IMS Bulletin



April/May 2014

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Read it online at http://bulletin.imstat.org

Elect new Council members

The annual IMS elections are announced, with one candidate for President-Elect— Richard Davis—and 12 candidates standing for six places on Council. The Council nominees, in alphabetical order, are: Marek Biskup, Peter Bühlmann, Florentina Bunea, Sourav Chatterjee, Frank Den Hollander, Holger Dette, Geoffrey Grimmett, Davy Paindaveine, Kavita Ramanan, Jonathan Taylor, Aad van der Vaart and Naisyin Wang. You can read their statements starting on page 8, or online at http://www.imstat.org/ elections/candidates.htm.

Electronic voting for the 2014 IMS Elections has opened. You can vote online using the personalized link in the email sent by Aurore Delaigle, IMS Executive Secretary,



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 30, 2014.

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



Richard Davis

Peter Bühlmann









Jonathan Taylo





Sourav Chatterjee





Aad van der Vaart

Geoffrey Grimmett

Davy Paindaveine



Naisyin Wand

IMS Bulletin

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IMS Members' News

Ying Hung receives 2014 Tweedie Award

The Institute of Mathematical Statistics has selected Ying Hung as the winner of this year's Tweedie New Researcher Award. Ying received her PhD in 2008 from Georgia Institute of Technology, and is currently an Assistant Professor in the Department of Statistics and Biostatistics at Rutgers.

The IMS Travel Awards Committee, selected Ying, "for her outstanding contributions to design and analysis of computer experiments and statistical analysis with applications in cell biology."

The IMS Tweedie New Researcher Award will fund Dr. Hung's travel to present the Tweedie New Researcher Invited Lecture at the IMS New Researchers' Conference, held this year in Boston in August.



Ying Hung

American Association for Advancement of Science elects new Fellows

The theme for the 2014 American Association for the Advancement of Science (AAAS) annual meeting was *Meeting Global Challenges: Discovery and Innovation*—which also neatly describes the achievements of the 388 newly announced AAAS Fellows. Among them were six IMS members and Fellows.

Philip Protter, Columbia University, was elected in the AAAS Section on Mathematics. In the Section on Statistics were Raymond J. Carroll, Texas A&M University, Keith N. Crank, retired, Bani K. Mallick, Texas A&M University, Robert T. Smythe, Oregon State University, and Michael Stein, University of Chicago.

The new AAAS Fellows who were recognized by their peers for their efforts to advance science or its applications. The new AAAS Fellows, whose names will be published in the 29 November issue of Science, were honored at the AAAS Fellows Forum on Saturday, 15 February during the AAAS Annual Meeting in Chicago, where they received a certificate and a blue and gold rosette as a symbol of their distinguished accomplishments.

The complete list of new AAAS Fellows is online: see http://www.aaas.org/news/releases/2013/1125_fellows.shtml



Advancing science . Serving society

Fienberg on Forensic Commission

IMS Fellow Stephen Fienberg (Carnegie Mellon University) was appointed in January to the newly created US National Commission on Forensic Science by the US Department of Justice and National Institute of Standards and Technology. Fienberg and other commission members will work to improve the practice of forensic science by developing guidance concerning intersections between forensic science and the criminal justice system.

IMS Members' News

Alexandre Tsybakov's Humboldt Award

IMS Fellow Alexandre Tsybakov, a faculty member of the CNRS Groupe de Recherche en Economie et Statistique, has been elected the recipient of a Humboldt Research Award. He was nominated for this award by Professor Enno Mammen, Universität Mannheim, Germany. The award is conferred in recognition of lifetime achievements in research. In addition, award winners are invited to carry out research projects of their choice in cooperation with specialist colleagues in Germany; the aim is to further promote international scientific cooperation.

See http://www.humboldt-foundation.de/ web/programmes-by-target-group.html

Gang Zheng: 1965–2014

Gang Zheng lost his battle with head and neck cancer on January 9, 2014. He was 48. Gang earned his BS from Fudan University in Shanghai, and moved to work in the US in 1994, earning a master's in mathematics at Michigan Tech (1996) and PhD in statistics at The George Washington University (2000). He then joined the National Heart, Blood, and Lung Institute, where he worked until his death. His colleagues Nancy Geller, Colin Wu, and Michael Lauer remember him as a "prolific and versatile statistician" whose "efficiency, creativity and generosity were truly inspiring," in an obituary at magazine.amstat.org/blog/2014/03/01/ obituaries-03-2014/

Announcing *Statistics in Action: A Canadian Outlook* published by SSC in Celebration of the International Year of Statistics

Jerry Lawless writes: In early 2013 the Statistical Society of Canada commissioned a volume of expository articles in celebration of the 2013 International Year of Statistics. The resulting book *Statistics in Action: A Canadian Outlook* is published by Taylor and Francis/CRC Press in March 2014. By agreement with the publisher, an electronic version will be freely available at www.ssc.ca/statistics-in-action.

The objectives for the volume are to present for a general audience some of the ways that statistics contributes to science, technology, business, government and other areas, while highlighting important contributions being made by Canadians. We hope that in addition to serving an educational function, the book will motivate students and others to learn more about statistics and its role in diverse fields.

The volume was edited by Jerry Lawless and prepared for publication by Christian Genest. It features 21 articles by leading Canadian researchers, covering a wide range of statistical methodology. Many subject areas are represented within the applications described, including climate change, e-commerce, ecology, financial engineering, genetics, medicine, public health and resource management. Two

articles, on the development of statistics in Canada, and on Statistics Canada's contributions to survey methodology, provide historical perspectives.

A table of contents can be found on the website, where you can also order a paper copy.



access published papers online

IMS Journals and Publications

Annals of Statistics: Peter Hall and Runze Li http://imstat.org/aos @http://projecteuclid.org/aos

Annals of Applied Statistics: Stephen Fienberg http://imstat.org/aoas @http://projecteuclid.org/aoas

Annals of Probability: Krzysztof Burdzy http://imstat.org/aop @http://projecteuclid.org/aop

Annals of Applied Probability: Timo Seppäläinen http://imstat.org/aap @http://projecteuclid.org/aoap

Statistical Science: Peter Green http://imstat.org/sts Mhttp://projecteuclid.org/ss

IMS Collections http://imstat.org/publications/imscollections.htm ¤http://projecteuclid.org/imsc

IMS Monographs and IMS Textbooks: David Cox http://imstat.org/cup/

IMS Co-sponsored Journals and Publications

Electronic Journal of Statistics: George Michailidis http://imstat.org/ejs Mhttp://projecteuclid.org/ejs

Electronic Communications in Probability: Anton Bovier @ http://ecp.ejpecp.org

Current Index to Statistics: George Styan http://www.statindex.org ©log into members' area at imstat.org

Journal of Computational and Graphical Statistics: Thomas Lee

http://www.amstat.org/publications/jcgs 🖾 log into members' area at imstat.org

Statistics Surveys: Donald Richards http://imstat.org/ss @http://projecteuclid.org/ssu

Probability Surveys: Laurent Saloff-Coste http://imstat.org/ps @http://www.i-journals.org/ps/

IMS-Supported Journals

Annales de l'Institut Henri Poincaré (B): Thierry Bodineau & Lorenzo Zambotti http://imstat.org/aihp ¤http://projecteuclid.org/aihp

Bayesian Analysis: Marina Vannucci Mhttp://ba.stat.cmu.edu

Bernoulli: Eric Moulines http://www.bernoulli-society.org/ ¤http://projecteuclid.org/bj

Brazilian Journal of Probability and Statistics: Nancy Lopes Garcia http://imstat.org/bjps @http://projecteuclid.org/bjps

Stochastic Systems: Peter W Glynn Mhttp://www.i-journals.org/ssy/

IMS-Affiliated Journal

ALEA: Latin American Journal of Probability and Statistics: Servet Martinez @http://alea.impa.br/english

Probability and Mathematical Statistics: K. Bogdan, M. Musiela, J. Rosiński, W. Szczotka, & W.A. Woyczyński @http://www.math.uni.wroc.pl/~pms

Big Data: promises, threats, and challenges

Stéphane Boucheron works in the Statistics Group at the Laboratoire de Probabilités et



Modèles Aléatoires, Université Paris Diderot. He writes as one of our team of Contributing Editors: Since 2011, the growing hype around

Big Data has provoked mixed reactions among statisticians. For a while, there will be jobs in the data science industry. This provides arguments when trying to recruit students in a statistics curriculum. But beyond this opportunity, the next question is how connected to statistics is this emerging data science? Comparing trends in the use of terms like big data analytics and big data statistics suggests that the Big Data industry is not reducible to Statistics. I will not try to define here what Big Data is or could be. Several articles in this Bulletin have already safely avoided this point. But I will comment on connections between (mathematical) statistics and computer science that are emphasized by the so-called Data Deluge.

Big Data is sometimes said to be hijacked by computer science at the expense of statistics. This feeling is a real concern on the applied side where databases, business intelligence, analytics, visualization and reporting tools get most of the attention, while advances in computational statistics and statistical learning remain in the shadows. Statistical theory might also be challenged by the Big Data movement. For a century, high church statistical theory has been shaped by the analysis of experiments in agronomy, physics, experimental psychology... In those contexts, data are usually made of a matrix (or rather a data-frame) where *n* rows correspond to individuals and p columns to variables. In the mathematical statistics community, Big

Data is often equated with High Dimension, that is with $n \ll p$. For almost two decades, this has been the playground for inference under sparsity constraints. This attempt to cope with various aspects of the curse of dimensionality has stimulated many exciting developments both on the theoretical and the algorithmic side. This endeavor has already delivered Compressed Sensing, the Lasso and a variety of sparsity-inducing penalization techniques, renewed interest in Greedy methods and a surge of interest in optimization in the statistics community.

There might be something else. For mathematical statistics, Big Data might not be reducible to high dimension. In the language of databases, a data frame corresponds to a relational table. The fact that many working statisticians are now able to query databases or even data-warehouses (collections of possibly heterogenous databases) changes the status of the traditional data-frame. Whereas in the old days, building a data frame represented a lot of work, and data had to be milked thoroughly, it is now possible to re-shape, enrich, decimate data-frame by querying back the databases, that is by filtering, joining and projecting a complex database schema. Things may turn out to be slightly different with NoSQL databases (Not Only SQL databases), such as document databases, and databases made of semi-structured data. But the statistician's job is quietly broadening. Statistical techniques like resampling methods (bootstrap, subsampling) make their way inside OLAP (OnLine Analytical Processing) databases but OLAP databases also constitute a challenge for those very methods.

The rate of data acquisition and data dimensionality are not the only changes in the landscape. Thanks to the possibility of mining databases, data acquisition is also becoming more flexible. There is a theory of

classical statistics. On the asymptotic side, it culminates with the theory of comparison of experiments. When we add lines to the single data-frame—that is, when the sample becomes large—we are (sometimes) able to realize that apparently very different statistical problems are actually equivalent to a Gaussian shift experiment. One may wonder whether there could be a comparable and useful theory for statistical inference in this new, broader framework. Plausible directions may come from computational or statistical learning theory. The classical supervised learning setting has been supplemented by interesting variants, for example, semisupervised learning where the data (labelled examples) of a classification problem are supplemented by a (large) collection of unlabeled examples, active learning where the statistician is allowed to request the labeling of well-chosen data. The asymptotic nature of the theory of comparison of experiments may seem unattractive to many statistical learners. Nevertheless, although the theory of statistical learning has largely complied with the line pioneered by Vapnik and Chervonenkis in the 60s and 70s—sticking to non-asymptotic risk guarantees, and avoiding assumptions about the existence of a correct model—the ability to compare two classification experiments would nicely complement the picture that has been built during the last 20 years (showing that the risk suffered classification depends primarily on the complexity of the dictionary and on the called noise conditions). The semi-supervised scenario and its companion, active learning, provide us with plausible abstractions for Big Data analytics.

In my next columns, I will elaborate on plausible interactions between (theoretical) statistics and Big Data.

l NSF funding opportunity

Xiaoming Huo, Program Director for Statistics, Computational and Data-enabled Science & Engineering at NSF, writes: CDS&E-MSS (Computational and Data-Enabled Science and Engineering in Mathematical and Statistical Sciences) is a relatively new funding opportunity that is managed by the Division of Mathematical Sciences (DMS) of the National Science Foundation (NSF). Its updated information can be found at the program web site (http:// www.nsf.gov/funding/pgm_summ.jsp?pims_id=504687). The next submission window will be November 25-December 9, 2014. The CDS&E-MSS program supports research that confronts the host of mathematical and statistical challenges presented to the scientific and engineering communities by the ever-expanding role of computational modeling and simulation on the one hand, and the explosion in production of digital and observational data on the other. The goal of the program is to promote the creation and development of the next generation of mathematical and statistical theories and methodologies that will be essential for addressing such issues. To this end, the program supports fundamental research in mathematics and statistics whose primary emphasis is on meeting these computational and data-related challenges.

CDS&E-MSS can be viewed as a complement to the Big Data endeavor of NSF (http://www.nsf.gov/news/news_summ.jsp?cntn_ id=123607) as well as a partner of the Data-to-Knowledge-to-Action drive by the Office of Science and Technology Policy (White House) (http://www.whitehouse.gov/sites/default/files/microsites/ostp/ Data2Action%20Announcements.pdf).

CDS&E-MSS is highly integrated and collaborative with CDS&E, which is a larger effort in NSF and involves many other NSF directorates and divisions. We refer you to http://www.nsf.gov/ mps/cds-e/ and http://www.nsf.gov/funding/pgm_summ.jsp?pims_ id=504813 for further information on CDS&E. Note that CDS&E-MSS and CDS&E are not the same; if proposed work emphasizes mathematical or statistical development, CDS&E-MSS may be a fit. If the proposed work is more driven by particular scientific and/or engineering applications, the CDS&E program (which covers wider areas) may be more suitable. Also please note that CDS&E and CDS&E-MSS have different submission windows and different solicitation numbers. Potential investigators should contact the program directors to assess the suitability of their projects to a particular program.

You may have seen information on this program via a *Dear Colleague* letter at www.nsf.gov/pubs/2012/nsf12018/nsf12018.jsp, and an October 2012 article by Jia Li in *Amstat News*.

CDS&E-MSS was launched in 2011. The first two rounds of awards were made in the middle of 2012 and 2013, respectively. To know more about CDS&E-MSS supported projects, one can visit the NSF/DMS web site (http://www.nsf.gov/div/index. jsp?div=DMS), and locate the link to CDS&E-MSS. After arriving at the CDS&E-MSS web site, at the bottom of the web site, there is a hyperlink named "What Has Been Funded..." which takes you to the NSF Award Search web site, where all active projects funded by the CDS&E-MSS program are listed. An alternative means is to go to the NSF Award Search web site and then use the CDS&E program element code 8069 in search.

The awards from CDS&E-MSS cover a wide range of topics: e.g., stochastic partial differential equations, Lie groups and representation theory, manifold learning, sparse optimization, data assimilation, partially-observed Markov processes, and high dimensional learning. Many emerging methodologies have been proposed to be developed: e.g., efficient parallel iterative Monte Carlo methods, accelerated Monte Carlo schemes, solving large-scale eigen-related problems, and measurement model specification search. Some projects are dealing with newly emerged datasets: e.g., algebraic, geometric, and computational tools for data cloud and data array; LiDAR point cloud data; and data with network structure. A wide range of applications can be found in the current awards, including tumor microenvironment, genetic association, brain connectivity, coastal ocean modeling, and subsurface imaging. More information can be found online.

Many CDS&E-MSS awards support interdisciplinary research. In fact, a large proportion of existing awards are jointly supported by several divisions within NSF.

Principal investigators are advised not to submit to CDS&E-MSS a proposal for research that could be supported by another DMS program. For CDS&E-MSS, besides addressing the data-enabling component (which seems to be a strength of many statistically oriented projects), it is equally important to argue convincingly on its application(s) in science and engineering. A project that appears to fit into other traditional programs will have low funding priority in the CDS&E-MSS program.

The statistics community ought to play a significant role in the CDS&E-MSS. Note the letter D (in CDSE) stands for "dataenabled." Because statistics is a significant component of data science, statisticians are well positioned to tackle the problems that fit into CDS&E-MSS. Proposers are more likely to succeed if they demonstrate their efforts to collaborate with other scientists, who can serve as domain experts in the associated science and engineering fields.

In summary, if you propose a research project for development of the next generation of statistical theories and methodologies that will address computational and data-related challenges, with solid collaboration and important scientific and engineering application, CDS&E-MSS is your potential sponsor.

Hand Writing: Solving the Right Problem

Contributing Editor David J. Hand writes: George Box once said "You have a big approximation and a small approximation. The big approximation is your approximation to the problem you want to solve. The small approximation is involved in getting the solution to the approximate problem." In a similar vein, John Tukey said "Far better an approximate answer to the *right* question, which is often vague, than an *exact* answer to the wrong question, which can always be made precise."

I've never been entirely convinced by these statements. They have the ring of nice soundbites (especially when polished up, for example to "An approximate answer to the right question is worth a great deal more than a precise answer to the wrong question") but it seems to me that the critical thing is the accuracy of *both* approximations.

Nonetheless, the underlying point, that people should think carefully about the problem they actually want to solve, holds good. Researchers should not expend energy answering the "wrong question" unless they are confident that it is near enough to the right one.

A particularly simple example of this is whether to use the mean or the median to summarise a set of data. Since these statistics are different, they naturally have different properties. Indeed, as all statisticians will know it's possible for one of two groups to have a higher mean but lower median than the other group. Changes in the extreme values will impact the mean, but not the median. So, for example, one can make the sample mean as large as one likes by increasing the single largest value enough, while the median remains unchanged. If the world's richest person's wealth increases sufficiently while everyone else's declines, the mean wealth goes up, while the median wealth decreases.

For such reasons, it's common to see

statements to the effect that the choice should depend on how the data are distributed, and that the mean is a better measure of "location" than the median for symmetric distributions, while otherwise the median should be used.

But this is an oversimplification—and you will note that that description of which measure is appropriate made no reference at all to the question being asked.

If, as an employer, I choose the remuneration of new recruits randomly from a pronouncedly skewed distribution of salaries, then the average which will interest me is the mean of the distribution: those receiving large salaries will be compensated for by the larger number receiving small salaries, and my total wage bill is the product of the number of employees and their mean salary. In contrast, a potential new recruit considering joining the firm will be interested in the median salary. To her the mean is of little interest, since she is very likely to receive substantially less than that.

The distribution has the same shape in each case, but the appropriate average depends on what one wants to know.

I picked the mean/median example because it was the simplest example I could think of, but the principle is ubiquitous: the choice of statistical method depends on the question you want to answer.

Correlation coefficients are another very widely used basic summary statistic. The Pearson product-moment coefficient is known to be a measure of the strength of *linear* relationship. Often, however, one wants a weaker measure of relationship perhaps merely a measure of strength of monotonic relationship. Correlation coefficients for this are sometimes called nonparametric measures of correlation, and they are invariant to monotonic increasing transformations of the two variables involved. The Spearman coefficient is an example. This works by transforming the observed values to ranks and calculating the Pearson coefficient of the ranked data. That's equivalent to transforming the raw data to uniform scores, before applying the Pearson measure. But the choice of a uniform distribution here is arbitrary—or at least, in almost all the applications I have encountered, it's arbitrary. No-one has told me why, for their problem, they believed uniform scores were appropriate, rather than, for example, normal scores, or scores derived from some other distribution. Unfortunately, the derived value of the Pearson coefficient will depend on the chosen distribution. What this means is that the value of the coefficient is using arbitrary "information" that the researcher has injected into the calculation, not merely the information in the data.

To overcome this, we need to step back and think more carefully about how the invariance to monotonic transformations of the two variables is achieved. The Spearman coefficient does it by mapping to a standard representation, but an alternative approach would be to base one's measure solely on the ordinal properties of the data. A measure which does this is the Kendall coefficient. This measure thus sidesteps the intrinsic arbitrariness implicit in the Spearman measure. Again the two measures are different, with different properties, and which is appropriate depends on what you want to know.

As Box, Tukey, and other great statisticians have pointed out, it is critical in a statistical analysis to make sure you solve the right problem.

David Hand is Senior Research Investigator and Emeritus Professor of Mathematics at Imperial College, London, and Chief Scientific Advisor to Winton Capital Management. He serves on the Board of the UK Statistics Authority. He is a Fellow of the British Academy, and a recipient of the RSS Guy Medal. He was made OBE for services to research and innovation.



The *Student Puzzle Corner* contains one or two problems in statistics or probability. Sometimes, solving the problems may require a literature search.

Current student members of the IMS are invited to submit solutions electronically (to **bulletin@imstat.org with subject "Student Puzzle Corner"**). Deadline **May 1, 2014**.

The names and affiliations of (up to) the first 10 student members to submit correct solutions, and the answer(s) to the problem(s), will be published in the next issue of the *Bulletin*.

The Editor's decision is final.

Last issue's Student Puzzle:

In a house, there are six cuckoo clocks. They are showing these times 9:44, 9:46, 9:34, 9:45, 8:57 and 9:44. We want to guess the correct time μ . We have to model the problem. Here is how the six data values were generated. A subset of the six observations were generated from a normal distribution with mean μ and standard deviation $\frac{1}{30}$ (meaning 2 minutes); the rest of the six observations were generated from a Cauchy distribution with parameters μ and 1. Thus, we think that a subset of the cuckoo clocks have become a bit inaccurate, and the others have gone completely erratic. You are not told how many and which data values came from the normal distribution. Can you guess µ? Give your answer in hours and minutes; e.g., 10.5 will mean 10:30.

Student Puzzle Corner 3

Let *P*,*Q* be two randomly chosen points on the surface of the Earth and let *D* be the Euclidean distance between *P* and *Q*. Assuming that Earth is a perfect sphere of radius 3960 miles, find the exact value of E(D). Notice that we are not asking for $E(D^2)$, but E(D) itself.

Airplanes generally travel approximately along the geodesic distance, because to take the path corresponding to the Euclidean distance, one has to go through the interior of the Earth. It is possible to find how how much larger the geodesic distance is than the Euclidean distance on the average.

We will publish the names and affiliations of (up to) the first 10 respondents who send a correct solution.



Last issue's correct answer

Anirban DasGupta, IMS Bulletin Editor, writes:

Tengyuan Liang at the Wharton School, University of Pennsylvania, sent the correct value of μ (though without sending any work).

Note that the correct value just refers to the μ that was used to generate the six data values. Of course, μ cannot be exactly estimated, but we can formulate the estimation problem.

Let $\chi = \{9.73, 9.77, 9.57, 9.75, 8.95, 9.73\}$ denote the set of sample values. Let f_0 denote the normal density with mean μ and standard deviation $\frac{1}{30}$ and f_1 the standard Cauchy density with median at μ . We are not told how many or which of the sample values are from f_0 . Let $A \subseteq \chi$ consist of the observations from f_0 , and A^c the observations from f_1 ; there are 64 such subsets of χ . We could try to maximize the likelihood function

$$_{x \in A} f_0(x \mid \mu) \times \prod_{x \in A^c} f_1(x \mid \mu)$$

over A and μ . This is a formal attack. An informal attack would be to treat it as a problem in simple data analysis, and conclude that the clocks showing the times 9:34 and 8:57 have become completely unreliable and treat the other four as a Gaussian sample. Both approaches lead to a value of μ close to 9:45, and then you guess that probably 9:45 was used for the simulation purpose.

Are you on Facebook? We are! Search "IMSTATI" in Facebook



Meet the Candidates for 2014 IMS Council

President-Elect Nominee (one candidate)

<u>Richard Davis</u>

Howard Levene Professor and Chair of Statistics, Columbia University Education: 1974 BA Mathematics, University of California at San Diego; 1979 PhD Mathematics, University of California at San Diego

Research Interests

- Time series analysis
- Extreme value for stationary sequence and space-time processes
- Spatial statistics with application to environmental data
- Applied probability

Previous Service to the Profession

- IMS Council (2013-)
- Joint IMS/Bernoulli Society Publications Management Committee (Jan '14-)
- Editor-in-Chief, *Bernoulli* (Jan '10–Dec '12)
- Associate Editor, Annals of Applied Probability (Jan '94–Jan '00)
- Associate Editor, *Extremes* (Jan '07-)



- Editor, *Statistical Science* (Jan '08–Dec '10)
- Associate Editor, Stochastic Processes and Their Applications (Jan '93–Jan '96, Mar '08–Jan '10)
- Business and Economics Statistics Section, Chair-elect (2009), Chair (2010)
- Co-organizer (with James Stock, Ruey Tsay, and Serena Ng) NBER/NSF Workshops in Time Series (2001 –)

Brief Statement

I am honored to have the opportunity to stand for election as president-elect of IMS. With many areas in our field currently in the public eye, these are heady and exciting times for probabilists and statisticians. Fortunately, IMS is well positioned to provide timely fora to address the challenges of an expanding and changing research landscape and must do so while maintaining the high quality expected of IMS sponsored activities. It is also crucial for IMS to be proactive in expanding its outreach and support of young researchers—these actions help build a more vibrant and engaged community. w http://www.stat.columbia.edu/~rdavis/

Council Nominees (12 candidates for six positions)

<u>Marek Biskup</u>

Professor, Department of Mathematics, UCLA

Education: PhD Mathematics, University of Nijmegen, The Netherlands

Research Interests

Probability related to statistical mechanics including:

- Phase transitions and critical phenomena
- Random motions in random media
- Homogenization and heat-kernel estimates
- Percolation
- Extrema of Gaussian processes

Random Schroedinger operators

Previous Service to the Profession

- Associate Editor, *Electronic Journal of Probability* and *Electronic Communications in Probability*, 2007–present
- Summer school organizer (Prague schools on statistical mechanics) and lecturer (e.g. 2007 Park City Summer School)



- Frequent conference organizer (Oberwolfach, Banff, IPAM, probability sessions at AMS meetings, etc)
- Steering committee member for the RGLIS program at the European Science Foundation

Brief Statement

The IMS should maintain its indispensable role in providing outlets for high-quality publications and making them widely accessible at affordable price. Further expansion should be considered by inviting other valuable probability/statistics journals under the IMS umbrella. The IMS should also try to capitalize on a recent influx of motivated young researchers into probability. This could be done by offering a shelter, and providing support within means, for young-researcher symposia and/or summer schools around the world. Finally, the IMS is primarily a meeting ground for probabilists and statisticians but it should also constantly develop further means of outreach to other areas of mathematics, computer science and applied sciences. If elected, I will do my best to represent the probability community in these endeavors.

w http://www.math.ucla.edu/~biskup/

<u>Peter Bühlmann</u>

Professor, Seminar for Statistics, Department of Mathematics, ETH Zurich Education: Ph.D. Mathematics (Statistics), ETH Zurich 1993 Research Interests

High-dimensional statistics

- Computational statistics and machine learning
 Statistics in life sciences
- Previous Service to the Profession
- Frevious Service to the Frotession
- Annals of Statistics, Co-Editor 2010–2012
- Annals of Statistics, Assoc. Editor 2005–2009
- Journal of Machine Learning Research, Editorial Board 2001–2009
- Journal of the Royal Statistical Society, Series B, Assoc. Editor 2004–2007
- *Biometrical Journal*, Assoc. Editor 2004–2009 Brief Statement

I like IMS very much: it is a broad-minded society for statistics, probability theory, and interdisciplinary applications. If elected to the council, I would contribute towards maintaining this broad-minded spirit of the society and opening new connections with other fields from e.g. computer science, mathematics, natural and social sciences. To achieve these goals, the current high quality of IMS publications and conferences is of utmost importance for outstanding communication of science within and across fields, and IMS's engagement in education and training of young researchers worldwide should be further strengthened.

w http://stat.ethz.ch/~buhlmann/

<u>Florentina Bunea</u>

Professor of Statistical Science, Department of Statistical Science, Cornell University Education: MS in Mathematics, University

of Bucharest, 1991; Ph.D. in Statistics, University of Washington, Seattle, 2000 Research Interests

- High dimensional parametric and semi-parametric inference
- Model selection and aggregation
- High dimensional matrix modeling and inferenceStatistical theory

Previous Service to the Profession

- Series Co-Editor, *Monographs on Statistics and Applied Probability*, (*The Green Series*), Chapman & Hall CRC, since 2009
- Associate Editor, JASA, since 2011
- Associate Editor, *Bernoulli*, since 2010



- Associate Editor, *The Electronic Journal of Statistics*, since 2007
- Associate Editor, Journal of the Royal Statistical Society (JRSS)-B (2012–2014)
- Associate Editor, The Annals of Applied Statistics (2011–2012)
- Associate Editor, *The International Journal of Biostatistics*, Berkeley Press (2007–2012)
- Associate Editor, *The Annals of Statistics* (2007–2010)
- Program leader for the 2013–2014 SAMSI Program on Lowdimensional Structure in High-dimensional Systems (LDHD)
- IMS representative for the COPSS F.N. David Award committee, 2014–2018

Brief Statement

If elected, my efforts in the IMS council will be directed towards activities that will promote the new wave of mathematical statistics that is rapidly developing in response to emerging applications of unprecedented complexity. I view training the next generation of statisticians in this spirit as key for statistics as a discipline to maintain a leading role in sciences. I will work on developing new IMS initiatives that can make this happen.

w https://courses.cit.cornell.edu/fb238/

<u>Sourav (hatterjee</u>

Professor, Statistics and Mathematics, Stanford University Education: Ph.D. from Stanford University in 2005

Research Interests

- Probability theory
- Mathematical statistics
- Previous Service to the Profession

Served on the editorial boards for: *Annals of Probability, Probability Theory and Related Fields, Annales de l'Institut Henri Poincaré, Sankhya*

Brief Statement

I will be honored to serve as a member of the council, if elected. I will be particularly interested in forwarding the interests of young researchers, because I have personal experience in benefitting from the IMS's commendable role in supporting young people at the beginning stages of their career. There are very few academic institutions that play this role with as much sincerity. I will also try to forward the interests of the probability community, because that is where I primarily belong.

w http://statweb.stanford.edu/~souravc/





<u>Frank Den Hollander</u>

Prof. Dr., Mathematical Institute, Leiden University, The Netherlands Education: MSc 1980 Theoretical Physics; PhD 1985 Mathematical Physics

Research Interests

- Probability Theory
- Statistical Physics
- Ergodic Theory
- Population Genetics

Previous Service to the Profession

- Scientific Director of EURANDOM (2000–2005)
- Council of the Bernoulli Society (2003–2007)
- Council of the IMS (2006–2009)
- Publications Committee of the Bernoulli Society (since 2011)
- Advisory Council for Exact Sciences of the Royal Dutch Academy of Sciences (since 2011, chair)
- Mathematics Advisory Council of Elsevier (since 2012)
- Served on 10 editorial boards

Brief Statement

Internationalisation continues to be a key challenge for mathematics. A viable model for open access, combined with a refereeing system that works efficiently and does justice to high-quality papers, need our attention as well. Over the years I have been active both within the Institute of Mathematical Statistics and the Bernoulli Society, trying to help our profession wherever I can. The stochastic sciences are flourishing. This offers unique possibilities for the future, especially close interaction with other sciences.

w http://www.math.leidenuniv.nl/~denholla/

<u>Holger Dette</u>

Professor, Department of Mathematics, Ruhr-Universität Bochum, Germany Education: PhD, 1989, Universität Hannover, Germany; Habilitation, 1992; Universität Göttingen, Germany Research Interests

- Design of experiments
- Nonparametric regression
- Time series, locally stationary processes
- Random matrices
- Matrix measures
- Birth and death processes
- Approximation theory and orthogonal polynomials Previous Service to the Profession
- Editor: *Metrika* (2008–2012)



- Editor: Journal of Statistical Planning and Inference (2012–)
- Editor: *Stat* (2012–)
- Associate Editor: Annals of Statistics (1995–2007, 2011–)
- Associate Editor: *Bernoulli* (2013-)
- Associate Editor: International Statistical Review (2011-)
- Associate Editor: Journal of the American Statistical Association (2011-)
- Associate Editor: Journal of the Royal Statistical Society: Series B (2007-)
- Associate Editor: Test (2000-)
- Associate Editor: Sankhya (2004–)
- Associate Editor: ESAIM: Probability and Statistics (2005-)
- Associate Editor: Statistics & Probability Letters (2007-)
- Associate Editor: *Statistics & Decisions* (2007-)

Brief Statement

The IMS plays a major role for the development of Probability and Statistics in the future. My list of priorities for the work in the council is:

- 1) Promotion of young researchers.
- 2) Improving the collaboration between probability and statistics.
- 3) Improving the quality of refereeing.
- 4) Supporting interactions between IMS and other scientific organisation in mathematics—in particular SIAM.
- 5) Improving the visibility of our field to other disciplines, where massive and new data structures require the development of new methodology and theory.
- 6) Support of open access electronic publishing.
- w http://www.ruhr-uni-bochum.de/mathematik3/en/dette.html

<u>Geoffrey Grimmett</u>

Professor of Mathematical Statistics, Statistical Laboratory, University of Cambridge

Education: BA (1971), MSc (1972), MA (1974), DPhil (1974), DSc (2010), Oxford University

Research Interests

- Probability theory
- Stochastic processes on graphs
- · Percolation and disordered systems

Previous Service to the Profession

- Membership of numerous IMS committees including Council (2007–10)
- AE, Annals of Probability (1988–94)
- Managing Editor, Probability Surveys (2009-11)
- Managing Editor, Probability Theory and Related Fields (2000-05)





Brief Statement: The IMS has a very special role as a beacon publisher of top-rank and widely accessible journals and books in probability and statistics. I support activities in North America and further afield that support our community worldwide, and I will take some interest in matters of governance.

w http://www.statslab.cam.ac.uk/~grg/

<u>Davy Paindaveine</u>

Professor of Statistics, ECARES and Department of Mathematics, Université libre de Bruxelles

Education: MA in Mathematics, 1998, Université libre de Bruxelles; Ph.D. in Statistics, 2002, Université libre de Bruxelles Research Interests

- Nonparametric Statistics
- Robust inference
- Asymptotic Statistics
- Multivariate analysis
- High-dimensional data

Previous Service to the Profession

- Co-Editor-in-Chief, Statistics and Probability Letters, since 2014
- Associate Editor, Annals of Statistics: since 2013
- Associate Editor, ESAIM Probability and Statistics: since 2013
- Assoc. Editor, *Journal of Statistical Planning and Inference:* since 2012
- Associate Editor, Statistica Sinica: since 2011
- Associate Editor, *International Statistical Review:* since 2011
- Associate Editor, *Statistics and Probability Letters:* 2010–2013
- IMS Committee on New Researchers: 2011–2013

Brief Statement: "The best thing about being a statistician is that you get to play in everyone's backyard" (John Tukey). I could not agree more with this point and see this as a further reason to try and strengthen the links between the IMS and scientific societies in other fields. At least as important is to pursue the on-going efforts to make the IMS more and more useful and visible to young statisticians. w http://homepages.ulb.ac.be/~dpaindav/

<u>Kavita Ramanan</u>

Professor, Applied Mathematics, Brown University

Education: B.Tech. Chemical Engineering, IIT Mumbai, 1992; MS Applied Mathematics, Brown University, 1993; PhD Applied Mathematics, Brown Univ., 1998



Research Interests

- · Probability theory, stochastic processes and their applications
- Large deviations
- Concentration of measure
- Gibbs measures and phase transitions
- Stochastic analysis
- Stochastic networks and their scaling limits
- Previous Service to the Profession
- Editorial Board of: Annals of Probability (2006–2012), Annals of Applied Probability (2009–present), Mathematics of Operations Research (2007–present), Queueing Systems (2008–present), Stochastic Analysis and Applications (2002–2012)
- IMS Committee on Nominations, Member (2011-2013)
- IMS Membership Committee (2007)
- Bernoulli Society Nominations Committee, Member (2014-)
- Prize Committees: (i) George Nicholson Prize (2013 member; 2014 Chair); (ii) Erlang Prize of the Applied Probability Society(2014-)
- AMS (American Mathematical Society) Eastern Section Program Committee, Member 2012, Chair 2013
- Organizer/Co-Organizer of several international Conferences, including (i) Computational Challenges in Probability, semester program at ICERM, Providence, RI (Fall '12) (ii) INFORMS Applied Probability Conference (Stockholm, Sweden, July '11) (iii) Stochastic Networks Meeting (Newton Institute, Cambridge, UK, Mar '10) (iv) IMI Meeting on Limit Theorems in Probability, Bangalore India (Jan '13)
- Scientific Committee of various Conference Series, including (i) Committee for the Conferences on Stochastic Processes (2010-) (ii) Seminar on Stochastic Processes, Long-term member (2014-) (iii) Stochastic Networks (2008-present)
- International research panels, including for NSF (National Science Foundation), ERC (European Research Commission), INRIA
- Faculty Sponsor AWM (Association for Women in Mathematics) Chapter Division of Applied Math, Brown University
- Outreach Activities, including talks at Rhode Island School of Design, Providence, RI Center for Women in Mathematics, Smith College, MLK Elementary School, Providence Girl's Science Club, Jewish Day School, Pittsburgh

Brief Statement: I am honored to have been nominated as a candidate for the IMS Council. This is an exciting era for probability and statistics, with significant advances in both theory and applications. If elected to the council, I would help foster interaction between probability, statistics, and other mathematical and scientific disciplines, and take measures to improve public understanding of the importance of these fields. I would strongly encourage meetings and other activities



that support young researchers from around the world and continue to support the IMS in its mission to maintain the highest standards for its publications.

w http://www.dam.brown.edu/people/ramanan/index.htm

<u> Jonathan Taylor</u>

Associate Professor, Department of Statistics, Stanford University Education: B.Sc., McGill University (1997); Ph.D., McGill University (2011) Research Interests

- Geometric methods in statistics
- Smooth stochastic processes
- Optimization methods in statistics (consistency, inference, computation)
- Multiple comparisons problems with dependent data
- Extreme value theory

Previous Service to the Profession

- Current Associate Editor for Annals of Statistics, Scandinavian
 Journal of Statistics
- IMS Nominations Committee

Brief Statement: The growth of data-intensive scientific applications and big data in industry has greatly increased the importance of probability and statistics to other disciplines. I believe the IMS, as the world's leading society committed to both probability and statistics, has an important role to play in this outreach. If elected, I am committed to ensuring that probability and statistics' role in science, society and computing continues to grow. I am also committed to encouraging the continued communication of research between the theoretical and applied constituencies within the IMS.

<u>Aad van der Vaart</u>

Professor of Stochastics, Mathematical Institute, Leiden University, Netherlands Education: B.S. Psychology, Leiden University, 1983; M.S. Mathematics, Leiden University, 1983; Ph.D. Mathematics, Leiden University, 1987

Research Interests

- Semiparametric statistics
- Bayesian statistics
- Empirical processes
- Genomics, genetics, imaging, finance Previous Service to the Profession
- · Associate editor Annals of Statistics, ESAIM, Statistica

Neerlandica, Statistics and Decisions, PTRF, Indagationes Mathematicae, JSPI, ALEA.

- Program chair EMS 2005 Oslo, and BNP10 2015 Rayleigh
- Chair local organizing committee BNP9, and EMS 2015
- Member program and organizing committees of workshops and conferences
- Chair European Regional Committee Bernoulli Society
- ISI council member
- President Netherlands Society for Statistics and Operations Research.
- Member local, European and international scientific councils, review panels, nominating committees, governing boards, prize committees, including some of IMS.

• Head Department of Mathematics, VU University Amsterdam Brief Statement: Thanks to the effort of many, IMS publishes the most significant journals and organizes main conferences in our area. It is attractive that it keeps statistics and probability together in this effort, without losing sight of the wider area of statistics. I am more than happy to serve on the council to help IMS continue to be an efficient representative of our profession.

w http://www.math.leidenuniv.nl/~avdvaart/

<u>Naisyin Wang</u>

Professor, Department of Statistics, University of Michigan Education: Ph.D. Statistics, Cornell University, 1992; M.A. Statistics, Ohio State University, 1987; B.S. Mathematics, National Tsing-Hua University, Taiwan, 1986 Research Interests



- Functional and Longitudinal Data Analysis
- Weighting and Transformation in Regression
- Measurement Error and Mixture Modeling
- Interdisciplinary Research on Nutrition and Dietary Studies Previous Service to the Profession
- Co-Chair Editor, Statistica Sinica, 2011-current
- Associate Editor, JASA, 2008-2012, 2005-2006
- Associate Editor, Biostatistics, 2008-2011
- Associate Editor, Statistics and Its Interface, 2008-2011
- Co-Editor, Biometrics, 2006-2008
- Editor, Statistical Science, 2005-2006
- Associate Editor, Biometrics, 1997-2006
- President, International Chinese Statistical Association, 2011
- PIMS nomination committee, 2011-2012
- ASA Wilks Memorial Medal Committee, 2011-2013



- COPSS Fisher Lecture Committee, 2003–2006 (Chair, 2006)
- IMS Program Chair, 2003 IMS–WNAR Meeting

Brief Statement: It is an honor to be given this opportunity to serve IMS. We are in an era of big data, which provides excitements as well as challenges. The concepts of building strong applications on the backbone of theoretical statistics/probability seem to be in danger of being lost in this fast-paste world, particularly among some of our younger researchers. If elected, I would work with other council members to identify means that promote the recognition of importance of such support in conducting interdisciplinary research. w http://dept.stat.lsa.umich.edu/~nwangaa/

IMS elections close on May 30, 2014: don't forget to vote!

Recent papers

Probability Surveys

Probability Surveys publishes survey articles in theoretical and applied probability. **Access papers at http://www.i-journals.org/ps/**

Volume 10, 2013

Planar percolation with a glimpse of Schramm–Loewner evolution.	VINCENT BEFFARA AND HUGO DUMINIL-COPIN: 1-50
On spectral methods for variance based sensitivity analysis	ALEN ALEXANDERIAN: 51-68
Self-normalized limit theorems: A survey.	
Volume 11, 2014	
Integrable probability: From representation theory to Macdonald processes	

Stochastic Systems

Focusing on the interface of applied probability and operations research, *Stochastic Systems* is the flagship journal of the INFORMS Applied Probability Society and is published through a cooperative agreement between INFORMS and the IMS. **Access papers at http://www.i-journals.org/ssy/**

Volume 3, issue 1, 2013

Some new results on information percolation	ALAIN BÉLANGER AND GASTON GIROUX: 1-10
Stability of a stochastic model for demand-response	JEAN-YVES LE BOUDEC AND DAN-CRISTIAN TOMOZEI: 11-37
On the convergence of simulation-based iterative methods for solving singular linear systems	
Many-server queues with customer abandonment: Numerical analysis of their diffusion model.	SHUANGCHI HE AND JIM DAI: 96-146
Directed random graphs with given degree distributions	NINGYUAN CHEN AND MARIANA OLVERA-CRAVIOTO: 147-186
Optimal paths in large deviations of symmetric reflected Brownian motion in the octant	
A linear response bandit problem	ALEXANDER GOLDENSHLUGER AND ASSAF ZEEVI: 230-261
Fluid limits for overloaded multiclass FIFO single-server queues with general abandonment	OTIS B. JENNINGS AND AMBER L. PUHA: 262-321
Volume 3, issue 2, 2013	
Tuning approximate dynamic programming policies for ambulance redeployment via direct search MATTHEW	S. MAXWELL, SHANE G. HENDERSON AND HUSEYIN TOPALOGLU: 322-361
Learning loosely connected Markov random fields	
The supermarket game	JIAMING XU AND BRUCE HAJEK: 405-441
Brownian inventory models with convex holding cost, Part 1: Average-optimal controls	JIM DAI AND DACHENG YAO: 442-499
Brownian inventory models with convex holding cost, Part 2: Discount-optimal controls	JIM DAI AND DACHENG YAO: 500-573
Two coupled Lévy queues with independent input	
Second order corrections for the limits of normalized ruin times in the presence of heavy tails.	DOMINIK KORTSCHAK AND SØREN ASMUSSEN: 591-633



ANNUAL REVIEWS

It's about time. Your time. It's time well spent.

New in 2014 from Annual Reviews:

Annual Review of Statistics and Its Application

Volume 1 • Online January 2014 • http://statistics.annualreviews.org

Editor: Stephen E. Fienberg, Carnegie Mellon University

Associate Editors: Nancy Reid, University of Toronto and Stephen M. Stigler, University of Chicago

The Annual Review of Statistics and Its Application informs statisticians, quantitative methodologists, and users of statistics about major methodological advances and the computational tools that allow for their implementation. It includes developments in the field of statistics, including theoretical statistical underpinnings of new methodology, as well as developments in specific application domains such as biostatistics and bioinformatics, economics, machine learning, psychology, sociology, and aspects of the physical sciences.

Complimentary online access to the first volume will be available until January 2015.

TABLE OF CONTENTS:

- What Is Statistics? Stephen E. Fienberg
- A Systematic Statistical Approach to Evaluating Evidence from Observational Studies, David Madigan, Paul E. Stang, Jesse A. Berlin, Martijn Schuemie, J. Marc Overhage, Marc A. Suchard, Bill Dumouchel, Abraham G. Hartzema, Patrick B. Ryan
- The Role of Statistics in the Discovery of a Higgs Boson, David A. van Dyk
- Brain Imaging Analysis, F. DuBois Bowman
- Statistics and Climate, Peter Guttorp
- Climate Simulators and Climate Projections, Jonathan Rougier, Michael Goldstein
- Probabilistic Forecasting, Tilmann Gneiting, Matthias Katzfuss
- Bayesian Computational Tools, Christian P. Robert
- Bayesian Computation Via Markov Chain Monte Carlo, Radu V. Craiu, Jeffrey S. Rosenthal
- Build, Compute, Critique, Repeat: Data Analysis with Latent Variable Models, David M. Blei
- Structured Regularizers for High-Dimensional Problems: Statistical and Computational Issues, Martin J. Wainwright
- High-Dimensional Statistics with a View Toward Applications in Biology, Peter Bühlmann, Markus Kalisch, Lukas Meier

- Next-Generation Statistical Genetics: Modeling, Penalization, and Optimization in High-Dimensional Data, Kenneth Lange, Jeanette C. Papp, Janet S. Sinsheimer, Eric M. Sobel
- Breaking Bad: Two Decades of Life-Course Data Analysis in Criminology, Developmental Psychology, and Beyond, Elena A. Erosheva, Ross L. Matsueda, Donatello Telesca
- Event History Analysis, Niels Keiding
- Statistical Evaluation of Forensic DNA Profile Evidence, Christopher D. Steele, David J. Balding
- Using League Table Rankings in Public Policy Formation: Statistical Issues, Harvey Goldstein
- Statistical Ecology, Ruth King
- Estimating the Number of Species in Microbial Diversity Studies, John Bunge, Amy Willis, Fiona Walsh
- *Dynamic Treatment Regimes,* Bibhas Chakraborty, Susan A. Murphy
- Statistics and Related Topics in Single-Molecule Biophysics, Hong Qian, S.C. Kou
- Statistics and Quantitative Risk Management for Banking and Insurance, Paul Embrechts, Marius Hofert

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l COPSS publishes 50th anniversary volume

COPSS 50th Anniversary Volume: Past, Present and Future of Statistical Science

Co-editors: Xihong Lin, Christian Genest, David Banks, Geert Molenberghs, David Scott, and Jane-Ling Wang This book entitled Past, Present and Future of Statistical Science was commissioned in 2013 by the Committee of Presidents of Statistical Societies (COPSS) to celebrate both its 50th anniversary and the International Year of Statistics. Hard copies will be published in April, 2014 by Chapman & Hall/CRC (use discount code AJL01 to obtain a 20% discount on the list price). With the publisher's authorization, an electronic version is freely available at www.copss.org.

COPSS consists of five member societies: the American Statistical Association (ASA), the Institute of Mathematical Statistics (IMS), the Statistical Society of Canada/Société statistique du Canada (SSC), and the Eastern and Western North American Regions of the International Biometric Society (ENAR and WNAR). COPSS is best known for sponsoring prestigious awards given each year at the Joint Statistical Meetings.

The 50 contributors to this volume are all past winners of at least one of the awards sponsored by COPSS: the R.A. Fisher Lectureship Award, the Presidents' Award, the George W. Snedecor Award, the Elizabeth L.

Scott Award, and the F.N. David Award. A list of authors can be found at the end of each article.

This volume is not only about statistics and science, but also about people and their passion for discovery. It contains expository articles by distinguished authors on a broad spectrum of topics of interest in statistical education, research, and applications. Many of these articles are accessible not only to professional statisticians and graduate students, but also to undergraduates interested in pursuing statistics as a career, and to all those who use statistics in solving real-world problems.

Topics include reminiscences and personal reflections on statistical careers, perspectives on the field and profession, thoughts on the discipline and the future of statistical science, as well as advice for young statisticians. A consistent theme of all the articles is the passion for statistics enthusiastically shared by the authors. Their success stories inspire, give a sense of statistics as a discipline, and provide a taste of the exhilaration of discovery, success, and professional accomplishment.

This volume has five parts. In Part I, Ingram Olkin gives a brief overview of the 50-year history of COPSS. Part II consists of 11 articles by authors who reflect on their own careers and the lessons they learned. Part III has nine articles describing the challenges of statistical science in science and society, statistical education, equity and diversity in statistics, and the opportunities of statistical science in the era of big data science. Part IV has of 24 articles on past developments, current challenges, and future opportunities for statistics, in which authors provide insight on past developments, current challenges, and future opportunities in statistical science. Part V has seven articles, in which senior statisticians share their experience and provide career advice for the next generation.

This book project was supported by COPSS and its member societies, as well as several of COPSS friend societies including the International



Chinese Statistical Society (ICSA), the International Indian Statistical Association (IISA), and the Korean International Statistical Society (KISS), and substantial in-kind support provided by the Institut des sciences mathématiques du Québec.

We hope that this volume will inspire you and help you develop the same passion for statistics that we share with the authors. Happy reading!

Rao Prize Conference: report

Runze Li writes: The Penn State Department of Statistics held the 2013 Rao Prize Conference on October 5, 2013 to honor the 2013 Rao Prize winner Herman Chernoff, Professor Emeritus of Applied Mathematics at the Massachusetts Institute of Technology and of Statistics at Harvard University, and the 2013 P. R. Krishnaiah lecturer Stephen E. Fienberg, the Maurice Falk University Professor of Statistics and Social Science at Carnegie Mellon University. This conference was co-organized with the 2013 Penn State Bioinformatics and Genomics Retreat. About 200 researchers, including statisticians and biologists, attended this conference.

The conference program consisted of two plenary speakers, five invited speakers, and more than 40 posters by graduate students. The plenary speakers were Chernoff and Fienberg. The invited speakers were Francesca Chiaromonte, a professor of statistics at Penn State; Jiashun Jin, a professor of statistics at Carnegie Mellon University; Shaw-Hwa Lo, a professor of statistics at Columbia University; Adam Smith, an associate professor of computer science and engineering at Penn State University; and Tian Zheng, an associate professor of statistics at Columbia University. More information about the conference is online at http://www.stat.psu.edu/~rli/raoprize2013.html.

One of the highlights of the conference was the awarding of the 2013 Rao Prize to Herman Chernoff. Chernoff is an elected Fellow of the American Academy of Arts and Sciences, an elected member of the National Academy of Sciences, a winner of the Townsend Harris Medal and the Samuel S. Wilks Award, and a fellow of the IMS and the American Statistical Association. He was the president of the IMS in 1968. He has received honorary doctorates from the Ohio State University; the Technion, Israel's Institute of Technology; La Sapienza, the University of Rome; and the University of Athens.



From left to right: Herman Chernoff, Bhargavi Rao, C. R. Rao, Stephen E. Fienberg

This conference also highlighted the 2013 P. R. Krishnaiah lecturer, Stephen E. Fienberg. An IMS Fellow, Fienberg is a recipient of the COPSS Presidents' Award, an elected member of the National Academy of Sciences, an elected Fellow of the Royal Society of Canada, the American Academy of Arts and Sciences, the American Association for the Advancement of Science, the American Statistical Association and a winner of its Wilks Award. He was IMS president in 1999.

The C. R. and Bhargavi Rao Prize was established to honor and recognize outstanding and influential innovations in the theory and practice of mathematical statistics, international leadership in directing statistics research, and pioneering contributions by a recognized leader in the field of statistics (see the call for nominations in the box on page 17). The Krishnaiah lectureship, which began as the P. R. Krishnaiah visiting scholars program in 1992, honors the memory of P. R. Krishnaiah by inviting outstanding researchers in statistics to deliver lectures at Penn State. More details are on the web at http:// stat.psu.edu/information/prizes-and-memorial-lectures



Below: Poster session during lunch break

Calls for Nominations

Gweneth Humphreys Award for Mentorship of Undergraduate Women in Mathematics

Open to all regardless of nationality and citizenship

Nomination deadline: April 30, 2014

The Executive Committee of the Association for Women in Mathematics established a prize in memory of M. Gweneth Humphreys to recognize outstanding mentorship activities. This prize is awarded annually to a mathematics teacher (female or male) who has encouraged female undergraduate students to pursue mathematical careers and/or the study of mathematics at the graduate level. The recipient will receive a cash prize and honorary plaque and will be featured in an article in the *AWM Newsletter*. The award is open to all regardless of nationality and citizenship. Nominees must be living at the time of their nomination.

The award will be presented at the Joint Prize Session at the Joint Mathematics Meetings every January.

The nomination should include:

- a one- to three-page letter of nomination highlighting the exceptional contributions of the candidate to be recognized; the name, position, institution, address, phone, and e-mail address of the nominee and the nominator should be included in the cover letter;
- a list of female students mentored by the nominee during their undergraduate years, with a brief account of their post-baccalaureate mathematical careers and/or graduate study in the mathematical sciences;
- supporting letters from colleagues and/or students; at least one letter from a current or former student of the candidate must be included.
- the nominee's vita.

Nomination materials for this award should be compiled into one PDF file and submitted online at https://www.mathprograms.org/db/programs/277.

Louise Hay Award for Contribution to Mathematics Education

Awarded to women contributing to mathematics education

Nomination deadline: April 30, 2014

The Executive Committee of the Association for Women in Mathematics established the Louise Hay Award for Contributions to Mathematics Education, awarded to a woman at the Joint Prize Session at the Joint Mathematics Meetings every January. The purpose of this award is to recognize outstanding achievements in any area of mathematics education, to be interpreted in the broadest possible sense. While Louise Hay was widely recognized for her contributions to mathematical logic and for her strong leadership, her devotion to students and her lifelong commitment to nurturing the talent of young women and men secure her

reputation as a consummate educator. The annual presentation of this award is intended to highlight the importance of mathematics education and to evoke the memory of all that Hay exemplified as a teacher, scholar, administrator, and human being.

The nomination should include:

- a one- to three-page letter of nomination highlighting the exceptional contributions of the candidate to be recognized;
- a curriculum vitae of the candidate not to exceed three pages and;
- three letters supporting the nomination. It is strongly recommended that the letters represent a range of constituents affected by the nominee's work.

Nomination materials for this award should be compiled into one PDF file and submitted online at https://www.mathprograms.org/db/programs/276.

Questions? Call 703-934-0163 x215 or email awm@awm-math.org.

The C.R. and Bhargavi Rao Prize was established to honor and recognize outstanding and influential innovations in the theory and practice of mathematical statistics, international leadership in directing statistical research, and pioneering contributions by a recognized leader in the field of statistics. The Rao Prize is awarded in odd-numbered years by the Department of Statistics at Penn State University to a nominee selected by the members of the Rao Prize Committee.

Nominations for the 2015 Rao Prize should be submitted by July 1, 2014 to Dr. Hunter at depthead@stat.psu. edu by email. Candidates nominated in previous years will be considered. Nominations should include a letter describing the nominee's outstanding contributions to leadership and research in statistics, a current curriculum vita, and two supporting letters. The award recipient will receive a medal, a cash prize, and an invitation to visit Penn State to give a talk. See http://stat.psu.edu/information/prizesand-memorial-lectures/c.-r.-rao-prizefor-outstanding-research-in-statistics for additional details.

Calls for Nominations

The Thirteenth Annual Janet L. Norwood Award for Outstanding Achievement by a Woman in the Statistical Sciences

The Section on Statistical Genetics and the Department of Biostatistics in the School of Public Health, University of Alabama at Birmingham (UAB) are pleased to request nominations for the Thirteenth Annual Janet L. Norwood Award for Outstanding Achievement by a Woman in the Statistical Sciences. The award will be conferred on September 10, 2014. The award recipient will be invited to deliver a lecture at the UAB award ceremony, and will receive all expenses, the award, and a \$5,000 prize.

Eligible individuals are women who have completed their terminal degree, have made extraordinary contributions and have an outstanding record of service to the statistical sciences, with an emphasis on both their own scholarship and on teaching and leadership of the field in general and of women in particular and who, if selected, are willing to deliver a lecture at the award ceremony.

For additional details about the award, please visit our website at http://www.soph.uab.edu/ssg/norwoodaward/aboutaward.

How to nominate: Please send a full curriculum vitae accompanied by a letter of not more than two pages describing the nature of the candidate's contributions. Contributions may be in the area of development and evaluation of statistical methods, teaching of statistics, application of statistics, or any other activity that can arguably be said to have advanced the field of statistical science. Self-nominations are acceptable.

Please send nominations to: David B. Allison, PhD, Distinguished Professor, Quetelet Endowed Professor of Public Health, Associate Dean for Science; Director, Office of Energetics; Director, Nutrition Obesity Research Center **e** dallison@uab.edu

Deadline for receipt of nominations is Friday June 27, 2014. Electronic submissions of nominations are encouraged. The winner will be announced by Mon 7/7/2014.

Previous Recipients

- 2002 Jane F. Gentleman, NCHS & VP ASA
- 2003 Nan M. Laird, Harvard
- 2004 Alice S. Whittemore, Stanford
- 2005 Clarice R. Weinberg, NIEHS Biostatistics Branch Chief
- 2006 Janet Turk Wittes, Statistics Collaborative Inc.
- 2007 Marie Davidian, NC State
- 2008 Xihong Lin, Harvard
- 2009 Nancy Geller, NHLBI Office of Biostatistics Research.
- 2010 L. Adrienne Cupples, Boston University
- 2011 Lynne Billard, University of Georgia
- 2012 Nancy Flournoy, University of Missouri
- 2013 Kathryn Roeder, Carnegie Mellon University

The Emanuel and Carol Parzen Prize for Statistical Innovation

The Department of Statistics at Texas A&M University invites nominations for the Emanuel and Carol Parzen Prize for Statistical Innovation. To promote the dissemination of statistical innovation, the Emanuel and Carol Parzen Prize for Statistical Innovation is awarded in even numbered years to a North American statistician whose outstanding research contributions include innovations that have had impact on practice and whose PhD degree is at least 25 years old.

The Parzen Prize is awarded by the Department of Statistics at Texas A&M University and is selected by the members of the Parzen Prize Committee (consisting of three internal faculty members and two external faculty members). The prize consists of an honorarium of \$1000 and travel to College Station, TX, to present a lecture at the Prize Ceremony.

Nominations for the 2014 Parzen Prize should include a letter describing the nominee's outstanding contributions to high impact innovative research in statistics, a current curriculum vita, and two supporting letters. Nominations should be submitted by August 15, 2014 to the Chair of the 2014 Parzen Prize Committee:

Professor Thomas Wehrly Department of Statistics Texas A&M University TAMU 3143 College Station Texas 77843-3143

Previous Parzen Prize Winners:

- 1994 Grace Wahba, University of Wisconsin
- 1996 Donald P. Rubin, Harvard University
- 1998 Bradley Efron, Stanford University
- 2000 C.R. Rao, Pennsylvania State University
- 2002 David R. Brillinger, University of California, Berkeley
- 2004 Jerome H. Friedman, Stanford University
- 2006 Alan Gelfand, Duke University
- 2008 Nancy Reid, University of Toronto
- Marvin Zelen, Harvard University
- 2010 Roger Koenker, University of Illinois
- 2012 Adrian Raftery, University of Washington

For more information on the Parzen Prize, please visit our website at http://www.stat.tamu.edu/events/parzenprize/index.html.

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XL-Files: My Valentine's Escape



Xiao-Li Meng finds it harder to escape statistics than he thought...

The 2014 AAAS (American Association for the Advancement of Science) Annual Meeting (held February 13–17) has given me a new meaning to "Valentine's Escape". February is always jam-packed with most of the 57 graduate program admissions meetings, many starting at 8 a.m. I was therefore longing for a "morning escape", one where I could start my morning haphazardly (not randomly) without any haphazard consequences. Furthermore, for my continuing general education (see May 2013 *XL-Files*), I also felt I needed an intellectual escape from statistics.

The AAAS meeting therefore seemed perfect, but my actual experience was anything but an escape. Cruelly, enticing Scientific Symposia sessions such as "The Physics of Information" started right at 8 a.m.! Worse, unlike admissions meetings, no one would wait for me (or give a hoot if I was there or not). Nor could I afford to be late, as I could for a statistical session, for which I usually can reasonably impute the missed content from an abstract. The end result was that I even lost those weekend "morning escapes" I normally would have had!

So, did I have better luck escaping from statistics, since I deliberately avoided any session with big (signs of) data? Well, you be the judge. The symposia on "The Physics of Information" was really about quantum physics, quantum computation,

and quantum cryptography. The fact that the only phrase involving quantum that I had some understanding of is "quantum leap" did not stop me from wondering whether the quantum phenomenon implies that the world we live in is fundamentally stochastic; and that all the ignorability assumptions about data collections are always approximate, with differences only being to what degree. I wondered whether for statisticians an effective way to appreciate the uncertainty principle, which says the product of the variance of the position and the variance of the momentum is bounded below by a positive constant, is to express the Cramér–Rao lower bound (CRLB) in an analogous form. That is, the CRLB says that the product of the variance of an unbiased estimator and the variance of the score function must be bounded below by 1. (Of course, the deeper connections between uncertainty principle and CRLB require more space than the margin of any XL-File; but see http://www-isl.stanford.edu/~cover/ papers/dembo_cover_thomas_91.pdf)

Admittedly this was a self-imposed trap—how could any statistician expect to escape from a healthy dose of statistics by entering the quantum world? So what about a session on effective communication between scientific and religious communities? At least there I shouldn't expect myself to raise any serious issue of a statistical nature, right? Wrong again, as the session was largely about a major survey on the perceptions these communities have about each other. I was deeply trapped again the moment the speaker mentioned that only those who responded to all questions were included in the analysis. As this was a session on effective communication, I was rather proud of myself when I framed my question as, "Given it is well-known that those who have stronger opinions are more likely to respond, could we interpret that your findings reflect more of

those who have stronger perceptions?"

My intention should be obvious. Instead of criticizing the non-response bias, I offered the speaker the option of redefining the target population so the complete-case analysis is relevant. The redefinition here is more than a post-analysis face-saving strategy, because for matters such as the impact of perceptions on policies, those who have stronger opinions can and do matter more, and therefore focusing on that sub-population is not a useless exercise. I therefore expected the speaker to gladly take my suggestion, or at least to acknowledge it as a possible interpretation. But a good intention is not always well received. The speaker's answer was a quick "No," because, "It is a well accepted practice in sociology to only analyze the complete answers, and the response rate is large enough." (About 60% of cases were reported to be complete.)

The first reason would drive most statisticians up the wall. Indeed, I had to repeatedly remind myself that I was on "escape" in order to prevent myself from accidentally insulting an entire discipline ("Just because everyone does it does not make it right," was on the tip of my tongue). The second reason is even more dangerous because using sample/ response fraction to control bias is far more difficult than using sample size to control variance. For example, a biased sampling mechanism can easily induce a larger meansquared error than a simple random sample of size 500 can, even if it records 95% the population (see, e.g. http://www.stat.harvard. edu/Faculty_Content/meng/COPSS_50.pdf).

Retrospectively I laughed at myself for trying to escape from statistics. The only way I can forgive myself for this dumb attempt is to perform a statistical self-flagellation, that is, to repeatedly submit papers to *The Annals* of *Statistics* (until acceptance)!

IMS meetings around the world

IMS sponsored meeting



JSM 2014: August 2–7, 2014, Boston, USA

w http://amstat.org/meetings/jsm/2014/

JSM Program Chair: Jean Opsomer, Colorado State University. IMS Invited Program chair: Nancy Reid, University of Toronto. IMS Contributed Program chair: Bertrand Clark, University of Nebraska–Lincoln.

Key dates:

March 31–April 17, 2014: Online Abstract Editing Open May 1, 2014: Registration & Housing Open (early-bird registration deadline May 29; housing deadline July 2) May 29, 2014: Early-bird registration deadline July 2, 2014: Housing deadline

Plenary Sessions at JSM 2014

Stephen Stigler, University of Chicago: ASA President's Invited Address The Seven Pillars of Statistical Wisdom. Monday, August 4, 4:00 p.m.
Nathaniel Schenker, 2014 ASA President: ASA Presidential Address and Founder & Fellows Recognition Why Your Involvement Matters. Tuesday, August 5, 7:00 p.m.
Sharon Lohr, Westat: Deming Lecture Red Beads and Profound Knowledge: Deming and Quality of Education. Tuesday, August 5, 4:00 p.m.
Grace Wahba, University of Wisconsin–Madison: COPSS Fisher Lecture Positive definite functions, reproducing kernel Hilbert spaces and all that. Wednesday, August 6, 4:00 p.m.
Gareth Roberts, University of Warwick: IMS Blackwell Lecture Rao-Blackwellisation for improved Monte carlo for stochastic processes. Sunday, August 3, 4:00 p.m.
Mathias Drton, University of Washington: IMS Medallion Lecture

What do we know about linear structural equation models? Monday, August 4, 10:30 a.m.

Joint Statistical Meetings dates, 2015–2020

IMS sponsored meeting

IMS Annual Meeting @ JSM 2015: August 8–13, 2015 Seattle, WA, USA w http://amstat.org/meetings/jsm/

IMS sponsored meeting

JSM 2016: July 30-August 4, 2016, Chicago, IL, USA w http://amstat.org/meetings/jsm/

IMS sponsored meeting

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

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.

At a glance:

forthcoming IMS Annual Meeting and JSM dates

2014

IMS Annual Meeting:

Sydney, Australia, July 7–10, 2014 ims-asc2014.com

JSM: Boston, MA, August 2–7, 2014

2015

IMS Annual Meeting

@ JSM: Seattle, WA, August 8–13, 2015

2016

IMS Annual Meeting: Toronto, Canada, July 11–15, 2016

JSM: Chicago, IL, July 30 – August 4, 2016

2017

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

2018

IMS Annual Meeting: TBD

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

IMS sponsored meeting JSM 2018

July 28–August 2, 2018 Vancouver, Canada

IMS sponsored meeting

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

IMS sponsored meeting

JSM 2020 August 1–6, 2020 Philadelphia, PA

IMS co-sponsored meeting

16th IMS New Researchers Conference Harvard University, Cambridge, Massachusetts July 31–August 2, 2014

w http://www.stat.harvard.edu/NRC2014/

The 16th IMS New Researchers Conference is an annual meeting organized under the auspices of the IMS, and jointly sponsored this year by the National Science Foundation (NSF), the Office of Naval Research (ONR), and other federal agencies and industry sponsors. The conference is hosted by the Department of Statistics at Harvard and will be held just prior to the 2014 Joint Statistical Meetings in Boston.

The purpose of the conference is to promote interaction and networking among new researchers in probability and statistics.

Confirmed participants include Edo Airoldi, Stephen Fienberg, Peter Hall, Michael Jordan, Alan Karr, Jun Liu, Xiao-Li Meng, Susan Murphy, Giovanni Parmigiani, Donald Rubin, Steven Scott and Bin Yu.

The application deadline was March 24, 2014.

Contact e symposia@stat.harvard.edu

IMS co-sponsored meeting

XIII CLAPEM: Congreso Latino-americano de Probabilidad y Estadística Matemática September 22–26, 2014

Cartagena de Indias, Colombia

w http://www.clapem.unal.edu.co/

The Latin American Congress on Probability and Mathematical Statistics (CLAPEM, by its initials in Spanish) will be holding its 13th edition in Cartagena de Indias, Colombia, September 22–26, 2014. CLAPEM is the largest event in Probability and Statistics of the Latin American region and has been held every two/three years in different countries of the region since 1980.

The XIII CLAPEM will include three short courses, six plenary conferences, eighteen thematic sessions, contributed talk sessions and poster sessions. Short courses by Bin Yu, Department of Statistics, University of California, Berkeley, USA; Alison Etheridge, Department of Statistics, University of Oxford, UK; and Paul Embrechts, Department of Mathematics, ETH Zurich, Switzerland.

Plenary speakers: Gerard Biau, Université Pierre et Marie Curie, France; Sourav Chatterjee, Courant Institute of Mathematical Sciences, USA; Carenne Ludeña, Universidad Central de Venezuela; Thomas Mikosch, University of Copenhagen, Denmark; Roberto Imbuzeiro Oliveira, IMPA, Brazil; and Victor Rivero, CIMAT, Mexico. The Invited thematic session titles can be found at www. clapem.unal.edu.co

The deadlines for abstract submission for the contributed talk and poster sessions, and for applying for financial support, have passed.

IMS co-sponsored meeting

2015 European Meeting of Statisticians July 6–10, 2015



w http://ems2015.nl/

The European Meeting of Statisticians (EMS) is the main conference in statistics and probability in Europe. It is organized in a roughly two-yearly schedule and is sponsored by the European Regional Committee of the Bernoulli Society. The program consists of invited and contributed lectures, and posters, addressing a full range of subjects in statistics and its many applications.

The conference will be held at the campus of the VU University Amsterdam. The conference will start on Monday, July 6, 2015 and will end on Friday, July 10.

Program committee: Marc Hallin (Belgium, chair); Claudia Klüppelberg (Germany); Susanne Ditlevsen (Denmark); Dominique Picard (France); Daniel Hlubinka (Czech Republic); Luigi Augugliaro (Italy); Geurt Jongbloed (Netherlands); Niels Hansen (Denmark, ERC Bernoulli Society)

IMS sponsored meeting

2015 IMS-China Conference on Statistics and Probability July 1–4, 2015

Kunming, Yunnan, P. R. China

w http://www.2015imschina.com

Contact: Qiwei Yao e q.yao@lse.ac.uk

The fifth IMS-China International Conference on Statistics and Probability will be held in Kunming, China, from July 1–4, 2015. Its scientific program will cover a wide range of topics in probability, statistics and their related areas. The conference will also provide an excellent forum for scientific exchanges and for forging new research collaborations. The conference website contains updated information and contact details.

IMS co-sponsored meeting

The 3rd Workshop on Biostatistics and Bioinformatics May 9–11, 2014, Atlanta, GA

w http://www2.gsu.edu/~matyiz/2014 workshop/

Biostatistics and Bioinformatics have been playing very important roles in scientific research fields in recent years. The goal of the 3rd workshop is to stimulate research and to foster the interaction of researchers in Biostatistics & Bioinformatics research areas. The keynote speaker is Professor Xihong Lin, Harvard University. The workshop will provide the opportunity for faculty and graduate students to meet the top researchers, identify important directions for future research, facilitate research collaborations.



NEW



IMS-ASC 2014 meeting: Sydney, Australia

Australian Statistical Conference in Conjunction with the IMS Annual Meeting

July 7–10, 2014, Sydney, Australia

w http://www.ims-asc2014.com/

On behalf of the Statistical Society of Australia and the Institute of Mathematical Statistics, the organising committee invite you to attend the joint Australian Statistical Conference & IMS Annual Meeting, to be held 7–10 July, 2014, at the Australian Technology Park in Sydney, Australia.

IMS Keynote Speakers:

Wald Lecturer: Thomas G. Kurtz, University of Wisconsin-Madison

Neyman Lecturer: Peter Donnelly, University of Oxford Schramm Lecturer: Terry Lyons, University of Oxford

Medallion Lecturers: Nina Gantert, Technische Universität München; Martin Hairer, University of Warwick; Timo Seppäläinen, University of Wisconsin-Madison; Matthew Stephens, University of Chicago; Harrison Zhou, Yale University

ASC Keynote Speakers: James Brown, University of Technology; Adrian Baddeley, CSIRO/University of Western Australia; Sheila Bird, Cambridge University; Terry Speed, University of California/Walter & Eliza Hall Institute of Medical Research **Preliminary Program**

Since abstract submission closed late last year the program committee have been eagerly putting together an exciting line up of papers and speakers. The preliminary program outlines the key themes that will be addressed and a broad structure for the 4 day conference.

Iconic Sydney

Registration is open!

You can register now for the meeting with or without lunches. As an IMS member you receive a discount on registration rates: see www.ims-asc2014.com/ registration-page/

You can view the Preliminary Program at http://www.ims-asc2014.com/program/ Please

note this is work in progress and subject to change, the full program will be available in the next few weeks.

Satellite Events

A series of pre- and post-conference workshops will support the conference. Early booking is recommended. See http://www.ims-asc2014. com/asc-2014-satellite-events/ for more information.

Why come to Sydney?

Sydney, Australia's gateway city and the capital of New South Wales is built around one of the largest, most beautiful harbours in the world with plenty to see and do during your time here. Sydney is a vigorous, cosmopolitan city, a major industrial, business and commercial centre and is endlessly fascinating in its variety and its beauty.

IMS co-sponsored meeting

Workshop on Finance, Probability and Statistics (FPS) July 2-5, 2014 University of Technology, Sydney (UTS)

w http://www.qfrc.uts.edu.au/IMS-FPS-2014

This, the Fourth IMS-FPS workshop, is a satellite workshop to the joint Australian Statistical Conference & IMS Annual Meeting, which will be held in Sydney from 7–10 July. The previous IMS-FPS workshops were held in 2011 at Columbia University, in 2012 at the University of California at Berkeley and in 2013 at the National University of Singapore. The goal of the workshop is to bring together leading academic experts, practitioners and junior researchers, which will highlight important contributions to mathematical and computational finance made through the use of statistics and probability.

The workshop topics include, but are not limited to: Computational and simulation methods in finance and risk management; Credit and liquidity risk; Energy and weather derivatives; Financial time series and econometrics; High frequency trading: data, models and strategies; Volatility models. Please see the website for details.

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IMS co-sponsored meeting

37th Conference on Stochastic Processes and their Applications July 28–August 1, 2014 Buenos Aires, Argentina

w http://mate.dm.uba.ar/~probab/spa2014/

SPA 2014: Call for Contributed Sessions

The 37th Conference on Stochastic Processes and their Applications will take place at the University of Buenos Aires, Argentina, from July 28 to August 1, 2014. The meeting will consist of Plenary Lectures, Invited Sessions and Contributed Sessions conducted in parallel.

Plenary speakers: Anton Bovier, Ivan Corwin, Laszlo Erdös, Antonio Galves, Christophe Garban, Martin Hairer (Lévy Lecture), Milton Jara, Gady Kozma, Eyal Lubetzky, Sylvie Méléard, David Nualart (IMS Medallion Lecture), Felix Otto, Tomohiro Sasamoto, Scott Sheffield, Fabio Toninelli, and Balint Tóth, and a Doeblin Prize Lecture to be announced.

The Invited Sessions can be found at http://mate.dm.uba.ar/~probab/spa2014/program. html#invitedsessions

Organizing Committee: Inés Armendáriz, Pablo A. Ferrari, Pablo Groisman, Matthieu Jonckheere, Nora Muler, Leonardo T. Rolla. Contact **e** spa.conference.2014@gmail.com

IMS co-sponsored meeting

38th Conference on Stochastic Processes and their Applications July 13–17, 2015, Oxford, United Kingdom w TBC

IMS co-sponsored meeting

Second Conference of the International Society of Nonparametric Statistics (II ISNPS) June 12–16, 2014

Cadiz, Spain

w www.isnpstat.org

IMS Representative on Program Committees: Juan Romo

Following the successful I ISNPS (International Society of NonParametric Statistics) conference in 2012 in Greece, Ricardo Cao, Wenceslao Gonzalez-Manteiga and Juan Romo are organizing the II ISNPS Conference in Cadiz, southern Spain, from June 12–16, 2014.

The conference hotel is located 60 km (40 miles) from Jerez de la Frontera airport. The province of Cadiz is an exceptional and unique area, with high quality cultural, ecologic and gastronomic values, including villages, landscapes and 138 km of first class beaches with coves, inlets and long stretches of sand. Jerez de la Frontera has an international airport with direct connections to many European cities.

The IMS co-sponsored conference will put together recent advances and trends in several areas of nonparametric statistics in order to facilitate the exchange of research ideas, promote collaboration among researchers from all over the world and contribute to the further development of the field. The program (scheduled on June 12, 13, 15 & 16; June 14 will be a free day) will include plenary talks, special invited talks, invited talks and contributed talks on all areas of nonparametric statistics. Deadline for submission of contributed talks is February 15, 2014.

For any questions, please email isnps2014@adcommcentury.com and see the webpage.

ENAR, 2015-2017

IMS sponsored meeting

2015 ENAR/IMS Spring Meeting March 15–18, 2015 Miami, Florida, USA

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

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IMS sponsored meeting

2016 ENAR/IMS Spring Meeting March 6–9, 2016 Austin, Texas

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

IMS sponsored meeting

2017 ENAR/IMS Spring Meeting March 12–15, 2017 Washington DC

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

IMS co-sponsored meeting

INFORMS Applied Probability Society Conference 2015 July 5–8, 2015, Istanbul, Turkey w TBC

IMS sponsored meeting

2014 WNAR/IMS Annual Meeting June 15–18, 2014 Honolulu, Hawaii, USA

w http://www.wnar.org/

The 2014 WNAR/IMS meeting will be June 15-18, in Hawaii. It will be held at the Conference Center of the University of Hawaii at Manoa, in Honolulu, HI.

IMS co-sponsored meeting

Frontier Probability Days May 18–20, 2014 University of Asianan Transmission

University of Arizona, Tucson, AZ

w http://math.arizona.edu/~fpd/ IMS Representatives on Program Committees: Tom Alberts, Davar Koshnevisan, Firas Rassoul-Agha, Sundar Sethuraman, Edward Waymire Web page under construction; details to follow.

More IMS meetings around the world

IMS co-sponsored meeting

International Symposium in Statistics (ISS) 2015

Parametric and Semi-parametric Inferences for Spatial-temporal, and Multi-dimensional Familial-longitudinal Data

July 6-8, 2015

Memorial University, St. John's, Canada

w http://www.iss-2015-stjohns.ca/

The ISS-2015 is planned to discuss the methodological advances and challenges in the analysis of continuous and discrete correlated data both in parametric and semi-parametric setup.

The main topics of interest of this symposium are:

- Multivariate analysis in a wider non-normal elliptical distribution setup;
- Multivariate analysis for longitudinal categorical data;
- Time series volatility models;
- Spatial-temporal data analysis;
- Familial longitudinal data analysis in semi-parametric setup.

It is also of interest to discuss further challenges in analysis when data may contain measurement errors, missing values, and/or outliers, for example.

The scientific program will include keynote, special invited, invited, and contributed paper sessions.

IMS co-sponsored meeting

Third IMS Asia Pacific Rim Meetings June 30–July 3, 2014 Taipei, Taiwan

NEW website http://ims-aprm2014.ntu.edu.tw/

The third IMS Asia Pacific Rim Meetings will take place in Howard International House (http://intl-house.howard-hotels.com/), Taipei, Taiwan, during the period Monday, June 30–Thursday, July 3, 2014. This meeting series provides an excellent forum for scientific communications and collaborations for researchers in Asia and the Pacific Rim. It also promotes communications and collaborations between the researchers in this area and those from other parts of the world.

The program covers a wide range of topics in statistics and probability, presenting recent developments and the state of the art in a variety of modern research topics and in applications. For more information, you may contact the program chairs: Byeong U. Park (bupark@stats.snu.ac.kr) and Feifang Hu (fh6e@virginia.edu).

The conference website has been recently changed to http://imsaprm2014.ntu.edu.tw/

IMS co-sponsored meeting

10th Cornell Probability Summer School July 20–August 1, 2014 Cornell University, Ithaca, NY

w http://www.math.cornell.edu/~cpss/

Registration is expected to open in January with a tentative deadline of April 7, 2014. Funding is available to support local expenses of some advanced graduate students and young researchers. Applications for funding will be accepted during the registration process. Main Lecturers

Three main lecturers will each give six 75-minute lectures:
Gerard Ben Arous (New York University)
Eyal Lubetzky (Microsoft Research, Theory Group), *Time-space information percolation for the stochastic Ising model*Jeremy Quastel (University of Toronto), *The Kardar-Parisi-Zhang equation and universality class*Other speakers will be invited to give short talks.

IMS co-sponsored meeting

Frontiers of Hierarchical Modeling in Observational Studies, Complex Surveys and Big Data Conference Honoring Professor Malay Ghosh May 29–31, 2014 University of Maryland, College Park, USA w http://www.jpsm.umd.edu/ghosh IMS Representative on Program Committees: Gauri S. Datta

IMS co-sponsored meeting

International Workshop in Applied Probability June 16–19, 2014 Antalya, Turkey

w www.iwap2014.org

The provisional program is available for the International Workshop in Applied Probability (June 16–19, 2014, in Antalya, Turkey). The theme of IWAP 2014 is "Probability: The Measure of Tomorrow". Early-bird registration until March 31. See www.iwap2014.org

The plenary speakers are Ismihan Bayramoglu (Izmir University of Economics, Turkey); Antonis Economou (University of Athens, Greece); Jingchen Liu (Columbia University, USA); Jorge Navarro (Universidad De Murcia, Spain); Sheldon M. Ross (University of Southern California, USA); Nozer D. Singpurwalla (City University of Hong Kong); Michael S. Waterman (University of Southern California, USA)

l Other meetings around the world

2014 Rutgers Statistics Symposium: Statistics and the Century of Data May 2, 2014

Piscataway, New Jersey, USA

w http://www.stat.rutgers.edu/conferences/centuryofdata2014 Contact Han Xiao **e** hxiao@stat.rutgers.edu

The Department of Statistics and Biostatistics of Rutgers University will hold the "2014 Rutgers Statistics Symposium: Statistics and the Century of Data" on Friday, May 2, 2014, with invited speakers Professors David Donoho (Stanford University), Jianqing Fan (Princeton University), David Madigan (Columbia University), Peter McCullagh (University of Chicago), Giovanni Parmigiani (Harvard University), and Bin Yu (University of California, Berkeley).

Second Barcelona Summer School on Stochastic Analysis July 7–11, 2014

Bellaterra, Barcelona, Spain

w http://www.crm.cat/en/Activities/Pages/ActivityFoldersAndPages/ Curs%202013-2014/2ndStochasticAnalysis/default.aspx Contact: Lluís Quer-Sardanyons **e** quer@mat.uab.cat The Barcelona Summer School on Stochastic Analysis is a one-week scientific activity consisting mainly of courses addressed to PhD students and young researchers on current research topics in Stochastic Analysis. Selected participants are also given the opportunity to deliver short talks or to display posters. The courses in 2014 are on Lévy processes and stochastic partial differential equations, and will be given, respectively, by Prof. René Schilling (TU Dresden, Germany) and Prof. Davar Khoshnevisan (University of Utah, USA).

A day of lectures for the 90th birthday of David R. Cox July 18, 2014 Nuffield College, Oxford, UK

w http://www.math.chalmers.se/~wermuth/DRC14.html Group of organizers: Lucy Carpenter, Anthony Davison, Christl Donnelly, Valerie Isham, Nancy Reid, Nanny Wermuth Invited speakers: Helen Jenkins, Tom Johnston, Christiana Kartsonaki, Ruth Keogh, Peter McCullagh, Paul Northrop, Andrea Rotnitzky and Rhian Daniel

Celebrating Women in Statistics: Know Your Power May 15–17, 2014

Research Triangle Park, NC, USA

w http://women-in-stats.org

Know Your Power: Enticing, Elevating and Empowering Careers of Women in Statistics. Connect...learn...grow! You're invited to this new conference highlighting the achievements and career interests of women in statistics. Special sessions focused on career development, work presented by leading researchers, and opportunities to connect with peers will provide unique perspectives on the role of women in today's statistical fields.

See the conference website for details on registration, travel awards, and poster abstract submission.

International Colloquium on Stein's Method, Concentration Inequalities, and Malliavin Calculus June 29–July 2, 2014

Château de la Bretesche in Missillac, Loire-Atlantique, France

w http://dornsife.usc.edu/conferences/steincolloquium/ The confirmed speakers are: Jay Bartroff, University of Southern California; Stéphane Boucheron, University Paris Diderot; Louis Chen, National University of Singapore; Laurent Decreusefond, Telecom ParisTech; Larry Goldstein, University of Southern California; Michel Ledoux, Université de Toulouse; Erol Peköz, Boston University; Gesine Reinert, University of Oxford; Adrian Röllin, National University of Singapore; Nathan Ross, University of Melbourne; Yvik Swan, Université de Liège; Ciprian Tudor, Université Paris 1

International Seminar on Stability Problems for Stochastic Models June 16–21, 2014 Trondheim, Norway

w http://www.ipiran.ru/conference/stabil2014/

Registration to the International Seminar on Stability Problems for Stochastic Models is extended until March 31. The Seminar will take place in Trondheim, Norway, from 16 to 21 of June, 2014. Further information about registration, accommodation, abstract submission, social events and registration fee payments is available at the webpage above. Registration is available via the website, and includes payment for registration fee and social events, as well as hotel booking.



NEW



NEW

More meetings around the world

Workshop on empirical processes and applications to statistics September 10–11, 2014

Besançon, France

w https://trimestres-lmb.univ-fcomte.fr/Workshop-on-empiricialprocesses.html

This workshop takes place within a series of conferences in mathematics, named thematic trimesters of the Laboratoire de mathématiques de Besançon, the Université de Franche-Comté, France.

This workshop will encompass recent research works on empirical processes theory and their applications to statistics. A non exhaustive list of subjects covered will be:

- asymptotic and non asymptotic theory of empirical processes based on independent samples or samples having specific dependence structure (mixing, positively or negatively, associated random, variables...)
- applications to classification theory, model selection, penalization procedures
- More generally, all possible applications in semi or nonparametric inference

The plenary speakers of this workshop are:

Philippe Berthet (Univ. Toulouse),

Laurent Bordes (Univ. Pau, to be confirmed),

Armelle Guillou (Univ. Strasbourg),

Guillaume Lecué (École Polytechnique)

No registration fees are required. The maximum number of participants is 35. Abstracts should be submitted by e-mail to davit. varron@univ-fcomte.fr, before May 31. Registration is free of charge, but mandatory; it is open until June 15.

More information can be found on https://trimestres-Imb.univfcomte.fr/Workshop-on-empiricial-processes.html

> If you're organizing a meeting and want it listed here, please visit the "submit a meeting" webpage and fill in the details. Easy.

imstat.org/submit-meeting.html

It's free publicity!

NIMBioS Tutorial: Evolutionary Quantitative Genetics August 4–9, 2014

Knoxville, Tennessee

w http://www.nimbios.org/tutorials/TT_eqg

The National Institute for Mathematical and Biological Synthesis (NIMBioS) is now accepting applications for its Tutorial, "Evolutionary Quantitative Genetics," to be held August 4–9, 2014, at NIMBioS.

Objectives: Quantitative genetic theory has been applied to a wide range of phenomena including the evolution of differences between the sexes, sexual preferences, life history traits, plasticity of traits, as well as the evolution of body size and other morphological measurements. This tutorial is for evolutionary biologists interested in how quantitative genetics theory can be tested with data. Participants – graduate students, postdocs, and junior faculty – will learn how to use R to build and test evolutionary models. There is a need for evolutionary biologists to understand the field of evolutionary quantitative genetics because of the ability to collect large amounts of data by computer, the development of statistical methods for changes of traits on evolutionary trees and for changes in a single species through time, and the realization that quantitative characters will not soon be fully explained by genomics.

Location: NIMBioS at the University of Tennessee, Knoxville

For more information about the tutorial and a link to the online application form, go to http://www.nimbios.org/tutorials/TT_eqg There are no fees associated with this tutorial. Tutorial participation in the tutorial is by application only. Individuals with a strong interest in the topic, including post-docs and graduate students, are encouraged to apply, and successful applicants will be notified within two weeks of the application deadline.

Food and Lodging: Breakfast and lunch will be provided at NIMBioS each day of the tutorial, as well as coffee and mid-morning and mid-afternoon snacks. NIMBioS is not covering other expenses for participants, but a block of rooms will be reserved at a nearby hotel. More information will be available on our website soon about lodging, room rates, and how participants can make reservations.

Application deadline: May 1, 2014

NIMBioS (http://www.nimbios.org) brings together researchers from around the world to collaborate across disciplinary boundaries to investigate solutions to basic and applied problems in the life sciences. NIMBioS is sponsored by the National Science Foundation, the U.S. Department of Homeland Security, and the U.S. Department of Agriculture with additional support from The University of Tennessee, Knoxville.



Fifth Linnaeus University Workshop in Stochastic Analysis and Applications June 11–13, 2014

Växjö, Sweden.

w http://lnu.se/subjects/mathematics/conferences/lsaa---stochasticanalysis-and-applications/lsaa2014?l=en

This three-day workshop deals with analytical and numerical results of stochastic models. It addresses a topic of intensive and growing research activities: particle aspects, equilibria, and related methods in stochastic finance.

International Congress of Women Mathematicians 2014 August 12 & 14, 2014, Seoul, Korea

w https://sites.google.com/site/icwm2014/

The International Congress of Women Mathematicians 2014 (ICWM2014), starts on August 12, just preceding ICM 2014 in Seoul, Korea, and continues its schedule intertwined with that of its (much larger) ICM sibling. Please display the poster that you can download from the congress website.



www.kwms.or.kr/icwm2014 icwm2014.seoul@gmail.com KWMS 한국여성수리과학회

One-day conference on Geometry and Statistics Monday, June 23, 2014 University of Bath, UK

NEW

w http://people.bath.ac.uk/kai21/conference.html

We would like to bring this one-day conference not only to the attention of the Statistics community but also to Geometers of all kinds! We will really appreciate if you can help in advertising this meeting with the Geometry group of researchers and students at your institution!

The aim of this one-day conference is to attract pure mathematicians and in particular, Geometers, to work together with Statisticians in this area by highlighting interesting and powerful applications of Geometry to Statistics. The conference takes a very broad view of the interplay between Geometry (Differential, Algebraic, Convex, etc) and Statistics, which includes:

- the model functional space approach called Information Geometry which endows the space of probability densities with appropriate geometric structures and from there develops method to analyse data
- * the data geometry approach which gives geometries to the space of the data and for which prominent examples are the computational geometry based algorithms used in Robust Statistics
- As such, the conference intends to bring opportunities
- to extend the scope of the applications of Geometry research and hence to increase its impact
- to develop new projects (research and student) jointly with Statisticians

The format of this one-day conference consists of a series of talks by researchers who have worked on this area that will highlight the key elements of the interplay between Geometry and Statistics in their particular areas of expertise.

Confirmed speakers: Eva Riccomagno (Genoa); Peter Jupp (St Andrews); CTJ Dodson (Manchester); Johannes Rauh (Max Planck Institute); Paul Marriott (Waterloo); Frank Critchley (Open University); Michael Betancourt (Warwick); Karim Anaya-Izquierdo (Bath)

Posters: Postgraduate students and postdoctoral researchers in both areas (Geometry and/or Statistics) are particularly encouraged to submit a poster. If you would like to present your poster please indicate so in the registration form.

Main contact: Karim Anaya-Izquierdo



More meetings around the world

2014 NISS/ASA/IMS Writing Workshop for Junior Researchers Sunday 3 August & Wednesday 6 August at JSM Boston, USA

w http://www.amstat.org/meetings/wwjr/registration/

The National Institute of Statistical Science (NISS), the American Statistical Association (ASA), and the Institute of Mathematical Statistics (IMS) will hold a writing workshop for junior researchers (subject to availability of funds). The goal of the workshop is to provide instruction in how to write journal articles and grant proposals. Participants will be required to provide a recent sample of their writing, which will be reviewed by a senior mentor. The sample could be a current draft of an article to be submitted for publication, or it could be an early version of a grant proposal. (Submission of the manuscript will be required as part of the registration process. Prior experience suggests that the best results come from submitting an early draft of something that is written solely or primarily by the participant.)

The mentors will be former journal editors and program officers, who will critique (a portion of) the submitted material. Individual feedback will be provided as part of the opening session, and participants will be expected to prepare a revision in response. The workshop will open with a one-day session of general instruction in effective writing techniques and will close with discussion and debriefing at a follow-up lunch.

The full-day session is scheduled for Sunday, August 3, in Boston, Massachusetts at the Joint Statistical Meetings (JSM). At the close of the formal activities, mentors will meet individually with participants to go over the writing samples they submitted. Each participant will then prepare a revision of a critiqued portion of the paper and return this to the mentor by Tuesday evening, August 5. Mentors and participants will meet again in conjunction with a lunch on Wednesday, August 6, to discuss the success of the revisions. The lunch program will also include general feedback to participants, mentors, and organizers.

Attendance will be limited and will depend on the number of mentors available. To apply, go to http://www.amstat.org/meetings/wwjr/registration/. Applications are due by June 1, 2014, and successful applicants will be notified by June 30. Applications received after June 1 will be considered if space is available. There is no fee for participation. Participants will receive lunch on Sunday, August 3, and Wednesday, August 7. Participants must agree to attend both the full Sunday session and the Wednesday lunch. We have requested funding for partial travel support.

This workshop is designed for researchers with a recent Ph.D. in either statistics or biostatistics. Top priority will go to those who have held the Ph.D. for 0-3 years. The limited available funding will be used to support attendance by researchers at U.S. institutions. Current Ph.D. students who are completing their degree before the end of the summer and who will be at US institutions in the fall will also be considered. If space is available, researchers at institutions outside the US will be admitted to the workshop, but will not be provided with travel support.



Flint: One City – 100 Years Under Variability June 24–28, 2014 Flint, Michigan, USA

w http://bulldogs.kettering.edu/fisc/

- Contact: Leszek Gawarecki
- e lgawarec@kettering.edu

This international conference is being organized by Kettering University to celebrate the IYS 2013 and the 175th anniversary of the ASA. Our intention is to bring together statisticians with expertise in statistical modeling, education, and applications. The conference will focus on multi-disciplinary use of historical data for urban communities. Participants may use any data of their choice. Analysis and models based on historical records will be included or discussed in the plenary sessions, invited talks, presentations and tutorials. Data about the City of Flint, MI, consisting of up to 100 years of demographic, health, labor, census, and crime records will be summarized in advance of the conference and made available to the participants. The Flint history spans the early years of the automotive industry, the force behind Flint's growth, as well as its decline, both of which have had an impact on the Flint community. Each Session of the conference will start with an extended presentation of the statistical achievements and perspectives in the discussed area, followed by several talks on current research and results.

Early bird registration and abstract submission by April 25, 2014.

Tutorials will include:

The measure of dependence between random events, its statistical evaluation and use;

The use of the copula approach for modeling dependent components in multivariate distributions;

Life insurance in actuarial modeling;

The matrix-analytic method in computational stochastics; and

The importance of Bayesian statistics in statistical education.

Call for Short Course Proposals: 2015 ISI World Statistics Congress July 26–31, 2015

NEW

Rio de Janeiro, Brazil w http://www.isi2015.ibge.gov.br/

The Short Course Committee for the 2015 World Statistics Congress (SCC-2015) in Rio de Janeiro, Brazil has been appointed. The Committee is chaired by Alicia Carriquiry, and the full list of members is given below. The SCC-2015 has been asked to develop a short course program to serve the diverse needs of participants at the WSC.

The SCC-2015 is inviting the members of ISI and its Associations to submit proposals for short courses. The ISI views the short course program as an important part of its statistical capacity building activities. Therefore, courses aimed at the development of statistical capacity of participants in the local region, including young statisticians, are especially welcome. The proposals received from members and other sources will be reviewed by the SCC-2015, which will develop the short course program for WSC 2015 and submit it to the EC for approval.

Here is some information about the short course program:

- Courses should be 1 to 2 days in length and will be offered immediately before the WSC 2015 meetings.
- Topics may be drawn from any area of statistics represented in the ISI and its Associations. Courses that are aimed at the needs of the participants in the local region and young statisticians will be given preference.
- Short courses will be offered in partnership with the Brazilian Institute for Geography and Statistics (IBGE) which is hosting the WSC. The venue for the short courses will be identified by our IBGE partners.
- The fees for the courses will be determined by the ISI. They will be set at reasonably low levels to allow participants from developing countries to participate.
- Up to two instructors will be reimbursed for local expenses (lodging and per diem at the UN rate) for the period that they are teaching the short courses. Travel expenses to the WSC in Rio de Janeiro will not be covered, as it is expected that the instructors are already planning to attend the WSC. Unfortunately, we cannot provide any honorarium. It is hoped that instructors will view this as a service to the international statistical community.

Please provide the following information when you submit your proposal:

- 1. Title of short course
- 2. Names and contact information of instructor(s)
- 3. Description of course (500 words or less)
- 4. Anticipated course length (1 to 2 days)
- 5. Description of course materials that will be provided to participants (e.g. course pack, presentation slides, recommended text, etc.)
- 6. Description of target audience, needed prerequisites, etc.

Proposals should be submitted to Liliana Happel at I.happel@cbs.nl no later than May 15, 2014.

If you have questions concerning the short course program or your proposal, please feel free to contact the Chair of SCC-2015, Alicia Carriquiry, by e-mail at alicia@iastate.edu.

The members of SCC-2015: Alicia Carriquiry (Chair); Tomas Aluja (IASC); Ayse Bilgin (IASE); Mick Couper (IASS); Lawrence Cox (ISI); Yulia Gel (TIES); Regina Liu (ISBIS); Pedro Morettin (BS); Mario Palma (IAOS); Maysa de Magalhães (Liaison with the LOC); Steven Heeringa (Ex-officio); Liliana Happel (ISI PO)

Summer Institute in Statistics for Clinical Research June 23–27, 2014



University of Washington, Seattle

w http://www.biostat.washington.edu/suminst/siib/general

Contact: Mónica Feliú-Mójer **e** siscr@uw.edu

The Summer Institute in Statistics for Clinical Research (SISCR 2014), consists of a series of half-day, one-day and one-and-a-half day workshops conducted by experts in the field and designed to introduce participants to modern issues in the design and conduct of clinical trials and the statistical analysis of clinical trial data. Topics covered include enrichment, design and missing data in randomized clinical trials, personalized medicine, and comparative effectiveness, among others. Prerequisites are minimal.

Employment Opportunities around the world

Canada: Toronto, ON

Fields Institute Postdoctoral Fellowship

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=17122278

China: Shanghai

Center for Statistical Science, Shanghai Jiao Tong University Distinguished Research Fellow (Associate Professor), Professor, Endowed Chair Professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=16897387

Hong Kong

The University of Hong Kong

Tenure-Track Associate Professor/Assistant Professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=16755737

Kazakhstan: Astana

Nazarbayev University Assistant/Associate/Full Professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=15921573

Singapore

Nanyang Technological University, Singapore Faculty positions in Mathematics http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=16464944

Switzerland: Fribourg

UNI Fr

The Faculty of Science of the University of Fribourg / Switzerland (Department of Mathematics) invites applications for a tenured position of an

Associate Professor in Mathematics

The selected candidate will have a record of successful independent research **in probability and its applications**. She/He is expected to establish a funded research programme and to teach students in mathematics and natural sciences.

More information about the position, the application procedure (deadline: June 30, 2014) as well as the Department of Mathematics, facilities and curriculum are available at www.unifr.ch/science/positions.

United States: Palmer, AK

State of Alaska, Department of Fish & Game, Wildlife Conservation Biometrician II/III (Flexibly Classed) http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=16964962

United States: Dunwoody, GA

State Farm Mutual Automobile Insurance Company Credit Card Modeler - Statistician http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=14484113

United States: Indianapolis, IN

Eli Lilly Statistician http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=16839067

United States: Indianapolis, IN

Eli Lilly Biostatistician http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=16839026

United States: Baltimore, MD

Johns Hopkins University Bloomberg Distinguished Professor - Mathematics & Applied Mathematics http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=16101447

United States: East Lansing, MI

Michigan State University, Department of Statistics & Probability Associate or Full Professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=16431985

United States: Lincoln, NE

Department of Statistics, U. Nebraska–Lincoln Post-doctoral research associate http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=16534391

United States: Columbus, OH

Alliance Data Predictive Analytics Intern http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=16895811

International Calendar of Statistical Events

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

April 2014

April 6–8: NIMBioS, Knoxville, TN. Computing in the Cloud w http://www.nimbios.org/tutorials/TT_cloud

April 24–25: NIMBioS at the University of Tennessee, Knoxville. NIMBioS Investigative Workshop: Modeling Contamination of Fresh Produce w http://www.nimbios.org/workshops/WS_produce. html

April 28–30: NIMBioS at the University of Tennessee, Knoxville. NIMBioS Investigative Workshop: Predictive Models for Ecological Risk Assessment w http://www.nimbios.org/workshops/ WS_era.html

April 28–May 23: CMSS, Peechi, Kerala. 2014 SERB School on Matrix Methods & Fractional Calculus w http://cmsintl.org/

May 2014

May 2: Piscataway, NJ, USA. 2014 Rutgers Statistics Symposium: Statistics and the Century of Data **w** http://www.stat. rutgers.edu/conferences/centuryofdata2014

May 9–11: Atlanta, GA. **3rd Workshop on Biostatistics & Bioinformatics w** http://www2.gsu.edu/~matyiz/2014 workshop/

May 12-14: Hilversum, The Netherlands. 22nd Meeting of PhD students in Stochastics w http://www.ewi.tudelft.nl/over-de-faculteit/ afdelingen/toegepaste-wiskunde/statistiek/aio-netwerk/nextmeeting/

May 15–17: Research Triangle Park, NC, USA. Celebrating Women in Statistics: Know Your Power **w** http://women-in-stats.org

Lims May 18–20: University of Arizona, Tucson, AZ. Frontier Probability Days w http://math.arizona.edu/~fpd/

May 19–21: NIMBioS, Knoxville, TN. **Parameter Estimation for Dynamic Biological Models w** http://www.nimbios.org/tutorials/ TT_data.html

May 20–22: Washington, DC. ISBA George Box Research Workshop on Frontiers of Statistics w http://business.gwu.edu/ decisionsciences/i2sds/conferences.cfm

May 26–28: Paris, France. PLS 2014: 8th International Conference on Partial Least Squares and Related Methods w www.pls14.org/ *ims* May 29–31: University of Maryland, College Park, USA. Frontiers of Hierarchical Modeling in Observational Studies, Complex Surveys and Big Data: Conference Honoring Professor Malay Ghosh w http://www.jpsm.umd.edu/ghosh

May 30: Philadelphia, PA. 2014 Mid-Atlantic Genetic Epidemiology and Statistics (MAGES) Conference: **Integrated Systems Biology Analytical Methods for Epidemiological Studies of Complex Traits** w http://www.med.upenn.edu/magesconference/index.shtml

June 2014

June 1–4: Galveston, Texas, USA 50th Anniversary SRC w http:// srcos2014.rice.edu/

June 2–6: Institute of Computational and Experimental Research in Mathematics, Brown University, Providence, RI. Computational Nonlinear Algebra w http://icerm.brown.edu/tw-14-3-cna

June 2–6: Będlewo, Poland. 11th International Conference on Ordered Statistical Data w http://bcc.impan.pl/14OrderStat/

June 2–27: University of British Columbia, Vancouver, Canada. PIMS Summer School in Probability w http://www.math.ubc.ca/ Links/ssprob14/

June 3–5: NIMBioS, Knoxville, TN. Leptospirosis Modeling w http://www.nimbios.org/workshops/WS_leptospirosis

June 7–10: Lisbon, Portugal. 7th Chaotic Modeling and Simulation International Conference (CHAOS2014) w http://www.cmsim.org

June 8–12: Ljubljana, Slovenia. 23rd International Workshop on Matrices and Statistics (IWMS) w www.law05.si/iwms

June 11–13: Växjö, Sweden. Fifth Linnaeus University Workshop in Stochastic Analysis and Applications **w** http://lnu.se/ subjects/mathematics/conferences/lsaa---stochastic-analysis-andapplications/lsaa2014?l=en

June 11–13: Pau, France. ALT'2014 (reliability testing and analysis) w http://alt2014.sciencesconf.org/

June 11–14: Lisbon, Portugal. 3rd Stochastic Modeling Techniques and Data Analysis Conference w http://www.smtda.net/

ims June 12–16: Cadiz, Spain. Second Conference of the

International Calendar continued

June 2014 continued

International Society of Nonparametric Statistics (II ISNPS) **w** www.isnpstat.org

June 15–18: Honolulu, Hawaii. 2014 WNAR/IMS Annual Meeting w TBC

June 15–18: Portland, OR, USA. 2014 ICSA and KISS Joint Applied Statistics Symposium w http://www.statkiss.org/ icsakiss2014

Applied Probability w www.iwap2014.org

June 16–21: Trondheim, Norway. XXXII International Seminar on Stability Problems for Stochastic Models w http://www.ipiran.ru/ conference/stabil2014/

June 16–26: Búzios, Brazil. Pan-American Advanced Study Institute on Spatial Statistics w http://www.stat.washington.edu/peter/PASI/ PASI_2014.html

June 17–20: Bogotá, Colombia. First International Congress on Actuarial Science and Quantitative Finance **w** http://www. matematicas.unal.edu.co/icasqf/

June 18–20: Knoxville, Tennessee, USA. Algebraic and Discrete Biological Models for Undergraduate Courses w http://nimbios.org/ tutorials/TT_mathbio

June 20–21: San Diego, CA, USA. Combinatorial Stochastic Processes: in celebration of Jim Pitman's 65th birthday w http:// www.stat.berkeley.edu/~aldous/Pitman_Conference/

June 23: University of Bath, UK. Geometry and Statistics **w** http://people.bath.ac.uk/kai21/conference.html

June 23–25: Center for Mathematical Sciences, University of Cambridge, UK. Probability and Statistics in High and Infinite Dimensions: Conference on the occasion of Evarist Giné's 70th Birthday w http://www.statslab.cam.ac.uk/~nickl/Site/2014.html

June 23–27: University of Washington, Seattle. Summer Institute in Statistics for Clinical Research **w** http://www.biostat. washington.edu/suminst/siib/general

Years Under Variability **w** http://bulldogs.kettering.edu/fisc/

June 27–28: Beijing, China. International Symposium on Financial Engineering and Risk Management 2014 (FERM 2014) w http:// www.stat.wisc.edu/~zjz/FERM2014/index.html

June 28–July 2: Winthrop University, SC, USA. NSF–CBMS Mathematical Phylogeny Conference w www.birdnest.org/ phylogeny/

June 29–July 2: Missillac, France. International Colloquium on Stein's Method, Concentration Inequalities, and Malliavin Calculus w http://dornsife.usc.edu/conferences/steincolloquium/

June 29–July 2: Rotterdam, The Netherlands. 34th International Symposium on Forecasting w http://forecasters.org/isf/

Lims June 30–July 3: Taipei, Taiwan. Third IMS Asia Pacific Rim Meetings w http://ims-aprm2014.ntu.edu.tw/

June 30–July 3: Athens, Greece. 8th Annual International Conference on Mathematics Education & Statistics Education w http://www.atiner.gr/edumatsta.htm

July 2014

July 1–4: Montpellier, France. International Statistical Ecology Conference w http://isec2014.sciencesconf.org/

July 2–5: University of Technology, Sydney. **Workshop on Finance, Probability and Statistics w** http://www.qfrc.uts.edu.au/ IMS-FPS-2014

July 4–5: Taipei, Taiwan. Conference on Experimental Designs and Analysis (CEDA) 2014 w http://www3.stat.sinica.edu.tw/ceda2014/

July 6–11: Florence, Italy. XXVII International Biometric Conference (IBC) 2014 **w** http://www.ibs-italy.info/ibc-2014.html

July 7–9: Huquan Hotel, Mile, Yunnan, China. Building Statistical Methodology and Theory 2014: In honor of Jeff Wu's 65th birthday w http://www.stat.purdue.edu/~sunz/Jeff_2014/index.html

July 7–9: Coventry, UK. Computational Methods for Jump Processes w http://www2.warwick.ac.uk/fac/sci/statistics/crism/ workshops/jumps/

July 7–10: Sydney, Australia. 2014 IMS Annual Meeting with Australian Statistical Conference w http://www.asc-ims2014.com/ July 7–11: Bellaterra, Spain. 2nd Barcelona Summer School on Stochastic Analysis **w** http://www.crm.cat/en/Activities/Pages/ ActivityFoldersAndPages/Curs%202013-2014/2ndStochasticAnalysis/ default.aspx

July 11–13: Riverside, CA. 2014 International Indian Statistical Association Conference w http://2014iisa.intindstat.org

July 14–18: Cancun, Mexico. 12th World Meeting of ISBA (ISBA2014) w http://www.isba2014.eventos.cimat.mx/

July 18: Oxford, UK. A day of lectures for the 90th birthday of David R. Cox w http://www.math.chalmers.se/~wermuth/DRC14. html

Probability Summer School w http://www.math.cornell.edu/~cpss/

July 28 – August 1: Buenos Aires, Argentina. 37th Conference on Stochastic Processes and Applications w http://mate.dm.uba.ar/~probab/spa2014/

July 31 – August 2: Harvard, Cambridge, MA. 16th New Researchers Conference w http://www.stat.harvard.edu/NRC2014/

August 2014

Lims August 2–7: Boston, MA. JSM2014 and ASA's 175th Anniversary w http://amstat.org/meetings/jsm/

August 3 & 6: JSM, Boston, USA. 2014 NISS/ASA/IMS Writing Workshop for Junior Researchers **w** http://www.amstat.org/ meetings/wwjr/registration/

August 4–9: Knoxville, Tennessee. NIMBioS Tutorial: Evolutionary Quantitative Genetics w http://www.nimbios.org/ tutorials/TT_eqg

August 6–11: Seoul, Korea. 7th International Conference on Stochastic Analysis and its Applications 2014 (Satellite to ICM2014) w http://www.icm2014.org/en/program/satellite/satellites

August 12 & 14: Seoul, Korea. International Congress of Women Mathematicians 2014 w http://www.kwms.or.kr/icwm2014

August 13-21: Seoul, Korea. International Congress of

Mathematicians: ICM2014 w http://www.icm2014.org

August 24–28: Linköping, Sweden. LINSTAT 2014 w http://www. mai.liu.se/LinStat2014/

August 25–27: Kermanshah, Iran. 12th Iranian Statistical Conference w http://isc12.razi.ac.ir/index.php?slc_lang=en&sid=1

August 25–29: Kansai University, Osaka, Japan. Stochastic Processes, Analysis and Mathematical Physics w http://stoc-proc.com/ sympo/2014/SPAMP2014.htm

September 2014

September 10–11: Besançon, France. Workshop on empirical processes and applications to statistics **w** https://trimestres-lmb.univfcomte.fr/Workshop-on-empiricial-processes.html

September 11–13: Shymkent, Kazakhstan. ICAAM 2014 Second International Conference on Analysis and Applied Mathematics w http://www.icaam-online.org/index/

ims September 22–26: Cartagena de Indias, Colombia XIII CLAPEM: Congreso Latino-americano de Probabilidad y Estadística Matemática w http://www.clapem.unal.edu.co/

December 2014

December 18–21: Bogor, Indonesia. 13th Islamic Countries Conference on Statistical Sciences (ICCS-13) w http://www.iccs13. isoss.net

March 2015

Lims March 15–18: Miami, Florida. 2015 ENAR/IMS Spring Meeting. w http://www.enar.org/meetings.cfm

June 2015

June (exact dates TBC): Location TBC. 2015 WNAR/IMS Annual Meeting w TBC

International Calendar continued

July 2015

July 1–4: Kunming, Yunnan, P. R. China. 2015 IMS-China International Conference on Statistics and Probability w http:// www.2015imschina.com

July 5–8: Istanbul, Turkey. **INFORMS Applied Probability Society Conference 2015 w** TBC

July 6–8: Memorial University, St John's, Canada. International Symposium in Statistics (ISS 2015) Parametric and Semi-parametric Inferences for Spatial-temporal, and Multi-dimensional Familiallongitudinal Data. w http://www.iss-2015-stjohns.ca

Meeting of Statisticians w http://ems2015.nl/

Lims July 13–17: Oxford, UK. 38th Conference on Stochastic Processes and Applications w TBC

July 26–31: Rio de Janeiro, Brazil. 2015 ISI World Statistics Congress w http://www.isi2015.ibge.gov.br/

August 2015

Lims August 8–13: Seattle, WA. **IMS Annual Meeting at JSM2015.** w http://amstat.org/meetings/jsm/

September 2015

September 21–25: Vienna, Austria. 8th International Workshop on Simulation w http://iws.boku.ac.at/index.php

March 2016

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

June 2016

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

July 2016

July 30 – August 4: Chicago, USA. JSM 2016 w http://amstat. org/meetings/jsm/ *Ims* July 11–15: Toronto, ON, Canada. IMS Annual Meeting at 9th World Congress in Probability and Statistics w TBC

July 2017

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

July 2018

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

July 2019

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

August 2020

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

Are we missing something? If you know of any statistics or probability meetings which aren't listed here, please let us know. You can email the details to Elyse Gustafson at erg@imstat.org, or you can submit the details yourself at http://www.imstat.org/ submit-meeting.html We'll list them here in the Bulletin, and on the IMS website too, at www.imstat.org/meetings

Membership and Subscription Information

Journals

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

Individual and Organizational Memberships

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