

August 2017

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## IMS Election results

We are delighted to introduce the newest members of IMS Council. The next President-Elect is **Xiao-Li Meng**, and the six new members of Council are: **Mathias Drton**, **Peter Hoff**, **Greg Lawler**, **Antonietta Mira**, **Axel Munk** and **Byeong Park**. All of these will serve a three-year term starting in August, apart from Mathias Drton, who will serve a two-year term.

Mathias, Peter, Greg, Antonietta, Axel and Byeong will be joining Andreas Buja, Gerda Claeskens, Nancy Heckman, Kavita Ramanan and Ming Yuan (whose terms end August 2018); and Jean Bertoin, Song Xi Chen, Elizaveta Levina and Simon Tavaré (whose terms run through July 2019). Cun-Hui Zhang, who became *Statistical Science* Editor in January, still serves on Council (see below); his vacant position as an elected member is filled by Mathias Drton.

In addition to these elected members, IMS Council is made up of the Executive Committee and the Editors, who serve ex officio. The Executive Committee will, from August, comprise:

- President: Alison Etheridge
- Past President: Jon Wellner
- President-elect: Xiao-Li Meng
- Treasurer: Zhengjun Zhang
- Program Secretary: Judith Rousseau
- Executive Secretary: Edsel A. Peña

**Richard Davis**, outgoing past-president, will be leaving the Executive Committee after three years' service. **Aurore Delaigle** will be stepping down after six years as Executive Secretary, replaced by **Edsel Peña**.

The Editors are Bálint Tóth (*Annals of Applied Probability*); Maria Eulalia Vares (*Annals of Probability*); Tilmann Gneiting (*Annals of Applied Statistics*); Ed George and Tailen Hsing (*Annals of Statistics*); Cun-Hui Zhang (*Statistical Science*); and Vlada Limic (*IMS Bulletin*). T.N. Sriram is Managing Editor for Statistics & Probability. **Maria Eulalia Vares** will be stepping down as Editor of the *Annals of Probability* at the end of this year, and **Amir Dembo** will be taking on this role from next January.

The elected members who are leaving Council this year are **Peter Bühlmann**, **Florentina Bunea**, **Geoffrey Grimmett**, **Aad van der Vaart** and **Naisyin Wang**. Thanks to all the outgoing officers, editors and council members for their dedicated service to our institute. Thanks, too, to all the candidates, and all who voted!

**Xiao-Li Meng**

Introducing the new IMS President-Elect (above) and elected members of the IMS Council (below)

**Mathias Drton****Peter Hoff****Greg Lawler****Antonietta Mira****Axel Munk****Byeong Park**

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## IMS Members' News

### Peter Bühlmann receives honorary doctorate

The Université catholique de Louvain (UCL), in Belgium, has awarded Professor **Peter Bühlmann** with a Doctor honoris causa degree. Peter Bühlmann received the honorary doctorate for his achievements in the fields of mathematical statistics, machine learning and high-dimensional data analysis. In addition, he has also “contributed to solving pertinent problems in the application of his fundamental research to the fields of biology and bio-medicine (in particular, in genetics and bioinformatics)”.



Vincent Blondel, Rector of UCL, and Peter Bühlmann

The ceremony was part of the UCL

workshop on Data Sciences held in May 2017 in Louvain-la-Neuve (<https://uclouvain.be/en/research-institutes/immaq/isba/dhc-data-sciences.html>).

Peter Bühlmann is Professor of Mathematics and Statistics, and currently Chair of the Department of Mathematics, at ETH Zürich. He received his doctoral degree in mathematics in 1993 from ETHZ; after spending three years at UC Berkeley, he returned to ETHZ in 1997. His main research interests are in high-dimensional and computational statistics, machine learning, causal inference and applications in the bio-medical field. He has been a highly cited researcher in mathematics in the last few years.

Peter Bühlmann is a Fellow of IMS and ASA, and a recipient of several awards, including the Winton Research Prize. He served as Co-editor of the *Annals of Statistics* (2010–12), and has guided 29 doctoral students, to date.

### Donald Rubin receives honors

**Donald B. Rubin**, the John L. Loeb Professor of Statistics at Harvard University, has received several awards this year. He won the 2017 Rao Prize for Outstanding Research in Statistics (the last winner was David Cox in 2015); the 2017 Waksberg Prize for Contributions to Survey Methodology; and the 2017 ISI Karl Pearson Prize, shared with Roderick Little for their book on missing data, first published in 1987. In January he received an Honorary Degree (his fourth) from the Medical Faculty at Uppsala University, Sweden; and will shortly receive one from Northwestern University, Evanston, Illinois (the first three are from Bamberg University, Germany, the University of Ljubljana, Slovenia, and Santo Tomas University, Columbia).

### SIAM Fellow Emmanuel Candès

Among the Society for Industrial and Applied Mathematics (SIAM) 2017 SIAM Fellows is **Emmanuel Candès**, Stanford University. The 28 Fellows were nominated for their exemplary research as well as outstanding service to the community. Emmanuel's citation reads: *For pioneering work in mathematics of information, compressive sensing, computational harmonic analysis, statistics, and scientific computing.*

See <https://sinews.siam.org/Details-Page/siam-announces-class-of-2017-fellows>

# More Members' News

## Jeff Wu receives 2017 ENBIS Box Medal Award for Achievements in Statistics

Professor **Jeff Wu**, Georgia Tech's Stewart School of Industrial & Systems Engineering (ISyE) Coca-Cola Chair in Engineering Statistics, has received the 2017 Box Medal Award from ENBIS, the European Network for Business and Industrial Statistics.

The Box Medal is named after George Box, the late British-American statistician who is considered one of the greatest statistical minds of our time. Box was extremely influential on Wu's work during his formative years as a young academic at the University of Wisconsin-Madison, where Box was also a professor. In a 2015 interview with Hugh Chapman and Roshan Joseph, Wu said Box was "a great scholar and a great lecturer. His opinions and passion for work were contagious ... I respected him a lot."

The ENBIS press release announcing Wu as this year's Box Medal recipient stated that "with the medal, the link between two great statisticians is strengthened even further." The press release also noted that Wu was chosen for his many contributions to the study of statistics, as well as "his ability to clearly explain complex concepts ... and for systematically passing on his knowledge." Wu has supervised 45 PhD students, many of whom are active researchers in the statistical sciences.

Jeff Wu will accept the Box Medal, and deliver a keynote speech, at the ENBIS conference, held from September 9–14, 2017, in Naples, Italy. See <https://www.isye.gatech.edu/news/isye-professor-jeff-wu-receives-2017-enbis-box-medal-award-achievements-statistics>



Jeff Wu

## Gordon Slade elected Fellow of the Royal Society

IMS Fellow Professor **Gordon Slade**, University of British Columbia, has been elected a Fellow of the UK's Royal Society. Gordon's research is in the fields of probability theory and mathematical physics, especially statistical mechanics. He is well-known for his work on the mathematical study of critical phenomena and phase transitions. With his collaborators, he developed the "lace expansion" into a powerful and flexible method for the analysis of high-dimensional critical phenomena in many mathematical models of interest in physics, including the self-avoiding walk and percolation. In more recent work, he and his collaborators have developed a rigorous renormalisation group method for the analysis of the critical behaviour of spin systems and the weakly self-avoiding walk. His awards include election as Fellow of the Royal Society of Canada in 2000, the CRM-Fields-PIMS Prize in 2010, and a University of British Columbia Killam Teaching Prize in 2017.

## Clifford Spiegelman appointed to Texas Holocaust and Genocide Commission

On April 20, **Clifford Spiegelman** was named the first official statistician of the Texas Holocaust and Genocide Commission. Spiegelman will aid in producing the Educator Survey, a major project for the commission. The survey will help the commission gain an understanding of what Texas educators know of the Holocaust and what they are teaching about this seminal event. William McWhorter, executive director of the commission, wrote that the survey is critical to meeting the commission's mission and, with Spiegelman's assistance, they hope to produce the most effective Educator Survey possible.

Visit the commissions' website for details: <http://thgc.texas.gov/>

= access published papers online

## IMS Journals and Publications

*Annals of Statistics*: Ed George and Tailen Hsing

<http://imstat.org/aos>

<http://projecteuclid.org/aos>

*Annals of Applied Statistics*: Tilmann Gneiting

<http://imstat.org/aoas>

<http://projecteuclid.org/aoas>

*Annals of Probability*: Maria Eulalia Vares

<http://imstat.org/aop>

<http://projecteuclid.org/aop>

*Annals of Applied Probability*: Bálint Tóth

<http://imstat.org/aap>

<http://projecteuclid.org/aop>

*Statistical Science*: Cun-Hui Zhang

<http://imstat.org/sts>

<http://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*: Domenico Marinucci

<http://imstat.org/ejs>

<http://projecteuclid.org/ejs>

*Electronic Journal of Probability*: Brian Rider

<http://ejp.ejpecp.org>

*Electronic Communications in Probability*:

Sandrine Péché

<http://ecp.ejpecp.org>

*Current Index to Statistics*: George Styan

<http://www.statindex.org>

log into members' area at [imstat.org](http://imstat.org)

*Journal of Computational and Graphical Statistics*:

Diane Cook

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

log into members' area at [imstat.org](http://imstat.org)

*Statistics Surveys*: Donald Richards

<http://imstat.org/ss>

<http://projecteuclid.org/ssu>

*Probability Surveys*: Ben Hambly

<http://imstat.org/ps>

<http://www.i-journals.org/ps/>

## IMS-Supported Journals

*ALEA: Latin American Journal of Probability and Statistics*: Victor Perez Abreu

<http://alea.impa.br/english>

*Annales de l'Institut Henri Poincaré (B)*: Gregory

Miermont, Christophe Sabot <http://imstat.org/aihpb>

<http://projecteuclid.org/aihpb>

*Bayesian Analysis*: Bruno Sansó

<http://ba.stat.cmu.edu>

*Bernoulli*: Holger Dette

<http://www.bernoulli-society.org/>

<http://projecteuclid.org/bj>

*Brazilian Journal of Probability and Statistics*:

Francisco Louzada Neto <http://imstat.org/bjps>

<http://projecteuclid.org/bjps>

*Stochastic Systems*: Assaf Zeevi

<http://www.i-journals.org/ssy/>

## IMS-Affiliated Journals

*Observational Studies*: Dylan Small

<http://www.obsstudies.org>

*Probability and Mathematical Statistics*: K. Bogdan,

M. Musiela, J. Rosiński, W. Szczotka, & W.A. Woyczyński

<http://www.math.uni.wroc.pl/~pms>

# Regina Explicat: Quantitative communication

**Regina Nuzzo**, one of our new Contributing Editors, has a PhD in statistics and is also a graduate of the Science Communication program at University of California–Santa Cruz. Her work as a part-time freelancer over the past 12 years has appeared in *Nature*, *New Scientist*, *Scientific American*, *Reader's Digest*, the *New York Times* and the *Los Angeles Times*, among others. In 2014 she received the American Statistical Association Excellence in Statistical Reporting Award for her *Nature* feature on *p*-values.

Her geeky Latin friends tell her that a rough translation of the name of this column, Regina Explicat, is, “The queen disentangles.” She explains why below.



A couple of years ago when I was at a conference at Stanford I spotted a fellow science journalist—Christie Aschwanden, a writer for the digital magazine FiveThirtyEight—pulling aside attendees one by one into the courtyard, where she would then flip on her video camera and fire a single question at them.

The interviewees—all gathered for the inaugural METRICS conference on “meta-science” to improve biomedical research—had different reactions. Some squirmed uncomfortably at the question, some gamely gave their best answer, and others (like me) dodged it entirely. Aschwanden eventually put them together for a short FiveThirtyEight article—one that, to be honest, was not entirely flattering to the field of statistics.

The hard-hitting question posed to the attendees: “What is a *p*-value?”

Aschwanden apparently



interpreted our fumbling discomfort to mean that no one could say what this statistic really is—not even statisticians themselves. “I figured that if anyone could explain *p*-values in plain English, these folks could,” she wrote. “I was wrong.” And the subtext, perhaps, was that if experts couldn’t communicate it, then journalists and other non-statisticians shouldn’t feel too bad if they didn’t understand it either.

I think she was missing the point.

To be fair, Aschwanden was in a tough spot as a journalist. She’d recently had to print a correction to an article she’d written for FiveThirtyEight on cloud seeding, in which a *p*-value of 0.28 had been miscommunicated: “An earlier version of this article misstated the chance that cloud seeding produced a 3 percent increase in precipitation. There was a 28 percent probability that the result was at least that extreme if cloud seeding doesn’t actually work, not a 28 percent chance that the research could have happened by chance.”

Aschwanden’s original language, in turn, had been pulled from the official executive summary for the study her article was based on, the Wyoming Weather Modification Pilot Program: “The primary statistical analysis yielded a RRR [root regression ratio] of 1.03 and a *p*-value of 0.28. These results

imply a 3% increase in precipitation with a 28% probability that the result occurred by chance.” (Ah, yes, the flipped conditional probability.)

So you can see why journalists might be frustrated. How can they convey to their readers the implication of  $p = 0.28$  if they don’t know how to communicate it well themselves, and neither do the expert scientists?

This issue is not limited to *p*-values, of course. We could be talking instead about confidence intervals, odds ratios, nonparametric methods, Bayesian networks, logistic regression. This is about statistics communication—or, more broadly, “quantitative communication.”

And that leads to why I think Aschwanden’s bit of mathematical “gotcha” journalism ignored bigger issues at hand, but at the same time points to interesting opportunities for the statistical community.

First of all, statisticians are already quite good at communication, by and large, even if it’s not yet a formal part of our training. And what good communicators intuitively know is that audience and purpose are everything.

So I suspect the experts Aschwanden interviewed were uncomfortable with her question not because they didn’t know how to explain a *p*-value well, but simply because the question itself was devoid of

*Continues on page 5*



Continued from page 4

context. It would have been fair to ask her, “Who is the audience? Why do they need to know this? Are you asking what this statistic is, or are you asking how it’s used? Do you have time for a concrete example, or is this just a sound bite?”

There’s no one-size-fits-all explanation for statistical ideas.

Yet while we may already be decent communicators, we can do better still. A good start would be discussions about best practices for discussing our work in different contexts, in which we realize that we may get only five minutes in a courtyard instead of a semester in the classroom.

Aschwanden wrote that her favorite  $p$ -value explanation invoked a coin-flip experiment. We could ask: Do examples like these strike the right balance of accuracy, simplicity, and brevity for this audience? Or should we focus on what  $p$ -values mean for researchers’ behavior, an idea discussed a few years ago on Andrew Gelman’s blog (<http://andrewgelman.com/>), rather than the number itself?

In these pages over the next year I plan to explore what good quantitative communication looks like, what we can learn from the scientists who have found ways to engage better with lay audiences, and also what’s unique about our own communications niche.

Despite the above example, this will not in fact be a column about  $p$ -values. Nor will this be a column about grammar, or even writing. Communication is much more than that. Hence the column’s name: *explicare* is to explain, unfold, disentangle, which feels like the perfect physical manifestation of communicating statistics.

I’d love to hear people’s ideas on this topic, so feel free to drop me a line: [Regina.Nuzzo@Gallaudet.edu](mailto:Regina.Nuzzo@Gallaudet.edu).

### CALL FOR NOMINATIONS FOR THE 2018 DOEBLIN PRIZE

The Bernoulli Society for Mathematical Statistics and Probability welcomes nominations for the 2018 Wolfgang Doeblin Prize.

The Wolfgang Doeblin Prize, which was founded in 2011 and is generously sponsored by Springer, is awarded biannually to a single individual who is in the beginning of his or her mathematical career, for outstanding research in the field of probability theory. The awardee will be invited to submit to the journal *Probability Theory and Related Fields* a paper for publication as the Wolfgang Doeblin Prize Article, and will also be invited to present the Doeblin Prize Lecture at a World Congress of the Bernoulli Society, or at a Conference on Stochastic Processes and their Applications.

More information about the Wolfgang Doeblin prize and past awardees can be viewed at <http://www.bernoulli-society.org/index.php/prizes/>

Each nomination should offer a brief but adequate case of support and should be sent by **November 15, 2017**, to the chair of the prize committee at the following e-mail address: [Kavita\\_Ramanan@brown.edu](mailto:Kavita_Ramanan@brown.edu) with subject heading: **Doeblin Prize 2018**.

## Stat community responds to proposed US visa changes

On May 18, thirty professional science societies in the USA, including IMS, ASA, CBMS, INFORMS and SIAM, signed a letter to the US Department of State, responding to the new guidelines for visa applicants. The letter expressed concern that the requirement of supplemental information would have a negative effect on those pursuing academic study and scientific research, stating that, “Academic and scientific exchange fuels the innovations essential to strengthening the US economy and improving the lives of US citizens.”

Kathie Bailey, Director of the Board on International Scientific Organizations at the National Academies, reported an update following the community comment period: “Not all applicants will be asked to complete the supplementary form, but the exact number of applicants who will be asked to complete it is still unknown. The new questions will be voluntary, but the form states that, ‘failure to provide the information may delay or prevent the processing of an individual visa application.’”

The letter from societies can be viewed on the AAAS website at <https://mcmprodaaas.s3.amazonaws.com/s3fs-public/DS-5535%20Supplemental%20Questions%20for%20Visa%20Applicants%20Emergency%20Submission%20Comment%20051817%20FINAL.pdf>

The National Academies International Visitors Office (IVO) provides direct assistance to scientists, engineers, and students in those fields who are experiencing difficulties or delays with US visa applications. The IVO works directly with the Department of State to seek resolution of those problems. Individuals experiencing difficulties should complete the questionnaire on the IVO’s webpage (<http://sites.nationalacademies.org/PGA/biso/visas/index.htm>). The IVO also works with organizers of large scientific meetings (over 100 foreign attendees), and registers those meetings with the Department of State.

If you are a non-US student with questions about traveling to the US for study, the NAFSA: Association of International Educators has created an excellent FAQ resource available at <https://www.nafsa.org/2017/03/15/tips-for-surviving-in-a-time-of-immigration-uncertainty/>.

# OBITUARY: Alastair Scott

## 1939–2017

Alastair Scott, one of the finest statisticians New Zealand has produced, died in Auckland, New Zealand on Thursday, May 25. He served the University of Auckland with distinction from 1972 to 2005.

His research was characterised by deep insight and he made pioneering contributions across a wide range of statistical fields. Alastair was acknowledged, in particular, as a world leader in survey sampling theory and the development of methods to efficiently obtain and analyse data from medical studies. His methods are applied in a wide range of areas, notably in public health. Beyond research, he contributed prolifically to the statistical profession in academia, government, and society.

Alastair was a Fellow of the Royal Society of New Zealand, the American Statistical Association, the Institute of Mathematical Statistics and the Royal Statistical Society, and an honorary life member of the New Zealand Statistical Association. In November last year, Alastair was awarded the Royal Society of New Zealand's Jones Medal, which recognised his lifetime contribution to the mathematical sciences.

Alastair gained his first degrees at the University of Auckland: BSc

in Mathematics in 1961 and MSc in Mathematics in 1962. After a period at the New Zealand Department of Scientific and Industrial Research, he pursued a PhD in Statistics at the University of Chicago, graduating in 1965. He then worked at the London School of Economics from 1965–1972.

Alastair returned to New Zealand in 1972 to a post in what was then the Department of Mathematics and Statistics at the University of Auckland; he and wife Margaret had decided that they wanted to raise their children, Andrew and Julie, in New Zealand. Throughout his career, Alastair was regularly offered posts at prestigious universities overseas, but turned them down. However, he held visiting positions at Bell Labs, the universities of North Carolina, Wisconsin, and California Berkeley in the US, and at the University of Southampton in the UK.

In 1994, the University's statistics staff, led by Professor George Seber, had a very amicable divorce from the Department of Mathematics and Statistics, and Alastair became the head of the new Department of Statistics. He helped set the tone for the department that still exists—hard-working, but welcoming, and social. The Department



Alastair Scott

of Statistics is now the largest such school in Australasia.

In 2005, Alastair officially retired. A conference in Auckland that year in his honour attracted the largest concentration of first-rank international statisticians in New Zealand in one place at one time. Alastair kept an office in the department and continued writing and advising, coming into work almost every day.

Alastair Scott was an influential teacher and generous mentor to several generations of statisticians who valued his sage advice coupled with his trademark affability. Alastair had a full life professionally and personally. He was a wonderful teacher, mentor, colleague, and friend. We will all miss him greatly and we extend our sincere condolences to Margaret, Andrew and Julie, and his family, friends, and colleagues all over the world.

*Ilze Ziedins, Chris Wild, and Chris Triggs,  
Department of Statistics, University of  
Auckland, New Zealand*

### Joseph Hilbe, 1944–2017

IMS member Joseph Hilbe passed away March 12, 2017, aged 72. Known for his work in astronomy and statistics, Hilbe was also an excellent athlete, and his first doctorate was in Philosophy. His interest in astronomy led to him initiating the International Statistical Institute (ISI) Astrostatistics Interest Group, eventually becoming the International Astrostatistics Association, with Hilbe elected as its founding president. Hilbe was a fellow of the ASA and Royal Statistical Society, an elected member of the ISI, and a full member of the American Astronomical Society. From 1997–2009, he was software reviews editor for *The American Statistician*.

A full obituary will appear in a future issue.

**Tapas K. Chandra**, professor of statistics at the Indian Statistical Institute, has passed away in Calcutta; he was 64. Professor Chandra is known for his work on asymptotic stochastic expansions of test statistics under Pitman and fixed alternatives and for strong laws for dependent sequences. Jointly with Sreela Gangopadhyay, he authored *Fundamentals of Probability Theory*; a text on the theory of stochastic processes also authored by them is in press.

# Medallion Lecture preview: Subhashis Ghoshal



Subhashis Ghoshal is a professor of statistics at North Carolina State University, Raleigh. His research interests span many areas including Bayesian statistics, asymptotics, nonparametrics and high dimensional models, with diverse applications. In particular, his pioneering work on concentration of posterior distributions led to theoretical understanding of nonparametric Bayesian procedures. He was honored with fellowship from the IMS (2006), ASA (2010) and ISBA (2016). He has received several awards, including the P.C. Mahalanobis Gold Medal (1990), Indian Science Congress Young Scientist Award (1995), NSF Career Award (2003), Sigma-Xi Research Award (2004), International Indian Statistical Association Young Researcher Award (2007) and Cavell Brownie

Mentoring Award (2015). He held the honorary positions of Eurandom Chair (2010–11) and the Royal Netherlands Academy Arts and Sciences Visiting Professorship (2013–14). His research has been supported by several US federal funding agencies, European granting institutions and industry grants. He serves or has served on the editorial boards of many leading statistics journals including the *Annals of Statistics*, *Bernoulli*, *Electronic Journal of Statistics* and *Sankhya*. Seventeen doctoral students so far have graduated under his advising. Subhashis Ghoshal's Medallion lecture will be given at the 2017 Joint Statistical Meetings in Baltimore (July 29–August 4, 2017). See the online program at <http://ww2.amstat.org/meetings/jsm/2017/onlineprogram/index.cfm>

## Coverage of Nonparametric Credible Sets

Subhashis Ghoshal's Medallion lecture will discuss frequentist coverage properties of Bayesian credible sets for nonparametric and high dimensional models. Bayesians and frequentists quantify uncertainty in very different ways. While a Bayesian's uncertainty quantification is based on a direct probability assessment of the parameters and thus has excellent interpretation in a conditional framework, potential strong dependence on the prior may lead to confusion. This necessitates the study of frequentist coverage of Bayesian credible sets. In the classical setting of repeated sampling from fixed dimensional smooth parametric families, the celebrated Bernstein–von Mises theorem asserts that the posterior distribution of the parameter is asymptotically normal with mean at the maximum likelihood estimator and variance the inverse of Fisher information. The most important consequence of this result is that the coverage of a Bayesian credible set approximately matches its credibility, and hence Bayesians and frequentists are in agreement about uncertainty quantification. Such a matching continues in many other fixed dimensional parametric families which are not smoothly parameterized as well as in models where the number of parameters grows to infinity sufficiently slowly. In certain nonparametric problems with parametric convergence rate (like that of estimating a distribution function), empirical estimators typically have Gaussian process limits by Donkser-type theorems. For certain priors, the posterior of the function centered at the empirical estimator can have the same limit, thus again Bayesian credible sets will have asymptotically valid coverage. A similar behavior is observed in many semi-parametric models for the parametric part, or for certain differentiable functionals of the function indexing a nonparametric model. In certain parametric models described by

structural relations like in differential equation models, a type of “projection posterior” distributions gives credible sets with valid asymptotic frequentist coverage. However, in smoothing problems with interest in the whole function, all these niceties go away, even for the simple signal plus white noise model although a conjugate prior is immediately available. Under optimal smoothing to produce the best convergence rate, posterior credible regions may have arbitrarily low asymptotic frequentist coverage. The reason for such an anomaly is that the order of the bias under optimal smoothing matches the order of posterior variability, thus poorly centering posterior credible sets and spoiling coverage. Interestingly, the disagreement between Bayesian credibility and frequentist coverage at fixed credibility level may go away in the high credibility regime. In general the problem may be resolved by slightly inflating Bayesian credible sets, especially if uniform credible bands are desired. Assuring frequentist coverage of a Bayesian credible set which adapts its size to the smoothness of the underlying true function is a lot more subtle. The only possible way to maintain both coverage and size is to discard certain “deceptive parameters” from consideration which lead to “excessive bias” in the procedure. Then optimal sized inflated credible sets with guaranteed asymptotic coverage can be obtained. The talk will be concluded by considering a setup of shape-restricted models, for which it is observed that asymptotic coverage of a Bayesian credible set can be obtained explicitly but it may differ from the corresponding frequentist coverage. A simple modification of a credible set is devised to guarantee a desired coverage level.

# Medallion Lecture preview: Judith Rousseau



Judith Rousseau is currently Professor at University Paris Dauphine. Her research interests range from theoretical aspects of Bayesian procedures, both parametric and nonparametric, to more methodological developments. From a theoretical perspective she is interested in the interface between Bayesian and frequentist approaches, looking at frequentist properties of Bayesian methods. From a more methodological perspective, she has worked on MCMC or related algorithms or on the elicitation of subjective priors. She is an associate editor of the *Annals of Statistics*, *Bernoulli*, *ANZJS* and *Stat*, and is currently the program secretary of IMS. She has also been active on various aspects of the ISBA society. She is an ISBA and an IMS fellow and received the Ethel Newbold prize in 2015.

## On the semi-parametric Bernstein von Mises Theorem in some regular and non regular models.

Bayesian nonparametrics has become a major field in Bayesian statistics, and more generally in statistics, over the last couple of decades with applications in a large number of fields within biostatistics, physics, economics, social sciences, computational biology, computer vision and language processing. Bayesian approaches are based on both a sampling model about observations given a parameter and on a prior model on the parameter.

With the elaboration of modern complex and large dimensional models, the need to understand their theoretical properties becomes crucial, in particular to understand what are the underlying assumptions behind the prior model. One way to shed light on such assumptions is to study the frequentist properties of the Bayesian procedures.

Consider a statistical model associated to a set of observations  $Y^n \in \mathcal{Y}^{(n)} \sim P_\theta$ ,  $\theta \in \Theta$  where  $n$  denotes a measure of information of the data  $Y^n$ . Generally speaking  $\Theta$  can have a very complex structure, be high- or infinite-dimensional. In a Bayesian approach, then one must additionally consider a prior model on the parameter through a probability distribution on  $\Theta$ , called the prior distribution.

In large-dimensional models the influence of the prior is strong and does not entirely vanish asymptotically, i.e. when the information in the sample increases. It is then of interest to understand the types of implicit assumptions which are made by the choice of a specific prior and also within a family of priors which are the hyperparameters whose influence does not disappear as the number of observations increases.

Among the (many) advantages of Bayesian approaches is the fact that the inference is based on a whole probability distribution on the unknown parameter  $\theta$ , namely the posterior distribution which is the conditional probability distribution of the parameter given the observations. With such a flexible tool, one can derive not only point estimators but also various measures of uncertainty. A

common way to derive such measures of uncertainty is to construct credible regions, which are regions of the parameter space which have large posterior probability. These regions obviously depend on the prior distributions and it is important to understand how they are impacted by the assumptions (not necessarily explicit) made by the choice of the prior model. A way to do so is to study the asymptotic frequentist properties of these regions. The Bernstein–von Mises Theorem is a powerful tool to conduct such studies.

In my lecture I will describe some of the recent advances that have been obtained in the study of the Bernstein–von Mises theorem in large- and infinite-dimensional models, concentrating mainly in cases where only a finite-dimensional parameter is of interest in an infinite-dimensional model. I will consider both regular and irregular models.

### Call for Nominations: IMS Special Lectures

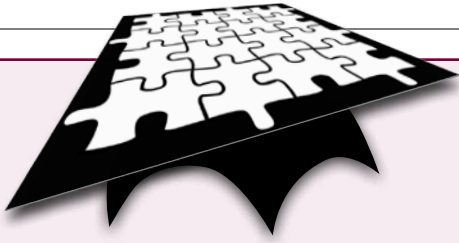
The IMS Committee on Special Lectures is now accepting nominations for the following IMS Named and Medallion Lectures.

- 2019 Wald Lecturer
- 2019 Rietz Lecturer
- 2020 Medallion Lecturers (eight lecturers)

The deadline for nominations is **October 1, 2017**. To nominate someone, you will need a nomination letter (half a page, including your name, the nominee's name and the name of the IMS lecture for which the nominee is nominated), and a list of five of their most relevant publications, with a URL where these publications are accessible.

For more information visit: <http://imstat.org/awards/lectures/nominations.htm>





## Student Puzzle Corner 18

After a relaxed rendezvous with effulgent nothingness, we should now seriously get back to the problem corner. It is the turn of a problem in statistics. We will pose a problem on **deconvolution**, sometimes brandished as noisy data. The basic model is that you get to observe a random variable  $Y$  which has the distribution of the convolution of  $X$  and  $Z$ , it being usually assumed that  $Z$  has a completely known distribution, while the distribution of  $X$  has unknown parameters, perhaps infinite dimensional, associated with it. We would want to infer about the distribution of  $X$ , knowing only  $Y$ ; often, it is assumed that iid replicates of  $Y$  are available. There is massive literature on deconvolution, particularly Gaussian deconvolution. Generally, the results are asymptotic in some sense. The problem we describe today was originally posed by C.R. Rao in 1952.

Here is the exact problem of this issue.

Suppose  $X \sim \text{Bin}(n_1, 1/2)$  and  $Z \sim \text{Bin}(n_2, p)$ ,  $0 < p < 1$  being an unknown parameter;  $X$  and  $Z$  are assumed to be independent. Due to (spatial) aggregation, we can only observe  $Y = X + Z$ .

- Is there always an MLE of  $p$ ?
- In suitable asymptotic paradigms, are there consistent estimators of  $p$  based on  $Y$  alone?
- How does one construct a confidence interval for  $p$ , again, based on  $Y$  alone?
- What can be said about minimax estimation of  $p$  on the basis of  $Y$ , using squared error loss?

The Student Puzzle Corner contains problems in statistics or probability. Solving them may require a literature search.

Student IMS members are invited to submit solutions (to [bulletin@imstat.org](mailto:bulletin@imstat.org) with subject "Student Puzzle Corner"). The deadline is **September 4, 2017**.

The names and affiliations of student members who submit correct solutions, and the answer, will be published in the following issue. The Puzzle Editor's decision is final.

**Deadline: September 4**

### Answer to the previous problem

#### Student Puzzle 17

Let  $X_1, X_2, \dots$  be iid discrete uniform on the set  $\{1, 2, \dots, 6\}$ , and let for  $n \geq 1$ ,  $S_n = \sum_{i=1}^n X_i$ . Let  $\mathcal{P}$  denote the set of prime numbers  $\{2, 3, 5, 7, \dots\}$ , and  $\tau = \inf\{n \geq 1 : S_n \in \mathcal{P}\}$ .

- Is  $P(\tau < \infty) > 0$ ?
- If  $P(\tau < \infty) > 0$ , does it have to be 1?
- Show that  $E(\tau) > \frac{7}{3}$ .
- Is  $E(\tau) < \infty$ ?
- If  $E(\tau) < \infty$ , give an approximate numerical value for it.
- Conjecture if the variance of  $\tau$  is finite.
- Is  $P(S_n \in \mathcal{P} \text{ for infinitely many } n) = 1$ ?

Contributing Editor Anirban DasGupta writes:

The problem asked [see left] was about the first hitting time  $\tau$  of the set of prime numbers by the process  $\{S_n\}$ ,  $S_n$  being the sum of the first  $n$  rolls in an infinite sequence of rolls of an honest die. Evidently,  $P(\tau < \infty) > 0$ . The set of primes  $\mathcal{P}$  is an infinite set, and in fact, with probability one, (the process)  $S_n$  will hit  $\mathcal{P}$  infinitely many times (see, e.g. Feller, Vol. 2, pp 360, 381). We know from classic number theory that for fixed  $n$ , large,  $P(S_n \in \mathcal{P}) \approx \frac{1}{\log n}$ , and since the series  $\sum_{n=2}^{\infty} \frac{1}{\log n}$  diverges, the expected number of hits is easily  $+\infty$ . The tailsum formula tells us  $E(\tau) = 1 + \sum_{n=1}^{\infty} P(\tau > n) = 1 + \sum_{n=1}^{\infty} P(\cap_{k=1}^n S_k \notin \mathcal{P})$ , and a geometric approximation by terminating the infinite series at one million terms gives  $E(\tau) \approx 7.6$ . The initial terms  $P(\tau > k)$  can be calculated exactly. By summing  $P(\tau > k)$  from  $k = 0$  to 9, we get  $E(\tau) > 2.34 > 7/3$ . It is less clear if  $\tau$  has a finite variance, but it probably does. To my knowledge, the answer is not explicitly known.

#### References:

Brown, L. (private communication), Davis, B. (private communication), Feller, W. (1971), Pitman, J. (private communication; provided an approximate value of 7.62 for  $E(\tau)$ ), Rao, C.R. (1952), Szekely, G. (private communication).

## XL-Files: Why (good) statisticians tend to be happier

Contributing Editor Xiao-Li Meng writes:

A good number of people have asked me about what have been the best and the worst parts of being a dean. Whereas the worst part should only be shared over two glasses of Long Island iced tea (my first and still the most memorable iced tea I had in the US, though I have no memory of who paid for it), there are several “best parts” I am willing to share any time. Among the best parts are the opportunities to speak to many young talents about the roles of statistical thinking in their lives, especially as they are about to start their post-university lives. Perhaps as a fitting souvenir of having survived deanship for five years, I had the honor of delivering two graduation speeches this May, instead of the usual one for GSAS (Graduate School of Arts and Sciences) at Harvard. The extra one was at the kind invitation of the Department of Mathematics and Department of Statistics at the University of Illinois at Urbana-Champaign, where I took the opportunity to repeat a similar message as conveyed in two previous XL-Files (<http://bulletin.imstat.org/2013/11/xl-files-romantic-regression-towards-the-mean/> and <http://bulletin.imstat.org/2016/05/xl-files-lectures-marriages-that-last/>). For those of you who just cannot get enough of regression towards the mean (and in regions where YouTube is not MuteTube), you can find my 15 minutes of fame between minutes 29 and 44 in the following video: <https://www.youtube.com/watch?v=xQGBKNHLFqM&feature=youtu.be>

For my regular GSAS one (which has been always held at Harvard’s largest classroom, Sanders Theater), I decided to give the Law of Large Numbers (LLN) a shot, especially as it has helped me to be a happier person—and a better fundraiser. Curious? Read on...

“How many of you heard my welcoming speech when you joined GSAS, in this very Sanders Theater? OK, I gather the rest of you either skipped your new student orientation or didn’t feel the urge to complete your degree within five years. Thanks to President Faust and Dean Smith’s trust and many colleagues’ strong support, I have had the privilege to serve as GSAS Dean for the past five years, and this commencement marks the completion of my first term as GSAS Dean. Naturally I reflect on what I have learned, starting from day one. I surmise that how I felt five years ago is not very different from how many of you are feeling right now: excited, anxious, and bedeviled by self-doubt: am I really ready to navigate a new world?

“Well, if you are seeking reassurance from me, my response will be a very short one: NO! I was not ready, nor are you ready for whatever your new world will bring, even if it’s just another degree program. A curveball is easy to handle because at least you know it is a ball, and the curve is eventually coming in your direction. But you just don’t know what you don’t know.

“I am not trying to scare you off so you can take the dropout option --- it’s too late for that anyway, and indeed there is no way to drop out of life, only to drop dead. But I would like to share with you a key lesson that I learned in navigating a new world: the insights generated from whatever disciplines you studied can help you in ways that you may not expect. And God forbid, should your field not generate any useful insights (I’m sure Dean Smith will want to know which field this is, so he can stop funding it), you are always welcome to borrow mine, that is, statistics.

“So let me give you an example. A good part of my job is fundraising, for which I received no training whatsoever. But I was intrigued by it. Why would anyone give me

money just because I asked for it? Can I be that persuasive or charming?

“I doubt that many of you have had fundraising experience. But I surmise that the following scenario may sound familiar to most of you. You were introduced to someone at a party and you hit it off. The evening was too short. You made an arrangement to have dinner, and it went as beautifully as you had hoped. You started to communicate with each other more frequently. The feeling was getting stronger and it seemed mutual. Your heart was starting to beat faster: OMG, this might be The One!

“Then, suddenly, it’s all silence. Your invitation for the next dinner was never answered, no text, no email, no nothing. You were completely puzzled. What did I do wrong? Did I move too fast? Did I misinterpret the whole thing from the very beginning? Am I just not that charming?

The chances are that you will never find out the real reason, no matter how much time you spend driving yourself crazy replaying every moment together, speculating, regretting, or even feeling guilty. In fundraising, that person could be someone who indeed had intended to give, but then their business went south; or someone who was flirting with multiple institutions and then decided to commit to another one; or someone who was treating philanthropy as an investment, and then realized that definitely was a mistake.

“Indeed, my initial mistake was to expect a positive return from every one of my investments, that is, the time and energy I put into building each fundraising relationship. But such expectations only bring disappointment, frustration, and even self-doubt—am I perhaps just not good at this job? Fortunately, my statistical training soon stopped me from consuming myself with these not very helpful thoughts.

*Continues on page 11*

“You see there are simply too many factors that are beyond my control, or even outside my awareness, that would determine the ultimate outcome of each fundraising effort. It is just unwise and unproductive for me to worry too much about each case and to overthink it. What I can predict reasonably well is the total amount of funds raised annually, which reflects the overall fundraising effort. That’s the essence of the Law of Large Numbers: while individual outcomes can vary tremendously for reasons hard to decipher, with enough trial and error, we can expect a rather stable average, capturing a central characteristic of our overall effort. That statistical insight redirected my energy from working unproductively on trying to save every fundraising relationship, to building and communicating the clear message of how additional funding can establish, sustain and enhance GSAS’s global leadership in supporting students’ well-being, scholarly training, and professional development.

“I also started to enjoy those fundraising conversations much more, because I no longer needed to worry about where any particular conversation would lead. All I cared about was knowing that as long as we communicated our message loudly and clearly, to as many people as possible, we would do better and better. Indeed, one day I received the largest check in my life from a GSAS alum, with a simple note: “Dean Meng, here is my number. Give me a call.” I called, and the alum told me that he very much liked the effort we were making and wanted to support it in ways he could. That’s how we were able to fund the new Center for Writing and Communicating Ideas, located in Dudley House, a center that celebrates writing and communication as a critical part of graduate education; it might already have helped a few of you to arrive here today.

“So, the Law of Large Numbers helped me to be more productive and happier. And I hope it can help you, too, as you navigate your new world, both professionally and personally. You of course should have high aspirations and you should work hard to achieve your goals. But you should not expect a positive return from every effort you make. That would make you miserable, and worse, make everyone around you miserable. I have seen some very unhappy colleagues, unfortunately in every generation, trying to receive recognition for everything they do, to compete and expect to win every grant or award, and to advance their careers at every possible opportunity. Perhaps the saddest thing is that many of them would have achieved what they wanted if only they hadn’t tried so hard, thereby making themselves less respected or liked by their peers. I certainly hope you won’t become one of them. With 95% confidence, I can also guarantee that your love life won’t last too long if you expect an ounce-for-ounce return every time you do something nice for your love interest. Keeping the Law of Large Numbers in mind can help to remind you that the payoff of your effort comes in aggregation and on average. That should be your aim, not to expect unrealistically positive returns in every effort you make.

“To practice what I just preached, and

having given each of you some profound advice on how to have a happy (or at least a happier) life, I am not expecting a positive return from each of you. But I do expect that someday I will receive a few checks from some of you with a note, “Dean Meng, here is my number. Call me.” In fact, I am willing to expect even less. No need to write a note; just put your number on your check. I will call. Until then, may the Law of Large Numbers always be with you, and may your life be happier than those who don’t respect the law. Congratulations!”

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Of course, all such life lessons have to be taken with “a grain of statistics,” especially regarding their precise statements. For example, a serious reader might worry about if the assumptions for LLN can be hold here – surely i.i.d would be problematic, as it would imply that things never improve (or deteriorate) on average. As I have already used up twice as many pages as my regular allotment permits, I’d leave it to the interested readers to impute what I didn’t have space (or time) for. For the rest, think about LLN the next time you are so bothered by a particular outcome. I guarantee that the thought would make some of you happier, but just don’t ask me which ones of you ...



## Recent papers : two IMS-supported journals

### *Bayesian Analysis* Volume 12, No 2, June 2017

*Bayesian Analysis* is an electronic journal of the International Society for Bayesian Analysis. It seeks to publish a wide range of articles that demonstrate or discuss Bayesian methods in some theoretical or applied context. The journal welcomes submissions involving presentation of new computational and statistical methods; critical reviews and discussions of existing approaches; historical perspectives; description of important scientific or policy application areas; case studies; and methods for experimental design, data collection, data sharing, or data mining.

Access papers at <http://projecteuclid.org/euclid.ba>

Bayesian Estimation of Principal Components for Functional Data . . . . .	ADAM J. SUAREZ AND SUBHASHIS GHOSAL; 311 – 333
Bayesian Functional Data Modeling for Heterogeneous Volatility . . . . .	BIN ZHU AND DAVID B. DUNSON; 335 – 350
Latent Space Approaches to Community Detection in Dynamic Networks . . . . .	DANIEL K. SEWELL AND YUGUO CHEN; 351 – 377
Dependent Species Sampling Models for Spatial Density Estimation . . . . .	SEONGIL JO, JAEYONG LEE, PETER MÜLLER, FERNANDO A. QUINTANA, AND LORENZO TRIPPA; 379 – 406
A Hierarchical Bayesian Setting for an Inverse Problem in Linear Parabolic PDEs with Noisy Boundary Conditions . . . . .	FABRIZIO RUGGERI, ZAID SAWLAN, MARCO SCAVINO, AND RAUL TEMPONE; 407 – 433
Bayesian Inference for Diffusion-Driven Mixed-Effects Models . . . . .	GAVIN A. WHITAKER, ANDREW GOLIGHTLY, RICHARD J. BOYS, AND CHRIS SHERLOCK; 435 – 463
Automated Parameter Blocking for Efficient Markov Chain Monte Carlo Sampling . . . . .	DANIEL TUREK, PERRY DE VALPINE, CHRISTOPHER J. PACIOREK, AND CLIFFORD ANDERSON-BERGMAN; 465 – 490
Dynamic Chain Graph Models for Time Series Network Data . . . . .	OSVALDO ANACLETO AND CATRIONA QUEEN; 491 – 509
Mixtures of gg-Priors for Analysis of Variance Models with a Diverging Number of Parameters . . . . .	MIN WANG; 511 – 532
Data-Dependent Posterior Propriety of a Bayesian Beta-Binomial-Logit Model . . . . .	HYUNGSUK TAK AND CARL N. MORRIS; 533 – 555
Variational Bayes for Functional Data Registration, Smoothing, and Prediction . . . . .	CECILIA EARLS AND GILES HOOKER; 557 – 582
Invited Review Paper: High-Dimensional Bayesian Geostatistics . . . . .	SUDIPTO BANERJEE; 583 – 614

### *Brazilian Journal of Probability and Statistics*

### *Volume 31, No 2, May 2017*

The *Brazilian Journal of Probability and Statistics* is an official publication of the Brazilian Statistical Association and is supported by the IMS. It is published four times a year, in February, May, August, and December. The Journal publishes papers in applied probability, applied statistics, computational statistics, mathematical statistics, probability theory and stochastic processes.

Access papers at <http://projecteuclid.org/euclid.bjps>

On the critical probability of percolation on random causal triangulations . . . . .	JOSÉ CERDA-HERNÁNDEZ, ANATOLY YAMBERTSEV, AND STEFAN ZOHREN; 215 – 228
A generating function approach to branching random walks . . . . .	DANIELA BERTACCHI AND FABIO ZUCCA; 229 – 253
Improved asymptotic estimates for the contact process with stirring . . . . .	ANNA LEVIT AND DANIEL VALESIN; 254 – 274
On bivariate inverse Weibull distribution . . . . .	DEBASIS KUNDU AND ARJUN K. GUPTA; 275 – 302
On estimating the scale parameter of the selected uniform population under the entropy loss function . . . . .	MOHD. ARSHAD AND NEERAJ MISRA; 303 – 319
The probability that $n$ random points in a disk are in convex position . . . . .	JEAN-FRANÇOIS MARCKERT; 320 – 337
GG method in action: Fast exact sampling from set of permutations of order $n$ according to Mallows model through Cayley metric . . . . .	UDREA PĂUN; 338 – 352
A bivariate optimal replacement policy with cumulative repair cost limit for a two-unit system under shock damage interaction . . . . .	MIN-TSAI LAI, CHUNG-HO CHEN, AND TAQWA HARIGUNA; 353 – 372
Concentration function for the skew-normal and skew-tt distributions, with application in robust Bayesian analysis . . . . .	LUCIANA G. GODOI, MÁRCIA D. BRANCO, AND FABRIZIO RUGGERI; 373 – 393
Asymptotics for sparse exponential random graph models . . . . .	MEI YIN AND LINGJIONG ZHU; 394 – 412



# IMS meetings around the world

## Joint Statistical Meetings: 2017–2022

IMS sponsored meeting

**IMS Annual Meeting @ JSM 2017:**

**July 29–August 3, 2017**

**Baltimore, MD**

[w https://www.amstat.org/meetings/jsm/2017/index.cfm](https://www.amstat.org/meetings/jsm/2017/index.cfm)

Join us in Baltimore, Maryland, for one of the biggest statistical events of the year: with more than 6,000 attendees (including over 1,000 students) from 52 countries, and over 600 sessions, it's a busy few days! The theme is *"Statistics: It's Essential."*

Registration and housing reservations are open.

*Registration and housing now open.  
Book early to avoid disappointment.*



IMS sponsored meetings: JSM dates for 2018–2022

**JSM 2018**

**July 28–August 2,  
2018**

**Vancouver, Canada**

**IMS Annual Meeting**

**@ JSM 2019**

**July 27–August 1,  
2019, Denver, CO**

**JSM 2020**

**August 1–6, 2020**

**Philadelphia, PA**

**IMS Annual Meeting**

**@ JSM 2021**

**August 7–12, 2021,  
Seattle, WA**

**2022 Joint Statistical**

**Meetings**

**August 6–11, 2022  
Washington, D.C.**

IMS co-sponsored meeting

**Seventh IMS-FIPS Conference**

**July 27–28, 2017. Baltimore, MD, USA**

[w www.umbc.edu/circ/hosting/IMS-FIPS2017](http://www.umbc.edu/circ/hosting/IMS-FIPS2017)

Just before JSM, there is the Seventh IMS-FIPS Conference, a workshop on Finance, Insurance, Probability and Statistics. It takes place at University of Maryland, Baltimore County (UMBC).

By bringing together a global cast of leading experts and junior researchers from academia, industry and government, this workshop, held annually since 2011, underscores the contributions of Probability and Statistics, particularly recent developments in big data and high-dimensional statistical methods, networks, reinforcement learning and dynamic optimization, to the fields of Finance and Insurance. It is also a satellite workshop of this year's JSM: Baltimore Convention Center is accessible by public transportation.

Confirmed plenary speakers: Alain Bensoussan (Univ. Texas and City University of Hong Kong), Siddhartha Dalal (AIG

Science), Jianqing Fan (Princeton), Mark Flood (US Treasury), Helyette Geman (Johns Hopkins and Birkbeck, London), Paul Glasserman (Columbia).



IMS sponsored meetings

**ENAR dates, 2018–2020**

**March 25–28, 2018: in Atlanta, GA**

**March 24–27, 2019: in Philadelphia, PA**

**March 22–25, 2020: in Nashville, TN**

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

IMS co-sponsored meeting

**19th Meeting of New Researchers in  
Statistics and Probability**

**July 27–29, 2017**

**Johns Hopkins University, Baltimore, MD**

[w http://groups.imstat.org/](http://groups.imstat.org/newresearchers/conferences/nrc.html)

[newresearchers/conferences/nrc.html](http://groups.imstat.org/newresearchers/conferences/nrc.html)

Each year the IMS sponsors the New Researchers Conference (NRC) during the week preceding the Joint Statistical Meeting (JSM). This year, with JSM in Baltimore, the 19th NRC will be hosted by Johns Hopkins University from July 27–29.

IMS sponsored meeting

**Joint 2018 IMS Annual Meeting and 12th**

**International Vilnius Conference on**

**Probability Theory & Mathematical Statistics**

**July 2–6, 2018**

**Vilnius, Lithuania**

**w TBC**

The Program Co-chairs are Peter Bühlmann (IMS) and Vygantas Paulauskas (Vilnius).

The Local Chair is Remigijus Leipus.

Details to follow.

*At a glance:*

*forthcoming  
IMS Annual  
Meeting and  
JSM dates*

**2017**

**IMS Annual Meeting**

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

**2018**

**IMS Annual Meeting:**

**Vilnius, Lithuania,  
July 2–6, 2018**

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

**2019**

**IMS Annual Meeting @**

**JSM: Denver, CO,  
July 27–August 1,  
2019**

**2020**

**IMS Annual Meeting/**

**10th World Congress:**

**Seoul, South  
Korea, August  
17–21, 2020**

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

**2021**

**IMS Annual Meeting**

**@ JSM: Seattle, WA,  
August 7–12,  
2021**

## IMS co-sponsored meeting

**40th Conference on Stochastic Processes and their Applications (SPA)****June 11–15, 2018. Gothenburg, Sweden****NEW** w <http://spa2018.org/>

The 40th Conference on Stochastic Processes and their Applications (SPA 2018) will be held June 11–15, 2018, at the Chalmers University of Technology in Gothenburg, Sweden.

Submission of proposals for contributed sessions, contributed talks and posters are welcomed! The organizers encourage early submissions to leave the accepted speakers plenty of time to make travel and funding arrangements. The submissions will be assessed and good proposals are accepted on a regular basis. Accepted contributed talks will be grouped into additional contributed sessions after the submission deadline, **March 2, 2018**.

**Plenary speakers:** Robert Adler (Technion, Israel); Francois Baccelli (U. Austin, USA and ENS, France); Mia Dejifen (U. Stockholm, Sweden); Alison Etheridge (U. Oxford, UK) – Lévy lecture; Patricia Gonçalves (U. Lisbon, Portugal); Kurt Johansson (KTH, Sweden); Olav Kallenberg (U. Auburn, USA); Davar Khoshnevisan (U. Utah, USA) – IMS Medallion lecture; Anna De Masi (U. Aquila, Italy) – IMS Medallion lecture; Mikhail Menshikov (U. Durham, UK); Annie Millet (U. Paris-1, France); Elchanan Mossel (MIT, USA); Asaf Nachmias (U. Tel Aviv, Israel); Jeffrey Steif (Chalmers, Sweden) – Doob lecture; and Nike Sun (U. Berkeley, USA).

**NEW**

## IMS co-sponsored meeting

**41st Conference on Stochastic Processes and their Applications (SPA)****July 8–12, 2019****Evanston, IL, USA**

w TBC

The 2019 Conference on Stochastic Processes and their Applications will be held in Evanston, Illinois. Details to follow.

**NEW**

## IMS co-sponsored meeting

**39th Conference on Stochastic Processes and their Applications (SPA)****July 24–28, 2017. Moscow, Russia**w <http://www.spa2017.org/>

**Last chance to register** for SPA 2017 in Moscow. The conference features keynote lectures from:

- **Lévy lecture:** Grigorii Olshanski
- **Doob lecture:** Vladimir Bogachev
- **IMS Medallion lectures:** Takashi Kumagai and Marta Sanz-Solé
- **Schramm lecture:** Richard Kenyon
- **Döblin Prize lecture:** Allan Sly
- **Itô prize lecture:** Noemi Kurt

**Plenary speakers** are Sandra Cerrai, Massimiliano Gubinelli, Nicolas Curien, Mikhail Lifshits, Charles Bordenave, Dmitry Chelkak, Shi Zhan and Xicheng Zhang.

## IMS co-sponsored meeting

**Bernoulli/IMS 10th World Congress in Probability and Statistics****August 17–21, 2020. Seoul, South Korea**

w TBC

The next World Congress in Probability and Statistics will be in Seoul, South Korea.

## IMS co-sponsored meeting

**Statistics Meets Friends:****From Inverse Problems to Biophysics and back****November 29–December 1, 2017****Göttingen, Germany****NEW** w <http://www.stochastik.math.uni-goettingen.de/smf2017/>

This workshop is held on the occasion of the 50th birthday of **Axel Munk**. DEADLINE: September 15th, 2017

## IMS co-sponsored meeting

**2018 IMS Asia Pacific Rim Meeting****June 26–29, 2018. Singapore****NEW** w <https://ims-aprm2018.stat.nus.edu.sg/>

The fifth IMS Asia Pacific Rim meeting (IMS-APRM) will be held in Singapore from June 26–29, 2018. It will provide an excellent forum for researchers in Asia and the Pacific Rim, and promote communications and collaborations between the researchers in this area and those from other parts of the world. The program, covering a wide range of topics in statistics and probability, includes **Plenary Lectures** from Rick Durrett and Bin Yu, and **Distinguished Speakers:** Vivek S. Borkar (Indian Institute of Technology), Raymond J. Carroll (Texas A&M), Zhen-Qing Chen (Washington), Ching-Kang Ing (Academia Sinica), Bing-Yi Jing (Hong Kong University of Science and Technology), S.C. Samuel Kou (Harvard), Satoshi Kuriki (Institute of Statistical Mathematics, Japan), Regina Y. Liu (Rutgers), Eric Moulines (École Polytechnique), Art B. Owen (Stanford), Byeong Uk Park (Seoul National University), Giovanni Peccati (Luxembourg), John Robinson (Sydney), Ingrid Van Keilegom (Université catholique de Louvain), Fengyu Wang (Tianjin University), Hongyu Zhao (Yale).

**UPDATED**

# Other meetings and events around the world

## Workshop on Stochastic Processes and their Applications

NEW

August 9–11, 2017

Carleton University, Canada

**w** <http://www.fields.utoronto.ca/activities/17-18/stochastic-processes>

Organizing Committee: Minyi Huang, Gennady Shaikhet and Yiqiang Zhao, from Carleton University. Check the website for details.

## Conference on Statistical Practice

February 15–17, 2018

Portland, OR

**w** <https://ww2.amstat.org/meetings/csp/2018/index.cfm>

The 2018 American Statistical Association Conference on Statistical Practice aims to bring together hundreds of statistical practitioners and data scientists—including data analysts, researchers, and scientists—who engage in the application of statistics to solve real-world problems on a daily basis.

The goal of the conference is to provide participants with opportunities to learn new statistical methodologies and best practices in statistical analysis, design, consulting, and programming. The conference is designed to help applied statisticians improve their abilities in consulting with and aiding customers and organizations solve real-world problems.

CSP 2018 will offer courses, tutorials, a keynote session, concurrent sessions, poster sessions, a closing session, exhibits, and more.

Poster abstract submission is now open (deadline August 31).

## 2018 ISBA World Meeting

NEW

June 24–29, 2018

Edinburgh, UK

**w** <https://bayesian.org/2018-world-meeting/>

The 2018 ISBA World Meeting will take place June 24–29, 2018 (not in July as previously announced), in Edinburgh, UK. Details are forthcoming on the website.

## Higher Order Chromatin Interactions

NEW

November 2–3, 2017

Harvard Medical School Conference Center, Boston, MA, USA

**w** <https://www.hsph.harvard.edu/2017-pqg-conference/>

The impetus for this year's theme comes from the increasing amount of data that provides information on the nuclear organization of the human genome and its applications. A series of "chromatin confirmation capture" techniques have been developed in the past decade for identifying a three-dimensional interaction, which is critical for a full understanding of gene regulation. Until recently, we did not have data with sufficient resolution to infer such interactions accurately. However, with more refined technology and decreasing sequencing cost, it is now possible to generate high-resolution datasets, and the scientific community is on the verge of generating an immense amount of Hi-C and related types of data. Over the course of the conference, we will deal with the key aspects of analyzing and interpreting these large and complex datasets. The conference will center on the following three topics: Emerging Technologies; Computational Challenges in Higher Order Chromatin Data; and New Horizons in Population Genetics. The conference schedule includes time for scientific presentations and a poster session and reception for submitted abstracts. *Three abstracts will be selected to be presented as 10-minute platform talks:* these speakers will receive an award of up to \$500 for travel assistance or other conference expenses. Submit an abstract at <https://www.hsph.harvard.edu/2017-pqg-conference/submit-an-abstract/>

## ISC14: Fourteenth Iranian Statistics Conference

NEW

August 25–27, 2018. Shahrood, Iran

**w** [isc14.shahroodut.ac.ir](http://isc14.shahroodut.ac.ir)

We are pleased to announce that the fourteenth Iranian Statistics Conference will take place in Shahrood (25-27 August 2018). It will provide an excellent forum for scientific communications and collaborations for the researchers in Iran, and promote communications and collaborations between researchers in this area and those from other parts of the world. The conference will continue and extend the accomplishment of the previous conferences, and will contribute significantly to the advancement of the common mission in our statistical profession. The program will cover a wide range of topics in statistics and probability, presenting recent developments and the state of the art in a variety of research topics and in applications. The meeting will be held in the beautiful Shahrood University of Technology. On behalf of the Local Organizing and Scientific Program Committees, we invite you to come to Shahrood for a memorable visit. Please register at the website above.



# More meetings around the world

## Symposium on Statistical Inference

**October 11–13, 2017. Bethesda, MD, USA**

**w** <http://ww2.amstat.org/meetings/ssi/2017/index.cfm>

The SSI program is nearly set! Here are some of the people you'll hear from during the symposium's many valuable sessions: Lisa LaVange, U.S. Food and Drug Administration; John Bailer, Miami University; Jim Berger, Duke University; Merlise Clyde, Duke University; Francesca Dominici, Harvard University; Naomi Goldstein, U.S. Department of Health and Human Services; Mark Hansen, Columbia University; Frank Harrell, Vanderbilt University; Val Johnson, Texas A&M University; Laura Lazzeroni, Stanford University; Xihong Lin, Harvard University; Rod Little, University of Michigan; Tom Louis, The Johns Hopkins University; Bhramar Mukherjee, University of Michigan; Regina Nuzzo, Gallaudet University; Jane Pendergast, Duke University; Dalene Stangl, Duke University; Paaige Turner, National Communication Association... and more. See the full online program at <http://ww2.amstat.org/meetings/ssi/2017/onlineprogram/index.cfm>.

What makes SSI so special, though, is that we also get to hear from you! Audience participation is one of the most important components of this symposium and, as an attendee, you will have many opportunities to ask questions and offer insights. In fact, 30 minutes will be reserved for Q&A with speakers in every session.

Early registration and housing close September 12.

## Joint International Society for Clinical Biostatistics and Australian Statistical Conference 2018



**August 26–30, 2018**

**Melbourne, Australia**

**w** <http://iscbasc2018.com/>

The 2018 Joint International Society for Clinical Biostatistics and Australian Statistical Conference will take place in Melbourne from the 26-30 of August 2018. The aim of this conference is to bring together a broad range of statistical researchers across a variety of research areas to facilitate the international exchange of theory, methods and applications. This, the 24th Australian Statistical Conference (ASC) and the 39th conference of the ISCB, promises to be a fascinating meeting as Big Data becomes commonplace, personalized medicine becomes palpable with rapidly advancing "omics" technologies, census-taking faces unprecedented pressures, environmental concerns place ecological research under increasing strain, and online social interaction becomes the norm. Have statistical methods kept pace with societal change?

## 17th Winter School on Mathematical Finance



**January 22–24, 2018. Lunteren, The Netherlands**

**w** <https://staff.fnwi.uva.nl/p.j.c.spreij/winterschool/winterschool.html>

The 17th Winter School on Mathematical Finance takes place next January, with mini-courses by Emmanuel Gobet and Sebastian Jaimungal, and special invited lectures by Beatrice Acciaio, Giulia Di Nunno and Martino Grasselli. Short lectures will complete the programme.

## StatFest 2017



**September 23, 2017. Emory University, Atlanta, GA, USA**

**w** <http://community.amstat.org/cmis/events/statfest>

StatFest is a one-day (free) conference aimed at encouraging undergraduate students from historically underrepresented groups to consider careers and graduate studies in the statistical sciences. The conference is an ongoing initiative of the American Statistical Association through its Committee on Minorities in Statistics.

It includes presentations from established professionals, academic leaders, and current graduate students that will help attendees understand the opportunities and routes for success in the field. Panel forums provide information and tips for a rewarding graduate student experience, achieving success as an academic statistician, opportunities in the private and government arenas, among other topics.

We are excited that StatFest 2017 will be held in Atlanta, Georgia at Emory University, one of the world's leading research universities. The conference is hosted by the Department of Biostatistics and Bioinformatics at the Rollins School of Public Health.

While the conference is free, registration is required (see the website above to register or for more information).

## Melbourne-Singapore Probability and Statistics Forum



**September 25–28, 2017. Melbourne, Australia**

**w** <http://acems.org.au/news-events/mel-sin-probability-statistics/>  
The third Melbourne-Singapore Probability and Statistics Forum will be held at the University of Melbourne 25-28 September. As Professor **Andrew Barbour** is turning 70 in 2017, we will be celebrating his outstanding contribution to Probability Theory in conjunction with the forum. We would like to invite you to contribute a talk and/or attend the event. The registration is free with deadline on Friday 11 August 2017. The abstract submission deadline is Friday 11 August. Please see the website for more details.



**Biometrics by the Border****November 26–30, 2017****Kingscliff, NSW, Australia****w** <http://biometric2017.org/>

The biannual International Biometric Society Australasian Region Conference will be held at the Mantra on Salt Beach, Kingscliff which is located just south of the Gold Coast in Australia. An all female keynote speaker line-up makes this conference a historic occasion. Keynote speakers are Prof Elisabetta Carfagna (U Bologna, Italy), Prof Di Cook (Monash, Australia), Prof Sonja Greven (LMU Munich, Germany), Prof Louise Ryan (UTS, Australia), Prof Jean Yang (U Sydney, Australia), A/Prof Rachel Fewster (U Auckland, New Zealand)

**NEW****RevBayes: Bayesian Inference of Phylogeny****August 7–11, 2017****Knoxville, Tennessee, USA****w** <http://www.nimbios.org/tutorials/revbayes>

The National Institute for Mathematical and Biological Synthesis (NIMBioS) continues to accept applications for its Tutorial, “RevBayes: Bayesian Inference of Phylogeny,” to be held August 7–11, 2017, at NIMBioS.

**Objectives:** This course features RevBayes, an exciting new program for Bayesian inference of phylogeny. RevBayes is the successor to the popular program MrBayes, but represents both a complete rewrite of the computer code and a fundamental re-conception of phylogenetic models. Specifically, RevBayes adopts a ‘graphical-model’ framework that views all statistical models as comprised of components that can be assembled in myriad configurations to explore a corresponding array of questions. This graphical-model approach to phylogenetic inference provides effectively infinite flexibility. Moreover, the graphical models are specified using an R-like language, Rev, that empowers users to construct arbitrarily complex phylogenetic models from simple component parts (i.e. random variables, parameter transformations and constants of different sorts).

This course is focused on phylogenetic trees and comparative-phylogenetic methods, including divergence-time estimation, morphological evolution, lineage diversification, and historical biogeography. Instruction is based on a combination of carefully tailored lectures introducing the theoretical and conceptual basis of each inference problem and hands-on computer tutorials demonstrating how to explore these questions using RevBayes (see <http://revbayes.github.io/tutorials.html>).

Participants are not assumed to have expertise in phylogenetic theory; rather, we provide an accessible introduction to Bayesian statistical inference and stochastic models. We assume only that the students are familiar with phylogenetic trees and their applications to evolutionary biology. We therefore anticipate that this course will be most suitable for senior PhD students, postdoctoral researchers, and faculty who want to learn these techniques.

Registration Fee: \$500 for faculty and postdocs and \$350 for students, payable upon acceptance of application.

Participation in NIMBioS tutorials is by application only. Individuals with a strong interest in the topic are encouraged to apply, and successful applicants will be notified within three weeks after the application deadline.

**PCM 125: International Conference in Statistics and Probability****January 2–4, 2018****Kolkata, India****w** <http://www.isid.ac.in/~pcm125spconf>

Indian Statistical Institute is organizing an international conference in Statistics and Probability at the Kolkata campus of the institute. This is to celebrate the 125 birth anniversary of Prof. P.C. Mahalanobis, the founder of the institute, and the father of Statistics discipline in India. The conference will be from January 2–4, 2018; the details of the conference can be found at the website <http://www.isid.ac.in/~pcm125spconf>.

**NEW****Statistical Methods in Finance 2017****December 16–19, 2017****Chennai, India****w** <http://www.cmi.ac.in/~sourish/StatFin2017>

The third conference and workshop on Statistical Methods in Finance aims to expose the participants to new and active areas of research and to engage researchers into working groups. The conference is jointly organized by ISI Chennai and CMI with support from MCX-IPF Trust. PhD students, post-doctoral researchers and faculty in mathematics, statistics, business, economics and physics are eligible to apply. Participants from the industry are encouraged to apply with a paper to be considered for presentation in the contributed paper sessions.

**NEW**

# More meetings around the world

## 2nd Bangkok Workshop on Discrete Geometry and Statistics NEW

January 8–12, 2018

Chulalongkorn University, Bangkok, Thailand

[w http://thaihep.phys.sc.chula.ac.th/BKK2018DSCR/](http://thaihep.phys.sc.chula.ac.th/BKK2018DSCR/)



The workshop will focus on mathematical statistical physics of discrete systems, and in particular its applications to random geometries. Real-life motivations for such studies range from attempts to quantize gravity to problems in condensed matter physics to mathematical modelling of cooperative phenomena in macroscopic communities. Some concrete directions include:

- 1 Discrete random geometries with applications to gravity quantization,
- 2 Discrete mathematical models in equilibrium and non-equilibrium statistical physics (the Ising model and its relatives, percolation, lattice gases, etc),
- 3 Random matrix and tensor models,
- 4 Random graphs and dynamics of complex networks,
- 5 Topics in lattice gauge theory (especially with emphasis on analytic approaches),
- 6 Conformal field theories (especially with connections to the above subjects).

The talks are expected to be informal and interactive, with a substantial pedagogical component.

This workshop precedes the 7th Bangkok Workshop on High-Energy Theory, held at the same venue two weeks later.

**Pre- and post-workshop residence program:** Participants are invited to remain in residence for informal communication and collaboration during the weeks preceding (January 1-5) and succeeding (January 15-19) the workshop. Please indicate the prospective timing of your stay at the time of registration.

**Registration:** There will be no registration fees for the upcoming workshop. Please completely fill the online form in order to register. General inquiries may be directed to Yuki Sato <yusato.phys@gmail.com> and/or Oleg Evnin <oleg.evnin@gmail.com>.

## Modern Math Workshop NEW

October 18–19, 2017

Salt Lake City, Utah, USA

[w https://icerm.brown.edu/mmw2017/](https://icerm.brown.edu/mmw2017/)

The NSF Mathematical Sciences Institutes Diversity Committee is pleased to offer its annual Modern Math Workshop, Oct. 18-19, 2017, preceding the Society for Advancement of Chicanos and Native Americans in Science (SACNAS) national conference in Salt Lake City, UT. The workshop is Intended to encourage undergraduates, graduate students and recent PhDs from underrepresented minority groups to pursue careers in the mathematical sciences and build research and mentoring networks. The event features early career researcher sessions, mini-courses, a keynote and reception.

**Application deadline for funding support: July 31, 2017.**

For more information and the online application, visit <https://icerm.brown.edu/mmw2017/>

The hosting NSF Mathematics Institutes Diversity Committee members are the American Institute of Mathematics (AIM), Institute for Advanced Study (IAS), Institute for Computational and Experimental Research in Mathematics (ICERM), Institute for Mathematics and its Applications (IMA), Institute for Pure and Applied Mathematics (IPAM), Mathematical Biosciences Institute (MBI), Mathematical Sciences Research Institute (MSRI), the National Institute for Mathematical & Biological Synthesis (NIMBioS) and Statistical and Applied Mathematical Sciences Institute (SAMSI).

## The 2017 Women in Statistics and Data Science Conference

October 19–21, 2017

La Jolla, California

[w https://ww2.amstat.org/meetings/wds/2017/index.cfm](https://ww2.amstat.org/meetings/wds/2017/index.cfm)

Join us in La Jolla this October for the only conference in the field tailored specifically for women. Early registration is now open.

Wherever you are in your career, WSDS offers attendees unique opportunities to grow their influence, their community, and their knowledge, including valuable short courses and Donna Brogan's powerful keynote.

We're particularly excited for WSDS 2017 because it's the first time the conference has been offered on the West Coast and it could be the largest WSDS yet. The excitement around last year's conference was tremendous, and we're taking that momentum to WSDS 2017.

# Employment Opportunities around the world

## Canada: Waterloo, ON

### University of Waterloo

Tenure-track or tenured faculty positions

[http://jobs.imstat.org/c/job.cfm?site\\_id=1847&jb=35867411](http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=35867411)

## Singapore

### Nanyang Technological University, Singapore

Open Rank Professor Position in Operations Research

[http://jobs.imstat.org/c/job.cfm?site\\_id=1847&jb=35832891](http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=35832891)

## United States: Berkeley, CA

### UC Berkeley

Lecturer

[http://jobs.imstat.org/c/job.cfm?site\\_id=1847&jb=30782008](http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=30782008)

## United States: Davis, CA

### University of California, Davis, Department of Statistics

Assistant Professor Tenure-Track

[http://jobs.imstat.org/c/job.cfm?site\\_id=1847&jb=35783972](http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=35783972)

## United States: Storrs, CT

### University of Connecticut

Instructor/Assistant Professor In-Residence, Operations and Information Management, Stamford

[http://jobs.imstat.org/c/job.cfm?site\\_id=1847&jb=35640607](http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=35640607)

## United States: South Bend, IN

### University of Notre Dame

Assistant, Associate or Full Professor of Statistics

[http://jobs.imstat.org/c/job.cfm?site\\_id=1847&jb=35973718](http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=35973718)

## United States: Cambridge, MA

### Harvard Statistics

Concentration Advisor and Lecturer

[http://jobs.imstat.org/c/job.cfm?site\\_id=1847&jb=35245158](http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=35245158)

## United States: Durham, NC

### Fuqua School of Business, Duke University

Tenure-track faculty position in Decision Sciences

[http://jobs.imstat.org/c/job.cfm?site\\_id=1847&jb=35757055](http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=35757055)

## United States: Cleveland, OH

### Cleveland Clinic - Department of Quantitative Health Science

Bioinformatics Faculty

[http://jobs.imstat.org/c/job.cfm?site\\_id=1847&jb=36053758](http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=36053758)

## United States: College Station, TX

### Texas A&M University

Post Doctoral Research Associate

[http://jobs.imstat.org/c/job.cfm?site\\_id=1847&jb=35546092](http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=35546092)

## United States: Colchester, VT

### Saint Michael's College

Assistant Professor of Mathematics (Statistician)

[http://jobs.imstat.org/c/job.cfm?site\\_id=1847&jb=35944825](http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=35944825)

*Visit the jobs section on the IMS website,  
where you can:*

- \* *view job opportunities in probability and statistics, including in academia and industry*
- \* *post your resume/CV online*
- \* *create personal Job Alerts so you never let a matching job opportunity pass you by...*



<http://jobs.imstat.org/>



# International Calendar of Statistical Events

IMS meetings are highlighted in maroon with the  logo, and new or updated entries have the  or  symbol. Please submit your meeting details and any corrections to Elyse Gustafson: [erg@imstat.org](mailto:erg@imstat.org)


## July 2017



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


*Come to JSM 2017: this is Baltimore Inner Harbor at night (photo by Mitch Lebovic)*




## August 2017


August 7–11: Knoxville, TN, USA. **NIMBioS Tutorial. RevBayes: Bayesian Inference of Phylogeny**  [http://www.nimbios.org/tutorials/TT\\_revbayes](http://www.nimbios.org/tutorials/TT_revbayes)


 August 9–11: Carleton University, Canada. **Workshop on Stochastic Processes and their Applications**  <http://www.fields.utoronto.ca/activities/17-18/stochastic-processes>


August 12–14: St Louis, MO, USA: **Second Workshop on Higher-Order Asymptotics and Post-Selection Inference (WHOA-PSI)<sup>2</sup>**  <http://www.math.wustl.edu/~kuffner/WHOA-PSI-2.html>


August 16–20: Houghton, Michigan, USA. **Bayesian Inference in Statistics and Statistical Genetics**  <http://kliak.mtu.edu/2017/>


August 25–29: Debrecen, Hungary. **XXXIV International Seminar on Stability Problems for Stochastic Models**  <https://arato.inf.unideb.hu/isspsm2017/index.php>


August 28–31: CRM, Montréal, Canada. **Environmental Risk Modeling and Extreme Events**  [http://www.crm.umontreal.ca/2017/Extreme17/index\\_e.php](http://www.crm.umontreal.ca/2017/Extreme17/index_e.php)

August 28–September 1: Paris, France. **Data Science Summer School (DS<sup>3</sup>)**  <http://www.ds3-datascience-polytechnique.fr/>


August 28–September 1: New York, USA. **Dyson–Schwinger equations, topological expansions, and random matrices**  <http://www.math.columbia.edu/department/probability/seminar/guionnet.html>


August 28–September 1: Vienna, Austria. **CEN-ISBS Vienna 2017 Joint Conference on Biometrics & Biopharmaceutical Statistics**  [www.cenisbs2017.org](http://www.cenisbs2017.org)

August 30–31: Qazvin, Iran. **11th Seminar on Probability and Stochastic Processes**  <https://spsp11.conf.ikiu.ac.ir>


August 30–September 1: Uppsala, Sweden. **Sequential Monte Carlo workshop**  <http://www.it.uu.se/conferences/smc2017>


## September 2017


September 3–5: Hamedan, Iran. **Modern Methods in Insurance Pricing and Industrial Statistics**  <http://thiele.au.dk/events/conferences/2017/modernmethods/>


September 3–7: Tel Aviv, Israel. **Elegance in probability: conference honoring Russell Lyons's 60th birthday**  <http://www.tau.ac.il/~russfest/>



September 4–7: Glasgow, UK. **RSS 2017 International Conference**  [www.rss.org.uk/conference2017](http://www.rss.org.uk/conference2017)


September 11–14: CRM, Montréal, Canada. **Risk Measurement and Regulatory Issues in Business**  [http://www.crm.umontreal.ca/2017/Affaires17/index\\_e.php](http://www.crm.umontreal.ca/2017/Affaires17/index_e.php)

September 11–15: Leuven, Belgium. **Summer School on Advanced Bayesian Methods**  <https://ibiostat.be/seminar/summerschool2017/Summer2017Bayesian>

September 19–21: Cambridge, UK. **IMA Conference on Inverse Problems from Theory to Application**  <https://ima.org.uk/3536/ima-conference-inverse-problems-theory-application/>

September 19–22: Rostock, Germany. **Annual Meeting of the German Statistical Society**  <http://www.statistische-woche.de/index.php?id=1&L=1>

 September 23: Emory University, Atlanta, GA, USA. **StatFest 2017**  <http://community.amstat.org/cmis/events/statfest>

September 25–27: Washington DC. **2017 ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop**  <http://www2.amstat.org/meetings/biopharmworkshop/2017/>



**NEW** September 25–28: Melbourne, Australia. **Melbourne–Singapore Probability and Statistics Forum** **w** <http://acems.org.au/news-events/mel-sin-probability-statistics/>

September 25–28: CRM, Montréal, Canada. **Measurement and Control of Systemic Risk** **w** [http://www.crm.umontreal.ca/2017/Financier17/index\\_e.php](http://www.crm.umontreal.ca/2017/Financier17/index_e.php)

September 28–30: Milwaukee, WI. **Biostatistics in the Modern Computing Era** **w** <http://www.mcw.edu/Biostatistics-National-Conference.htm>

## October 2017

October 1–6: Fréjus, France. **High Dimensional Statistics, Theory and Practice** **w** <http://ecas2017.sfds.asso.fr/>

October 2–5: CRM, Montréal, Canada. **Dependence Modeling Tools for Risk Management** **w** [http://www.crm.umontreal.ca/2017/Dependence17/index\\_e.php](http://www.crm.umontreal.ca/2017/Dependence17/index_e.php)

October 4–6: Västerås, Stockholm, Sweden. **Stochastic Processes and Algebraic Structures: From Theory Towards Applications** **w** <https://spas2017blog.wordpress.com/>

October 11–13: Bethesda, MD, USA. **ASA Symposium on Statistical Inference** **w** <http://ww2.amstat.org/meetings/ssi/2017/>

October 12–14: Los Angeles, CA, USA. **Design and Analysis of Experiments (DAE 2017) Conference** **w** <http://www.stat.ucla.edu/~hqxu/dae2017/>

October 16–19: Fields Institute, Toronto, ON, Canada. **2017 Fields Medal Symposium: Martin Hairer** **w** <http://www.fields.utoronto.ca/activities/17-18/fieldsmedalsym>


**NEW** October 18–19: Salt Lake City, Utah, USA. **Modern Math Workshop** **w** <https://icerm.brown.edu/mmw2017/>

**NEW** October 19–21: La Jolla, CA, USA. **2017 ASA Women in Statistics and Data Science Conference** **NEW** **w** <https://ww2.amstat.org/meetings/wds/2017/index.cfm>

October 23–27: Moscow, Russia. **Analytical and Computational Methods in Probability Theory and its Applications** **w** <http://acmpt.ru/>

## November 2017

**NEW** November 26–30: Kingscliff, NSW, Australia. **Biometrics by the Border** **w** <http://biometric2017.org/>

 November 29–December 1: Göttingen, Germany. **Statistics Meets Friends: From Inverse Problems to Biophysics and Back** **w** TBC

## December 2017

December 11–14: CRM, Montréal, Canada. **Risk Modeling, Management and Mitigation in Health Sciences** **w** [http://www.crm.umontreal.ca/2017/Sante17/index\\_e.php](http://www.crm.umontreal.ca/2017/Sante17/index_e.php)

December 11–15: Manipal, India. **Linear Algebra and its Applications** **w** <http://iclaa2017.com>

**NEW** December 16–19: Chennai, India. **Statistical Methods in Finance 2017** **w** <http://www.cmi.ac.in/~sourish/StatFin2017>

## January 2018

**NEW** January 2–4: Kolkata, India. **PCM 125: International Conference in Statistics and Probability** **w** <http://www.isid.ac.in/~pcm125spconf>

**NEW** January 8–12: Chulalongkorn University, Bangkok, Thailand. **2nd Bangkok Workshop on Discrete Geometry and Statistics** **w** <http://thaihep.phys.sc.chula.ac.th/BKK2018DSCR/>

**NEW** January 22–24: Lunteren, The Netherlands. **17th Winter School on Mathematical Finance** **w** <https://staff.fnwi.uva.nl/p.j.c.spreij/winterschool/winterschool.html>

## February 2018

February 5–16: National University of Singapore. **Meeting the Statistical Challenges in High Dimensional Data and Complex Networks** **w** <http://www2.ims.nus.edu.sg/Programs/018wstat/index.php>

**NEW** February 15–17: Portland, OR, USA. **Conference on Statistical Practice** **w** <https://ww2.amstat.org/meetings/csp/2018/index.cfm>

## March 2018


 March 25–28: Atlanta, GA, USA. **ENAR Spring Meeting** **w** <http://www.enar.org/meetings/future.cfm>

March 26–29: Barcelona, Spain. **Bayes Comp 2018** **w** <https://www.maths.nottingham.ac.uk/personal/tk/bayescomp/>

# International Calendar *continued*


## June 2018

  June 11–15: Gothenburg, Sweden. 40th Conference on Stochastic Processes and their Applications (SPA 2018) **w** <http://spa2018.org/>

 June 24–29: Edinburgh, UK. ISBA 2018 World Meeting **w** <https://bayesian.org/2018-world-meeting/>

 June 26–29: Singapore. 2018 IMS Asia Pacific Rim Meeting (IMS-APRM) **NEW w** <https://ims-aprm2018.stat.nus.edu.sg/>

## July 2018

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


July 2–6: St Andrews, UK. Sixth International Statistical Ecology Conference **w** <http://www.isec2018.org>


July 16–20: Bristol, UK. 33rd International Workshop on Statistical Modelling **w** <http://www.statmod.org/workshops.htm>

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

## August 2018

August 1–9: Rio de Janeiro, Brazil. International Congress of Mathematicians 2018 (ICM 2018) **w** <http://www.icm2018.org/>

 August 25–27: Shahrood, Iran. ISC14: Fourteenth Iranian Statistics Conference **w** <http://isc14.shahroodut.ac.ir>

 August 26–30: Melbourne, Australia. Joint International Society for Clinical Biostatistics and Australian Statistical Conference 2018 **w** <http://iscbasc2018.com/>

## March 2019

 March 24–27: Philadelphia, PA, USA. ENAR Spring Meeting **w** <http://www.enar.org/meetings/future.cfm>

## July 2019

  July 8–12: Evanston, IL, USA. 41st Conference on Stochastic Processes and their Applications (SPA 2019) **w** TBC

July 14–18: Leuven, Belgium. 40th Conference of the International Society for Clinical Biostatistics **w** <http://www.icsb.info>

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

## March 2020

 March 22–25: Nashville, TN, USA. ENAR Spring Meeting **w** <http://www.enar.org/meetings/future.cfm>

## July 2020

July 5–11: Portoroz, Slovenia. 8th European Congress of Mathematics. **w** <http://www.8ecm.si/>

## August 2020

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

 August 17–21: Seoul, Korea. Bernoulli/IMS World Congress on Probability and Statistics **w** TBC

## August 2021

 August 7–12: Seattle, WA, USA. IMS Annual Meeting at JSM 2021 **w** <http://amstat.org/meetings/jsm/>

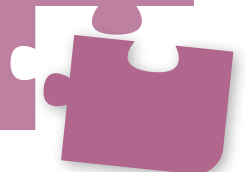
## August 2022

 August 6–11: Washington DC, USA. JSM 2022 **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](mailto: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/](http://www.imstat.org/meetings/)



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6: September	<b>August 15</b>	September 1	September 15
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8: December	<b>November 1</b>	November 15	December 1

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