March 2016

CONTENTS

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http://bulletin.imstat.org

Peter Gavin Hall, 1951–2016

It is with great sadness that we report the passing away of Peter Gavin Hall on January 9, 2016, in Melbourne, Australia. He was 64.

During the past four decades Peter was a monumental figure in the statistics community, both internationally and within his home country of Australia.

Peter was born in Sydney in 1951 and earned degrees from the University of Sydney, the Australian National University and Oxford University. He spent many years at the Australian National University, and moved to the University of Melbourne in 2006. He also held a one-quarter appointment at the University of California, Davis, that commenced in 2005.

Peter was one of the most influential and prolific theoretical statisticians in the history of the field. The breadth of problems he tackled, and the depth and creativity with which he solved them, are unique. He made seminal contributions concerning the bootstrap, rates of convergence, functional data analysis, martingale theory, measurement error models, nonparametric function estimation and smoothing parameter selection and published 4 books and approximately 600 journal articles. His contributions were recognized with fellowships from the Australian Academy of Science, the Academy of Social Sciences in Australia, and the UK's Royal Society, and election as a foreign associate of the US National Academy of Sciences, as well as honorary doctorates and awards that include the Committee of Presidents of Statistical Societies Award in 1989 and the Guy Medal in Silver from the Royal Statistical Society in 2011.

Despite his stature, Peter had a gentle and unassuming nature. He offered especially strong support to young scientists, trained more than sixty young statisticians at the doctoral or post-doctoral level, and had hundreds of collaborators. He will be remembered for his kindness, generosity and sheer brilliance. Few could rip apart a theoretical problem as well as Peter.

Peter was also strongly committed to his profession more generally, and the amount of service and support he provided to mathematics and science throughout his life, both in Australia and internationally, was also extraordinary. He served as IMS President in 2011, as an editor of *Statistica Sinica* during 2008–11 and co-editor of *The Annals of Statistics* during 2013–15.

Outside of statistics Peter was a keen photographer, with a particular interest in train photography. He enjoyed travel and was a regular visitor to many institutions around the world. He is survived by his wife, Jeannie and his sister, Fiona.

IMS Bulletin

Contact information

Executive Committee

IMS Members' News

Emanuel (Manny) Parzen: 1929–2016

IMS Fellow Emanuel Parzen, a respected figure in signal detection theory and time series analysis who, with Murray Rosenblatt, introduced the use of kernel density estimation (the so-called "Parzen window"), died February 6, 2016, in Boca Raton, Florida. He was 86.

Manny Parzen, who was born on April 21, 1929, in New York, received the ASA's 1994 Samuel S. Wilks Memorial Medal for his time series analysis research, in particular his "innovative introduction" of reproducing kernel Hilbert spaces, spectral analysis and

Emanuel (Manny) Parzen and his wife, Carol

spectrum smoothing, as well as for "pioneering contributions" in quantile and density quantile functions and estimation. Manny wrote six highly successful books, including the classic *Modern Probability Theory and its Applications.* Manny was a Fellow of the IMS, ASA and the AAAS. He received the 2005 Gottfried E. Noether Award, "for a lifetime of outstanding achievements and contributions in the field of nonparametric statistics."

In a tribute on the Texas A&M University's website (http://www.science.tamu.edu/news/story.php?story_ID=1541#.VrtLZMCyOko), Dr. Valen E. Johnson, professor and head of Texas A&M Statistics department, said, "Manny Parzen was a pioneer in statistics during its nascent stages of development in the 1960s. He played a central role in the development of the theory of stochastic processes and was a pioneer in the fields of time series and spectral analyses in addition to making important contributions in the area of nonparametric statistics. His textbook *Modern Probability Theory and its Applications* is a classic text that continues to be widely used as reference in the field today. On a personal level, Manny was extremely engaging and always anxious to discuss new approaches toward statistical inference. The Department of Statistics — and the statistical community in general — has lost one of its giants."

A full obituary will appear in a future issue.

Xihong Lin, Peter Diggle speakers at ENAR

The 2016 ENAR Spring Meeting will be held in Austin, Texas, from March 6–9. The meeting brings together researchers and practitioners from academia, industry and government, connected through a common interest in Biometry.

Featuring the 2016 ENAR Presidential Invited Speaker, Xihong Lin (Harvard University), whose lecture will be on *Biostatistics, Biomedical Informatics, and Health Data Science: Research and Training.* There will also be an IMS Medallion Lecture, *Model-Based Geostatistics for Prevalence Mapping in Low-Resource Settings* by Peter Diggle (Lancaster University, UK).

See http://www.enar.org/meetings/spring2016/index.cfm

Xihong Lin   *Peter Diggle*

Letter to the Editor

A Commentary on "The Kids Are Alright: Divide by *n* when estimating variance," by Jeffrey S. Rosenthal, *IMS Bulletin* (December 2015), Vol. 44, No. 8, Page 9

Dear Editor

Professor Rosenthal's piece is persuasive and very clearly written. I thank Professor Rosenthal for taking us back to this old concern that never truly goes away. Indeed the basic issue under consideration appears and reappears when one teaches a cohort of new students.

With nearly 40 years of teaching experience now, I have a different, but easy, way to explain why the divisor in the customary sample variance is suddenly $n - 1$ instead of n. It is my understanding that there are readers out there who may happen to like my simple persuasion, below, in favor of a traditional divisor $n - 1$.

Suppose that I have n random samples $X_1, \dots, X_n$ from a single population with a population mean μ. Customarily, in many elementary courses, I propose that μ is estimated by the sample mean, $\bar{X} = \frac{1}{n}\sum_{i=1}^{n} X_i$. Here, the divisor is n and no one really objects to that idea.

Then comes the idea of variation around μ. First, I explain why no-one considers $E[X - \mu]$ as a quantification of variation. An explanation is simple: $E[X - \mu] = 0$ under the population distribution. In other words, the errors in over-estimation and under-estimation of μ by $\bar{X}$ cancel out.

Thus, many proceed to the next step.

Define a population variation or variance as σ^2 given by $E[(X - \mu)^2]$, which will be positive unless all observations coincide with μ (with probability 1). After all, who wants to collect data where every data point is the same, and waste time and money!

So, how should one estimate σ^2? Well, I begin with $\sum_{i=1}^{n} (X_i - \bar{X})^2$. But I note that $\sum_{i=1}^{n} (X_i - \bar{X})$ is identically zero for any set of n numbers. That is, among n numbers (residuals) $X_1 - \bar{X}, X_2 - \bar{X}, \dots, X_n - \bar{X}$, we have exactly $n - 1$ free-riding numbers, since all n residuals add up to zero. That is, the remaining n^{th} number is fully determined by the other $n - 1$ free-riding numbers. Thus, while one obtains the sample variance, one divides $\sum_{i=1}^{n} (X_i - \bar{X})^2$ by $(n - 1)$ instead of n. In this sense, $n - 1$ is customarily called the "degree of freedom," that is, an indication of how many among n residuals are truly free-riding.

In a first-year pre-calculus course that is often mandatory for all (or a large majority of) undergraduate students, the idea of pursuing *mean square criterion* (MSE) considerations never really convinces our first-year undergraduates since they had never heard of MSE prior to taking Stat 100 or Stat 110.

Especially for them, in order to have a painless discourse, I take a very small set of numbers, say, 3, 4, 2, 4, 2 with $n = 5$. Obviously, $\bar{x} = 3$ and
$$\sum_{i=1}^{n} (x_i - \bar{x}) = 0 + 1 - 1 + 1 - 1 = 0,$$
but
$$\sum_{i=1}^{n} (x_i - \bar{x})^2 = 0 + 1 + 1 + 1 + 1 = 4.$$

Thus, the sample variance should be the customary
$$s^2 = \frac{1}{4}\sum_{i=1}^{n} (x_i - \bar{x})^2 = 1.$$
The divisor is 4 instead of 5 because 4 is the "degree of freedom" as explained.

Nitis Mukhopadhyay
Professor of Statistics
University of Connecticut, Storrs, USA
w nitis.mukhopadhyay@uconn.edu

Introducing the New Researchers Group

Alexander Volfovsky writes:

For more than twenty years (with a gap year here and there) the IMS has been hosting the Meeting of New Researchers in Statistics and Probability immediately before the Joint Statistical Meetings (JSM). At each of these conferences a group of around 50 new researchers — postdocs and newly minted faculty — is exposed to panels led by leading researchers in the field on subjects that range from teaching to writing grants to finding collaborators. Beyond these presentations from established statisticians and probabilists, the conference has been a place for new researchers to meet others in their "academic cohort" and to establish lasting collaborations and friendships. Following one of these conferences the idea for the New Researchers Group (NRG) was born.

Prior to the establishment of the group, the New Researchers Conference was the only venue within the IMS that provided guidance and instruction specifically for early career researchers. The main goal of this newly formed group (announced by Richard Davis in the January 2016 issue of the *Bulletin*) is to provide new forms of engagement for early career researchers with the IMS. The Group will continue with organizing the Conference but will also sponsor sessions at the IMS annual meetings and other IMS co-sponsored conferences, organize new annual workshops that will showcase the work of new researchers, and provide a general forum for new researchers to interact. More lightheartedly, after the success of the new researchers reception at the 2015 Seattle JSM (see below), we will be making such a reception a yearly tradition.

New website

The first order of business for our Group is the establishment of a website that will serve as a portal to all things related to the engagement of new researchers within the IMS. While the page is still under construction (http://groups.imstat.org/newresearchers/) I am excited to share some of the details that we have planned. The landing page of the website will (quite literally) showcase the work of new researchers by presenting a sampling of their recent arXiv submissions. The New Researchers Conference output (such as abstracts and slides) will now be archived on this page. New meetings, grants and job announcement pages will be created to address the needs of early career researchers. The aspect that I am most excited about is the establishment of a community discussion forum to facilitate collaboration

Poster session at NRC Seattle in 2015 (photo: Ali Shojaie)

and interaction among those entering the field. The highlights of this forum will include an "Open Problems" and "Finding Collaborators" sections for sharing and developing new work ideas and a "Teaching" section that will hopefully be the start of a repository of lecture notes, problems, and classroom ideas that will provide much needed support for those balancing research and teaching loads.

We'll publish here when the site is ready. We expect to make a few more announcements in the near future (such as the reissuing of an updated version of *The IMS New Researchers' Survival Guide*).

New Researchers Conference: deadline February 27, 2016

w http://www.stat.wisc.edu/imsnrc18/
New researchers (in this particular instance defined as those who received a PhD in or after 2011 or expect to receive one by the end of 2016) should apply for the 18th Meeting of New Researchers in Statistics and Probability that is going to be held at the University of Wisconsin–Madison on July 28–30, 2016 (for those who are interested, the conference will culminate in a road trip to Chicago for JSM). The deadline for the application is February 27.

Finally, stay tuned for details about the New Researchers Group reception at this year's JSM!

Below: New Researchers reception at JSM in Seattle
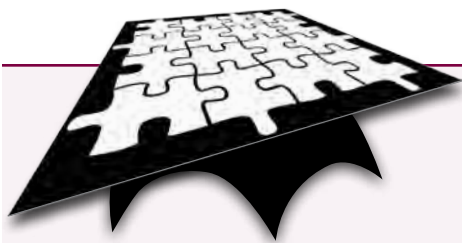
Student Puzzle Corner 13

We consider a problem on Gaussian extreme values. It comes across as a difficult calculation, but when looked at the right way, it is actually not at all difficult. Here is the exact problem.

Consider a sequence of iid random variables $X_1, X_2, \cdots \sim N(\mu, \sigma^2)$. For any given $n \geq 1$, suppose $\bar{X} = \bar{X}_n$ denotes the mean and $X_{(n)}$ denotes the maximum of the first n observations $X_1, \cdots, X_n$. Define $\mu_n(\bar{X}) = E(X_{(n)} \mid \bar{X})$, and $V_n(\bar{X}) = \mathrm{Var}(X_{(n)} \mid \bar{X})$.

(a) Find explicit closed form deterministic sequences a_n, b_n such that $b_n[\mu_n(\bar{X}) - a_n] \overset{\text{a.s.}}{\to} 1$.

(b) Find explicit closed form deterministic sequences c_n, d_n such that $d_n[V_n(\bar{X}) - c_n] \overset{\text{a.s.}}{\to} 1$.

Solution to Puzzle 12:

Editor Anirban DasGupta writes:

Well done to Lu Mao (pictured below), of the department of biostatistics at the University of North Carolina at Chapel Hill, who sent a carefully written solution. The problem was to find a minimax estimator of $m = |\mu|$ under squared error loss when there are n iid observations from $N(\mu, 1)$, $\mu \in \mathcal{R}$. The claim is that the plug-in estimator $|\bar{X}|$ is unique minimax.

Lu Mao sent a correct solution to Student Puzzle 12

First, note that by the triangular inequality,
$$\sup_\mu E_\mu[(|\bar{X}| - m)^2] \leq \sup_\mu E_\mu[(\bar{X} - \mu)^2] = \tfrac{1}{n}.$$
Consider now any other estimator $\delta(X_1, \cdots, X_n)$ of m; we may assume δ to be a function of $\bar{X}$ by Rao–Blackwell. Then, $\sup_\mu E_\mu[(\delta - m)^2] \geq \sup_{\mu \geq 0} E_\mu[(\delta - \mu)^2] \geq \tfrac{1}{n}$, the last inequality following from a standard application of the Cramér–Rao inequality. Thus $|\bar{X}|$ is minimax; unique minimaxity follows because the last inequality above is strict by completeness. The exact risk function of $|\bar{X}|$ equals $R(\theta, |\bar{X}|) = \tfrac{1}{n}[1 + 4\theta^2(1 - \Phi(\theta)) - 4\theta\varphi(\theta)]$, where $\theta = |\sqrt{n}\,\mu|$.

By elementary calculus, the function $g(x) = x^2(1 - \Phi(x)) - x\varphi(x)$, $x \geq 0$ has a unique minimum at x_0 where x_0 is the unique root of $\frac{x(1 - \Phi(x))}{\varphi(x)} = \frac{1}{2}$; $x_0 \approx .61200$.

Plugging this back into the exact risk formula, one gets that the minimum risk of $|\bar{X}|$ is $\frac{1 - 2x_0\varphi(x_0)}{n} = \frac{.59509}{n}$.

Puzzle deadline March 7

IMS Bulletin printed issue

As you may have noticed, the IMS has reintroduced sending the printed *IMS Bulletin* to all members. Before now, you had to opt-in to receive the *Bulletin* in print. We hope you like receiving the printed version. Of course, if you prefer to keep up with IMS-related news electronically, please email Elyse Gustafson, IMS Executive Director, at erg@imstat.org to opt out of the print copy.

OBITUARY: S. Panchapakesan

1933–2016

SUBRAMANIAN PANCHAPAKESAN — known as Kesan among his numerous friends and colleagues — passed away on January 28, 2016, in Chennai (formerly Madras), the city in which he was born on August 27, 1933. Kesan graduated from Vivekananda College in Chennai with a BA(Hons) degree in Mathematics in 1954 and obtained an M.Stat. degree from the Indian Statistical Institute in 1962. He moved to Purdue University, Indiana, in 1965 as a PhD student in Mathematical Statistics. Working under the guidance of Professor Shanti S. Gupta, Kesan wrote his thesis entitled "Some Contributions to Multiple Decision (Selection and Ranking) Procedures" and graduated in 1969. Beginning with this work he had an illustrious career with pioneering contributions to the area of ranking and selection methodology and many other areas of Mathematical Statistics including order statistics, reliability theory, and inference.

Throughout his long academic career, Kesan served in various capacities all over the world. His first academic position was as a lecturer in mathematics at Islamiah College, Vaniambadi, Tamilnadu, India (1955–1960). He retired from the Department of Mathematics at Southern Illinois University, Carbondale, after 28 years of distinguished service, and became a Professor Emeritus on June 1, 1998. In between, he worked for the Indian Statistical Institute in various capacities during 1962–65, held visiting faculty positions at Purdue University (1970, '84, '86), and at the Institute of Mathematics at Academia Sinica in Taipei, Taiwan (1980). Even in retirement, he continued to be active in research with publications and participation in many international conferences.

Kesan was best known in the research community for the Wiley research monograph, *Multiple Decision Procedures:*

Methodology of Selecting and Ranking Populations, co-authored with S. S. Gupta (1979, SIAM reprint 2002). He published over 80 research papers in journals, edited volumes and as technical reports. He also co-edited, with N. Balakrishnan, a volume entitled *Advances in Statistical Decision Theory and Applications* (Birkhauser, 1997).

Kesan's collaborators and fellow researchers celebrated his work with an international conference in his honor in December 2002 in Chennai, and later with a research volume entitled *Advances in Ranking and Selection, Multiple Comparisons, and Reliability* (N. Balakrishnan, N. Kannan, and H. N. Nagaraja, Birkhauser, 2005).

Kesan was extremely generous with his time in the service of the statistical community and provided mentorship for many young researchers. He served several journals

Subramanian "Kesan" Panchapakesan

as a referee and as an associate editor for long periods, and wrote many book reviews. In addition to his devotion to statistics, Kesan had a great passion for Indian music and celebrated it with an outstanding collection of reel-to-real audiotapes, compact cassettes, and CDs, and periodic travel to Chennai to listen to maestros of Karnatic music. He also loved to travel and explore different cultures and societies. Kesan leaves behind numerous friends earned through his kindness and genuine interest in people around him.

H.N. Nagaraja, The Ohio State University, and N. Balakrishnan, McMaster University

Obituary: Asit Basu, 1937–2015

Asit Basu, who passed away October 19, 2015, was Professor of Statistics at the University of Missouri Columbia. Born 1937 in India, he received undergraduate and master's degrees, in 1956 and 1958, from the University of Calcutta and a PhD degree in Statistics from the University of Minnesota in 1966. Early in his career, Dr. Basu held positions in the University of Wisconsin–Madison, City University of New York, Northwestern University and University of Pittsburgh, as well as the IBM Research Center. In 1974 he joined the University of Missouri Columbia and remained there until his retirement in 2002. He served as department chair from 1976 to 1983.

Dr. Basu's research area was reliability. He published extensively, including papers in top journals, four books edited and one co-authored. He organized a series of international conferences on Reliability in Columbia, Missouri. Two special issues of the *Journal of Statistical Planning and Inference*, in 1987 and 1991, evolved from these conferences with Dr. Basu as the guest editor. Dr. Basu was a Fellow of the IMS, the American Statistical Association, American Association for the Advancement of Science, and the UK's Royal Statistical Society, and an elected member of the International Statistical Institute. Fourteen students received their PhD degrees under his supervision.

Dr. Basu is fondly remembered by students and colleagues for the genuine concern he had for students, his service as department chair, his devotion to the field of reliability, and his wonderful spirit. He is survived by his wife, Sandra, sons Amit and Sumit and brother Anshu.

Written by Dibyen Majumdar, University of Illinois at Chicago

Meeting report

Meta-analysis Workshop hosted by University of Malaya, Malaysia

Shahjahan Khan, University of Southern Queensland, Australia, is the founding chief editor of the *Journal of Applied Probability and Statistics*. He was recently the speaker at a meeting in Malaysia, and reports:

The University of Malaya (UM), Kuala Lumpur, Malaysia organised a workshop on "Evidence-Based Decision and Statistical Meta-Analysis with Applications". The workshop was held on Wednesday, 13 January 2016 at the Institute of Mathematical Sciences of UM.

Professor Ibrahim Mohamed, Deputy Dean, Faculty of Sciences of UM, opened the workshop and introduced the presenter, Professor Shahjahan Khan of University of Southern Queensland, Toowoomba, Australia.

Around 15 academics and researchers with diverse backgrounds, from University of Malaya and other universities in Kuala Lumpur, participated in the event. The event was coordinated by Dr Rossita M. Yunus and Dr Adriana Ibrahim.

The presentation introduced meta-analysis as part of evidence-based decision-making using statistics from independent randomised controlled trails in medical studies. Applications of meta-analysis from other areas such as education, social science, psychology, agriculture etc were also focused on.

Emphasizing the necessity of systematic review in selecting relevant studies and data collection method from selected studies, the presenter explained how meta-analysis may be viewed as an application of statistical methods on published statistics.

The workshop defined various effect size measures and discussed various methods of effect size estimation for the individual studies as well as for the common effect size of all studies. It also covered the effect size estimation using fixed effect, random effects, and inverse variance heterogeneity models.

Examples from various meta-analyses of diverse disciplines were used to demonstrate the methods to estimate different effect size measures for both binary and continuous outcome variables.

A free statistical package, MetaXL, an add-on to MS Excel, was used to illustrate the creation and display of forest plots, funnel plots and sensitivity analysis of various studies. The package has been created by Suhail Doi of Australian National University, and Jan Barendregt of University of Queensland, and is free to download from http://www.epigear.com

The presenter, Professor Shahjahan Khan (second from right) with some participants
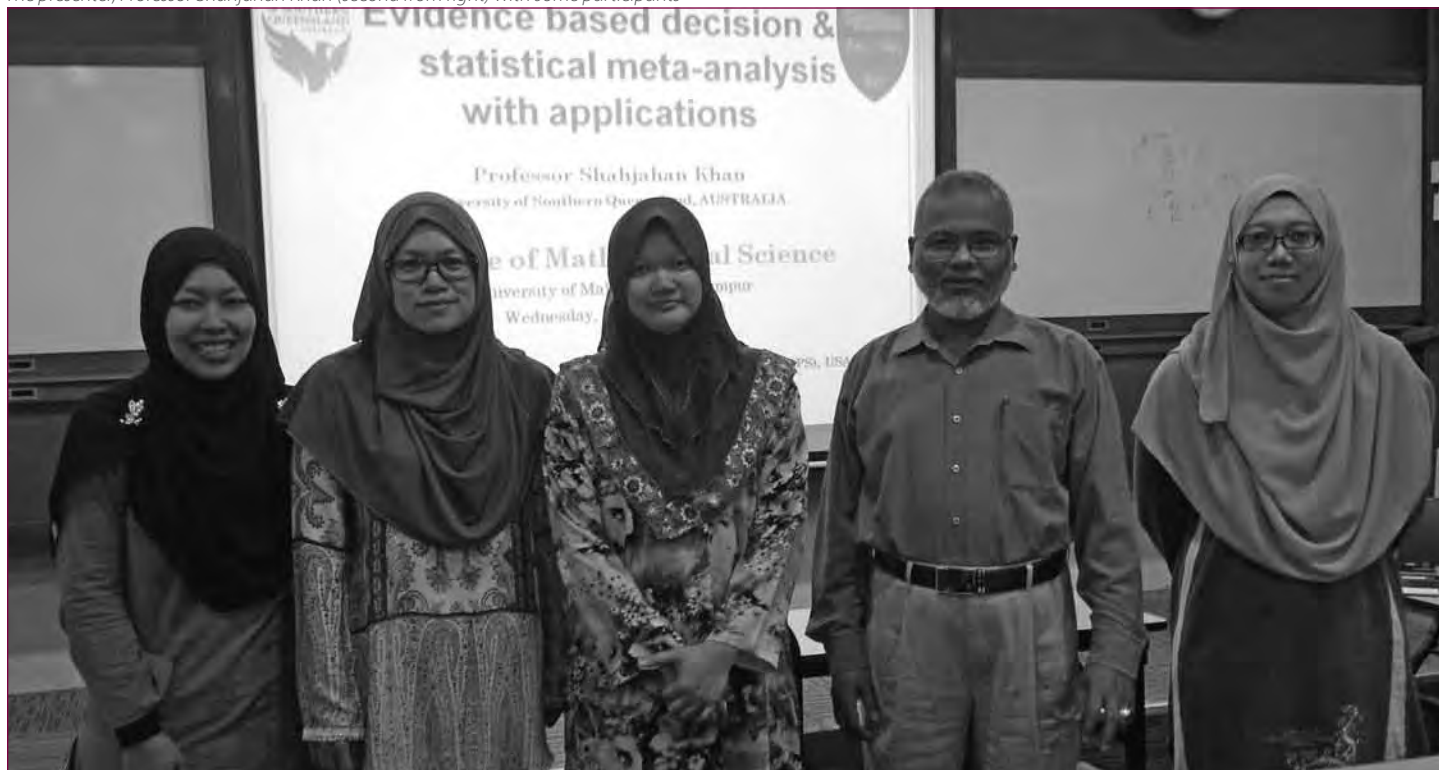
Recent papers: *Electronic Journal of Statistics*

The *Electronic Journal of Statistics* (*EJS*) publishes research articles and short notes in theoretical, computational and applied statistics. The journal is open access. Articles are refereed and are held to the same high standard as articles in other IMS journals. Articles become publicly available shortly after they are accepted. EJS is sponsored by IMS and the Bernoulli Society.

Access the latest published papers at **https://projecteuclid.org/euclid.ejs**

Volume 9, number 2

Recent papers: *Statistics Surveys*

Statistics Surveys publishes survey articles in theoretical, computational, and applied statistics. The style of articles may range from reviews of recent research to graduate textbook exposition. Articles may be broad or narrow in scope. The essential requirements are a well specified topic and target audience, together with clear exposition. *Statistics Surveys* is sponsored by the American Statistical Association, the Bernoulli Society, the Institute of Mathematical Statistics, and by the Statistical Society of Canada.

Access the latest published papers at **http://projecteuclid.org/current/euclid.ssu**

Volume 9 (2015)

SAMSI Deputy Director receives honorary degree

Sujit Ghosh, SAMSI's Deputy Director and Professor of Statistics at North Carolina State University, received an honorary doctoral degree in statistics from Thammasat University (TU) in Thailand. This is one of the highest forms of recognition a university can offer. Thammasat University primarily gives honorary doctorates to people from Thailand. Ghosh has been visiting the Department of Mathematics and Statistics at TU since the summer of 2005. "I have offered several short courses (e.g., Bayesian methods, Monte Carlo statistics, spatial statistics) which have now been incorporated into their doctoral curriculum," said Ghosh. In addition to graduate students, the courses were attended by the local faculty from TU and now their faculty are trained to offer such courses on their own. Ghosh also co-supervised four doctoral students from TU who initially attended his courses and then worked with him on completing their doctoral dissertations. Three of them visited him at NCSU during the last six months of their doctoral programs to complete their theses, and all are now lecturers at renowned universities in Thailand.

"I am truly honored to receive this recognition from Thammasat University. I hope to continue our wonderful relationship," said Ghosh.

Elect your new Council

We are pleased to introduce the candidates who are standing for election to the IMS Council in 2016. This year there is one candidate for President-Elect, and there are 10 candidates for five places on Council.

The President-Elect candidate is Alison Etheridge. The 10 Council candidates are, in alphabetical order: Jean Bertoin, Songxi Chen, Zhen-Qing Chen, Ricardo Fraiman, Tadahisa Funaki, Abba Krieger, Elizaveta Levina, Marta Sanz-Solé, Simon Tavaré and Cun-Hui Zhang. You can read their statements in the following pages, or online at http://www.imstat.org/elections/candidates.htm.

Electronic voting for the 2016 IMS Elections is now open. You can vote online using the personalized link in the email sent by Aurore Delaigle, IMS Executive Secretary, which also contains your member ID. If you would prefer a paper ballot please contact IMS Executive Director, Elyse Gustafson (for contact details see the panel on page 2).

Elections close on May 29, 2016.

If you have any questions, comments or concerns please feel free to contact Elyse Gustafson **e** erg@imstat.org.

President-Elect Nominee

Alison Etheridge

**Professor,
Departments of
Mathematics
and Statistics,
University of
Oxford, UK**

Education
BA Mathematics, Oxford (1985)
DPhil Mathematics, Oxford (1989)
Research Interests
* Mathematical models in population genetics and ecology
* Infinite dimensional stochastic processes
* Coalescent models
Previous Service to the Profession
IMS Council
Committee on Special Lectures
Associate Editor, *Annals of Probability*
Chair, Scientific Programme Committee of the IMS/Bernoulli World Congress 2016
Council of Bernoulli Society

Brief Statement
I am deeply honoured, and more than a little nervous, to be nominated as IMS President-Elect. This is a golden age for statistics and probability. Serving as the Chair of the Scientific Committee for the 2016 IMS/ Bernoulli World Congress in Toronto has really brought home to me the breadth and depth of our discipline. The role that the IMS has played in promoting and developing the field, for example through the excellence of its journals and conferences, should not be underestimated. The greatest asset of the IMS is, of course, its membership, coupled with its highly inclusive culture. Serving on various IMS committees I have seen how effectively we can work together, and so although it is undeniably daunting, I greatly look forward to working with the Executive Committee, the Council and all those who volunteer to serve on IMS committees to sustain and improve still further our activities and contributions to the development of probability and statistics.
w http://www.stats.ox.ac.uk/~etheridg/

Council Nominees
There are 10 candidates for five places on Council.

Jean Bertoin
**Professor, Institute of Mathematics,
University of Zürich**
Education
PhD 1987, Paris
Research Interests
* Probability theory, stochastic processes
* Stochastic analysis
* Random structures
Previous Service to the Profession
Scientific Committee, MFO Oberwolfach, 2015–

Scientific Committee, Ecole d'été de Saint Flour
Managing Editor, *Probability Theory and Related Fields*, 2005–2010 (jointly with J.-F. Le Gall)
Associate Editor, *ALEA*, 2005–present
Associate Editor, *Electronic Journal of Probability*, 1996–2005
Associate Editor, *Probability Surveys*, 2004–present
Associate Editor, *Annales de l'Institut Henri Poincaré (Probabilités & Statistics)*, 2001–2010
Associate Editor, *Annals of Probability*, 2003–2005
Chairman of the Committee for Conferences on Stochastic Processes, 2012–2013

Brief Statement

I would be proud to serve the IMS as Council Member. The IMS is a most important actor in promoting Statistics, Probability Theory, and their applications. If elected, I would endeavor to help maintaining the high quality of publications and conferences sponsored by the IMS. I would also promote activities for encouraging and supporting young researchers, especially from less favored countries.

w http://www.math.uzh.ch/index.php?professur&key1=6119

Songxi Chen

Professor, Department of Statistics, Iowa State University; University Chair Professor, Center for Statistical Science, Peking University

Education

Bsc in Mathematics, 1983, Beijing Normal University

Msc in Mathematical Statistics, 1988, Beijing Normal University

MSc in Statistics and OR, 1990, Victoria University of Wellington

PhD in Statistics, 1993, Australian National University

Research Interests

- Air quality Assessment
- Econometrics
- Empirical likelihood
- High Dimensional Multivariate Analysis
- Inference for Stochastic Processes
- Population Census

Previous Service to the Profession

Associate Editor, *The Annals of Statistics*, 2010–present

Associate Editor, *Journal of Business and Economic Statistics*, 2012–present

Board Member of International Chinese Statistical Association, 2010–2013

Program Committee, IMS Annual Meeting in Montreal, 2016

Brief Statement

I have benefited immensely from being an IMS member of two decades via the very high quality journals, conferences and the platform offered by the IMS. As the society for mathematical statisticians and probabilists, IMS have nurtured generations of statisticians and probabilists, thanks to generations of devoted members. I would think my academic experience in Australia, Asia and the US, and my recent effort in developing statistical science at Peking University, would provide me with the perspectives which would allow me to properly serve IMS members.

w http://www.public.iastate.edu/~songchen/

Zhen-Qing Chen

Professor, Department of Mathematics, University of Washington, Seattle

Education

B.S. East China Normal University, Shanghai, 1985

M.S. East China Normal University, Shanghai, 1987

Ph.D. Washington University in St. Louis, 1992

Research Interests

- Stochastic analysis and its application
- Potential theory for Markov processes and Dirichlet forms
- Scaling limits of stochastic systems and heat kernel estimates

Previous Service to the Profession

IMS Fellow Committee: 2012–2015

Committee for Conferences on Stochastic Processes of the Bernoulli Society: 2016–2019

Editor-in-Chief for *Potential Analysis*: November 2015–present

Associate Editor for *The Annals of Probability*: 2012–present

Editorial Board Member for *Journal of Theoretical Probability*: 2006–present

Editorial Board Member for *Sciences China Mathematics*: 2013–present

Associate Editor for *The Annals of Applied Probability*: 2009–2015

Associate Editor for *Stochastic Processes and their Applications*: 2012–2015

Managing Editor for *Electronic Journal of Probability* and for *Electronic Communications in Probability* 2002–2006

Brief Statement

It is an honor to have been nominated as a candidate for the IMS Council. IMS is an international society for probability and statistics. Both disciplines have seen significant advances in recent years with expanded scopes. I believe a closer interaction between these two fields will be mutually beneficial. If elected to the council, I would help promote and foster closer interaction between probability, statistics, and other mathematical and scientific disciplines. I would continue to support IMS's endeavor to maintain and improve the high quality and excellence of its journals, conferences, and related activities, and to encourage and support young researchers all over the world.

w https://www.math.washington.edu/~zchen/

Council Nominees continued

Ricardo Fraiman

Full Professor, Mathematical Center, Universidad de la República, Uruguay

Education

Diploma in Mathematics, Universidad de Buenos Aires, 1976

PhD in Mathematics, Universidad de Buenos Aires, 1980

Research Interests

- Functional data
- Supervised and unsupervised classification
- Set estimation
- Statistics on random networks
- Selection of variables
- Statistical modelling in Neuroscience
- Robustness

Previous Service to the Profession

Founding member of the Latin American branch of the Bernoulli Society

Member of the International Council of the Latin American branch of the Bernoulli Society, 2004–2008

Member of the International Council of the Bernoulli Society 2009–2013

Associate Editor of *Bernoulli* 2010–2014. Associate Editor of *ALEA* Associate Editor of *TEST*.

Member of the National Academy of Science, Uruguay since 2013

Member of the Scientific committee of various conference series

Chair of the Department of Mathematics, Universidad de San Andres, 2008–2013

Brief Statement

I would be proud and honored to serve the IMS. One of the fundamental aims of the IMS is to maintain the highest standards in the development of statistics. I hope to contribute in this direction. I am particularly interested in increasing the interaction between mathematical statistics and probability theory. Latin America is an area where we are attaining this goal, with strong relationships between research groups in Argentina, Brazil, Chile and Uruguay.

w http://www.cmat.edu.uy/cmat/docentes/rfraiman

Tadahisa Funaki

Professor, Graduate School of Mathematical Sciences, University of Tokyo

Education

Ph.D. in Mathematics, 1982, Nagoya University

Research Interests

- Probability theory, stochastic analysis
- Stochastic partial differential equations
- Large scale interacting systems, scaling limits
- Random interfaces

Previous Service to the Profession

President: Mathematical Society of Japan (2013–2015)

Associate Editors: *Annals of Probability* (1994–2000); *Annales de l'Institut Henri Poincaré, Probabilités et Statistique* (2005–2012); *Probability and Mathematical Statistics* (2006–2010); *Stochastic Partial Differential Equations: Analysis and Computations* (2012–); *Forum of Mathematics, Pi and Sigma* (2012–)

Scientific Committees of Conferences on Stochastic Processes and Their Applications: 30th (Santa Barbara, 2005), 34th (Osaka, 2010), 37th (Buenos Aires, 2014)

Member of Committee for Conferences on Stochastic Processes, Bernoulli Society (2001–2009)

Brief Statement

It is an honor for me to have been nominated as a candidate for the IMS Council. The purpose of IMS is to foster the development and dissemination of the theory and applications of statistics and probability. Needless to say, interdisciplinary relations to other areas of mathematics, sciences, industries increase and the activities are expanding worldwide. Japan has in particular a long tradition in modern probability originated with Kiyosi Itô. If elected to the council, I would be privileged to serve the IMS and promote its activities.

w http://www.ms.u-tokyo.ac.jp/~funaki/

Abba Krieger

Robert Steinberg Professor of Statistics, the Wharton School of the University of Pennsylvania

Education

1972: S.B. Math and Management Science, MIT

1972: M.S. Management Science, MIT

1973: M.S. Statistics, Harvard University

PhD Statistics, Harvard University

Research Interests

- Multiple Comparisons and Testing
- Optimal stopping problems
- Sequential Analysis
- Statistics models in neuroscience (autism and epilepsy)
- Design of sequential experiments

Previous Service to the Profession

Chairman of the statistics department at the University of Pennsylvania

Chair of the committee to evaluate the statistics department at Harvard

Committee member to evaluate the statistics, operations and information systems department at NYU

Chair of the committee for the Department of Education in Israel to evaluate the statistics departments in Israel

Reviewer for many journals including *The Annals of Statistics*, *The Annals of Applied Probability* and the *Journal of the American Statistical Association*

PhD coordinator and chair of the hiring committee for the statistics department at the U.P.

Brief Statement

The IMS is central in fostering the promotion and development of statistics and probability. I have been the beneficiary of all of its efforts through the conferences it arranges and the journals it organizes. My main contribution to our discipline has been more local, helping guide our department in an environment in which the popularity of our discipline is growing rapidly and the intellectual boundaries of our discipline are expanding. I have a broad range of administrative experience inside and outside of our discipline. I plan at first to play a more reactive role, responsibly helping to support the ongoing initiatives that improve the core function of conferences and journals and other related activities. My hope is that after some time I will be able to engage the council in considering activities that I could spearhead that would be beneficial to its membership.

w http://stat.wharton.upenn.edu/~krieger

Liza (Elizaveta) Levina

Professor, Department of Statistics, University of Michigan

Education

B.S. equivalent in Mathematics, St. Petersburg State University, Russia, 1994

M.S. in Mathematics, University of Utah, 1997

Ph.D. in Statistics, U.C. Berkeley, 2002

Research Interests

- Statistical network analysis
- High-dimensional data
- Applications to neuroimaging and spectroscopy

Previous Service to the Profession

Associate Editor: *The Annals of Statistics* (2012–present); *The Electronic Journal of Statistics* (2008–15); *Journal of Computational and Graphical Statistics* (2008–present); *Statistica Sinica* (2011–14). Conference Organizing and Program Committees: Workshop on Frontiers of Statistics, 2006; Inaugural Midwest Statistics Colloquium, 2008; Joint Statistical Learning and Data Mining and Biopharmaceutical ASA Sections Meeting, 2012; IMS representative on the ICSA conference program committee, 2013; From Industrial Statistics to Data Science conference, 2015; Isaac Newton Institute Theoretical Foundations for Statistical Network Analysis program, 2016.

Committee service: IMS representative for the F.N. David Award Committee, 2004–06; IMS Committee on Nominations, 2013–14; IMS Committee on Editor selection for the *Annals of Statistics*, 2014–15; Scientific Committee member, MATRIX (Mathematical Research Institute, Melbourne, Australia), 2015–17.

Steering Committee of the Association for Computational Learning, 2013–16

Brief Statement

The IMS provides our profession with some of its best and most important journals, conferences, and awards, and maintaining this record of excellence and high standards is a top priority. At the same time, it is important the IMS takes a position of leadership on the shifting role of statistics in the emerging broader culture of data science, and works to improve our visibility and attract young talent to the field. Steps towards this goal might include expanding the recently formed IMS groups, including the data science group, and attracting more students to IMS meetings by sponsoring paper competitions.

w http://dept.stat.lsa.umich.edu/~elevina/

Council Nominees continued

Marta Sanz-Solé

Professor, Faculty of Mathematics, University of Barcelona

Education

1974 BS Mathematics, University of Barcelona

1978 PhD in Mathematics, University of Barcelona

Research Interests

- Stochastic analysis
- Stochastic partial differential equations
- Malliavin calculus
- Probabilistic potential theory

Previous Service to the Profession

President of the European Mathematical Society (EMS): 2011–2014

Executive Committee of the EMS: 1997–2004

IMU Commission on Development and Exchanges: 2007–2010

IMS Fellows Committee: 2014–2016

IMS Committee on Special Lectures: 2008–2010

BS Committee for Conferences on Stochastic Processes: 2006–2009 (Chair 2008–2009)

Associate Editorships: *Annals of Probability* (2015–), *Bernoulli* (2013–), *EMS Surveys in Mathematical Sciences* (2013–), *Stochastic Partial Differential Equations. Analysis and Computations* (2012–), *Communication on Stochastic Analysis* (2010–2014), *Collectanea Mathematica* (2007–), *Stochastic Processes and their Applications* (2002–2012), *Bulletin of the Catalan Mathematical Society* (2004–)

Brief Statement

I am very honored to have been nominated as a candidate for the IMS Council. Since its foundation, the IMS has played a central role in the development of statistics and probability, thanks to a continued strong leadership and the committed work of many colleagues. If elected, I would work to maintain the excellent level of IMS scientific activities and journals, to improve the interaction between probability and statistics and other fields of the mathematical sciences, and to encourage and support young researchers.

w http://www.ub.edu/plie/Sanz-Sole

Simon Tavaré

Director, Cancer Research UK Cambridge Institute & Professor, Department of Applied Mathematics and Theoretical Physics, University of Cambridge, UK

Education

1974: BSc Probability and Statistics, University of Sheffield, UK

1975: MSc Probability and Statistics, University of Sheffield, UK

1979: PhD Probability and Statistics, University of Sheffield, UK

Research Interests

- Stochastic computation, approximate Bayesian computation
- Statistical and stochastic aspects of cancer evolution, population genetics, molecular evolution
- Computational biology and bioinformatics
- Probabilistic combinatorics

Previous Service to the Profession

President, London Mathematical Society (2015–2017)

Council, Academy of Medical Sciences (2011–2014)

Member, IMS Committee on Fellows, 1996–1999

Annals of Applied Probability (Associate Editor, 1993–1999)

Annals of Probability (Associate Editor, 2000–2002)

Annals of Applied Statistics (Associate Editor, 2007–2011)

Statistics Surveys (IMS Associate Editor, 2007–present)

Past (11) or present (6) Associate Editor or Editorial Board member for other journals in biological sciences, medicine, probability and statistics

Brief Statement

As a member of Council I will promote the fundamental role of probability and statistics in the rapidly growing field of data science, particularly as it impacts research in the biological and medical sciences. I will support the development of young researchers, and further consideration of ways we might make journal publication quicker while maintaining our aim of excellence.

w http://damtp.cam.ac.uk/user/st321

Cun-Hui Zhang

Distinguished Professor, Department of Statistics and Biostatistics, Rutgers University

Education

B.S. (1978), Hainan Mining Institute, China

M.A. (1982), Columbia University

Ph.D. (1984), Columbia University

Research Interests

- High-dimensional data
- Empirical Bayes
- Functional MRI
- Network data
- Semiparametric and nonparametric methods
- Probability theory

Previous Service to the Profession

Associate Editor, *Annals of Statistics*, 1993–1994, 2000–

Associate Editor, *Statistical Surveys*, 2007–

Associate Editor, *Statistica Sinica*, 1993–2002, 2006–

Associate Editor, *Bernoulli*, 2016–

Board of Directors, ICSA, 1998–2000

IMS committee on special lectures, 2014–

Brief Statement

It is an honor to be nominated as a candidate for the IMS council. We have the fortune to live in the information age in which our profession is blessed with enormous opportunities to grow and make great impacts. As the standard bearer of conferences and publications of the highest quality in statistics and probability theory, the IMS is uniquely positioned to promote our profession in this exciting environment. If elected, I would work with other members of the council to support this mission. I would support current and new IMS initiatives to enrich our field with new ideas and expand it to fertile new ground, to reach out to potential new members, to encourage collaboration amongst members of diverse interests, and to facilitate the career development of young members. The IMS is the intellectual home of its members, including myself. It would be my pleasure to contribute my efforts to its mission.

w http://www.stat.rutgers.edu/home/cunhui/

Now you have read the candidates' statements, don't forget to vote. Vote online using the personalized link in the email sent by Aurore Delaigle, IMS Executive Secretary, which also contains your member ID. Elections close on **May 29, 2016.**

Data Mining Cup 2016: a trial of intellectual strength

Attention students: the prudsys Data Mining Cup kicks off for the 17th year in the spring of 2016. Starting on 6 April 2016, international student teams will put their skills to the test competing in a practical task about intelligent data analysis. Cash prizes and recognition await the winners at the prudsys personalization summit 2016 in Berlin.

For 17 years, the Data Mining Cup (DMC) has been successfully bridging the gap between theory and practice in intelligent data analysis. Every year in spring prudsys AG, a company specialized in real-time personalization, calls on students from all over the world to compete in a trial of intellectual strength. Thousands of participants have answered the call. In 2015 the DMC competition set another new record for the number of participants: 188 teams from a total of 153 universities from 48 countries took part.

The dates for 2016 have now been set: Starting 9 March 2016, interested students can register their team online for the 2016 competition. The DMC competition kicks off on 6 April 2016 with the announcement of the task and ends six weeks later on 18 May 2016 when the solution is submitted. Prizes will be awarded to the winners on 28–29 June 2016 at the prudsys personalization summit 2016 in Berlin.

The DMC is a team competition. Each educational institution (university, technical university, vocational university etc.) can have two teams. The top ten teams will be invited to Berlin for the awards ceremony. At the prudsys personalization summit, the leading event for news and trends in dynamic omni-channel personalization for retail, students have the chance to exchange ideas with industry experts, and to network to secure internships, final projects and to enter the workforce.

Costs for travel to and accommodation in the vibrant metropolis will be covered by prudsys AG for the national and international teams. The top three teams will also receive prize money: first place €2,000; second place €1,000; third place €500.

Details of the task will be published on 6 April 2016.°
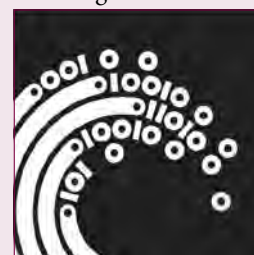
IMS meetings around the world

Joint Statistical Meetings: 2016–2020

IMS sponsored meeting
JSM 2016
July 30–August 4, 2016
Chicago, IL

w http://amstat.org/meetings/jsm/2016

The 2016 Joint Statistical Meetings will be held July 30 to August 4 at McCormick Place, 2301 South Lake Shore Drive, Chicago, IL 60616. The theme of JSM 2016 is "The Extraordinary Power of Statistics."

The IMS program chair for invited sessions is Jan Hannig, University of North Carolina **e** jan.hannig@unc.edu. The IMS contributed program chair is Alexander Aue, University of California, Davis **e** aaue@ucdavis.edu

Make a note of these important dates. Online submission of abstracts has closed, but submitted abstracts can be edited between March 31 and April 18, 2016.

Registration and housing open May 2, 2016, and the early-bird registration deadline is June 1. The 2015 JSM housing reservations went very quickly, so if you are planning to attend, be sure to book your accommodation via the JSM website as soon after May 2 as possible.

IMS sponsored meetings: JSM dates for 2017–2021

| IMS Annual Meeting @ JSM 2017: July 29–August 3, 2017, Baltimore, MD | JSM 2018 July 28–August 2, 2018 Vancouver, Canada | IMS Annual Meeting @ JSM 2019 July 27–August 1, 2019, Denver, CO | JSM 2020 August 1–6, 2020 Philadelphia, PA | IMS Annual Meeting @ JSM 2021 August 7–12, 2021, Seattle, WA |

IMS sponsored meeting   **NEW**
Joint 2018 IMS Annual Meeting and 12th International Vilnius Conference on Probability Theory & Mathematical Statistics
July 2–6, 2018
Vilnius, Lithuania

w TBC

We are please to announce that the 2018 IMS Annual Meeting will be held in beautiful Vilnius, the capital of Lithuania, in conjunction with the 12th Vilnius Conference on Probability Theory and Mathematical Statistics. The Program Co-chairs are Peter Bühlmann (IMS) and Vygantas Paulauskas (Vilnius). The Local Chair is Remigijus Leipus. Details to follow, but mark your calendars!

IMS co-sponsored meeting
The 10th ICSA International Conference
December 19–22, 2016
Shanghai Jiao Tong University, Shanghai, China

IMS Rep: Ming Yuan, University of Wisconsin–Madison
w http://www.math.sjtu.edu.cn/conference/2016icsa/

The tenth ICSA international conference will be held at Xuhui campus of Shanghai Jiao Tong University in China. The theme is *Global Growth of Modern Statistics in the 21st Century*. The International Chinese Statistical Association (ICSA) is a non-profit organization, established in 1987, with the aim of promoting the theory and applications of statistical disciplines through scholarly activities, including publication of journals in statistics and probability, scientific meetings, and other educational programs. The plenary speakers are: Jim Berger, Tony Cai, Kai-Tai Fang, Zhiming Ma, Marc A. Suchard, Lee-Jen Wei and C.F. Jeff Wu.

At a glance:

forthcoming IMS Annual Meeting and JSM dates

2016

IMS Annual Meeting/ 9th World Congress: Toronto, Canada, **July 11–15, 2016**

JSM: Chicago, IL, **July 30 – August 4**

2017

IMS Annual Meeting @ JSM: Baltimore, MD, **July 29 – August 3, 2017**

2018

IMS Annual Meeting: Vilnius, Lithuania, **July 2–6, 2018**

JSM: Vancouver, Canada, **July 28– August 2, 2018**

2019

IMS Annual Meeting @ JSM: Denver, CO, **July 27–August 1, 2019**

2020

IMS Annual Meeting: TBD

JSM: Philadelphia, **August 1–6, 2020**

IMS co-sponsored meeting

NSF/CBMS Conference on Discrete Painlevé Equations *NEW*
May 16–20, 2016. Edinburg, Texas, USA

w https://sites.google.com/site/nsfcbms2016utrgv/

The main lectures and the supplemental lectures plan to address the following major themes: (1) the basic theory of nonlinear difference equations; (2) the connection between discrete integrable systems and continuous integrable systems; (3) the connection of geometry with discrete Painlevé equations, especially the ell-discrete Painlevé equation; (4) asymptotic analysis of discrete Painlevé equations; and (5) obtaining special solutions through elementary methods such as Hirota's bilinear form and Bäcklund and other transformations.

IMS co-sponsored meeting

Advances in Statistics, Probability and Mathematical Physics
June 10–11, 2016
University of Pavia, Italy

w http://www-dimat.unipv.it/eugenioconference/

The conference will honor Eugenio Regazzini on the occasion of his 70th birthday. The program will feature invited talks of authoritative speakers who have been working on topics related to the ones Eugenio has contributed to in Statistics, Probability and Mathematical Physics. Invited speakers: Jim Berger, Eric Carlen, Persi Diaconis, Ed George, Alexander Gnedin, Robert C. Griffiths, Ildar Ibragimov, Michael Jordan, Giovanni Peccati, R.V. Ramamoorthi, Chiara Sabatti.

IMS co-sponsored meeting

2017 IMS-China International Conference on Statistics and Probability
June 28–July 1, 2017. Nanning, Guangxi Province, China
w TBC

Local organizing committee chair: Zijia Peng, Guangxi University for Nationalities, China **e** pengzijia@126.com. Scientific program committee chair: Ming Yuan, University of Wisconsin–Madison, USA **e** myuan@stat.wisc.edu. The website is under construction, but please mark your calendars not for this conference.

IMS co-sponsored meeting

The 25th ICSA Applied Statistics Symposium 2016
June 12–15, 2016
Atlanta, Georgia, USA

w http://www.math.gsu.edu/~icsa/

Contact: Yichuan Zhao **e** yichuan@gsu.edu

Keynote speakers: Bin Yu, David Madigan and Paul Albert; Banquet speaker Michael Eriksen. Details of the scientific programs are on the symposium website. See the website for calls for the Student Paper Award applications and short course proposals.

IMS sponsored meeting

18th Meeting of New Researchers in Statistics and Probability *NEW*
University of Wisconsin–Madison
July 28–30, 2016 (immediately before JSM)

w http://www.stat.wisc.edu/imsnrc18/about.html

See article on page 4 of this issue. Anyone who has received a PhD in or after 2011, or expects to receive one by the end of 2016, is eligible to attend, though participation is by invitation only. Go to the application page on the website for more information. Please note that the deadline for application is **February 27**.

IMS co-sponsored meeting

2016 UK Easter Probability Meeting
April 4–8, 2016, Lancaster, UK

w http://www.lancaster.ac.uk/maths/easter-probability-meeting/
e probability@lancaster.ac.uk

The 2016 UK Easter Probability Meeting is on "Random Structures Arising in Physics and Analysis" and consists of four mini-courses and twelve invited talks. The mini-course speakers and topics are: Alice Guionnet on "Random matrices, free probability and topological expansions", Michel Ledoux on "Concentration inequalities: basics and some new challenges", Jason Miller on "Quantum Loewner Evolution", and Vladas Sidoravicius on "Three lectures on random walk in dynamically changing environments". The invited speakers are Vincent Beffara, Dmitry Belyaev, Noam Berger, Natasha Blitvic, Erwin Bolthausen, Dimitris Cheliotis, Ivan Gentil, Jon Keating, Kay Kirkpatrick, Elizabeth Meckes, Anatoly Vershik and Fredrik Viklund.

Registration is open until February 29, 2016.

IMS co-sponsored meeting

Reproducibility of Research: Issues and Proposed Remedies
March 8–10, 2017. Washington DC, USA

w http://www.nasonline.org/programs/sackler-colloquia/upcoming-colloquia/

This meeting is one of the Arthur M. Sackler Colloquia, which address scientific topics of broad and current interest that cut across the boundaries of traditional disciplines.

IMS co-sponsored meeting

6th IMS-FIPS (Finance, Insurance, Probability & Statistics) Workshop *NEW*
July 7–9, 2016. Edmonton, Alberta, Canada

w http://www.mathfinance2016.com

The primary purpose of the workshop is to bring together a global cast of leading academic experts, practitioners and junior researchers to share research that underscores the contributions of probability and statistics to the development of quantitative models, methods, techniques and technologies in the fields of finance and insurance.

More IMS meetings around the world

ENAR

IMS sponsored meetings
ENAR Spring Meeting
March 6–9, 2016, Austin, Texas
w http://www.enar.org/meetings/
spring2016/index.cfm

The 2016 ENAR Spring Meeting will be held at the JW Marriott Austin. The meeting brings together researchers and practitioners from academia, industry and government, connected through a common interest in Biometry. The scientific program will cover topics of great interest to researchers and practitioners, such as data science (big data), genomics, clinical trials, neuroimaging, biomarkers, health policy, electronic health records, ecology, and epidemiology.

ENAR 2017 & 2018 dates

IMS sponsored meetings
March 12–15, 2017: in Washington DC
March 25–28, 2018: in Atlanta, GA
w http://www.enar.org/meetings.cfm

IMS co-sponsored meeting
WNAR Annual Meeting in conjunction with the XXVIII International Biometric Conference
July 10–15, 2016, Victoria, BC, Canada
w http://biometricconference.org/

The next WNAR Annual Meeting, in conjunction with the XXVIII International Biometric Conference (IBC2016), will be held July 10–15, 2016 at the Victoria Conference Centre in Victoria, British Columbia, Canada. A list of invited sessions is at http://biometricconference. org/invited-sessions/. There will also be four full day short courses. Registration is open.

IMS co-sponsored meeting
NEW
NSF/CBMS Regional Research Conference on Topological Data Analysis
May 31–June 4, 2016. Austin, Texas, USA
w https://stat.utexas.edu/training/cbms-2016

The conference will feature Professor Sayan Mukherjee from Duke University as the principal lecturer, and five additional featured speakers including Professors Rabi Bhattacharya, Susan Holmes, Ann Lee, Lek-Heng Lim and Yusu Wang. This conference will introduce graduate students and junior researchers to TDA, an active new field, which lies at the exciting intersection of topology, geometry, and statistics and serve as an opportunity to foster research collaborations.

IMS co-sponsored meeting
Seminar on Stochastic Processes (SSP) 2016
March 16–19, 2016
University of Maryland, College Park, MD
w https://www-math.umd.edu/seminar-on-stochastic-processes.html

The Seminar on Stochastic Processes (SSP) in 2016 will be held from Wednesday, March 16, through Saturday, March 19. It will be hosted by the University of Maryland. The local organizers will be Sandra Cerrai, Dmitry Dolgopyat, Mark Freidlin and Leonid Koralov.

The invited speakers will be:
- Claudio Landim (_who is the Kai Lai Chung Lecturer_)
- Louigi Addario-Berry
- Yuri Bakhtin
- Yimin Xiao
- Thaleia Zariphopoulou

The tutorial lectures will be delivered on March 16 by Konstantin Khanin.

The first Seminar on Stochastic Processes was organized in 1981 by Kai Lai Chung, Erhan Çinlar and Ronald Getoor.

IMS co-sponsored meeting
Stochastic Networks Conference 2016
June 20–24, 2016. San Diego, CA
w http://stochasticnetworks2016.ucsd.edu/

The aim of the conference is to bring together researchers who share an interest in stochastic network models, to survey recent developments, and to identify future research directions. As in the past, the 2016 meeting will be structured in a workshop format, with approximately 20 hour-long invited talks, allowing ample unscheduled time to maximize interactions between speakers and participants and to facilitate a fruitful exchange of ideas. In addition, there will be a poster session for contributed papers.

Stochastic networks is a multifaceted area of research dealing with the modeling, stability, control, performance, approximation, and design of stochastic networks. It gives rise to challenging and subtle mathematical problems, whose solution often requires a combination of ideas and techniques from several branches of mathematics, including probability theory, stochastic processes, analysis, optimization, algorithms, combinatorics, and graph theory. Research in this area is strongly motivated by applications in diverse domains, ranging from traditional areas of telecommunications and manufacturing to service operations, biological and social networks, revenue management, and health care.

Like its predecessors, the 2016 Stochastic Networks Conference will emphasize new model structures and new mathematical problems that are motivated by contemporary developments in various application domains, as well as new mathematical methods for stochastic network analysis.

IMS co-sponsored meeting
39th Conference on Stochastic Processes and their Applications (SPA)
July 24–28, 2017. Moscow, Russia
w TBC

IMS co-sponsored meeting
9th World Congress on Probability and Statistics
July 11–15, 2016. Toronto, Canada

w http://www.fields.utoronto.ca/programs/scientific/16-17/WC2016/

This meeting is jointly sponsored by the Bernoulli Society and the IMS. The Scientific Programme Chair is Alison Etheridge. The Local Chair is Tom Salisbury. The 9th World Congress on Probability and Statistics will be hosted by the Fields Institute.

IMS co-sponsored meeting
Fourth IMS Asia Pacific Rim Meeting
June 27–30, 2016, Hong Kong, China

w http://ims-aprm2016.sta.cuhk.edu.hk/

The Institute of Mathematical Statistics Asia Pacific Rim Meeting series promotes interaction and networking among statisticians and probabilists from Asia, the Pacific Rim, and other parts of the world. The previous three meetings were successfully held in Seoul, Tsukuba, and Taipei. We are pleased to announce that the fourth meeting will take place on the beautiful campus of The Chinese University of Hong Kong, during the period June 27–30, 2016. The program covers recent developments and the state-of-the-art in a variety of modern research topics in statistics and probability. For more information, you may contact the program chairs: Ming-Yen Cheng (cheng@math.ntu.edu.tw) and Xuming He (xmhe@umich.edu).

Other meetings and events around the world

Conference on Probability and Statistics in High Dimensions: *NEW*
A scientific tribute to Evarist Giné
June 20–22, 2016
Centre de Recerca Matemàtica, Bellaterra, Barcelona, Spain

w http://www.crm.cat/en/Activities/Curs_2015-2016/Pages/MEG.aspx
This conference is held in memory of Evarist Giné (1944–2015), who was an influential, brilliant and prolific contributor to modern probability theory and mathematical statistics, with a focus on problems arising in infinite-dimensional settings. His work has had a profound impact on modern probability theory, mathematical statistics and recently also machine learning.

The workshop will highlight recent activities in the areas Evarist worked in, as well as memorial sessions to celebrate his mathematical achievements.

Ordered Data and their Applications in Reliability and Survival Analysis: *NEW*
An International Conference in Honour of N. Balakrishnan for his 60th Birthday (ODRS 2016)
August 7–10, 2016
Hamilton, ON, Canada

w http://mathandstats.mcmaster.ca/odreliabilityandsurvival/
This three-day conference will feature nine invited sessions, contributed sessions and three plenary speakers: Regina Liu (Rutgers University, USA), Fabrizio Ruggeri (Institute of Applied Mathematics and Information Technologies, Italy), and Bo Henry Lindqvist (Norwegian University of Science and Technology, Norway). In addition there will be a student workshop in two parts given by Udo Kamps (RWTH Aachen, Germany) and Barry Arnold (University of California at Riverside, USA) on August 7th.

N. Balakrishnan

PIMS Summer School 2016 in Mathematical Finance *NEW*
Edmonton, Alberta, Canada
June 25–July 6, 2016

w http://www.mathfinance2016.com
The summer school has two themes with the following speakers:
1. *Informational and Imperfect Financial Markets* (June 25 to June 29): Marek Rutkowski (University of Sydney), Agnès Sulem (INRIA Paris-Rocquencourt), and Thaleia Zariphopoulou (University of Texas at Austin)
2. *Market Microstructure and Algorithmic Trading* (July 2 to July 6): Robert Almgren (Quantitative Brokers), Alvaro Cartea (University of Oxford), and Sebastian Jaimungal (University of Toronto)

The Sixth IMS-FIPS Workshop takes place immediately after the PIMS Summer School 2016 and at the same location (see announcement on page 17). It is followed by the IMS Annual Meeting and World Congress in Probability and Statistics in Toronto, July 11-15.

There will be partial financial support for graduate students and postdoctoral fellows on a competitive basis, in the form of waiving the registration fees, paid accommodation and partial travel support (subject to approval by NSF). See the registration page on the conference website for deadlines.

Other meetings and events around the world

4th Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA2016)
June 1–4, 2016
Valletta, Malta
w http://www.smtda.net/

The 4th SMTDA conference will focus on new trends in theory, applications and software of Stochastic Modeling Techniques and Data Analysis.

The SMTDA2016 will be held in Valletta, Malta from the 1st to the 4th of June, 2016. SMTDA 2016 is organized by the ASMDA International Society and the University of Malta.

SMTDA main objective is to welcome papers, both theoretical or practical, presenting new techniques and methodologies in the broad area of stochastic modeling and data analysis. An objective is to use the methods proposed for solving real life problems by analysing the relevant data. Also, the use of recent advances in different fields will be promoted such as for example, new optimization and statistical methods, data warehouse, data mining and knowledge systems, computing-aided decision supports and neural computing.

Particular interest will be given to interesting applications in engineering, productions and services (maintenance, reliability, planning and control, quality control, finance, insurance, management and administration, inventory and logistics, marketing, environment, human resources, biotechnology, medicine).

For more information and Abstract/Paper submission and Special Session Proposals please visit the conference website at: http://www.smtda.net/smtda2016.html or send email to secretariat@smtda.net

Note that the same event will host the **5th Demographics 2016 International Workshop** (http://www.smtda.net/demographics2016.html) in the University of Malta, Valletta, from June 1–4, 2016.

Are you organizing a meeting? It's free, and easy, to get it listed here, and also at the online calendar, www.imstat.org/meetings. Submit the details at www.imstat.org/submit-meeting

23rd Australian Statistical Conference
December 5–9, 2016, Canberra, Australia
w http://asc2016.com.au/

Registrations and call for abstracts are now open for the 23rd Australian Statistical Conference (SSAI) in conjunction with the 14th Australasian Data Mining Conference (AusDM) and the 9th Australian Conference on Teaching Statistics (OZCOTS). The Program Committee now welcome the submission of abstracts and full papers for consideration in the conference program. To view the guidelines for submission, and submit your abstract or full paper, please visit the website.

Advances in Numerical and Analytic Approaches for the Study *NEW*
of Non-Spatial Stochastic Dynamical Systems in Molecular Biology
April 4–8, 2016
Isaac Newton Institute, Cambridge, UK
w https://www.newton.ac.uk/event/sdbw03

Spring Research Conference 2016 *NEW*
May 25–27, 2016, Illinois Institute of Technology
w http://iit.edu/src2016

SRC has a history of more than two decades, and continues to explore many important topics, including statistical methodologies and theories on design and analysis of experiments, uncertainty quantification, computer experiments and statistical computing, applications of data science in business, industry and government policy making, methods on quality improvement and measurement system, etc. Keynote speakers are Jeff Wu (Georgia Tech), Henry Wynn (London School of Economics) and Dennis Lin (Penn State). Join us in Chicago.

Computer Data Analysis and Modeling: *NEW*
Theoretical and Applied Stochastics (CDAM 2016)
September 6–10, 2016
Belarusian State University, Minsk, Republic of Belarus
w http://www.cdam.bsu.by

Titles of sessions: Robust and Nonparametric Data Analysis; Multivariate Analysis; Statistical Analysis of Time Series and Spatial Data; Probabilistic and Statistical Analysis of Discrete Data; Asymptotic Methods in Stochastics; Econometric Modeling and Financial Mathematics; Survey Analysis and Official Statistics; Data Mining. Proceedings will be published before the conference; extended versions of the selected papers will be published in special issues of some journals after the conference. Deadlines: Submission of papers March 8, 2016; Registration May 20, 2016.

International Conference on Statistical Distributions and Applications (ICOSDA 2016)
October 14–16, 2016
Crowne Plaza, Niagara Falls, Canada

w http://people.cst.cmich.edu/lee1c/icosda2016/

This international conference is being organized to provide a platform for researchers and practitioners to share and discuss recent advancements on statistical distributions and their applications, and to provide opportunities for collaborative work.

The scope of ICOSDA 2016 includes, but is not limited to, statistical distributions and their applications; statistical modeling; high dimensional data analysis; and Bayesian statistics.

The conference presenters are invited to submit their articles for consideration of publication in a special issue of the *Journal of Statistical Distributions and Applications* (http://www.JSDAjournal.com/). The submitted papers will go through the same rigorous peer review process as regular submissions. Accepted papers will receive at least 50% discount of Article Processing Charge (APC). A limited number of accepted articles may receive full APC waiver.

26th Nordic Conference in Mathematical Statistics (NORDSTAT 2016)
June 27–30, 2016. Copenhagen, Denmark

w www.nordstat2016.dk

The biennial NORDSTAT conference is organized under the auspices of the Nordic and Baltic statistical societies. This year the Danish Society for Theoretical Statistics is organizing the meeting at the North Campus of University of Copenhagen.

Plenary speakers: Ingrid Glad, Marloes Matthuis, Richard Samworth, Jonathan Tawn, Arnaud Doucet, Jonathan Taylor and David Lando.

The confirmed invited sessions are: Big Data in Smart Cities, Monte Carlo Methods, Spatial Statistics, Bayesian Statistics, Biodemography, Stochastic Processes, Statistical Theory, Functional Data Analysis, Systems Biology, Forensic Statistics, Biostatistics, Causal Inference, Bayesian Computation, Applied Probability

All participants are encouraged to contribute to the poster session with preceding flash talks. Abstract submission deadline: March 13. Early bird registration: April 11.

14th ISOSS International Conference on Statistical Sciences: Statistics for Better Decision-Making and Development
March 14–16, 2016
Jinnah Sindh Medical University (JSMU), Karachi, Pakistan

w www.isoss.net

5th Berlin Workshop on Mathematical Finance for Young Researchers
June 1–4, 2016. Berlin, Germany

w http://www.math.hu-berlin.de/~mfy2016/

The workshop, which is jointly organized by Humboldt University Berlin and Technical University Berlin, provides a forum for PhD students, postdoctoral researchers, and young faculty members from all over the world to discuss their research in an informal atmosphere. Keynote lectures will be given by Kostas Kardaras (London), Steven Kou (Singapore), Ronnie Sircar (Princeton), and Josef Teichmann (Zurich). Young researchers are invited to submit abstracts for contributed talks. The deadline for abstract submission is March 20, 2016. For further information, abstract submission, and registration, please visit the website.

Flexible Statistical Modeling past, present and future
September 15–16, 2016
Ghent, Belgium

w http://www.fsm16.ugent.be/

Contact Francisco Rubio

e Francisco.Rubio@warwick.ac.uk

The Flexible Statistical Modeling: past, present and future (FSM2016) workshop will take place the 15 and 16 September 2016 in the beautiful city of Ghent in Belgium. This workshop brings together international researchers in the field of flexible modeling to share their latest results. The purposes are to stimulate research in this field, identify interesting new problems and applications, and foster dialogue and future research collaborations. The program includes three plenary talks, eight invited talks and two young researcher talks.

Other meetings and events around the world

Discrete and Algebraic Mathematical Biology:
Research and Education
July 25–27, 2016
NIMBioS, Knoxville, TN, USA

NEW

w http://www.nimbios.org/workshops/WS_mathbio
Over the past fifteen years, modern biology has been transformed by new mathematical methods that have complemented and driven biological discoveries. Problems from signaling, gene regulation, genomics, RNA folding, infectious disease dynamics, drug resistance modeling, phylogenetics, neuroscience, and ecological networks such as food webs, have increasingly benefited from the application of discrete mathematics and computational algebra. While the use of modern algebraic methods is now in mainstream mathematical biology research, this trend has been slow to influence the undergraduate math and biology curricula, where classical difference and differential equation models still dominate. Students interested in mathematical biology have relatively easy access to courses that utilize these classical analytic methods, and they generally have adequate exposure to such methods before deciding upon a graduate program. However, students interested in algebraic and discrete mathematical approaches have fewer doors visibly open to them, and indeed may not even know that they exist. There is a general lack of awareness in the academic community for the critical impact of such approaches on contemporary biology and there is an urgent need to develop educational resources highlighting this growing trend.

Our 2.5-day workshop will bring together a diverse group of faculty from the field of algebraic and discrete mathematical biology to address this need by: 1) surveying existing educational resources in discrete and algebraic mathematical biology; 2) identifying topics appropriate for undergraduates not yet featured in the existing literature; 3) identifying target courses in the mathematics and biology curricula that would benefit most from featuring those topics; 4) initiating the development of new curricular materials and ultimately publishing the materials for those topics; 5) facilitating the growth of a community of faculty actively involved in creating and using curricular resources for algebraic mathematical biology.

Participation in the workshop is by application only. Individuals with a strong interest in the topic are encouraged to apply, and successful applicants will be notified within two weeks of the application deadline. If needed, financial support for travel, meals, and lodging is available for workshop attendees.

Application deadline: April 25, 2016

72nd Annual Deming Conference on Applied Statistics
December 4–9, 2016
Atlantic City, NJ, USA

NEW

w www.demingconference.com
Contact: Walter Young **e** demingchair@gmail.com
The program will be on our website by June 1st. The three-day conference (with poster sessions) provides a learning experience on recent developments in statistical methodologies. It's followed by two parallel two-day short courses. The conference at the Tropicana Casino Resort consists of 12 three-hour tutorials on current applied biostatistical topics based on recently published books that are sold at a ~40% discount. Attendees receive bound presentation proceedings. Walter Young has chaired this conference for 47 consecutive years.

2016 ASA Biopharmaceutical Section
Regulatory-Industry Statistics Workshop
September 28-30, 2016
Marriott Wardman Park, Washington D.C.

NEW

w http://www.amstat.org/meetings/biopharmworkshop/2016/
Roundtable Luncheon and Poster Abstracts accepted
NEW FOR 2016! Workshop to Feature Poster Sessions
The 2016 ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop will be held September 28-30 at the Washington Marriott Wardman Park in Washington, DC.
The program committee is currently accepting abstracts for the following:
Roundtable Luncheons (deadline March 15, 2016)
Poster Sessions, NEW for 2016 (deadline April 1, 2016)
For the first time, the workshop will feature poster sessions. The program committee is seeking abstracts highlighting current, relevant research in the areas of regulatory and industry statistics.

IWMST-2016, International Workshop on Mathematics and Statistics
May 28–29, 2016
Istanbul, Turkey

w http://conf-scoop.org/science/iwmst
Contact Seval Kayabolen **e** secretary@eng-scoop.org
The International Workshop on Mathematics and Statistics is a peer reviewed academic event held annually. IWMST-2016 is organized by Scientific Cooperations and aims to increase collaboration among researchers and practitioners with a common interest in Mathematics and Statistics through scientific publications. The workshop is part of the International Conference of Basic Sciences which consists of three separate workshops of different disciplines.

Population-based Time-to-event Analyses
August 31–September 2, 2016
London, UK

w http://csg.lshtm.ac.uk/pta2016/

Contact Francisco Rubio **e** Francisco.Rubio@warwick.ac.uk

The conference will be held at the London School of Hygiene and Tropical Medicine, in the main building on Keppel Street in Bloomsbury, London and it is co-organised by the Cancer Survival Group and the Centre for Statistical Methodology.

The conference will focus on three themes of time-to-event analyses, all of which concentrate on population-based data and translational epidemiology:

1. Recent methodological developments in competing risks and net survival (Invited Speakers: Per Kragh Andersen, University of Copenhagen, Denmark; Ronald Geskus, University of Amsterdam, Netherlands; Aurélien Latouche, Conservatoire national des arts et métiers, France)

2. *Hierarchical and correlated data in survival and longitudinal analysis* (Invited Speakers: Catherine Legrand, Université Catholique de Louvain, Belgium; Inês Sousa, Minho University, Portugal; Andreas Wienke, Martin Luther University Halle-Wittenberg, Germany)

3. *Causal inference in longitudinal settings with time-dependent confounding* (Invited Speakers: Stephen Cole, University of North Carolina, North Carolina (NC), USA; Miguel Hernan, Harvard School of Public Health, Harvard University, USA; Mark Van Der Laan, University of California, Berkeley, USA).

The conference will include world-renowned invited speakers as well as oral and poster communications. At the end of the conference, a panel will summarise the methods presented and the discussions highlighted during the three days and will look to the future in methodological developments regarding advanced time-to-event analyses of population-based data.

Important dates

Early-bird registration deadline — Monday 4 April 2016
Abstract submission deadline — Monday 4 April 2016
Notification of abstract results — by Friday 13 May 2016
Final registration deadline — Monday 22 August 2016
Conference — Wednesday 31 August to Friday 2 September 2016

RSS 2016 International Conference
September 5–8, 2016, Manchester, UK

w www.rss.org.uk/conference2016

Now in its 24th year, the Royal Statistical Society's annual conference has a focus on current statistical issues and fosters the exchange of ideas and information. Plenary speakers in 2016 will include Christl Donnelly (Imperial College London), Anne Glover (former Chief Scientific Adviser, European Commission) and Xiao-Li Meng (Harvard University).

This annual conference regularly attracts over 450 participants from all over the world, ranging from senior academic statisticians through to new graduates and postgraduate students.

The host city, Manchester, is the 2016 European City of Science (see http://manchestersciencecity.com/).

Submissions for talks or posters on any topic related to statistics and the use of data are welcome. The submission process is now open with an initial deadline for talk submissions of 31 March.

The three-day conference programme will be fully streamed and further information about the streams and session topics can be found on the website.

On Monday 5 September there will be a number of training courses during the day, with a welcome reception taking place in the evening. In addition, professional development workshops will run throughout the event.

Statistical Causal Inference and its Applications to Genetics
July 25–29, 2016
CRM Montreal, Canada

**w** http://www.crm.umontreal.ca/2016/Genetics16/index_e.php

We announce an exciting interdisciplinary five-day workshop to introduce a one month long research program on causal inference in genetics. For details, list of invited speakers, and registration, please see the website.

We are open to submissions for research presentations and posters, and particularly encourage the participation of junior researchers. To register your interest in attending and/or presenting work, please contact Robin Evans **e** evans@stats.ox.ac.uk

The Institute of Mathematical Statistics presents

IMS MONOGRAPHS
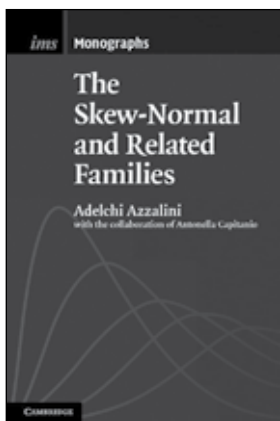
The Skew-Normal and Related Families

Adelchi Azzalini
in collaboration with Antonella Capitanio

Interest in the skew-normal and related families of distributions has grown enormously over recent years, as theory has advanced, challenges of data have grown, and computational tools have made substantial progress. This comprehensive treatment, blending theory and practice, will be the standard resource for statisticians and applied researchers. Assuming only basic knowledge of (non-measure-theoretic) probability and statistical inference, the book is accessible to the wide range of researchers who use statistical modelling techniques. Guiding readers through the main concepts and results, it covers both the probability and the statistics sides of the subject, in the univariate and multivariate settings. The theoretical development is complemented by numerous illustrations and applications to a range of fields including quantitative finance, medical statistics, environmental risk studies, and industrial and business efficiency.

The author's freely available R package sn, available from CRAN, equips readers to put the methods into action with their own data.

Hardback price US$80.00

IMS members are entitled to a discount: email ims@imstat.org to request your code

www.imstat.org/cup/

Cambridge University Press, with the Institute of Mathematical Statistics, established the *IMS Monographs* and *IMS Textbooks* series of high-quality books. The series editors are David R. Cox, Ben Hambly, Susan Holmes and Jon Wellner.

International Workshop on Mathematical Reliability and Safety (MRS 2016)
June 23–25, 2016
Xuzhou, China

w http://mrs2016.jsnu.edu.cn/

The international workshop on Mathematical Reliability and Safety (MRS 2016) aims to bring active experts in various fields including reliability theory, risk management, statistics, and safety to exchange the newest developments, and promote advances in reliability and safety. The topics of interest include, but are not limited to: Reliability theory; Stochastic orders; Risk and security; Extreme value theory; Order statistics; Dependence modeling.

The workshop will be held from June 23 to 25, 2016 at Jiangsu Normal University, Xuzhou, China. Xuzhou City is one of Chinese most well-known transportation hubs, with China's two most important rail lines that run north–south, and east–west directions. With a history of 2,600 years, Xuzhou is a historical city with the critical strategic importance from military views. Xuzhou is well known for its heritage and cultural relics for the Han Culture, which is honored the best city to search or eye-view these splendid items, displaying in its museums. There are total more than 200 Han tombs discovered, with thousands of unearthed priceless funerary objects and terracotta warriors.

The keynote speakers are Narayanaswamy Balakrishnan, McMaster University, Canada; Sheldon M. Ross, University of Southern California, USA; Taizhong Hu, University of Science and Technology of China, China.

MRS 2016 is supported by: the Priority Academic Program Development of Jiangsu Higher Education Institutions; the National Natural Science Foundation of China; and Jiangsu Normal University.

MCQMC 2016: 12th International *NEW*
conference on Monte Carlo and quasi-Monte Carlo methods in scientific computing
August 14–19, 2016
Stanford, California

w http://mcqmc2016.stanford.edu

The MCQMC Conference is a biennial meeting on Monte Carlo and quasi-Monte Carlo methods. This multidisciplinary conference focuses on the following topics: Monte Carlo, quasi-Monte Carlo, Markov chain Monte Carlo; Digital nets and lattice rules; Discrepancy theory; Complexity and tractability of multivariate problems; Multi-level Monte Carlo; Sequential Monte Carlo and particle methods; Rare event simulation; Randomized quasi-Monte Carlo; Variance reduction methods; MC/QMC methods in physics, chemistry, finance, computer graphics and other areas.

We are accepting mini-symposium and individual talk proposals.

Employment Opportunities around the world

Australia: Sydney

University of Sydney

Academic Positions in Mathematics and Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26229932

Austria: Vienna

WU (Vienna University of Economics and Business)

Full Professor of Mathematics for Economics and Business

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26827135

Canada: Vancouver, BC

University of British Columbia, Department of Statistics and the Institute for the Oceans and Fisheries

Assistant Professor, Tenure Track | Canada Research Chair - II in Statistical Ecology

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26196693

Canada: Scarborough, ON

Department of Computer & Mathematical Sciences

Assistant Professor, Teaching Stream - Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26467239

China: Shanghai

Shanghai Center for Mathematical Sciences

Chair Professor/Tenured Faculty/Tenure-track Faculty/Non Tenure-track Faculty/Postdoctoral

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26467509

United States: Los Angeles, CA

UCLA Statistics / UCLA Communication Studies

UCLA Joint Statistics and Communication Studies Faculty Search

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26345650

Employment Opportunities continued

USA: Los Angeles, CA

Institute for Pure and Applied Mathematics, UCLA

Director

The University of California, Los Angeles, Institute for Pure and Applied Mathematics (IPAM) is seeking its next Director, to begin a five-year term in July 2017 or 2018. Salary will be commensurate with the Director's education and experience. For a detailed job description and application instructions, go to www.ipam.ucla.edu/director. Applications will receive fullest consideration if received by June 1, 2016. The search will remain open until the position is filled. Please contact ipam@ucla.edu with any questions. UCLA is an equal opportunity/affirmative action employer.

IPAM is an NSF math institute at UCLA. UCLA is home to some of the most important mathematical scientists of this era. The Southern California region is highly dynamic and includes top 20 departments in virtually every scientific subject.

Candidates may come from mathematics, statistics, computer science or related fields, and should possess some of the following qualifications:

• Scientific distinction sufficient to be offered a tenured faculty position at UCLA

• Scientific and mathematical interest and vision, and the ability to interact with a wide range of researchers and research topics

• Experience and capability to manage IPAM, including programs, staff, finances and administration

• Ability to reach out to a broad range of constituents, including the math and science communities, the National Science Foundation, and the public, as well as to engage in fundraising

• A commitment to diversity in math and related disciplines, especially the participation of women and under-represented minorities in research.

United States: Stanford, CA

Stanford University, Department of Health Research & Policy

Assistant/Associate/Full Professor of Biostatistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=25125241

United States: Champaign, IL

University of Illinois at Urbana-Champaign, Department of Statistics

College of Liberal Arts & Sciences: Lecturer/Clinical Assistant Professor - Department of Statistics (F1600005)

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26687020

United States: East Lansing, MI

Michigan State University, Department of Statistics and Probability

Fixed Term Teaching Specialist

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26830277

United States: Durham, NC

Duke University

Assistant Professor, Tenure Track

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26170859

United States: New York, NY

College of Staten Island

Assistant Professor Department of Mathematics (Probability)

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26240293

United States: Cleveland, OH

Case Western Reserve University, Department of Mathematics, Applied Mathematics & Statistics

Professor and Department Chair

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26239789

United States: Philadelphia, PA

University of Pennsylvania, Wharton Department of Statistics

Shepp Research Fellow and Lecturer in Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26196470

United States: Richardson, TX

University of Texas at Dallas

Clinical Professor Position in Actuarial Sciences

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26677733

United States: Fairfax, VA

George Mason University

Open Rank Faculty Appointment

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=26235754

FRED HUTCH
CURES START HERE™

Biostatistician
Faculty Position in Biostatistics, Bioinformatics & Epidemiology Program
Vaccine and Infectious Disease Division

The Vaccine and Infectious Disease Division seeks a faculty member at the assistant, associate or full member level to conduct a collaborative research program in methodological and applied biostatistics. The faculty member will be expected to contribute to meeting the objectives of one or more of VIDD's major infectious disease prevention biostatistical research programs: the Statistical Data Management Centers of the HIV Vaccine Trials Network, HIV Prevention Trials Network, and Microbicide Trials Network; the Vaccine Immunology Statistical Center of the Collaboration for AIDS Vaccine Discovery; and the Center for Statistics and Quantitative Infectious Diseases. These programs conduct clinical, basic science, immunological, virological, dynamical modeling and epidemiological research for many infectious pathogens including HIV, malaria, TB, cholera, dengue, Ebola, polio, influenza, EBV and rotavirus. The member track faculty positions are equivalent to assistant, associate, and full professor positions at a University.

The successful candidate will establish a dynamic research program consisting of independent projects and collaborative studies that are pertinent to the mission of VIDD and the Fred Hutch. We seek candidates with outstanding methodological, analytic and communication skill whose objective is to innovate and become leaders within their field.

Candidates must hold a PhD or equivalent degree in biostatistics, statistics, or related area. Experience in clinical trials, infectious diseases, and/or computational immunology/virology is preferred. The successful candidate will have demonstrated the ability to work in a highly collaborative environment with biostatistical, laboratory, computational biology, and data scientists.

The Fred Hutchinson Cancer Research Center is a world-renowned research institution with a wealth of scientific and clinical expertise in basic biologic sciences, human biology, clinical research, epidemiology, biostatistics, and cancer prevention research. Its mission is the elimination of cancer as a cause of human suffering and death. The Vaccine and Infectious Disease Division (VIDD) is the home of an extensive portfolio of population science and laboratory-based research and has a large multidisciplinary faculty, with vision statement to eliminate disease and death attributable to infections. Fred Hutch offers active training programs for graduate students and postdoctoral fellows and offers exceptional opportunities for scientific interactions with other investigators in the Seattle area.

Candidates should submit a CV, a concise research plan statement and the names and email addresses for three (3) references to fredhutch.org/job/6894. **Applications should be received by March 31, 2016 to assure consideration. Later applications may be considered if the position is not yet filled.**

The Fred Hutchinson Cancer Research Center is an affirmative action, equal opportunity employer.

International Calendar of Statistical Events

IMS meetings are highlighted in maroon with the *ims* logo, and new or updated entries have the **NEW** or **UPDATED** symbol. Please submit your meeting details and any corrections to Elyse Gustafson: erg@imstat.org

March 2016

March 1–4: Bochum, Germany. **12th German Probability and Statistics Days 2016: Bochumer Stochastik-Tage w** http://www.gpsd-2016.de/

ims March 6–9: Austin, TX. 2016 **ENAR/IMS Spring Meeting w** http://www.enar.org/meetings.cfm

NEW March 14–16: Karachi, Pakistan. **14th ISOSS International Conference on Statistical Sciences: Statistics for Better Decision-Making and Development w** www.isoss.net

ims March 16–19: University of Maryland, College Park, MD, USA. **Seminar on Stochastic Processes (SSP) 2016 w** http://depts.washington.edu/ssproc/ssp_nextssp.php

April 2016

April 1–2: Cambridge, UK. **Info-Metrics Institute Spring 2016 Conference: Information-Theoretic Methods of Inference w** http://www.american.edu/cas/economics/info-metrics/conference/Info-Metrics-Spring-2016-conference.cfm

ims April 4–8: Lancaster University, UK. **UK Easter Probability Meeting 2016:** Random Structures Arising in Physics and Analysis **w** http://www.lancaster.ac.uk/maths/easter-probability-meeting/

NEW April 4–8: Cambridge, UK. **Advances in Numerical and Analytic Approaches for the Study of Non-Spatial Stochastic Dynamical Systems in Molecular Biology w** https://www.newton.ac.uk/event/sdbw03

April 5–8: Lausanne, Switzerland. **SIAM Conference on Uncertainty Quantification w** http://www.siam.org/meetings/uq16/

April 25–27: Knoxville, Tennessee, USA. **NIMBioS Tutorial: Game Theoretical Modeling of Evolution in Structured Populations w** http://www.nimbios.org/tutorials/TT_gametheory

May 2016

May 2–6: Fields Institute, Toronto, Canada. **Dependence, Stability, and Extremes w** http://www.fields.utoronto.ca/programs/scientific/15-16/dependence/

NEW *ims* May 16–20: Edinburg, Texas, USA. **NSF/CBMS Conference on Discrete Painlevé Equations w** https://sites.google.com/site/nsfcbms2016utrgv/

May 18–21: Cappadocia, Turkey. **International Conference on Information Complexity and Statistical Modeling in High Dimensions with Applications w** http://www.ic-smhd2016.com/

NEW May 25–27: Illinois Institute of Technology. **Spring Research Conference 2016 w** http://iit.edu/src2016

May 28–29: Istanbul, Turkey. **IWMST-2016: International Workshop on Mathematics and Statistics w** http://conf-scoop.org/science/iwmst

NEW *ims* May 31–June 4: Austin, Texas, USA. **NSF/CBMS Regional Research Conference on Topological Data Analysis w** https://stat.utexas.edu/training/cbms-2016

June 2016

NEW June 1–4: Berlin, Germany. **5th Berlin Workshop on Mathematical Finance for Young Researchers w** http://www.math.hu-berlin.de/~mfy2016/

June 1–4: Malta. **4th Stochastic Modeling Techniques & Data Analysis Conference w** http://www.smtda.net/smtda2016.html

June 6–10: Pittsburgh, PA, USA **Statistical Challenges in Modern Astronomy VI w** http://www.scma6.org

ims June 10–11: Pavia, Italy. **Advances in Statistics, Probability and Mathematical Physics w** http://www-dimat.unipv.it/eugenioconference/

June 11–16: Avignon, France. **3rd ISNPS Conference w** http://www.isnpstat.org

ims June 12–15: Atlanta, GA. **3rd ICSA Applied Statistics Symposium w** http://math.gsu.edu/~icsa/

June 12–18: Snowbird, Utah, USA. **Mathematics Research Community on Algebraic Statistics w** http://www.ams.org/programs/research-communities/mrc

June 13–17: Sardinia, Italy. **ISBA 2016 World Meeting w** http://www.corsiecongressi.com/isba2016/

June 15–18: Cartagena, Colombia. **Second International Congress on Actuarial Science and Quantitative Finance w** http://icasqf.org

June 19–22: Santander, Spain. **36th International Symposium on**

Forecasting **w** http://forecasters.org/isf/

NEW June 20–22: Centre de Recerca Matemàtica, Spain. **Conference on Probability and Statistics in High Dimensions: A scientific tribute to Evarist Giné w** http://www.crm.cat/en/Activities/Curs_2015-2016/Pages/MEG.aspx

June 20–23: Geneva, Switzerland. **ICES-V, the 5th International Conference on Establishment Statistics w** TBC

ims June 20–24: San Diego, CA. **Stochastic Networks Conference 2016 w** http://stochasticnetworks2016.ucsd.edu/

June 23–25: Xuzhou, China. **International Workshop on Mathematical Reliability and Safety (MRS 2016) w** http://mrs2016.jsnu.edu.cn/

NEW June 25–July 6: Edmonton, Alberta, Canada. **PIMS Summer School 2016 in Mathematical Finance w** http://www.mathfinance2016.com

ims June 27–30: Hong Kong, China. **Fourth IMS Asia Pacific Rim Meeting w** http://ims-aprm2016.sta.cuhk.edu.hk/

NEW June 27–30: Copenhagen, Denmark. **26th Nordic Conference in Mathematical Statistics (NORDSTAT 2016) w** www.nordstat2016.dk

June 27–July 1: Barcelona, Spain. **3rd Barcelona Summer School on Stochastic Analysis w** http://www.crm.cat/en/Activities/Curs_2015-2016/Pages/3rd-BCN-Summer-School-on-Stochastic-Analysis.aspx

July 2016

NEW *ims* July 7–9: Edmonton, Alberta, Canada. **6th IMS-FIPS (Finance, Insurance, Probability & Statistics) Workshop w** http://www.mathfinance2016.com

ims July 10–15: Victoria, BC, Canada. **WNAR Annual Meeting in conjunction with the XXVIII International Biometric Conference w** http://biometricconference.org/conference-information/

ims July 11–15: Toronto, ON, Canada. **IMS Annual Meeting at 9th World Congress in Probability and Statistics w** http://www.fields.utoronto.ca/programs/scientific/16-17/WC2016/

NEW July 25–27: NIMBioS, Knoxville, TN, USA. **Discrete and Algebraic Mathematical Biology: Research and Education w** http://www.nimbios.org/workshops/WS_mathbio

NEW July 25–29: CRM Montreal, Canada. **Statistical Causal Inference and its Applications to Genetics w** http://www.crm.umontreal.ca/2016/Genetics16/index_e.php

NEW *ims* July 28–30: University of Wisconsin–Madison. **18th Meeting of New Researchers in Statistics and Probability w** http://www.stat.wisc.edu/imsnrc18/about.html

ims July 30 – August 4: Chicago, USA. **JSM 2016 w** http://amstat.org/meetings/jsm/

August 2016

August 1–3: Ilulissat, Greenland. **Applied Probability Symposium w** http://thiele.au.dk/events/conferences/2016/ilulissat/

NEW August 7–10: Hamilton, ON, Canada. **Ordered Data and their Applications in Reliability and Survival Analysis: An International Conference in Honour of N. Balakrishnan for his 60th Birthday (ODRS 2016) w** http://mathandstats.mcmaster.ca/odreliabilityandsurvival/

NEW August 14–19: Stanford, CA, USA. **MCQMC 2016: 12th International conference on Monte Carlo and quasi-Monte Carlo methods in scientific computing w** http://mcqmc2016.stanford.edu

August 17–19: Maastricht, The Netherlands. **Small Area Estimation Conference 2016 w** http://www.sae2016.nl

August 21–24: Birmingham, UK. **International Society for Clinical Biostatistics 2016 Conference w** http://www.iscb2016.info/

August 24–26: Kerman, Iran. **13th Iranian Statistical Conference w** http://isc13.uk.ac.ir/index.php?slc_lang=en&sid=1

NEW August 31–September 2: London, UK. **Population-based Time-to-event Analyses w** http://csg.lshtm.ac.uk/pta2016/

September 2016

NEW September 5–8: Manchester, UK. **RSS 2016 International Conference w** www.rss.org.uk/conference2016

NEW September 6–10: Minsk, Republic of Belarus. **Computer Data Analysis and Modeling: Theoretical and Applied Stochastics (CDAM 2016) w** http://www.cdam.bsu.by

International Calendar *continued*

September 2016 *continued*

NEW September 15–16: Ghent, Belgium. **Flexible Statistical Modeling past, present and future w** http://www.fsm16.ugent.be/

NEW September 28–30: Washington DC. **2016 ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop w** http://www.amstat.org/meetings/biopharmworkshop/2016/

October 2016

NEW October 14–16: Niagara Falls, Canada. **International Conference on Statistical Distributions and Applications (ICOSDA 2016) w** http://people.cst.cmich.edu/lee1c/icosda2016/

November 2016

November 9–13: Miami, FL. **International Conference on Questionnaire Design, Development, Evaluation, and Testing w** http://www.amstat.org/meetings/qdet2/index.cfm

December 2016

NEW December 4–9: Atlantic City, NJ, USA. **72nd Annual Deming Conference on Applied Statistics w** www.demingconference.com

December 5–9: Canberra, Australia. **Australian Statistical Conference, 14th Australasian Data Mining Conference, 9th Conference on Teaching Statistics w** www.asc2016.com.au

ims December 19–22: Shanghai, China. **10th ICSA International Conference w** http://www.math.sjtu.edu.cn/conference/2016icsa/

March 2017

ims March 8–10: Washington DC, USA. **Reproducibility of Research: Issues and Proposed Remedies w** http://www.nasonline.org/programs/sackler-colloquia/upcoming-colloquia/

June 2017

ims June 28–July 1: Nanning, Guangxi Province, China. **2017 IMS-China International Conference on Statistics and Probability w** TBC

July 2017

July 9–13: Vigo, Spain. **38th Annual Conference of the International Society for Clinical Biostatistics w** TBC

July 16–21: Marrakech, Morocco. **61st ISI World Statistics Congress 2017 w** http://www.isi2017.org/

ims July 24–28: Moscow, Russia. **39th Conference on Stochastic Processes and their Applications (SPA) w** TBC

ims July 29 – August 3: Baltimore, USA. **IMS Annual Meeting at JSM 2017 w** http://amstat.org/meetings/jsm/

July 2018

NEW *ims* July 2–6: Vilnius, Lithuania. **Joint 2018 IMS Annual Meeting and 12th International Vilnius Conference on Probability Theory & Mathematical Statistics w** TBC

July 9–13: Edinburgh, UK. **ISBA 2018 World Meeting w** TBC

ims July 28 – August 2: Vancouver, Canada. **JSM 2018 w** http://amstat.org/meetings/jsm/

July 2019

ims July 27–August 1: Denver, CO, USA. **IMS Annual Meeting at JSM 2019 w** http://amstat.org/meetings/jsm/

August 2020

ims August 1–6: Philadelphia, PA, USA. **JSM 2020 w** http://amstat.org/meetings/jsm/

August 2021

ims August 7–12: Seattle, WA, USA. **JSM 2021 w** http://amstat.org/meetings/jsm/

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Are you organizing a meeting? It's free and easy to get it listed here (and at www.imstat.org/meetings). Submit the details at www.imstat.org/submit-meeting.html or send details to erg@imstat.org

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Journals

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

* Note that the August 2016 issue has an early deadline of June 15

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

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