birthday****December 31, 2009 – January 2, 2010****Hyderabad, India****w** <http://www.stat.osu.edu/~hnn/hydstatconf2010.html>

IMS Reps: S. Rao Jammalamadaka, S. Pantula, S. Ghosh

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.

For details visit <http://www.stat.osu.edu/~hnn/hydstatconf2010.html>

More IMS meetings around the world

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>

We are pleased to announce the 2nd IMS China International Conference on Statistics and Probability 2009 in Weihai, north-east China. The first meeting in this series was held in Hangzhou, China this past June.

The meeting is open to all current and prospective IMS members by registration, until the maximum of 110 non-local participants is reached. Local participants are defined as those who reside in mainland China. It will feature plenary lectures, and invited and contributed talks in all areas of probability and statistics. The official languages of the meeting are English and Chinese.

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, University of Pennsylvania

If you live in China, contact Professor Shige Peng (peng@sdu.edu.cn) and Jiaan Yan (jayan@amt.ac.cn) for more information.

If you live in other countries, send your enquiries, in English, to Professor Jiashun Jin (jiashun@stat.cmu.edu).



Happiness Gate in Weihai

Photo: Fenghong/Wikimedia Commons

Organizing Committee Co-chairs: Shige Peng, Shandong University, and Jiashun Jin, Carnegie Mellon University.

Scientific Committee Co-chairs: Jiaan Yan, Chinese Academy of Science, and Tony Cai, University of Pennsylvania

IMS sponsored meeting

2009 WNAR/IMS Meeting

June 14–17, 2009, Portland State University, OR, USA

w <http://www.mth.pdx.edu/wnar/>

IMS program chair: Dr. Haiyan Huang, hhuang@stat.berkeley.edu

The meeting will feature a short course on Generalized Linear Mixed Models by **Charles E. McCulloch**, University of California, San Francisco, and the WNAR Presidential Invited Address by **Peter Diggle**, Lancaster University, UK. The New Researchers Luncheon will provide the opportunity to meet new colleagues and have round-table discussions with senior faculty members. The Student Paper Competition has cash awards for the best manuscript and best oral presentation (free registration for competing students!). Sample invited session themes: emerging statistical challenges in longitudinal studies, clinical trials, and computational biology. Portland, Oregon, known as the City of Roses, has big city excitement and small town charm, making it one of the favorite destinations in the West.

IMS co-sponsored meeting

Symposium on New Directions in Asymptotic Statistics

May 15–16, 2009

Athens, Georgia, USA

w http://aaron.stat.uga.edu/news_events/symposium09/

The objective of the symposium is to bring together both well-established and emerging young researchers from around the world who are actively pursuing research in asymptotic methods in likelihood inference, time series, inference for stochastic processes, estimating functions, robust inference, parametric, semi-parametric and nonparametric methods, and functional estimation. The conference aims to provide a forum for leading experts and young researchers to discuss recent progress in asymptotic theory, thereby providing new directions for asymptotic inference in various fields.

The organizers of the conference are Ishwar Basawa ishwar@stat.uga.edu and T.N.Sriram tn@stat.uga.edu

IMS co-sponsored meeting

International Conference on Robust Statistics (ICORS) 2009**June 14–19, 2009****Parma, Italy****w** <http://www.icors2009.unipr.it>

The aim of this conference is to bring together established and young researchers from around the world who are actively working on, or are interested in, the theory, application, and overall development of robust statistics and related fields. The conference will provide a forum for leading experts and young researchers to discuss recent progress in the field, exchange ideas, and make informal contacts. Although robust statistics is the core of the

conference, special emphasis will be laid on interdisciplinary research and the interaction between theory and practice. For more information, visit the website or contact the conference organizer at icors2009@unipr.it.



IMS co-sponsored meeting

Innovation and Inventiveness in Statistics Methodologies**May 15–17, 2009****Yale University, New Haven, CT****w** <http://www.stat.yale.edu/Stats2009/>

Conference in honor of **John Hartigan**.
 Plenary Speakers: **James O. Berger**, **Peter J. Bickel**, **Lawrence D. Brown**, **David L. Donoho**, **William F. Eddy**, **Jianqing Fan**, **Iain M. Johnstone**, and **Peter G. Hall**.
 Banquet Speaker: **J. Michael Steele**
 Invited Speakers: **Donald J. Brown**, **T. Tony Cai**, **Tianxi Cai**, **Gary W. Oehlert**, **Jiashun Jin**, **Nouredine El Karoui**, **Xihong Lin**, **Deborah Nolan**, **Xiaotong Shen**, **Werner Stuetzle**, **Yanzhen Wang**, and **Bin Yu**

IMS co-sponsored meeting

2009 ICSA Applied Statistical Symposium**June 21–24, 2009****San Francisco, CA****w** <http://icsa2.org/2009/>

IMS Rep to Program Committee: Jiming Jiang

Deadline for student award and travel grants: **April 1, 2009** (see <http://icsa2.org/2009/StudentAwardsAndTravelGrants.htm>)Deadline for abstract and early registration Date: **May 1, 2009**

Keynote speakers are **Wing Hung Wong**, Stanford University, and **Nicholas Jewell**, University of California, Berkeley (*Alternatives to Intention to Treat—the MIRA Trial*). The banquet speaker is **Ronald Wasserstein**, Executive Director of the American Statistical Association

The 18th Annual ICSA Applied Statistics Symposium will be held on June 21–24, Sunday to Wednesday, 2009, with short courses on June 21st and scientific sessions on June 21–24, at the Westin Hotel, San Francisco International Airport, San Francisco, CA, USA. The symposium is co-sponsored by the American Statistical Association and the Institute of Mathematical Statistics.

The symposium has four short courses and 59 invited sessions, including two keynote address sessions, five special invited sessions, 53 invited sessions, and seven roundtable lunch discussions. We also invite members to submit their work in contributed sessions and poster sessions. The symposium webpage for registration and abstract submission is under construction and should be activated in February 2009.

Prior to the ICSA 2009 Symposium, there will be a pre-conference satellite workshop: “Conference on Innovative Clinical Trial Design and Related Topics” at Stanford University (June 19–20, 2009). Please contact Mei-Chiung Shih (meichiun@stanford.edu) for detailed information.

We welcome all new and current members to participate this event. Please note that program may change before it is finalized.

Tze Leung Lai and Ying Lu on behalf of ICSA 2009 Symposium Organizing Committee

Short courses

Recent Developments in Practical Bayesian Methods for Clinical Trials, Dr. Peter F. Thall, M.D. Anderson Cancer Center

Adaptive Designs in Drug Development, Dr. Sue-Jane Wang and Dr. Hsien Ming J. Hung, US FDA

Statistical Learning and Data Mining, Dr. Tao Shi, Ohio State University, and Dr. Ji Zhu, University of Michigan

Statistical Methods in Bioinformatics, Professor Jun Liu, Harvard University

IMS co-sponsored meeting

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

More IMS meetings around the world

IMS co-sponsored meeting

Recent Advances in Small Area Statistics: a two-day workshop cruise June 22–23, 2009

A cruise on the River Rhine, Germany



W <http://rrc09.surveystatistics.net>

The main purpose of the workshop is to assess the current state of research on small area estimation and to serve as a bridge between experienced researchers of small area methodology and practitioners working on sample surveys and official statistics either in government or private agencies. The workshop will also offer a unique opportunity for the students and junior researchers to interact with senior researchers in a very informal setting.

The two-day program will consist of nine plenary sessions, which will take place on a ship cruise on the famous Rhine river, Germany, and a poster session to be held in a hotel in Koblenz, Germany, during a wine reception immediately before the conference dinner on June 22. An award will be given for the best poster by a junior researcher. The cruise will start in Mainz on June 22 and end in Cologne on June 23. The plenary sessions each consist of a 50-minute lecture followed by a 20-minute floor discussion. There is no parallel session in the entire workshop, which will offer participants an opportunity to attend all sessions.

The confirmed plenary speakers are: **Ray Chambers** (University of Wollongong, Australia); **Robert Fay** (WESTAT, USA); **Malay**



Ghosh (University of Florida, Gainesville, USA); **Jiming Jiang** (University of California at Davis, USA); **Partha Lahiri** (University of Maryland, College Park, USA); **Risto Lehtonen** (University of Helsinki, Finland); **Carl N. Morris** (Harvard University, USA); **Danny Pfeffermann** (The Hebrew University of Jerusalem and the University of Southampton, UK); and **J.N.K. Rao** (Carleton University, Canada).

Posters that are related to the theme of the workshop will be accepted, subject to space constraints. Please visit the workshop website for detailed information on the workshop. The workshop is jointly co-sponsored by the German Research Foundation, German Statistical Association, University of Trier and the IMS.

Announcing your meeting—a free service

Meetings announcements should be sent to Elyse Gustafson, IMS Executive Director, erg@imstat.org who will then submit them to the *IMS Bulletin*, e-Bulletin and IMS web site, www.imstat.org/meetings. There is no charge for this service. Announcements for non-IMS sponsored meetings may be included in an IMS e-bulletin (monthly email to members) upon request, subject to space. Announcements are updated on the web site daily, and will be included in the next available printed *IMS Bulletin*.

Announce as early as possible

As soon as the meeting name, dates, location, and web page are set for the meeting, submit this information. We will place it immediately into the web and *Bulletin* calendars. This will help people put it on their radar screen. The sooner, the better for this: we can place this information months, and even years, in advance. You can submit another announcement nearer the date with updated information, too.

Print advertisements

IMS publishes meeting advertisements as a service to its members and the statistical community. All advertisements are subject to editorial approval and may be edited. For guidance on content and style, please read http://www.imstat.org/program/prog_announce.htm. Full details about the requirements are inside the back cover of every *Bulletin*. Advertisements should be submitted at least 6–9 months prior to the meeting. Special consideration should be given to deadlines when placing advertisements. You want to ensure people have a chance to see the ad in time to make your deadlines. Mail dates for the *Bulletin* can be found inside the back cover.

Other Meetings Around the World: Announcements and Calls for Papers

The 16th European Young Statistician Meeting (EYSM 2009)

August 24–28, 2009

Bucharest, Romania

W <http://www.eysm2009.ase.ro/>

The 16th edition of the European Young Statistician Meeting – a conference organized by young statisticians for young statisticians, under the auspices of European Regional Committee of the Bernoulli Society – will be held in Bucharest, Romania, during 24–28 August, 2009. The organizing institutions are Academy of Economic Studies (Department of Mathematics), University of Bucharest (Faculty of Mathematics and Computer Science) and Romanian Academy (through Patrimonium Foundation).

The meeting will gather about 40 participants coming from about 20 European countries. Participants are less than 30 years old or have 2 to 8 years of research experience. They are chosen by invitation only in a uniformly distributed way in Europe (2 participants per country). Every participant gives a talk and writes an abstract introducing his/her research subject. Papers can cover any topic in the field of probability and statistics. There are no parallel sessions.

The conference location is Hotel Siqua, a modern and new hotel, situated in the city centre, very close the one of the most beautiful parks in Bucharest, Cismigiu.

For more details visit the website, which is regularly updated, or contact the organizers: Roxana Ciumara • Roxana_ciumara@yahoo.com or Luiza Badin • luizabadin@yahoo.com

Atlantic Causal Modeling Conference

May 20–21, 2009

University of Pennsylvania, Philadelphia, PA

W <http://stat.wharton.upenn.edu/~fby/acc/>

This two-day conference is intended to provide a forum for researchers interested in causal modeling and inference to exchange ideas. Four sessions of talks are scheduled, which cover matching methods, automated algorithms for discovering causal structure, a case study, and recent advances in causal inference. Two named lectures will be given by **James Robins**, Harvard University, and by **Donald Rubin**, Harvard University. PhD and research Masters students are invited to submit proposed talks for the graduate student session. A poster session is open to all interested participants. For more information on the conference and for registration information, see the website or contact Dylan Small, Department of Statistics, University of Pennsylvania, • dsmall@wharton.upenn.edu.

16th European Young Statistician Meeting (EYSM 2009): an invitation

Chen Zhou writes: This is an invitation for ‘young’ probabilists and statisticians, working in The Netherlands, to participate in the 16th European Young Statisticians Meeting (EYSM 2009), August 24–28, 2009, Bucharest, Romania. [*See main announcement, left*]

The aim of the European Young Statisticians Meetings is to provide a scientific forum for the next generation of European researchers in probability theory and statistics. Participants are less than 30 years old or have 2 to 8 years of research experience.

As the international organizing committee member, I have the honour to choose the participants representing The Netherlands. If you want to participate in the meeting please send the application to zhou@few.eur.nl. It should contain the abstract of your talk and a short CV (a short description of your research interests, scientific experiences, list of publications, etc). Based on this info, the lucky two will be chosen. The deadline is **March 20, 2009**.

As a participant in the 15th EYSM in 2007, I would certainly recommend this meeting as a great scientific and social experience. The following link gives you what I enjoyed at that time: <http://kolmogorov.unex.es/~idelpuerto/15thEYSM>

7th PACOM (Pan African Congress of Mathematicians)

August 3–8, 2009

Yamoussoukro, Côte d’Ivoire

The 7th (PACOM) will be held from Monday 3rd to Saturday 8th of August 2009 in Yamoussoukro (Côte d’Ivoire), at the Félix Houphouët Boigny Foundation for Peace Research, on the theme: *New trends in the Development and applications of Mathematical Sciences*. For more information, please contact the Secretariat of the Congress: Prof. Etienne Desquith, African Mathematical Union (AMU) Vice-President, West African Region • desquith@hotmail.com



*The Institute of Mathematical Statistics
presents*

IMS COLLECTIONS

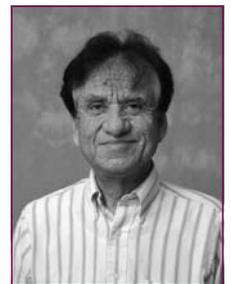
Volume 3:

Pushing the Limits of Contemporary Statistics: Contributions in Honor of Jayanta K. Ghosh

Bertrand Clarke and Subhashis Ghosal, Editors

Jayanta Kumar Ghosh is one of the most extraordinary professors in the field of Statistics. His research in numerous areas, especially asymptotics, has been groundbreaking, influential throughout the world, and has been widely recognized through awards and other honors.

This volume was written in his honor and it includes papers in five main areas: sequential estimation; prior specification; model selection; Bayesian nonparametrics; and high-dimensional problems.



Jayanta Kumar Ghosh, Purdue University

**IMS Members
US\$89**

**Non-members
US\$148**

Order securely online

or send payment

*(Mastercard/Visa/American Express/Discover,
or check payable on a US bank in US funds)*

<https://www.imstat.org/secure/orders/imsbooks.html>

Institute of Mathematical Statistics, Dues & Subscriptions Office,
9650 Rockville Pike, Suite L2407A, Bethesda MD 20814-3998, USA

t (301) 634-7029 f (301) 634-7099 e staff@imstat.org

Climate Change and Extreme Value Theory

May 11–13, 2009

Eurandom, Eindhoven, and KNMI, de Bilt, The Netherlands

w <http://www.eurandom.tue.nl/workshops/2009/Climate/>

The earth's climate can be characterized by a number of parameters, e.g. annual regional averages of temperature and rainfall, distribution of rainfall over a year and average wind intensity and direction. These parameters clearly show variability, depending on location and time. It is important to study the variation in these climate parameters over a longer period of time, especially trends that indicate non-stationarity of their behavior, of interest in order to attribute them to natural or anthropogenic causes. Studying possible causes for these trends, quantitative aspects of these trends and consequences for human, animal and plant life of these trends is important for reasons of safety, economy and quality of life for future generations.

Many researchers around the world work on aspects of climate change, e.g. people in climate studies, oceanography, mathematics, physics, economics etc. The stochastic methods used come from a broad range of subfields of stochastics, e.g. stochastic modelling, stochastic simulation, inverse problems, stochastic processes, extreme value statistics, curve estimation, time series analysis etc.

This workshop focuses on extreme value statistics in the context of climate change. Mathematically-oriented people from climate research who encounter problems related to extreme value theory will give talks on the background and special features of the problems they encounter. Also people from stochastics who work in extreme value theory (either on the applied or more theoretical side) will give presentations on their work. PhD students and young researchers are invited to attend in particular.

The meeting will be held at Eurandom (Technical University Eindhoven) and KNMI (Royal Netherlands Meteorological Institute, de Bilt).

The speakers are: **David S. Battisti**, University of Washington, Seattle, USA; **Anthony C. Davison**, EPFL, Switzerland; **Arnoldo Frigessi**, University of Oslo, Norway; **Gabriele C. Hegerl**, University of Edinburgh, UK; **Albert Klein Tank**, Climate Research and Seismology, KNMI, NL; **Douglas W. Nychka**, National Center for Atmospheric Research, Boulder, USA; **Holger Rootzén**, Chalmers University of Technology, Gothenburg, Sweden; **Richard L. Smith**, University of North Carolina, Chapel Hill, USA; and **David B. Stephenson**, University of Exeter and Hadley Centre, UK.

The workshop is sponsored by Netherlands Organisation of Scientific Research (NWO), KNMI and Eurandom. For registration: http://www.eurandom.tue.nl/xbf/registration_ClimateChange.html. Note the number of participants is limited. Deadline for registration is **April 10, 2009**.

ESF-EMS-ERCOM Conference on Harmonic Analysis, Geometric Measure Theory and Quasiconformal Mappings

June 15–19, 2009

CRM (Centre de Recerca Matemàtica), Bellaterra, Spain

Programme and applications: accessible online at www.esf.org/conferences/09308

Deadline for applications and abstracts: **23 March 2009**

Chair: Prof. Pertti Mattila, University of Helsinki, Finland

Scope: The purpose of the conference is to provide researchers working in harmonic analysis, quasiconformal mappings or geometric measure theory with a scientific event designed to promote a deep interaction between the three subjects.

The themes dealt with in the conference will be:

New developments on distortion of sets under quasiconformal mappings (Lacey, Sawyer, Uriarte)

Quasiconformal mappings and PDE, in particular the Calderón inverse problem (Astala, Faraco, Iwaniec, Päivärinta, Zhong)

Removability and quasiconformal mappings (Astala, Clop, Mateu, Orobitg, Tolsa)

Functions of finite distortion and hyperelastic deformations (David, Iwaniec, Koskela, Saksman)

Metric measure spaces, Poincaré's inequality and harmonic functions (Hajlasz, Koskela, Zhong)

Human vision and the Heisenberg group (Citti, Sarti)

Grants are available for young researchers to cover the conference fee and travel costs

Contact: Ms. Alessandra Piccolotto, ESF Conference Officer
e apiccolotto@esf.org

Modeling High Frequency Data in Finance

July 10–12 2009

Stevens Institute of Technology, Hoboken, NJ, USA

w <http://bergenbier.math.stevens.edu/conference2009/>

Deadlines: Abstract submission: **April 30 2009** (online abstract submission), registration (no deadline)

The goal of the meeting is to expose today's economic and modeling problems to mathematicians and current graduate students in the hope that this will improve the quality of the research problems studied at the moment of the conference.

Other considerations: This conference will host graduate student talks during the regular conference time. The organizers will select a number of presentations to be given by selected graduate students. The length of the time and their number remains to be determined and is dependent on the number and quality of the applicants.

ICSTI 2009 Conference: Managing Data for Science

June 9-10, 2009

Ottawa, Ontario

www.icsti2009.org

The International Council for Scientific and Technical Information (ICSTI) 2009 Public Conference: Managing Data for Science, will take place on June 9-10, 2009, Library and Archives Canada, Ottawa, Ontario.

This conference is organized by the National Research Council Canada Institute for Scientific and Technical Information (NRC-CISTI).

The conference will be of interest to researchers, scientific, technical and medical (STM) publishers, IM/IT professionals, chief information officers, and librarians in the academic, public and private sectors.

Boat tour on Rideau Canal. Photo: Ottawa Tourism



ESF-EMS-ERCOM Second European Set Theory Meeting: in Honour of Ronald Jensen

July 5–10, 2009

Mathematical Research and Conference Center, Będlewo, Poland

Programme and applications: accessible online at www.esf.org/conferences/09306

Deadline for applications and abstracts: **8 April 2009**

Chair: Prof. Jouko Väänänen, University of Helsinki, FI/University of Amsterdam, NL

Over the last century set theory has developed into a vibrant and important subject. On the one hand, it deals with questions of mathematical logic of deep foundational importance, such as the choice of axioms for mathematics and the questions of relative consistency of mathematical theories. On the other hand, techniques of set theory are applied in many areas of mathematics such as classical analysis, general topology, measure theory, Banach space theory, abstract algebra, ergodic theory and dynamical systems.

The conference topics will include:

- 1 Inner model theory and large cardinals
- 2 Descriptive set theory
- 3 Combinatorial set theory
- 4 Applications of set theory to Banach spaces, measure theory, general topology, and other neighboring areas

Menachem Magidor will give a Special Lecture on the work of Ronald Jensen.

Grants are available for young researchers to cover the conference fee and travel costs

Contact person: Ms. Anne Guehl, ESF Conference Officer • aguehl@esf.org



Left: Professor Ronald Jensen giving a lecture during The First European Set Theory Meeting, in Będlewo, Poland, in July 2007. Photo from Wikimedia Commons by Andrzej Roslanowski

Workshop on Parameter Estimation for Dynamical Systems June 8–10, 2009

EURANDOM, Eindhoven, The Netherlands

UPDATED WEBSITE ADDRESS: http://www.eurandom.tue.nl/workshops/2009/PEDS/PEDS_main.htm

Systems of ordinary differential equations play an important role in modelling various phenomena that arise in fields as diverse as physics, biology, engineering, chemistry and others. However, until recently relatively little attention has been paid to statistical inference procedures for such systems. The aim of the workshop is to provide a meeting place for researchers in this new and challenging area of statistical research. They will review different methods used to tackle the problem, assess the achieved progress and identify future research directions.

The main speakers include **Nicolas Brunel** (L'université d'Évry), **David Campbell** (Simon Fraser University), **Edward Ionides** (University of Michigan), **David Lunn** (Imperial College), **Kimberley McAuley** (Queen's University), **Eric Mjolsness** (University of California), **James Ramsay** (McGill University), **Eberhard Voit** (Georgia Institute of Technology) and **Victor Zavala** (Argonne National Laboratory). Other participants will also be given an opportunity of presenting short talks on their own research.

Organisers: Chris Klaassen (Universiteit van Amsterdam & EURANDOM), Shota Gugushvili (EURANDOM) and Bart Bakker (Philips Research).



CosmoStats09 and GREAT08 Challenge final workshop July 26–31, 2009

Ascona, Switzerland

w <http://www.itp.uzh.ch/cosmostats>

In the last ten years, a wealth of observational data has revolutionized cosmology. The purpose of this workshop is to bring together world-class leading figures in cosmology, particle physics and from the statistical community in order to exchange knowledge and experience in dealing with large and complex data sets, and to meet the challenge of upcoming large cosmological surveys. Furthermore, CosmoStat09 will host the GRavitational lEnsing Accuracy Testing 2008 (GREAT08) Challenge Final Workshop. The competition can be accessed via the website www.great08challenge.info

The CosmoStat09 meeting is part of a vibrant series of international conferences coordinated by the ETH. We expect to gather up to 70 participants in the beautiful surroundings of the Monte Verità (which used to host the Eranos conferences), for a 5-day residential conference, with lots of time for informal discussions. The program includes: statistical challenges in cosmology and particle physics (with statistics respondent); discovery issues; peta-scale inference & Great08 challenge final workshop; Frequentists vs Bayesians; and Great08/10.

Invited speakers:

Cosmology: **Tamas Budavari**, Johns Hopkins University, USA; **Mike Hobson**, Cambridge University, UK; **Ofer Lahav**, University College London, UK; **Glenn Starkman**, Case Western Reserve University, USA (TBC); **Ben Wandelt**, University of Illinois at Urbana-Champaign, USA

Statistics: **Jim Berger**, Duke University, USA; **Chris Genovese**, Carnegie Mellon University, USA; **Chad Schafer**, Carnegie Mellon University, USA; **Philip Stark**, Berkeley, USA

Particle Physics: **Glen Cowan**, Royal Holloway, University of London, UK; **Kyle Cranmer**, NYU, USA; **Bob Cousins**, UCLA, USA; **Louis Lyons**, Oxford/Imperial College London, UK

Early registration has ended. However, subject to space availability, late registrations are encouraged.

To promote a collaborative meeting full of opportunities for cross-disciplinary discussion, priority will be given to participants staying for the whole 5 days. There is no registration fee.

Organisers: Martin Kunz, Uros Seljak & Roberto Trotta.

We are looking forward to seeing many of you at the Monte Verità in warm Ticino in July!

**Measurement, Design, and Analysis Methods
for Health Outcomes Research**
August 17-19, 2009
Boston, Massachusetts

w <http://www.hsph.harvard.edu/ccpe/programs/MDA.html>

Offered by the Harvard School of Public Health Center for Continuing Professional Education. Taught in an interactive classroom setting, this program is geared towards introductory to intermediate learning levels to help participants design, implement, and analyze outcomes studies, and critically review and use outcomes data for clinical decision making, health care planning, and technology development. The course provides participants with an overview of several topics in the exciting new field of health outcomes, equipping newcomers with knowledge of the language and concepts.

In an increasingly competitive health care market, outcomes evaluation and research is important for:

- * Improving patient outcomes
- * Controlling costs and allocating resources
- * Implementing disease management programs
- * Making effective clinical and business decisions
- * Developing and marketing health care products and services

Improving your analytical and quantitative understanding and skills can greatly enhance the quality of health outcomes research in the health care and pharmaceutical industries.

For more information please visit the website. Please be sure to mention your reference code: MDA09 - CAL 11.

65th Annual Deming Conference on Applied Statistics
December 7–11, 2009
Atlantic City, NJ

w www.demingconference.com

Walter R. Young **e** demingchair@gmail.com

The purpose of the three-day Deming Conference on Applied Statistics and the following two parallel two-day short courses is to provide a learning experience on recent developments in statistical methodologies. The conference is composed of twelve three-hour tutorials on current statistical topics of interest. Recognized experts in the field of applied statistics will be invited to give the lectures and short courses based on their recently published books. The conference makes these books available for sale to its attendees at an appreciable discount. Attendees receive bound proceedings of the conference presentations.

The full program will be available on the web site on June 1.

The conference will be held in the recently built state-of-the-art Havana Tower of the Tropicana Casino Resort, whose shops and dining experiences mimic the atmosphere of Old Havana.

Walter Young has chaired this conference for 40 consecutive years.

ISBIS-2010, International Symposium for Business & Industrial Statistics
July 5–9, 2010
Croatia

w www.action-m.com/isbis2010

Contact Milena Zeithamlova **e** Milena@action-m.com

Sponsoring Society: ISBIS (International Society for Business & Industrial Statistics) ISBIS-2010, the biennial conference for ISBIS, has as its key themes: industrial applications of Statistical Image Analysis; Future Directions for handling large & complex data sets; Financial Services; Health Services; quality & productivity improvement and decision-making in business & industry.

Extended versions of papers may be submitted for publication in a special edition of the ISBIS journal, *Applied Stochastic Models in Business and Industry*.

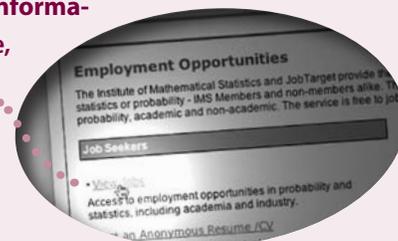


The Deming Medal

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: Scarborough, ON

University of Toronto

Lecturer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4846012

Ireland: Limerick

University of Limerick

Biostatistician (CSTAR)

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=5269533

United States: Ithaca, NY

Cornell University ILR (Department of Social Statistics in the School of Industrial and Labor Relations)

Visiting Lecturer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=5098376

United States: Pittsburgh, PA

Carnegie Mellon University, Department of Statistics

Tenure-track, lecturer, and visiting faculty (Professor)

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=4715152

United States: Madison, WI

University of Wisconsin School of Medicine & Public Health

Chair, Dept. of Biostatistics & Medical Informatics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=5273883

UK: Bristol

www.bristol.ac.uk

Chair in Statistics

Professorial grade salary

The Department of Mathematics is seeking to appoint a Professor of Statistics. The overriding criteria for appointment to the chair will be the candidate's ability to provide academic leadership in both research and teaching. The University is a leading research-intensive institution and is determined to attract individuals of the highest calibre to this position. We are prepared to offer a competitive salary. The person appointed will have research interests in any mainstream area of statistics; applicants with a strong record of innovation in statistical methodology, ideally backed by serious commitment to one or more domains of application, are especially welcomed.

For informal enquiries please contact Prof Peter Green (P.J.Green@bristol.ac.uk or +44 (0)117 928 7967), Prof Guy Nason (G.P.Nason@bristol.ac.uk or +44 (0)117 928 8633) or Prof Christophe Andrieu (C.Andrieu@bristol.ac.uk or +44 (0)117 928 9134).

In order to receive full attention, applications should be received by 9.00am on Thursday 30th April 2009. We anticipate undertaking the final stages of the selection process prior to the summer break in 2009. However, the position will be deemed open until filled.

Further details and an application form can be found at www.bristol.ac.uk/vacancies Alternatively you can telephone +44(0) 117 954 6947 or e-mail recruitment@bristol.ac.uk quoting reference number 14608.

EXCELLENCE THROUGH DIVERSITY

2009
CENTENARY
GREAT PAST - GREATER FUTURE

 University of
BRISTOL

International Calendar of Statistical Events

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

April 2009

April 1–3: Technical University of Denmark, Copenhagen. Conference on queueing theory on the centennial of the first paper on queueing by A.K. Erlang. **w** <http://www.erlang100.dk/>

April 17–18: Knoxville, Tennessee. Stochastic Analysis and Its Applications: 2009 Barrett Lectures at The University of Tennessee. **w** www.math.utk.edu/barrett/

April 25: Storrs, Connecticut. 23rd New England Statistics Symposium. Also short course and NISS Affiliates Annual Meeting on **April 24**. **w** www.stat.uconn.edu

May 2009

May 1–3: Chapel Hill, NC. 3rd Annual Graduate Student Conference in Probability. **w** www.unc.edu/~crbaek/gscp

May 4–10: Ålesund, Norway. 4th General Conference on Advanced Mathematical Methods for Finance. **w** <http://www.cma.uio.no/conferences/2009/amamef.html>

May 3–8: Ascona, Switzerland. Statistical Advances in Genome-scale Data Analysis. **w** http://stat.ethz.ch/talks/Ascona_09

 **May 11–13:** Eurandom (Eindhoven) and KNMI (de Bilt), The Netherlands. Climate Change and Extreme Value Theory **w** <http://www.eurandom.tue.nl/workshops/2009/Climate/>

May 14–15: Institute of Statistics, Université catholique de Louvain, Belgium. Exploring research frontiers in contemporary statistics and econometrics: conference in honor of Leopold Simar. **w** <http://www.stat.ucl.ac.be/EmeritatLS/>

 **May 15–16:** Athens, Georgia, USA. Symposium on New Directions in Asymptotic Statistics. Organizers Ishwar Basawa **e** ishwar@stat.uga.edu and T.N. Sriram **e** tn@stat.uga.edu **w** http://aaron.stat.uga.edu/news_events/symposium09/

 **May 15–17:** Yale University, New Haven, CT. Innovation and Inventiveness in Statistics Methodologies. **w** <http://www.stat.yale.edu/Stats2009/>

May 18–20: Hilversum, The Netherlands. 17th Meeting of AiOs in Stochastics. **w** <http://www.cs.vu.nl/~stochgrp/aionetwerk/meeting/09.html>

May 18–23: CRM, Montréal. Interacting Stochastic Particle Systems [CRM program] **w** http://www.crm.umontreal.ca/Mathphys2008/stochastics_e.shtml

 **May 20–21:** University of Pennsylvania, Philadelphia, PA. Atlantic Causal Modeling Conference. Contact Dylan Small, Department of Statistics, University of Pennsylvania, **e** dsmall@wharton.upenn.edu **w** <http://stat.wharton.upenn.edu/~fby/acc/>

May 25–27: Athens, Greece. Second International Conference on Quantitative and Qualitative Methodologies in the Economic and Administrative Sciences. **w** www.teiath.gr/sdo/de/page_nea_EN_r/home.htm

May 25–29: Harrah's Lake Tahoe, NV. 14th International Conference on Gambling and Risk Taking. **w** www.unr.edu/gaming

May 25–29: Bordeaux, France. 41st Annual Conference of the French Statistical Society. **w** <http://www.sm.u-bordeaux2.fr/JDS2009/index.html>

 **May 27–29:** Vancouver, Canada. 2009 Spring Research Conference on Statistics in Industry and Technology. Boxin Tang **e** boxint@stat.sfu.ca **w** <http://www.stat.sfu.ca/~boxint/src2009/>

May 31 – June 3: Vancouver, Canada. 2009 SSC Annual Meeting. Local Arrangements: Nancy Heckman (UBC). Program: Wendy Lou (Toronto) **w** http://www.ssc.ca/main/meetings_e.html

June 2009

 **June 3–5:** Iowa State University, Ames. The 75th Anniversary of the Statistical Laboratory Conference. IMS Rep to Program Committee: Song X. Chen **w** <http://www.stat.iastate.edu/ISUStatistics75thAnniversary/>

June 4–6: Vancouver, Canada. Workshop on Statistical Methods for Dynamic System Models. **w** <http://stat.sfu.ca/~dac5/workshop09/>

June 5–9: University of Pennsylvania, Philadelphia, USA. O-Bayes09: International Workshop on Objective Bayes Methodology. Contact Linda Zhao **e** lzhao@wharton.upenn.edu **w** <http://stat.wharton.upenn.edu/statweb/Conference/OBayes09/OBayes.html>

June 7–10: Jekyll Island, Georgia, USA. SRCOS 2009 Summer Research Conference. **w** <http://www.sph.emory.edu/srcos2009/>

June 8–9: University of Rochester Medical Center, Rochester, NY. **Statistical Modeling for Biological Systems: Conference in Memory of Andrei Yakovlev.** **w** www.urmc.rochester.edu/biostat/ayconference/

UPDATED **June 8–10:** EURANDOM, Eindhoven, The Netherlands. **Workshop on Parameter Estimation for Dynamical Systems.** **w** http://www.eurandom.tue.nl/workshops/2009/PEDS/PEDS_main.htm

June 8–13: CRM, Montréal. **Disordered Systems: Spin Glasses [CRM program]** **w** http://www.crm.umontreal.ca/Mathphys2008/spin_e.shtml

NEW **June 9–10:** Ottawa, Ontario. **ICSTI 2009 Conference: Managing Data for Science.** **w** www.icsti2009.org

June 10–12: Siena, Italy. **ITACOSM09: First Italian Conference on Survey Methodology.** **w** <http://www.unisi.it/eventi/dmq2009/>

 **June 14–17:** Portland State University, OR. **2009 WNAR/IMS Meeting.** IMS program chair: Dr. Haiyan Huang, hhuang@stat.berkeley.edu **w** <http://www.mth.pdx.edu/wnar/>

 **June 14–19:** Parma, Italy. **International Conference on Robust Statistics (ICORS) 2009** **w** <http://www.icors2009.unipr.it>

June 15–17: Troyes, France. **2nd International Workshop in Sequential Methodologies (IWSM).** **e** Igor.Nikiforov@utt.fr **w** <http://www.utt.fr/iwsm2009>

 **June 15–17:** Dublin, Ireland. **Statistical Methods for the Analysis of Network Data in Practice.** **w** <http://mathsci.ucd.ie/~brendan/networks.html>

NEW **June 15–19:** CRM (Centre de Recerca Matemàtica), Bellaterra, Spain. **ESF-EMS-ERCOM Conference on Harmonic Analysis, Geometric Measure Theory and Quasiconformal Mappings.** Grants available: contact Ms. Alessandra Piccolotto, ESF Conference Officer **e** apiccolotto@esf.org **w** www.esf.org/conferences/09308

June 17–20: University of Luxembourg, Luxembourg School of Finance. **4th Statistical Day at the University of Luxembourg.** **w** <http://sma.uni.lu/stat4/>

June 18–20: Leicester, UK. **Workshop on Spectral and Cubature Methods in Finance and Econometrics.** **w** <http://www2.le.ac.uk/departments/mathematics/extranet/staff-material/staff-profiles/>

[sl278/workshop-spectral-and-cubature-methods-in-finance-and-econometrics](http://www2.le.ac.uk/departments/mathematics/extranet/staff-material/staff-profiles/sl278/workshop-spectral-and-cubature-methods-in-finance-and-econometrics)

June 18–20: Vienna, Austria. **Econometrics, Time Series Analysis and Systems Theory: Conference in Honor of Manfred Deistler.** **w** www.ihs.ac.at/etsast

June 18–20: Bressanone/Brixen, Italy. **BISP6: Sixth Workshop on Bayesian Inference in Stochastic Processes.** **e** bisp6@mi.imati.cnr.it **w** www.mi.imati.cnr.it/conferences/bisp6.html

 **June 21–24:** San Francisco, CA. **2009 ICSA Applied Statistical Symposium.** IMS Rep: Jiming Jiang. **w** <http://icsa2.org/2009/>

 **June 21–25:** Collegio Carlo Alberto, Moncalieri, Italy. **Seventh Workshop on Bayesian Nonparametrics.** **w** <http://bnpworkshop.carloalberto.org/>

June 21–25: San Diego Convention Center, San Diego, CA. **DIA 44th Annual Meeting.** **w** <http://nextdocs.com/2008/06/45th-annual-dia-meeting/>

NEW  **June 22–23:** River Rhine, Germany (Koblenz, Mainz, Cologne). **Recent Advances in Small Area Statistics: a two-day workshop cruise.** **w** <http://rrc09.surveystatistics.net>

June 22–26: Fort Collins, CO. **Graybill VIII: 6th International Conference on Extreme Value Analysis.** **e** GraybillConference@stat.colostate.edu or EVA2009@stat.colostate.edu **w** www.stat.colostate.edu/graybillconference2009

June 23–27: Smolenice Castle, Slovakia. **IWMS'09: 18th International Workshop on Matrices and Statistics.** Contact Viktor Witkovsky **e** witkovsky@savba.sk **w** www.um.sav.sk/en/iwms2009.html

June 26–28: Peking University, Beijing, China. **International Workshop on Probability Theory, Statistics, and their Application to Biology.** **w** <http://bioinfo.math.pku.edu.cn/Workshop09/index.htm>

June 26–29: Università Degli Studi Di Milano, Italy. **Tenth European Conference on Image Analysis and Stereology (ECS10).** **w** <http://ecs10.mat.unimi.it/>

 **June 28–July 1:** Seoul, Korea. **First IMS Asia Pacific Rim Meeting.** Program chairs: Feifang Hu **e** fh6e@virginia.edu or Runze Li **e** fh6e@virginia.edu **w** <http://ims-aprm.org/>

International Calendar *continued*

June 2009 continued

June 29 – July 3: City University of Hong Kong, Hong Kong. **Workshop on Stochastic Analysis and Finance.** [w](http://www6.cityu.edu.hk/ma/wsaf09/) <http://www6.cityu.edu.hk/ma/wsaf09/>

July 2009

 July 3–6: Weihai, China. **2nd IMS China Conference on Statistics and Probability.** [w](http://www.stat.cmu.edu/~jashun/imschina/index.html) <http://www.stat.cmu.edu/~jashun/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](http://www.esf.org/conferences/09306) www.esf.org/conferences/09306

 July 6–17: Cornell, Ithaca, NY. **Fifth Cornell Probability Summer School.** [w](http://www.math.cornell.edu/~durrett/CPSS2009/) <http://www.math.cornell.edu/~durrett/CPSS2009/>

July 7–9: Leeds, UK. **LASR 2009: Statistical Tools for Challenges in Bioinformatics.** Contact Arief Gusnanto [e](mailto:workshop@maths.leeds.ac.uk) workshop@maths.leeds.ac.uk [w](http://www.maths.leeds.ac.uk/lasr2009) www.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/) <http://bergenbier.math.stevens.edu/conference2009/>

July 12–15: Cornell University, Ithaca, NY. **2009 INFORMS Applied Probability Society Conference.** Shane Henderson and Mark Lewis. [w](http://appliedprob.society.informs.org/apsconf09/APS09.html) <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](mailto:ktsui@isy.e.gatech.edu) ktsui@isy.e.gatech.edu [w](http://icise.bjut.edu.cn/index.htm) <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/) <http://extremes.epfl.ch/>

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

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

July 20–24: Warwick University, UK. **Probability at Warwick Young Researchers Workshop** [w](http://www.warwick.ac.uk/go/paw) www.warwick.ac.uk/go/paw

July 20–24: Angers, France. **International Conference on Self-similar Processes and their Applications.** [w](http://angers2009.math.univ-angers.fr/) <http://angers2009.math.univ-angers.fr/>

July 20–24: Cornell, Ithaca, NY. **24th International Workshop on Statistical Modeling.** [w](http://www.stat.cornell.edu/IWSM2009) www.stat.cornell.edu/IWSM2009

 July 26–31: Ascona, Switzerland. **CosmoStat09 and GREAT08 Challenge final workshop.** [w](http://www.itp.uzh.ch/cosmostats) <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](http://www.math.tu-berlin.de/SPA2009/) www.math.tu-berlin.de/SPA2009/

 July 28–31: Baltimore, MD. **12th IMS North American Meeting of New Researchers in Statistics and Probability.** [w](http://www.biostat.umn.edu/~tracyb/nrc.html) www.biostat.umn.edu/~tracyb/nrc.html

July 29–31: Singapore. **4th International Conference on Queueing Theory and Network Applications.** [w](http://www.qtna2009.org/) <http://www.qtna2009.org/>

August 2009

 August 1–6: Washington, DC. **IMS Annual Meeting at JSM2009.** IMS Program Chairs: Michael Kosorok kosorok@unc.edu Xiaotong Shen xshen@stat.umn.edu and Ji Zhu jizhu@umich.edu [w](http://www.amstat.org/meetings/jsm/2009/) www.amstat.org/meetings/jsm/2009/

August 3–6: UTIA, Prague, Czech Republic. **Limit Theorems for Dependent Random Variables** (SPA satellite meeting) [w](http://simu0292.utia.cas.cz/workshop09/) <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](mailto:desquith@hotmail.com) desquith@hotmail.com

August 16–22: Durban, South Africa. **57th Session of the International Statistical Institute.** [w](http://www.statssa.gov.za/isi2009/) 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) <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 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 21–22: Paris, France. **The 6th International Meeting on Statistical Methods on Biopharmacy.** **w** <http://www.biopharma2009-sfds.fr/>

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>

November 2009

November 9–13: EPFL, Switzerland. **Workshop on Spatio-temporal Extremes and Applications [Research program on Risk, Rare Events and Extremes].** **w** <http://extremes.epfl.ch/>

November 16–18: 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>

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 (AUC), New Cairo, Egypt. **ICCS-X: 10th Biennial Islamic Countries Conference on Statistical Sciences.** **w** www.isoss.com.pk/iccsx.htm

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

January 2010

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

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

May 2010

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

International Calendar *continued*

May 2010 continued

May 23–26: Québec City, Canada. 2010 SSC Annual Meeting. Local Arrangements: Thierry Duchesne **w** www.ssc.ca/main/meetings_e.html

June 2010

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

NEW 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/>

 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 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

December 2010

 December 19–22: Guangzhou University, Guang-Zhou, 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 (dates TBA): 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

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

August 2014

 August 3–7: Boston, MA. JSM2014.

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.

The *IMS Bulletin* (ISSN 1544-1881) is published ten times per year in January/February, March, April, May, June, July, August/September, October, November and December by the Institute of Mathematical Statistics, 3163 Somerset Dr, Cleveland, Ohio 44122, USA. Periodicals postage paid at Cleveland, Ohio, and at additional mailing offices. Postmaster: Send address changes to Institute of Mathematical Statistics, 9650 Rockville Pike, Suite L2407A, Bethesda, MD 20814-3998.

Copyright © 2009 by the Institute of Mathematical Statistics.

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

Information for Advertisers

General information

The *IMS Bulletin* and webpages are the official news organs of the Institute of Mathematical Statistics. The *IMS Bulletin*, established in 1972, is published 10 times per year. Circulation is 5,053 paper copies (July 2007). The *Bulletin* is also available free online in PDF format at <http://bulletin.imstat.org>, usually posted online about two weeks before mailout. Subscription to the *IMS Bulletin* costs \$82. To subscribe, call (301) 634 7029 or email staff@imstat.org. The IMS website, <http://imstat.org>, established in 1996, receives over 30,000 visits per month (34,578 in July 2007). Public access is free.

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	May 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

the
next
issue is

May
2009

News of members, announcements and information about meetings and jobs around the world.

Send in your ideas, articles, letters...

DEADLINE
for
submissions
April 1,
2009

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

Journal
alerts

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



The *purpose* of the *Institute* is to foster the *development and dissemination* of the *theory and applications* of *statistics and probability*

IMS: Organized September 12, 1935

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 32 from last issue

	10	45	17	13	38	45		
6	1	9			9	4	21	
11	1	2	8	24	7	8	9	
5	2	3	10	1	3	2	4	
42	3	7	4	9	6	5	8	
7	8	6	2	11	6	5	1	10
34	1	4	3	2	8	9	7	
27	4	8	6	9	3	9	7	2
8	2	5	1	9	2	6	1	
16	9	7		4	1	3		

Puzzle 33

	35	18	16	45		20	9	
16					5			
28					11			
			30					
17			17					
16						33	15	
37								
	22	34						
		11						
11					4			
					12			
16			29					
9			12					

Puzzle by www.yoogi.com