Volume 48 • Issue 3

IMS Bulletin

April/May 2019

CONTENTS

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Tweedie Award: Po-Ling Loh

Po-Ling Loh

The IMS has selected Po-Ling Loh as the winner of this year's Tweedie New Researcher Award. She is an assistant professor in the Department of Statistics at the University of Wisconsin–Madison, with secondary appointments in the Department of Computer Sciences and the Department of Industrial & Systems Engineering. She is also an affiliated faculty member of the Wisconsin Institute for Discovery.

The IMS Travel Awards Committee selected Po-Ling for "novel contributions in non-convex optimization, robust statistics, and statistical modeling and inference of random graphs and networks."

On receiving the news, she said, "I am very honored to be selected as this year's recipient of the Tweedie award. I will strive to uphold Richard Tweedie's illustrious legacy of scholarship and service! I am also extremely grateful to my mentors in the profession who nominated me for the award."

Dr. Loh received her PhD—"High-dimensional statistics with systematically corrupted data"—in 2014 from the University of California, Berkeley, advised by Martin Wainwright, and before that her MS in Computer Science in 2013; her BS in Mathematics was from California Institute of Technology in 2009.

She says her research interests include high-dimensional statistics, optimization, network inference, and robust statistics; she is also interested in statistical applications to medical imaging and epidemiology. including exact distribution theory, stochastic control, optimal stopping, mathematical finance and statistical inference for stochastic processes (see http://homepages.cae.wisc.edu/~loh/).

Po-Ling will present the Tweedie New Researcher Invited Lecture at the IMS New Researchers Conference, held this year in Fort Collins, Colorado from July 24–27 (immediately before JSM Denver). She plans to speak about some of her work on statistical modeling of stochastic spreads on networks.

The other invited speakers at the New Researchers Conference are: IMS President **Xiao-Li Meng**, Harvard University; IMS President-Elect **Susan Murphy**, Harvard University; **Jay Breidt**, Colorado State University; **Vanja Dukic**, University of Colorado, Boulder; **Debashis Ghosh**, University of Colorado, Denver; **Mevin Hooten**, Colorado State University; **Sally Morton**, Virginia Tech; **Susan Paddock**, RAND Corporation; **Julia Sharp**, Colorado State University; and **Eric Vance**, University of Colorado, Boulder. For more information about the New Researchers Conference visit http://groups.imstat.org/newresearchers/conferences/nrc.html.

The Tweedie award is named for Richard L. Tweedie (1947–2001), the Australian-born professor of biostatistics and head of the Division of Biostatistics at the University of Minnesota, who mentored many young colleagues at work and through professional society activities.

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Contact information

Executive Committee

IMS Members' News

ISI Pearson Prize awarded to Yoav Benjamini

Professor Yoav Benjamini, the Nathan and Lily Silver Professor of Applied Statistics at Tel Aviv University, Israel, has been selected to receive the International Statistical Institute's 2019 Pearson Prize for his 1995 paper, co-authored with his colleague Yosi Hochberg (deceased in 2013).

The ISI Pearson Prize celebrates and honors a research contribution that has had profound influence on statistical theory, methodology, practice, or applications. The Benjamini–Hochberg paper in the *Journal of the Royal Statistical Society* was titled, "Controlling the false discovery rate: a practical and powerful approach to multiple testing" (*J. Roy. Statist. Soc. Ser. B,* **57**, 1995, no. 1, 289–300). This paper, cited more than 50,000 times, introduced the false discovery rate, FDR, that is widely used in diverse sciences to make simultaneous inference about a large number of hypotheses. FDR liberalizes the threshold for identifying hypotheses worth further investigation, while at the same time controlling the rate of false discoveries. It has become an essential part of the analysis pipeline of complex data around the world. In addition to its wide applicability, the FDR paper includes elegant mathematical statistics.


Yoav Benjamini

The contribution recognized by the Karl Pearson Prize must be a research article or book published within the last three decades. Each Pearson Award selection committee comprises renowned statisticians from across the world. The prize, sponsored by Elsevier, is given biennially, at the ISI World Statistics Congress (WSC), starting with the WSC in Hong Kong in August 2013.

Yoav Benjamini is also this year's **Rietz lecturers**: you can read a preview of his lecture on page 4 (and of Charles Bordenave's Medallion lecture on page 5).

Zhen-Qing Chen receives 2019 Itô Prize

The Bernoulli Society for Mathematical Statistics and Probability has announced the joint recipients of the 2019 Itô Prize. Congratulations to IMS Fellow Professor Zhen-Qing Chen (University of Washington, Seattle, USA) and Professor Masatoshi Fukushima (Osaka University, Toyonaka, Japan), for their 2018 paper, "Stochastic Komatsu-Loewner evolution and BMD domain constant" in *Stochastic Processes and Applications*, **128**, 545–594.


Zhen-Qing Chen

The 2019 winning article was chosen by a selection committee consisting of senior members of the probability community and representing wide geographical and specialization diversity. The award will be presented at the 41st Conference on Stochastic Processes and their Applications (SPA 2019) in Evanston, Illinois, July 8–12, 2019, where the authors will give a plenary talk on the Friday (July 12). Read more about the meeting at http://sites.math.northwestern.edu/SPA2019/

The award consists of a certificate and a monetary award of US$5000.

The paper is freely available to access until the end of 2019 via ScienceDirect. See https://www.sciencedirect.com/science/article/pii/S0304414917301448

2020 Bernoulli–IMS World Congress

The named lecturers for the 2020 Bernoulli–IMS World Congress in Probability and Statistics (August 17–21, 2020, at Seoul National University, Seoul, Korea) have been announced. The IMS Lectures are as follows: the Wald Lecturer will be Martin Barlow; the Blackwell Lecture will be given by Gábor Lugosi, and the five IMS Medallion Lectures will be given by Gérard Ben Arous, Andrea Montanari, Elchanan Mossel, Laurent Saloff-Coste and Daniela Witten. The IMS Presidential Address will be given by Susan Murphy. There are two named IMS/BS Lectures: the Doob Lecture, which will be given by Nicolas Curien, and the Schramm Lecture, given by Omer Angel.

For the Bernoulli Society's lectures, Persi Diaconis will give the Kolmogorov Lecture, Alison Etheridge the Bernoulli Lecture, Massimilliano Gubinelli the Lévy Lecture, Tony Cai the Laplace Lecture and Sara van der Geer will give the Tukey Lecture.

Hee-Seok Oh is chair of the Local Organizing Committee. He says, "Seoul National University will have the distinguished privilege of hosting WC2020, and we are expecting to attract more than 900 experts from over 40 countries. Held every four years, the congress is a worldwide event covering all branches of statistics and probability. This includes the latest scientific breakthroughs in theoretical, methodological, applied and computational statistics and probability, as well as stochastic processes."

He describes Seoul as "a bewitching mix of ancient and modern structures, packaged in a surprisingly compact metropolis that has earned it the designation of a UNESCO City of Design. The nation's capital has a cutting-edge cityscape of glass, steel and futuristic skyscrapers, which tower over traditional wooden houses with tiled roofs and mazes of cobbled alleys in distinct, village-like districts."

The website for the 10th World Congress is http://www.wc2020.org. We hope to see you there next year!

David Hinkley: 1945–2019

We are sad to report that David Hinkley, IMS Fellow and emeritus professor at UC Santa Barbara, passed away January 11.

David, who was born in England, received his PhD at Imperial College London in 1969; he was a professor of statistics at the University of Minnesota, the University of Texas at Austin, the University of Oxford, and the University of California at Santa Barbara, retiring in 2014. In 1984 he was awarded the COPSS Presidents' Award; his other honors include fellowships of the ASA and the American Association for the Advancement of Science, and elected membership of the International Statistical Institute.

David Hinkley co-authored the 1974 book *Theoretical Statistics* with David Cox, which was influential in advancing the field of statistics through the 1970s and 80s. He also co-authored *Bootstrap Methods and their Application* with Anthony Davison. In 1978 he co-authored with Brad Efron an influential paper for the development of statistical theory: "Assessing the accuracy of the maximum likelihood estimator: Observed versus expected Fisher information," which preceded a rapid development of asymptotic theory of statistical inference, its relationship to conditioning, and the development of improved approximations to likelihood inference. Some of this early work was summarized in "Likelihood," a paper in the *Canadian Journal of Statistics* in 1980; this paper had a large impact on research in likelihood theory and methods.

A full obituary will appear in a future issue.

Preview: Rietz lecturer, Yoav Benjamini

Yoav Benjamini is the Nathan and Lily Silver Professor of Applied Statistics at the Department of statistics and Operations Research at Tel Aviv University. He holds BSc. In Physics and BSc and MSc. In mathematics from the Hebrew University (1976), and PhD in Statistics from Princeton University (1981). He is a member of the Sagol School of Neuroscience and the Edmond Safra Bioinformatics Center, both at Tel Aviv University. He was a visiting professor at Wharton, UC Berkeley, Stanford and Columbia Universities. Prof. Benjamini is a co-developer of the widely used and cited False Discovery Rate concept and methodology. His research topics are selective and simultaneous inference, replicability and reproducibility in science, and data mining, with applications in Biostatistics, Bioinformatics, Animal Behavior, Brain Imaging and Health Informatics. He received the Israel Prize for research in Statistics and Economics, is a member of the Israel Academy of Sciences and Humanities, and has been elected to receive the Karl Pearson Prize of ISI this summer.

Yoav Benjamini's Rietz Lecture will be given at JSM 2019 in Denver, USA (check the program at **http://ww2.amstat.org/meetings/jsm/2019/onlineprogram/index.cfm** when it is finalized in late March).

Selective inference: The silent killer of replicability

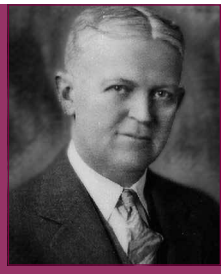
Replicability of results by other scientists has been a vital gold standard in science and should remain so. Concerns about lack of replicability increased in recent years, alongside the 'industrialization' of the scientific process with its generation of many potential discoveries. Transparency, good design and reproducible computing and data analysis are perquisite for replicability of the result, and have already been identified to have this important role. The importance of adopting appropriate statistical methodology has also been identified, yet which methodologies can be used to enhance replicability of results from a single stand-alone study remains debated, with ASA contributing formally to this debate.

I argue that addressing selective inference is essential for enhancing replicability, and demonstrate how ignoring it in current practices is harmful. This might be surprising, because selective inference is addressed in very complex problems in genomics, proteomics, functional imaging and other fields where the number of results screened for the few interesting ones is in the thousands. Yet this is not the case in much of pre-clinical and clinical Medical Research, Epidemiology, Experimental Psychology. In these areas, though the number of potential discoveries that are evident in the published study is large, it is still not in the thousands so apparently the potential harm is not apprehended. Unfortunately, many of the proposed solutions to the replicability problem. including those promoted by ASA, similarly ignore this issue.

I shall then review available approaches for addressing selective inference, and devote some time to (i) a less trodden strategy, that of offering simultaneous inference on the selected; and to (ii) a recent methodology, that of addressing selection in a hierarchical system of inferences. The second will be used for the analysis of microbiome data and to address the emerging problem of selective inference when a medical database is probed by different investigators.

Finally, we have to face the fact that replicability in a single study can only be enhanced. Replicability, and it closely related concept of generalizability, can only be assessed by actual replication attempts. Therefore, making replication an integral part of regular scientific work becomes crucial. I shall spell out a way requiring the efforts and cooperation of all parties involved: scientists, statisticians, publishers, granting agencies and academic leaders.

REMEMBERING RIETZ



Henry Lewis Rietz (1875–1943) was the first President, in 1935, of the Institute of Mathematical Statistics. He is credited with the early growth of interest in mathematical statistics.

Born in Gilmore, Ohio, Rietz received his BS degree from Ohio State University in 1899, then moved to Cornell University, first as a scholar, then fellow and assistant in mathematics. Following his PhD in 1902, he spent a year at Butler College, Indianapolis, then accepted an instructorship at the University of Illinois, where he stayed for 15 years. In 1918 he moved to the University of Iowa to head the Department of Mathematics, staying until his retirement in 1942. In his second year at Illinois, a demand arose for a course in statistics. Since nobody else wanted to teach it, Rietz was induced to try. So he offered a course, 'Averages and Mathematics of Investment', which led to his joint appointment as statistician at the College of Agriculture. From 1908 onwards, Rietz published 150 papers on statistical and actuarial topics – though it was difficult at first to find a place of publication for a mathematical statistics paper. His 1926 book *Mathematical Statistics* was the basis for many university courses for years afterwards. His many honors include fellowship of IMS, Royal Statistical Society and the American Association for the Advancement of Science. In appreciation of Rietz's contributions to the IMS, the 1943 volume of the *Annals of Mathematical Statistics* was dedicated to him. . . and, of course, the Rietz Lectures, intended to be of broad interest and clarifying the relationship of statistical methodology and analysis to other fields.

Preview: Medallion lecturer, Charles Bordenave

Charles Bordenave studied at Ecole Polytechnique in France, and received his PhD in 2006 under the supervision of François Baccelli. He was a postdoc at UC Berkeley before joining University of Toulouse as a CNRS researcher. Since 2018, he has been CNRS researcher at Aix-Marseille University. His research interests are in random matrices, random graphs, combinatorial optimization, stochastic geometry and more recently mixing times of Markov chains. He serves on the editorial boards of the *Annals of Applied Probability*, *Annals of Probability* and *Bernoulli*. He is the recipient of the 2017 Marc Yor prize from the French Academy of Sciences.

Charles Bordenave's Medallion Lecture will be given at the INFORMS-APS 2019 meeting, July 3–5, 2019, in Brisbane, Australia [*note that these are the correct dates, not July 2–4 as previously advertised*]. The meeting website is **http://informs-aps.smp.uq.edu.au/**

Non-backtracking spectrum of random matrices.

A fruitful line of thought in the study of discrete combinatorial structures, such as graphs, is to look for natural matrices or operators whose spectrum will contain valuable and accessible information on the underlying combinatorial structure.

The adjacency matrix of a graph is the matrix acting on the vertices of the graph whose entries are zero or one depending on the presence or absence of an edge between a given pair of vertices. The entries of powers of the adjacency matrix count paths along the edges of the graph.

The non-backtracking matrix of a graph is a matrix acting on pairs of vertices sharing an edge. The entries of powers of the non-backtracking matrix count non-backtracking paths along the edges of the graph, that is, paths which do not successively visit the same edge twice. A non-backtracking path may be interpreted as a discrete geodesic.

This matrix was introduced by Hashimoto in 1988 in the context of the Ihara zeta function of a graph, which is an analog in a discrete setting of the Selberg zeta function of a Riemannian manifold. In recent years, due to its strong geometric flavor, this non-backtracking matrix has been promoted as a powerful tool to analyze the subtle interplay between the geometry of a graph and its spectrum.

It has found a wide range of applications. For example, in 2013, Krzakala et al. have used this matrix in the design of a spectral algorithm to detect communities in social networks which bypass some of the limitations of classical spectral algorithms. Before that, Friedman (2008) used this matrix to prove the celebrated Alon's second eigenvalue conjecture which asserts that for any integer d, as n goes to infinity (with $n \times d$ even), almost all d-regular graphs on n vertices have the largest possible spectral gap at first order.

Non-backtracking matrices enjoy beautiful algebraic identities among which a spectral correspondence with matrices such as adjacency matrices. In this talk, we will explain how these spectral mappings can be used to translate problems on extremal eigenvalues of adjacency matrices into problems on extremal eigenvalues of weighted non-backtracking matrices.

We will then focus the talk on the study of the extremal eigenvalues of non-backtracking matrices of classical random graph ensembles: uniform regular graphs, Erdős-Rényi random graphs, stochastic block models and random n-lifts of a base graph. We will notably explain how these results can be used in community detection problems and in the theory of expander graphs, classical and quantum.

This is based on joint work with Benoit Collins, Marc Lelarge and Laurent Massoulié.

Rollo Davidson Prize

The Rollo Davidson Trustees give notice of the award of the 2019 Rollo Davidson Prizes to **Tom Hutchcroft** (University of Cambridge) in recognition of his many beautiful results in probability theory, including on random and self-avoiding walks, random forests, and percolation theory; and to **Vincent Tassion** (ETH Zurich) in recognition of his extensive achievements in disordered systems and percolation.

Recent papers

Stochastic Systems

Focusing on the interface of applied probability and operations research, *Stochastic Systems* is the flagship journal of the INFORMS Applied Probability Society and is published through a cooperative agreement between INFORMS/APS and IMS. This open-access journal seeks to publish high-quality papers that substantively contribute to the modeling, analysis, and control of stochastic systems. The contribution may lie in the formulation of new mathematical models, in the development of new mathematical methods, or in the innovative application of existing methods. A partial list of applications domains that are germane to this journal include: service operations; logistics, transportation and communications networks (including the Internet); computer systems; finance and risk management; manufacturing operations and supply chains; and revenue management.
Read it at **https://pubsonline.informs.org/toc/stsy/current**

Volume 8: Issue 4, December 2018

Probability Surveys

Probability Surveys is a peer-reviewed electronic journal which publishes survey articles in theoretical and applied probability. The style of articles may range from reviews of recent research to graduate textbook exposition. Articles may be broad or narrow in scope. The essential requirements are a well specified topic and target audience, together with clear exposition. The journal is sponsored by the Institute of Mathematical Statistics and by the Bernoulli Society. *Probability Surveys* is an Open Access journal. The full text of each article published is freely available to all readers.
Read it at **https://projecteuclid.org/euclid.ps**

Volume 16, 2019 (so far)

Volume 15, 2018

***Probability Surveys* is among the range of Open Access journals that IMS offers (the others are *Electronic Communications in Probability, Electronic Journal of Probability* and *Statistics Surveys*). Donations are welcome to the IMS Open Access Fund: https://www.imstat.org/shop/donation/**

Meeting report: Calcutta Triennial Symposium

Professor Donald Rubin delivered the S.N. Roy Memorial Lecture at the Tenth Calcutta Triennial Symposium, December 27-30, 2018. Meeting organizer Partha Lahiri writes:

Professor Donald Rubin delivered the 15th S.N Roy Memorial lecture entitled "Conditional Calibration and the Sage Statistician," on December 27, 2018, at the Tenth International Triennial Symposium, held at Calcutta University. Professor Rubin is a member of the US National Academy of Sciences and an IMS Fellow, and has received numerous other honors and awards. He is currently a professor at the Yau Mathematical Sciences Center, Tsinghua University, a Murray Shusterman Senior Research Fellow at the Fox School of Business, and a Professor Emeritus at Harvard University.

The Department of Statistics, University of Calcutta, India, established in 1941, with Professor P.C. Mahalanobis as head, is the oldest Department in Asia offering a master's degree in Statistics. Professor Samarendra Nath Roy (1906–1964), who served as the acting head of the department during 1947–48, was a distinguished alumnus of the department. Professor Roy pioneered research in multivariate analysis.

Pictured, left–right: Partha Lahiri, Junni Zhang, Don Rubin and Asis Chattopadhyay. Photo taken by Gaurangadeb Chatopadhyay shortly after the S.N Roy Memorial Lecture, Dec 27, 2018.

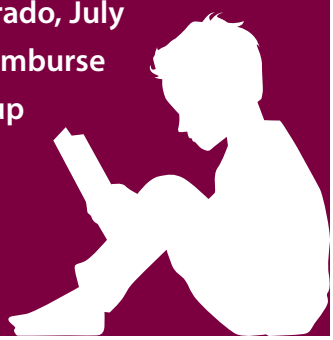
He introduced the ingenious concept of the union-intersection principle, which has been widely used in multivariate analysis. Professor Roy moved to the University of North Carolina at Chapel Hill in 1950, where he supervised the dissertations of 15 doctoral students, with Professor Ingram Olkin being his first PhD student there. Mudhokar et al. (2007, https://doi.org/10.1016/j.jspi.2007.03.003) wrote an article on the life and work of Professor Roy.

In 1966, the Department of Statistics, Calcutta University started a distinguished lecture series in honor of Professor S.N. Roy. The first S.N. Roy Memorial lecture was delivered by Professor R.C. Bose. Since then, S.N. Roy Memorial lectures have been delivered by: P. V. Sukhatme (1974), Harald Cramér (1977), P.K. Sen (1979), L. Pasinetti (1980), R.R. Bahadur (1981), T.W. Anderson (1985), Sir David Cox (1997), Y. Fujikoshi (2000), Malay Ghosh (2003), J.S. Marron (2004), Marianne Frisen (2009), Peter Hall (2012), and Danny Pfeffermann (2015).

CHILDCARE GRANTS AT JSM DENVER: APPLY BY JUNE 1

Are you bringing a child to the next IMS Annual Meeting (JSM in Denver, Colorado, July 27–August 1, 2019)? Apply to the IMS Child Care Initiative, and the IMS will reimburse 80% of the costs of privately arranged child care (for a dependent under 13), up to a maximum of US$250 per family. Priority will be given to those presenting papers or posters at the meeting. Application deadline June 1.

https://www.imstat.org/meetings/ims-child-care-initiative/



Call for expressions of interest in hosting the Bernoulli–IMS 11th World Congress in 2024

Preliminary bids / expressions of interest should be emailed to the IMS and Bernoulli society presidents (**Xiao-Li Meng** meng@stat.harvard.edu and **Susan Murphy** samurphy@fas.harvard.edu) and cc'ed to the BS president-elect (**Claudia Klüppelberg**, cklu@ma.tum.de). The due date for bids is **June 29, 2019**.

A preliminary bid should specify names and affiliations of academics who have provisionally agreed to serve on the Local Organizing Committee. It is important that this team contains sufficiently many energetic people to cover fully the oversight of this big event, but in particular the team should also include a couple of senior academics in probability and statistics who have strong research records and international profiles, and who are prepared to commit to ensure the proposed congress will successfully add great distinction to their institution. The Local Organizing Committee should be diverse, with all individuals playing significant roles. In many cases, the Local Organizing Committee will obtain the assistance from conference organizing professionals.

It is helpful if preliminary bids contain information about the following:

1: The proposed site for the congress. It is especially important to be clear about this if the proposed Local Organizing Committee involves names from across the immediate local region!
2: A range of proposed dates (typically summer in northern hemisphere). The selection of this range should involve explicit consideration of various competing meetings and conferences around the world -- to the extent that details are known at this advanced stage of planning.
3: Consideration of likely attendance numbers: for this, and for much other relevant data, the World Congress history page of the Bernoulli Society will be very helpful; it will become clear that numbers can vary to some extent with congress location.
4: Meeting facilities: there needs to be access to a large auditorium potentially able to accommodate 700 attendees, in addition to an adequate supply of breakout rooms for smaller sessions, and good supply of space for discussions over tea/coffee.
5: Accommodation: there needs to be a good supply of reasonably priced local accommodation. It is particularly helpful if some very cheap and basic accommodation is available for (for example) younger colleagues.
7: It is useful to supply cost estimates on venue rent, catering twice daily coffee breaks, office staff support, for a range of attendance from 500 to 700 participants.
8: Based on the previous item, it is helpful to estimate a range of potential registration fees. As a very rough guide, registration fees should be loosely in line for example with those charged for the 2019 European Meetings of Statisticians and the 2018 IMS meeting.

Overall cost is a particularly sensitive issue to the IMS and Bernoulli Society members, who include both young academics with very limited access to research funds, and distinguished academics from developing world countries who also find it a great challenge to secure sufficient funding to attend meetings. Neither IMS nor Bernoulli Society are in a position to provide substantial financial support, though both organizations organize special invited lectures for the Congress, thus ensuring the presence of very high-visibility speakers for whom the relevant society will pay registration, accommodation and transport.

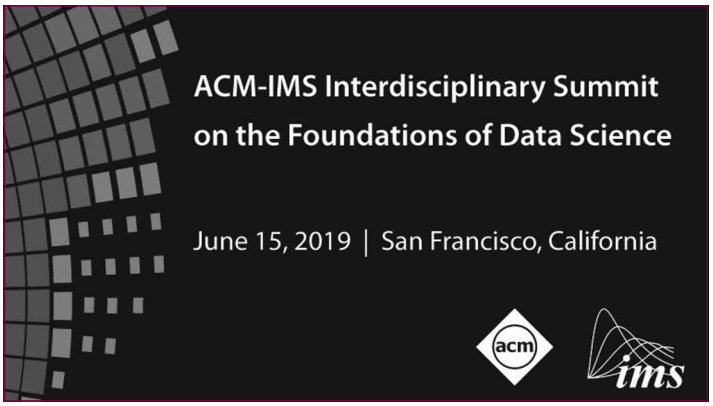
Where in the world could the 2024 World Congress be?

ACM–IMS Data Science Summit: register early!

Jeannette Wing and David Madigan, Columbia University, are the Event Co-Chairs of the **ACM–IMS Interdisciplinary Summit on the Foundations of Data Science** (June 15, 2019, in San Francisco).
They invite you to attend:

Data Science has emerged as a pivotal academic discipline with statistics and computer science at its core. Exciting new opportunities exist for statisticians and the IMS has a number of data science-related thrusts underway. One key initiative that we are delighted to share with you is a joint venture with the Association for Computing Machinery (ACM). The ACM is the world's largest educational and scientific computing society with nearly 100,000 members all over the world. We have launched the joint venture to propel data science and to engage and energize our communities to work together. The creation of a joint ACM–IMS membership option [announced in the previous issue: see https://www.acm.org/membership/joint-member-rates-for-ims] is one of our first accomplishments.

The joint venture's first event will be the **ACM–IMS Interdisciplinary Summit on the Foundations of Data Science** on June 15, 2019 in San Francisco (https://www.acm.org/data-science-summit). This full-day launch event will bring together distinguished speakers and panelists addressing topics such as deep learning, reinforcement learning, fairness, and ethics, in addition to discussions about the future of data science and the role of ACM and IMS. **Jeff Dean** from Google, **David Donoho** from Stanford, and **Daphne Koller** from insitro will deliver keynotes. Other IMS speakers include **Andrew Gelman**, Columbia; **Michael Jordan**, UC Berkeley; **Xiao-Li Meng**, Harvard; **Richard Samworth**, Cambridge; **Adrian Smith**, Turing Institute; and **Bin Yu**, UC Berkeley.



Registration is open for the ACM–IMS Interdisciplinary Summit on the Foundations of Data Science — but places are limited, so don't hang around!

We want to thank the ACM, and especially its executive director Vicki Hanson, for being so supportive. We also want to thank the members of the organizing committee for assembling such a terrific program: Magdalena Balazinska, University of Washington; Joseph Gonzalez, UC Berkeley; Chris Holmes, Oxford; Ryan Tibshirani, CMU; and Daniela Witten, University of Washington. We also thank Liza Levina, University of Michigan, co-chair of the IMS task force on the ACM–IMS partnership[1].

Please join us in San Francisco.

There will be limited seating, so **register early** at https://www.cvent.com/d/16qz03/4W.

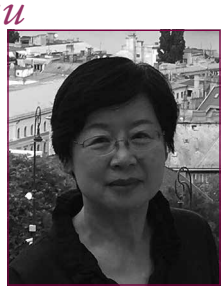
1 *David Madigan is the other co-chair of this ACM–IMS task force.*

The Data Science Summit will feature keynote lectures from [pictured below, left–right] Jeff Dean (Google AI Senior Fellow); David Donoho (Anne T. and Robert M. Bass Professor in the Humanities and Sciences Professor of Statistics at Stanford University); and Daphne Koller, CEO and Founder of insitro, and former CEO of Coursera.

IMS elections 2019: Meet the Candidates

President-Elect Nominee

Regina Y. Liu



Distinguished Professor, Department of Statistics, Rutgers, the State University of New Jersey, USA

https://www.stat.rutgers.edu/people-pages/faculty/people/130-faculty/391-regina-y-liu

Education

PhD and M. Phil, Statistics, Columbia University (1983)
BS, Applied Mathematics, Soochow University, Taiwan (1975)

Research Interests

- Fusion learning
- Confidence distribution
- Data depth
- Nonparametric and robust inference
- Resampling
- Aviation safety and risk management

Previous Service to IMS

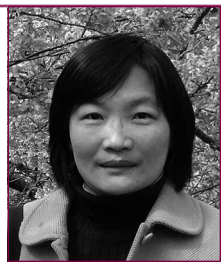
- IMS Nominating Committee, Chair / Member, 1992–1993; 2004–2005, 2015–2017
- IMS Committee on Editors, 2015–2017
- Committee on Fellows, 2011–2014
- IMS Program Chair, JSM Vancouver, 2010
- IMS Special Lectures Committee, Chair/Member, 2005–2008
- Associate Editor, *The Annals of Statistics*, 2000–2004
- IMS Council, Member, 1999–2002
- Program Chair, IMS Annual Meeting, Boston, 1992

Brief Statement

The IMS is the foremost society in statistics and probability worldwide, and I am deeply honored to be nominated as its President-Elect. Recent years have witnessed a phenomenal expansion of statistics and probability in all directions of data science. With this success come also many challenges and opportunities, which I hope to address if elected. In its broadest sense, data science interacts with many fields in both science and the humanities, and data science researchers can be widely dispersed in academia, high tech and financial industries, or government agencies. The IMS is ideally positioned to provide a common core and a welcoming home for all, including an effective platform for interactions and dissemination of important advances. Simultaneously, a goal of the IMS should be to raise the profile of the field and to ensure an influx of fresh talent to keep it vibrant and dynamic.

Council Nominees (10 candidates for five places on Council)

Ming-Yen Cheng



Professor, Department of Mathematics, Hong Kong Baptist University

http://www.math.hkbu.edu.hk/~chengmingyen/

Education

PhD in Statistics, 1994, University of North Carolina at Chapel Hill

Research Interests

- Classification and clustering
- Change-points
- High-dimensional data
- Nonparametric and semiparametric models

Previous Service to the Profession

Member, Award Committee, ICSA, 2016–2017
Member, Ad Hoc Committee on Peter Hall Award, 2016
Member, Organizing Committee for the International Prize in Statistics, ASA, 2016
Member, Board of Directors, ASA, 2014–2016
Member, Committee on Nominations, IMS, 2007–2008, 2014–2015
Member, Committee on Fellows, IMS, 2009–2011
Member, Committee on Asia Pacific Rim Meetings, IMS, 2007–2009, 2012–2014

Member, Nomination and Election Committee, ICSA, 2009–2010
Associate Editor, *Annals of Statistics* (2004–2009, 2016–2018), *Journal of the American Statistical Association* (2011–), *The American Statistician* (2017–), *Statistica Sinica* (2002–2014), *Lifetime Data Analysis* (2005–), *Journal of the Korean Statistical Society* (2008–2016), etc.

Brief Statement

I am extremely honored to be nominated for the IMS Council election. The IMS has long been playing a central role in advancing the development of probability and statistics and the fostering of new generations. In the era of data science, our profession face excitements as well as challenges in the efforts to be inclusive and visible and to lead. If elected, I would contribute towards these efforts.

Haiyan Huang

Professor, Department of Statistics, Graduate Group in Biostatistics, Center for Computational Biology

https://statistics.berkeley.edu/people/haiyan-huang

Education

BS, Mathematics, 1997, Peking University, China
PhD, Applied Mathematics, 2001, University of Southern California, USA

Research Interests

- Statistical genomics
- Bivariate dependence modeling
- Biological network inference
- Translating genomics features into therapeutics

Previous Service to the Profession

2004–2015: Associate Editor, *Statistical Applications in Genetics and Molecular Biology*
2005: Organization Committee Member, IMS/CSPS joint meeting in Beijing, PR China, 2005
2009: IMS Program Chair, 2009 WNAR/IMS annual meeting
2014–2015: Serving on a National Research Council committee
2014– : Editorial Board Member, *Journal of Computational Biology*
2015–2016: Member, Nomination Committee, IMS
2015– : Associate Editor, *Annals of Applied Statistics* (*AOAS*)
2016– : VP of Scientific Outreach and co-founder, DahShu (http://www.dahshu.org/, a non-profit organization to promote research and education in data sciences)
2017– : Associate Editor, *Journal of the American Statistical Association (JASA), Theory & Methods*

Brief Statement

It is an honor to be nominated for the IMS council, and it will be my privilege to serve. I have long observed the dedication of IMS colleagues, from near and afar, in strengthening our international community. I deeply appreciate the support this community has given me during my career. If elected, I will initiate new efforts to support young professionals, from diverse backgrounds, to promote their careers. I will also work to enhance the impact of mathematical statistics on science and society. Building on my interdisciplinary background, I will help connect IMS with other disciplines to expand the opportunities for our members to broaden their careers.

Mia Hubert

Professor, Department of Mathematics, University of Leuven, Belgium

https://wis.kuleuven.be/stat/robust

Education

1992, MSc in Mathematics, University of Antwerp, Belgium
1997, PhD in Science (Statistics), University of Antwerp, Belgium

Research Interests

- Robust statistics
- Outlier detection
- Depth functions
- Statistical process control
- Development of statistical software

Previous Service to the Profession

2001–2005: Associate editor for *Journal of Computational and Graphical Statistics*
2007–2011: Associate editor for *Computational Statistics and Data Analysis*
2008–2017: Associate editor for *Technometrics*
2008–2018: member of the Editorial Board of *Journal of Chemometrics*
2019– : Associate editor for *Statistical Methods and Applications*
Elected member, Board of Directors of the European Regional

IMS elections 2019 continued

Mia Hubert continued

Section (ERS) of the International Association for Statistical Computing (IASC)
Elected member of ISI; member of ASA, IASC, IMS

Brief Statement

If elected, I would like to strengthen the interplay between theoretical mathematical statistics/probability and applied statistics. Nowadays, with the unlimited availability of new data types (such as internet and social network data), we are facing many new problems. I would like the IMS to create opportunities for both theoretical and applied statisticians to tackle these challenges, and to learn from each other. As such, we might reinforce our important role within Data Science.

Edwin Perkins

Canada Research Chair in Probability, Department of Mathematics, University of British Columbia, Canada

https://www.math.ubc.ca/~perkins/perkins.html

Education

U. of Toronto, B.Sc., 1975
U. of Illinois at Urbana-Champaign, Ph.D., 1979

Research Interests

- Branching models, measure-valued processes and connections with population genetics and mathematical ecology
- Stochastic PDE
- Interacting particle systems
- Stochastic differential equations, Brownian motion and stochastic analysis

Previous Service to the Profession

Board of Directors of the Pacific Institute for Mathematical Sciences (1996–2017)
Vice-President, Canadian Mathematical Society, 2005–07
Committee for Conferences on Stochastic Processes, Bernoulli Society
IMS Nomination Committee (two terms)
Scientific Panel, Seminar on Stochastic Processes
Editorial Boards:
Annals of Probability (2012–17)
Annals of Applied Probability (1997–99)
Probability Theory and Related Fields (1983–1994)
Electronic J. Probability and *Electronic. Comm. Probability* (2002–2011)
Ann. Inst. Henri Poincaré (1994–2016)
Can. J. Math. (1994–99)

Brief Statement

I believe that statistics and probability have more to offer each other than many realize, and that continued involvement of both disciplines in the IMS, is one of its strengths. If elected, I will work hard on supporting the laudable, but at times conflicting, goals of building an open access and relevant publication system on one hand, and maintaining a fiscally healthy IMS on the other.

Gesine Reinert

Professor, Department of Statistics, University of Oxford

https://www.stats.ox.ac.uk/all-people/gesine-reinert/

Education

Diploma, Mathematics, 1989, University of Goettingen
PhD, Applied Mathematics, 1994, University of Zürich

Research Interests

- Probabilistic approximations, in particular Stein's method
- Analysis of networks
- Biological sequence analysis

Previous Service to the Profession

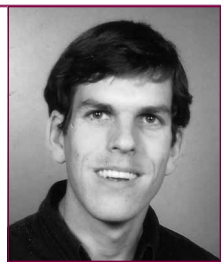
Since January 1, 2019: Chair of the Royal Statistical Society Applied Probability Panel
Since January 1, 2019: Associate Editor, *Bernoulli*
Since 2017: IMS journal panel
2017–2018: Secretary of the Royal Statistical Society Applied Probability Panel
Since 2017: Associate Editor, *Journal of Computational Biology*
Since 2016: Vice-Chair, European Cooperation for Statistics of

Network Data Science
2012–2018: Associate Editor, *Journal of Applied Probability*
2012–2017: IMS Nomination Panel
2005–2010: Associate Editor, *Bernoulli*

Brief Statement

It would be a great honour to serve on the IMS Council. The IMS is an outstanding professional organisation which embraces change while being rooted in solid scientific foundations. The area of statistics often develops in a dynamic interplay with application areas and new technological possibilities. To explore such areas, both junior researchers and experienced statisticians are needed. The inclusive approach of the IMS fosters such activities across disciplines and career stages, and it would be a privilege to contribute to this endeavour.

Markus Reiß



Professor, Institute of Mathematics, Humboldt-Universität zu Berlin

https://www.mathematik.hu-berlin.de/de/forschung/forschungsgebiete/stochastik/stoch-employees/mreiss

Education

Diploma in Mathematics, Free University Berlin, 1999
PhD, Humboldt University Berlin, 2002

Research Interests

- Nonparametric and High-dimensional Statistics
- Statistics for Stochastic Processes and SDEs
- Statistical Inverse Problems

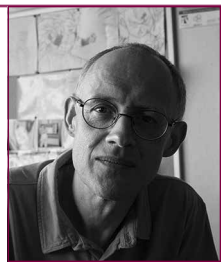
Previous Service to the Profession

Editor-in-Chief for *Bernoulli* 2019–2022, for *Statistics*, 2012–2015
AE for *Annals of Statistics* 2008–2018, *Stoch. Processes Appl.* 2009–2018, *Statistics* 2010–2012
Organizer of several larger meetings in statistics, e.g. this year Statistical and Computational Aspects of Learning with Complex Structure in Oberwolfach

Brief Statement

Knowing also a bit the scientific communities in neighbouring disciplines, e.g. in pure math or numerical analysis, I am more than happy to work in mathematical statistics. I believe that our community unites highest scientific standards with respectful and congenial cooperation. The part that the IMS contributes to this cannot be underestimated and I want to strongly support it further. I am particularly willing to invest myself in the excellent publication series and journals and in the European participation at IMS activities.

Christian Robert



Professor, Department of Mathematics & Department of Statistics, Université Paris Dauphine, France, & University of Warwick, UK

https://www.ceremade.dauphine.fr/~xian/

Education

PhD (Rouen, France) 1987

Research Interests

- Bayesian statistics, from foundations to methodology to applications
- Computational statistics (Monte Carlo methods, MCMC, ABC)

Previous Service to the Profession

Member of several IMS committees over the years
AE for *Annals of Statistics* for 13 years

Brief Statement

I am most interested in keeping and promoting the IMS as a diverse and top scientific society representative of all academics in probability, statistics, machine learning, ensuring both preserving the same highest academic standards as throughout its history and leading the data science revolution. This means pursuing novel ways of publishing and assessing research, providing tribunes and support to junior researchers, and guaranteeing an inclusive approach to research and dissemination.

More candidates overleaf...

IMS elections 2019 continued

Chiara Sabatti

Professor, Biomedical Data Science and Statistics, Stanford University

http://statweb.stanford.edu/~sabatti/

Education

BS in Economic and Social Disciplines, 1993, Bocconi University
PhD in Statistics, 1998, Stanford University

Research Interests

- Statistical genomics
- Model selection
- Adjustments for multiplicity and selection
- Relation between Bayesian and frequentists methods in high dimensional data analysis

Previous Service to the Profession

Associate editor for *Genetics* (2012–), *JASA* (2011–15), *The Annals of Applied Statistics* (2010–), *BMC Bioinformatics* (2010–), *IEEE/ACM Transaction on computational Biology and Bioinformatics* (2004–10)
Grant review panel member for NSF and NIH
Organizers of IPAM workshops "Sequence analysis towards system Biology" (2006) and "Computational genetics" (2007) and sessions at ASHG 2005, Interface 2006, and JSM 2011

Brief Statement

Our profession enjoys a renewed popularity and the IMS has an important role to play in this landscape. It should continue to foster the advancement of our discipline, capitalizing also on the vitality of other research domains such as optimization and computer science, etc. We have the opportunity to reaffirm and enable sound scientific methods, developing approaches that facilitate reproducibility and replicability of scientific results. And we need to reach out to the public at large, making sure that society has a "healthy" relationship with data: not assuming that "it speaks for itself" nor developing an indiscriminate and disabling skepticism. To achieve these goals I believe it is crucial (1) to revisit creatively foundational questions; (2) to engage in long-term collaborations with domain specialists working with an unprecedented wealth of data; (3) to enlarge the scope of our educational efforts. IMS has also the opportunity to foster a diverse and inclusive environment, that cultivates and benefits from the unique perspectives of individuals of different genders, ethnic and cultural backgrounds.

Qi-Man Shao

Chair Professor, Department of Statistics and Data Science, The Southern University of Science and Technology, China; and Choh-Ming Li Professor of Statistics, Department of Statistics, The Chinese University of Hong Kong, Hong Kong, SAR

http://www.sta.cuhk.edu.hk/qmshao

Education

BS, Mathematics (1983), Hangzhou University, China
PhD, Probability and Statistics (1989), University of Science and Technology of China

Research Interests

- Asymptotic theory in probability and statistics
- Self-normalized limit theory
- Stein's method for normal and non-normal approximation
- High-dimensional and large scale statistical analysis

Previous Service to the Profession

Associate editor, *The Annals of Statistics* (2003–2012)
Associate editor, *The Annals of Applied Probability* (2006–2012)
Associate editor, *Bernoulli* (2013–)
IMS Committee on Fellows, Member (2007–2009, 2011), Chair (2009)
Member, IMS Committee on Nominations (2011, 2016, 2017)
Chairman, Local organizing committee, the 4th IMS Asia Pacific Rim Meeting, 2016
Co–chair, Scientific Program Committee, the 5th IMS Asia Pacific Rim Meeting, 2018

Brief Statement

My main area of research is in asymptotic theory in probability and statistics. In Big Data era, data have become the world's most valuable resource. IMS can play a leading role in accelerating scientific discovery and innovation in data science, promoting basic

theoretical research and interdisciplinary collaborations worldwide, and enhancing activities in developing counties. If elected, I will make my contributions to these endeavours.

Alastair Young

Professor of Statistics, Department of Mathematics, Imperial College London

https://www.imperial.ac.uk/people/alastair.young

Education

BSc, Mathematics and Statistics, University of Edinburgh, 1981
Diploma in Mathematical Statistics, University of Cambridge, 1982
PhD, University of Cambridge, 1987

Research Interests

- Contemporary nonparametric inference: resampling methods, bootstrap, nonparametric likelihood
- Approximation methods in statistics
- Parametric likelihood theory
- Objective Bayes
- Selective inference

Previous Service to the Profession

1988–1992 Royal Statistical Society Research Section Committee member
1988–1994 Associate Editor, *Journal of Royal Statistical Society, Series B*
1994–1998 Joint Editor, *Journal of Royal Statistical Society, Series B*
1999– Associate Editor, *Biometrika*
2008–2012 Associate Editor, *Statistica Sinica*
2008–2012 Associate Editor, *Sankhya, Series A*
2010–2012 Chair, Committee of Professors of Statistics, UK and Ireland
2011–2012 Member, RSS Academic Affairs Advisory Group
2012– Associate Editor, *Journal of Statistical Planning and Inference*
2012–2013 Chair, Research Section Committee, Royal Statistical Society
2013– Associate Editor, *Computational Statistics and Data Analysis*
2014–2017 Honorary Officer, Publications Theme, Royal Statistical Society
2015– Associate Editor, *Bernoulli*
2015– Associate Editor, *Econometrics and Statistics*
2018– Associate Editor, *Journal of Royal Statistical Society, Series B*

Brief Statement

It is a great honor to be nominated for membership of the IMS Council. In the era of data science, it is more important than ever that the statistics and probability community maintains the united focus the IMS offers. The Institute has a long-standing reputation for the excellence of its publications, its meetings, its mentoring of new researchers, especially women, and shaping of the discipline. Its role and contributions deserve to be broadcast more loudly, especially outside North America.

IMS ELECTIONS CLOSE JUNE 15

2019 voting link: **https://www.imstat.org/elections/2019-ballot/**

The annual elections are taking place for the next IMS President, and for five places on the IMS Council. If you're an IMS member, you should have received an email from the IMS Executive Secretary, Edsel Peña, which contains a reminder of your member ID and a link to the voting site. So, having read through the candidates' profiles and statements, and decided who to vote for—don't forget to vote! You only have until June 15 to decide.

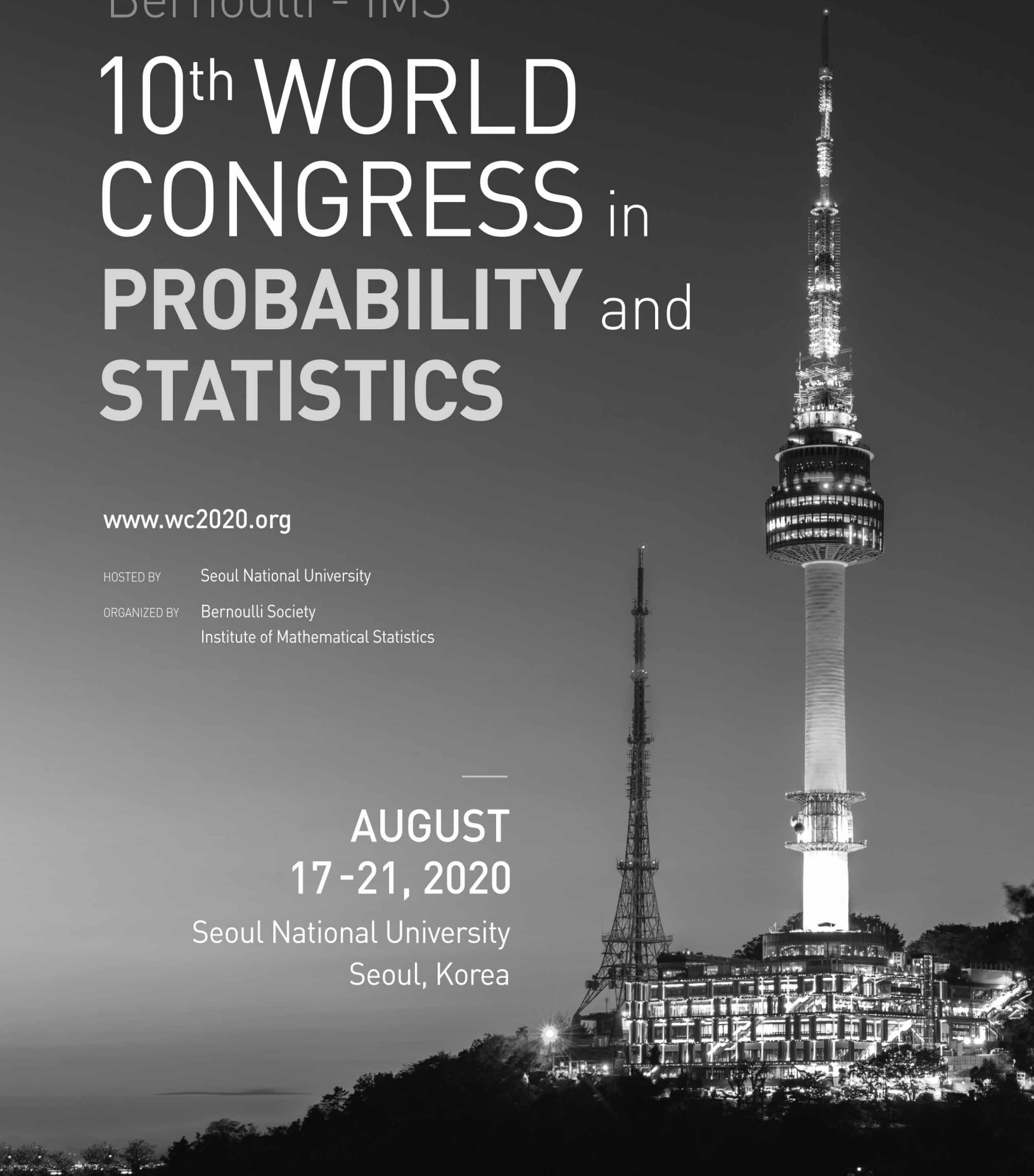
Bernoulli - IMS

10th WORLD CONGRESS in PROBABILITY and STATISTICS

www.wc2020.org

HOSTED BY Seoul National University

ORGANIZED BY Bernoulli Society
Institute of Mathematical Statistics



AUGUST 17-21, 2020

Seoul National University
Seoul, Korea

IMS meetings around the world

Joint Statistical Meetings: 2019–2023

IMS sponsored meeting

IMS Annual Meeting @ JSM 2019
July 27–August 1, 2019. Denver, CO, USA.
w http://ww2.amstat.org/meetings/jsm/2019/

We hope you'll join us in Denver for the 2019 IMS Annual Meeting, in conjunction with JSM. With more than 6,500 attendees (including over 1,000 students) from 52 countries, and over 600 sessions, it's a busy few days! The theme this year is *"Statistics: Making an Impact."*

Late-Breaking Sessions cover one or more technical, scientific, or policy-related topics that have arisen in past year. Proposals are accepted by Richard Levine, JSM 2019 program chair, via email from mid-February to mid-April 2019: for full details of what is required, please see http://ww2.amstat.org/meetings/jsm/2019/iolslatebreaking.cfm

IMS sponsored meetings: JSM dates for 2020–2024

JSM 2020	**IMS Annual Meeting @ JSM 2021**	**2022 Joint Statistical Meetings**	**IMS Annual Meeting @ JSM 2023**	**JSM 2024**
August 1–6, 2020	**August 7–12, 2021,**	**August 6–11, 2022**	**August 5–10, 2023**	**August 3–8, 2024**
Philadelphia, PA	**Seattle, WA**	**Washington DC**	**Toronto, ON, Canada**	**Portland, Oregon**

IMS Sponsored meeting

UPDATED

Bernoulli/IMS 10th World Congress in Probability and Statistics
August 17–21, 2020
Seoul, South Korea
w http://www.wc2020.org

Program chair: Siva Athreya; Local chair: Hee-Seok Oh.

The 10th World Congress in Probability and Statistics (WC2020), jointly organized by the Bernoulli Society and IMS, will be hosted by Seoul National University. We are expecting to attract more than 900 experts from over 40 countries.

This upcoming World Congress will take a comprehensive look at the latest developments in statistics and probability as well as the current trends emerging from all associated fields. A special lecture series will document a variety of modern research topics with in-depth uses and applications of these disciplines as they relate to science, industrial innovation, and society as a whole.

As the largest city in South Korea, dynamic Seoul is a bewitching mix of ancient and modern structures, packaged in a surprisingly compact metropolis that has earned it the designation of a UNESCO City of Design. The nation's capital has a cutting-edge cityscape of glass, steel and futuristic skyscrapers, which tower over traditional wooden houses with tiled roofs and mazes of cobbled alleys in distinct, village-like districts.

We look forward to seeing you in Seoul, Korea!

IMS co-sponsored meeting

20th INFORMS Applied Probability Society Conference
July 3–5, 2019
Brisbane, Australia
w http://informs-aps.smp.uq.edu.au/

The plenary speakers for the conference are: Charles Bordenave, Université de Toulouse, France (**IMS Medallion Lecturer:** see page 5 for preview); Ton Dieker, Columbia University; Nelly Litvak, University of Twente and Eindhoven University of Technology, Netherlands; and Sidney Resnick, Cornell (Marcel Neuts Lecturer).

A number of related events are being held before and after this conference: *Queues, Modelling, and Markov Chains: A Workshop Honouring Prof. Peter Taylor,* June 28–30 at Mount Tamborine, Queensland. *Applied² Probability*, July 2 at The University of Queensland, Brisbane *12th International Conference on Monte Carlo Methods and Applications (MCM2019)*, July 8–13 in Sydney.

At a glance: forthcoming IMS Annual Meeting and JSM dates

2019

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

2020

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

IMS Annual Meeting/ 10th World Congress: Seoul, South Korea, **August 17–21, 2020**

2021

IMS Annual Meeting @ JSM: Seattle, **August 7–12, 2021**

2022

IMS Annual Meeting: TBC

JSM: Washington, **August 6–11, 2022**

2023

IMS Annual Meeting @ JSM: Toronto, **August 5–10, 2023**

IMS co-sponsored meeting

2019 WNAR/IMS/JR meeting

June 23–26, 2019. Portland, OR, USA

w http://www.wnar.org/event-3013994

The 2019 WNAR/IMS/JR meeting will be in Portland, Oregon from June 23-26 hosted by Oregon Health & Science University (OHSU). Portland, Oregon's largest city, is known for eco-friendliness with high walkability, parks, bridges and bicycle paths. The scientific program features short courses, invited and contributed oral sessions, and student paper sessions. The local organizer is Byung Park (parkb@ohsu.edu), and the program chair is Meike Niederhausen (niederha@ohsu.edu).

WNAR Presidential Invited Speaker: **Bin Yu**

Bin Yu is Chancellor's Professor in the Departments of Statistics and of Electrical Engineering & Computer Sciences at the University of California at Berkeley. Her research focuses on practice, algorithm, and theory of statistical machine learning and causal inference. Her group is engaged in interdisciplinary research with scientists from genomics, neuroscience, and precision medicine to extract useful information based on data and domain knowledge. In order to augment empirical evidence for decision-making, they are investigating methods/algorithms (and associated statistical inference problems) such as dictionary learning, non-negative matrix factorization (NMF), EM and deep learning (CNNs and LSTMs), and heterogeneous effect estimation in randomized experiments (X-learner). Their recent algorithms include staNMF for unsupervised learning, iterative Random Forests (iRF) and signed iRF (s-iRF) for discovering predictive and stable high-order interactions in supervised learning, contextual decomposition (CD) and aggregated contextual decomposition (ACD) for phrase or patch importance extraction from an LSTM or a CNN.

She obtained her BS degree in Mathematics from Peking University in 1984, and her MA (1987) and PhD (1990) in Statistics from the University of California at Berkeley. She is Member of the US National Academy of Sciences and Fellow of the American Academy of Arts and Sciences. She was a Guggenheim Fellow in 2006, and the Tukey Memorial Lecturer of the Bernoulli Society in 2012. She was President of IMS in 2013–2014 and the IMS Rietz Lecturer in 2016. She received the COPSS Elizabeth L. Scott Award in 2018.

Read about her Presidential Invited Lecture in the column to the right.

Three principles of data science: Predictability, Computability, and Stability

In this talk, I'd like to discuss the intertwining importance and connections of three principles of data science in the title and the Predictability, Computability, and Stability (PCS) workflow that is built on the three principles. The principles will be demonstrated in the context of two collaborative projects in neuroscience and genomics for interpretable data results and testable hypothesis generation. If time allows, I will present proposed PCS inference that includes perturbation intervals and PCS hypothesis testing. The PCS inference uses prediction screening and takes into account both data and model perturbations.

Finally, a PCS documentation is proposed based on Rmarkdown, iPython, or Jupyter Notebook, with publicly available, reproducible codes and narratives to back up human choices made throughout an analysis. The PCS workflow and documentation are demonstrated in a genomics case study available on Zenodo.

IMS sponsored meetings

ENAR dates, 2020–2020
March 22–25, 2020: in Nashville, TN
March 14–17, 2021: Baltimore, MD
March 27–30, 2022: Houston, TX

w www.enar.org/meetings/future.cfm

The 2020 ENAR/IMS meeting will be in Nashville (and the following year in Baltimore, and then Houston in 2022). Featuring a *Fostering Diversity in Biostatistics* workshop, connecting underrepresented minority students interested in biostatistics with professional biostatisticians in academia, government and industry.

IMS co-sponsored meeting

Statistics and the Life Sciences: Creating a Healthier World
November 15, 2019
Boston University School of Public Health

w http://www.bu.edu/sph/news-events/signature-programs/deans-symposia/

IMS Representative(s) on Program Committees: Josee Dupuis, Eric Kolaczyk

A new website is under construction for this one-day meeting, but this URL gives details of the Dean's Symposia, of which this is one.

For now, please note the date.

IMS co-sponsored meeting UPDATED

IMS-China 2019
July 6–10, 2019. Dalian, China

w http://ims-china.org/

The 2019 IMS-China International Conference on Statistics and Probability, hosted by Dalian University of Technology, will be held at Dalian in Liaoning, China, on July 6-10, 2019. Keynote speakers: Jianqing Fan (Princeton) and Shigeo Kusuoka (University of Tokyo).
All talks will take place at the Dalian International Conference Center. Online registration will be opening soon.

IMS co-sponsored meeting UPDATED

Statistics Conference in Honor of Aad van der Vaart's 60th Birthday
June 17–21, 2019. Leiden, The Netherlands

w http://pub.math.leidenuniv.nl/~schmidthieberaj/aadbirthday/index.html

The conference, honoring Aad van der Vaart's 60th birthday and many professional achievements, will bring together collaborators and leading researchers in theoretical and applied statistics. Topics include nonparametric Bayes, high-dimensional/nonparametric statistics and applications of statistics in the life sciences.

If you are interested in participating, please register as soon as possible on the conference webpage. The conference fee is €200, which includes the welcome reception on Monday afternoon, and sandwich lunch, coffee and tea during the conference.

For further information, please do not hesitate to contact us (via the email address: b.t.szabo@math.leidenuniv.nl).

IMS co-sponsored meeting NEW

Design and Analysis of Experiments
October 17–19, 2019
Knoxville, TN

w https://haslam.utk.edu/dae2019

Deadline for submission of abstracts and requests for travel support: June 30, 2019.
The purpose of the Design and Analysis of Experiments (DAE) conference series, of which this is the 10th, is to provide support and encouragement to junior researchers in the field of design and analysis of experiments, and to stimulate interest in topics of practical relevance to science and industry. The meetings also attract top-notch senior researchers, and emphasize interaction between them and junior researchers. DAE 2019 will focus on emerging areas of research in experimental design, as well as novel innovations in traditional areas. A feature of the DAE series is **pairing of senior and junior researchers** for mentoring purposes and DAE 2019 at UT will follow this tradition. There will be 10 invited sessions, each with three speakers, two poster sessions, and opportunities to lead or participate in roundtable discussions as well. **Travel support** may be available for students and junior researchers who received their doctorate degrees after 2014.

IMS co-sponsored meeting

ICIAM 2019: the 9th International Congress on Industrial and Applied Mathematics
July 15–19, 2019. Valencia, Spain

w https://iciam2019.org/index.php

The 9th International Congress on Industrial and Applied Mathematics (ICIAM 2019) will be held in Valencia, Spain, from July 15–19, 2019. IMS is a member of ICIAM.

SPECIAL OFFER: Discounted travel with Lufthansa Group Partner Airlines & Iberia Airlines: see website for details.

IMS co-sponsored meeting

The 7th International Workshop in Sequential Methodologies
June 18–21, 2019. Binghamton, USA

w https://sites.google.com/view/iwsm2019

Hosted by Department of Mathematical Sciences at Binghamton University, State University of New York (SUNY), USA.

More IMS meetings around the world

IMS co-sponsored meeting

NEW

2019 9th IMS–FIPS Workshop
June 15–17, 2019
Fudan University, Shanghai, China

w http://www.sta.cuhk.edu.hk/ims-fips-2019.sta.cuhk.edu.hk/

2019 Workshop on Finance, Insurance, Probability and Statistics Plenary speakers: Robert Engle (New York Univ), Ioannis Karatzas (Columbia University), Per Mykland (University of Chicago).

IMS co-sponsored meeting

Symposium on Data Science and Statistics (SDSS) 2019
May 29–June 1, 2019. Bellevue, Washington, USA

w https://ww2.amstat.org/meetings/sdss/2018/

Now an IMS co-sponsored meeting, this is the second annual SDSS. It provides an opportunity for data scientists, computer scientists and statisticians to exchange ideas. Registration is open.

IMS co-sponsored meeting

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

w http://sites.math.northwestern.edu/SPA2019/

The 41st Stochastic Processes and their Applications conference will take place July 8–12, 2019, in Evanston, USA. It will feature the following invited lectures. **Plenary Speakers:** Cécile Ané, Béatrice de Tilière, James R. Lee, Dmitry Panchenko, Yanxia Ren, Allan Sly, Caroline Uhler. **IMS Medallion Lectures:** Krzysztof Burdzy and Etienne Pardoux. **Lévy Lecture:** Massimilliano Gubinelli. **Doob Lecture:** Jeremy Quastel. **Schramm Lecture:** Stanislav Smirnov.

IMS co-sponsored meeting

The 7th Workshop on Biostatistics and Bioinformatics
May 10–12, 2019. Atlanta, GA, USA

w https://math.gsu.edu/yichuan/2019Workshop/

The keynote speaker is Dr. **Samuel Kou**, Professor of both Statistics and Biostatistics, the chair of Statistics Department at Harvard, and the recipient of the COPSS President's Award in 2012. There will be invited talks by distinguished researchers, and a poster session by young researchers and graduate students.

In order to encourage graduate students and young researchers to conduct a cutting-edge research, we will organize a poster session. The workshop will be providing **partial travel awards** to selected conference participants. Priority will be given to senior graduate students, post-graduate, recent PhD's, junior faculty, and under-represented groups. Check the website for application details of travel awards for young and minority researchers.

IMS co-sponsored meeting

ACM–IMS Interdisciplinary Summit on the Foundations of Data Science
June 15, 2019. San Francisco, CA, USA

w https://acct-www.acm.org/data-science-summit

An interdisciplinary event bringing together researchers and practitioners to address fairness, privacy, ethics, causal inference, deep learning, reinforcement learning, and the future of data science. ACM (the Association for Computing Machinery) and IMS are the two key academic organizations in these areas. This new joint venture [*see page 9*] aims to propel data science and to engage and energize our communities to work together.

IMS co-sponsored meeting

12th International Conference on Bayesian Nonparametrics (BNP12)
June 24–28, 2019. Oxford, UK

w http://www.stats.ox.ac.uk/bnp12/

The Bayesian nonparametrics (BNP) conference is a bi-annual international meeting bringing together leading experts and talented young researchers working on applications and theory of nonparametric Bayesian statistics. Keynote speakers are Tamara Broderick (MIT), Long Nguyen (Michigan) and Aad van der Vaart (Leiden). CALL FOR POSTERS: **deadline May 15**. See details on http://www.stats.ox.ac.uk/bnp12/registration.html

Note that O'Bayes 2019 follows this meeting in Warwick, 70 miles away [see the announcement below]

IMS co-sponsored meeting

O'Bayes 2019: Objective Bayes Methodology Conference
June 29–July 2, 2019
University of Warwick, UK

w https://warwick.ac.uk/fac/sci/statistics/staff/academic-research/robert/0bayesconference/

O'Bayes 2019 is dedicated to facilitate the exchange of recent research developments in objective Bayes theory, methodology and applications, and related topics, to provide opportunities for new researchers, and to establish new collaborations and partnerships. The meeting is the biennial meeting of the Objective Bayes section of the International Society for Bayesian Analysis (ISBA).

Note that O'Bayes 2019 is immediately after the BNP 2019 conference in Oxford [see announcement above], which takes place 24–28 June 2019, close enough in both travel time (45 minutes by direct train) and distance (70 miles) to benefit members of both the Objective Bayes and Bayesian non-parametric communities, who should consider joint attendance. Registration is open now.

Other meetings and events around the world

ICORS–LACSC 2019
May 28–31, 2019
Guayaquil, Ecuador
w https://icors-lacsc-2019.com/

This year, the **International Conference on Robust Statistics** (ICORS) and the **Latin American Conference on Statistical Computing** (LACSC) will be jointly organized (ICORS–LACSC 2019) by ESPOL Polytechnic University (Escuela Superior Politécnica del Litorial) in Guayaquil, Ecuador. The **2nd LARS–IASC School on Computational Statistics and Data Science** will be a satellite event on May 26–27, 2019.

In 2019, ICORS celebrates its 19th edition, after the meetings in Kolkota, India (2015), Geneva, Switzerland (2016), Sydney, Australia (2017) and Leuven, Belgium (2018). On the other hand, LACSC celebrates its 4th edition, following its previous meetings in Gramado, Brazil (2016), Valparaíso, Chile (2017) and San José, Costa Rica (2018). LACSC is an official event of the International Association for Statistical Computing (IASC).

ICORS–LACSC 2019 will be a great opportunity to make academic and professional contacts and create a space for discussion about recent contributions and emerging ideas in statistics. ICORS–LACSC 2019 welcomes contributions in a wide range of topics. ICORS invites contributions to applied statistics as well as theoretical statistics, and in particular new problems related to robust statistics and data analysis. LACSC invites theoretical as well as applied contributions on Statistical Computing, Data Analysis, Multivariate Statistics, Classification, Data Mining, Optimization, Modeling, Applications, Big Data, Optimization Heuristics, and other related topics. For its second edition, the LARS–IASC School will feature a workshop on Robust Statistics given by Prof. Peter Rousseeuw and Prof. Stefan Van Aelst (KU Leuven, Belgium).

This will be an event without precedent as the communities of ICORS and LACSC will gather. ICORS–LACSC 2019 will bring together renown statisticians like: Stefan Van Aelst (KU Leuven, Belgium), Dirk Eddelbuettel (University of Illinois, USA), Ana Bianco (University of Buenos Aires, Argentina), Gareth James (University of Southern California, USA), Xuming He (University of Michigan, USA), Victor Yohai (University of Buenos Aires, Argentina), Marco Avella (Columbia University, USA), Maria-Pia Victoria-Feser, Ruben Zamar (University of British Columbia, Canada), Daniela Rodríguez (University of Buenos Aires, Argentina), Klaus Nordhausen (TU Wien, Austria) and more than 200 statisticians presenting new results and advances in statistics.

This will also be a unique opportunity to visit the beautiful city of Guayaquil in Ecuador with all its natural attractions like the Guayas river, Iguana parks, mangrove forests, museums, history, and the architecture of Spanish colonial houses. Ecuador as a small country has many natural attractions, not so far from Guayaquil, that includes volcanoes, large warm beaches, the Galapagos Islands and other beautiful cities like Quito, Cuenca and Baños with a great historical value.

We therefore want to invite you to be part of ICORS–LACSC 2019. We will be happy to host you in the charming and beautiful city of Guayaquil. Please feel free to spread this announcement to your community and partner institutions.

Follow us in our social networks (FB/IG/Tw): @icorslacsc2019

2018 ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop
September 23–25, 2019
Marriott Wardman Park in Washington, DC
w https://ww2.amstat.org/meetings/biop/2019/index.cfm

Student Travel Grants: deadline April 12

The workshop has funding for student travel grants. Up to $500 per student, by reimbursement, is available to support students' participation in the 2019 workshop. To qualify, an applicant must be a full-time student registered toward a master's or PhD degree in statistics, biostatistics, or a related field at a college or university when submitting the application; and be an author who will present an accepted poster at the 2019 workshop. All recipients of the student travel grants are required to register for the workshop by the advance registration deadline (August 12, 2019). See the application procedure on the website: https://ww2.amstat.org/meetings/biop/2019/travelgrant.cfm.

12th Chaotic Modeling and Simulation International Conference (CHAOS2019)
June 18–21, 2019. Chania, Crete, Greece
w http://www.cmsim.org

Chaos theory has developed rapidly over the last decades. With CHAOS2019, we are celebrating 12 years of active presence in the field via the annual conference, the proceedings and publications in books and the *CMSIM Journal* (www.cmsim.eu).

Parallel conference: CHAOS2019 conference participants can also attend the "**Symposium in Honor of the 60th Birthday of Professor Giorgos P. Tsironis**" to be held from 20–22 June parallel to the conference. A large group of leading scientists will contribute (see: http://www.cmsim.org/symposium2019.html for details).

More meetings around the world

2020 Australian and New Zealand Statistical Conference (ANZSC 2020)

NEW

July 6–10, 2020

Gold Coast Convention and Exhibition Centre, QLD, Australia

w https://anzsc2020.com.au

The 2020 Australian and New Zealand Statistical Conference, which will take place on the Gold Coast from the 6th to the 10th of July 2020, brings together four leading statistical communities in the region – the Statistical Society of Australia, the New Zealand Statistical Association, the International Institute of Business Analysis (Special Interest Group for Business Analytics), and the Australian Conference on Teaching Statistics.

The aim of this conference is to bring together a broad range of researchers and practitioners across a variety of statistical disciplines to facilitate the exchange of theory, methods and applications.

With these four societies working together there will be strong program components of interest to a wide diversity of academic, government, and industry colleagues. This includes the full spectrum of delegates from those advancing theoretical methodology to those working on industry applications (in traditional and non-traditional statistical areas). Of particular interest is how Big Data continues to impact all of us.

Information on Keynote Speakers and the Conference program will be available soon on the conference website.

The conference will be held at the Gold Coast Convention and Exhibition Centre (GCCEC) situated in the heart of the Gold Coast. From GCCEC, Surfers Paradise (the social hub of the Gold Coast) is 5km to the North, the Star Casino and Pacific Fair are immediately to the South (the largest regional shopping and dining destination in Queensland), the beach (Broadbeach) is just ten minutes walk, and the Broadbeach restaurant complex is immediately to the East (short 5 minutes walk). Social tours can easily be made to the rainforest (such as Tambourine National Park and World Heritage-listed Lamington National Park), to places of Aboriginal Indigenous significance, to Stradbroke Island, and to Australia's greatest theme parks.

ANZSC2020 promises to be a truly amazing experience on both a professional and a social level. We look forward to seeing you on the Gold Coast in 2020!

2019 Ascona Workshop: "Statistical Challenges in Medical Data Science"

NEW

June 16–21, 2019

Monte Verità, Ascona, Switzerland

w https://www.bsse.ethz.ch/cbg/cbg-news/ascona-2019.html

Rapid biotechnological advances have turned the biomedical sciences into a data science. Today, large-scale high-dimensional data is generated routinely by new imaging modalities, DNA sequencing technologies, and many other molecular profiling techniques. These profiles promise to reveal the molecular basis of diseases and to guide the design of novel therapeutic interventions. In addition to molecular and clinical data, mobile health data obtained from internet-based pervasive monitoring can also provide useful information. However, integrating and analyzing complex clinical, molecular, and mobile health data is extremely challenging, and new statistical models and computational inference methods are needed.

Our workshop will:

(i) explore recent advances and open problems in statistical modelling, inference, and integration of molecular profiling, electronic health record, and mobile health data;

(ii) identify opportunities and challenges for translation of data science approaches to health and disease, such as the construction of data-driven medical decision support systems; and

(iii) facilitate meaningful interactions between engineering, biomedical, and quantitative researchers.

International Conference on Establishment Statistics (ICES VI)
June 15–18, 2020
New Orleans, Louisiana, USA
w http://ww2.amstat.org/meetings/ices/2020/index.cfm

UPDATED

Continuing in the traditions of ICES I–V, ICES VI will explore new areas of establishment statistics, as well as reflect state-of-the-art methodology at the time of the conference. Situated in the French Quarter of New Orleans—a unique city known for its vibrant music and delicious beignets—ICES VI is expected to be attractive to professionals and researchers in statistics on businesses, farms, and institutions throughout the world.

The conference will include: short courses at introductory, intermediate, and advanced levels; introductory overview lectures about important and timely topics; selection of invited and contributed papers; two keynote speakers; speed sessions; and software demonstrations.

Employment Opportunities around the world

Australia: Canberra, ACT
Australian National University
Director, Statistical Consulting Unit
https://jobs.imstat.org/job//47135116

Hong Kong
The University of Hong Kong
Tenure-Track Associate Professor / Assistant Professor in Business Analytics
https://jobs.imstat.org/job//46530564

Switzerland: Lausanne
EPFL
Professorship in Statistics
https://jobs.imstat.org/job//47120969

United States: Auburn, AL
College of Agriculture at Auburn University
Director, Statistics Teaching and Consulting
https://jobs.imstat.org/job//47158788

United States: Los Angeles, CA
UCLA Department of Biostatistics
Assistant/Associate Professor
https://jobs.imstat.org/job//46071395

United States: Santa Barbara, CA
University of California, Santa Barbara
Open-Rank (tenured or tenure-track) position in Statistics with emphasis on Data Science
https://jobs.imstat.org/job//46645861

United States: Santa Cruz, CA
University of California Santa Cruz
Statistics: Visiting Assistant Professor (Open until filled. Apply by 4/12/19 for full consideration)
https://jobs.imstat.org/job//47302767

United States: New Haven, CT
Yale University, Department of Statistics and Data Science
Lecturer
https://jobs.imstat.org/job//47373580

United States: Ames, IA
Iowa State University
Professor and Chair of the Department of Statistics
https://jobs.imstat.org/job//46664235

United States: Boston, MA
Brigham and Women's Hospital, Center for Clinical Investigation
Instructor level Biostatistician
https://jobs.imstat.org/job//47240466

United States: Boston, MA
Brigham and Women's Hospital
Biostatistician
https://jobs.imstat.org/job//47409101

United States: Rockville, MD
FDA–Center for Veterinary Medicine
Mathematical Statisticians Staff Fellow
https://jobs.imstat.org/job//47158585

United States: Portland, OR
Portland State University
Instructor to Senior Instructor I
https://jobs.imstat.org/job//46531432

United States: Memphis, TN
University of Memphis, School of Public Health, Division of Epidemiology, Biostatistics, and Environmental Health
Assistant Professor in Biostatistics
https://jobs.imstat.org/job//47302910

International Calendar of Statistical Events

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

April 2019

April 23–26: Paris, France. **International Conference on Control, Decision and Information Technologies (CoDIT'19)**
w https://codit19.com

April 23–26: Vienna, Austria. **8th International Conference on Risk Analysis and Design of Experiments** **w** https://icr8.boku.ac.at/

April 25–26: Birmingham, UK. **2nd IMA and OR Society Mathematics of Operational Research** **w** https://ima.org.uk/9649/2nd-ima-and-or-society-conference-on-mathematics-of-operational-research/

May 2019

May 1–3: Knoxville, TN, USA. **NIMBioS/DySoC Investigative Workshop: Mathematics of Gun Violence**
w http://www.nimbios.org/workshops/WS_gunviolence

May 4: Washington DC, USA. **National Math Festival**
w https://www.nationalmathfestival.org/2019-festival/

IMS May 10–12: Atlanta, GA, USA. **7th Workshop on Biostatistics and Bioinformatics** **w** https://math.gsu.edu/yichuan/2019Workshop/

May 13–15: Knoxville, TN, USA. **NIMBioS Investigative Workshop: Scientific Collaboration Enabled by High Performance Computing** **w** http://www.nimbios.org/workshops/WS_hpc

May 21–23: Pittsburgh, PA, USA. **Statistical Analysis of Neural Data (SAND9)** **w** http://sand.stat.cmu.edu

May 25–26: Athens, Greece. **3rd International Conference On Quantitative, Social, Biomedical & Economic Issues 2019 – ICQSBEI 2019** **w** https://icqsbei2019.weebly.com

May 27–June 8: Charlottesville, VA, USA. **Integrable Probability summer school** **w** http://vipss.int-prob.org/

NEW May 28–31: Guayaquil, Ecuador. **ICORS–LACSC 2019** **w** https://icors-lacsc-2019.com/

May 29–31: Knoxville, TN, USA. **NIMBioS Investigative Workshop: Transients in Biological Systems**
w http://www.nimbios.org/workshops/WS_transients

IMS May 29–June 1: Washington DC, USA. **Symposium on Data Science and Statistics** [*now IMS co-sponsored*]
w http://ww2.amstat.org/meetings/sdss/2019/

June 2019

June 3–7: Knoxville, TN, USA. NIMBioS: **The Search for Selection**
w http://www.nimbios.org/tutorials/selection2

June 4–7: El Escorial, Spain. **SYSORM 2019**
w https://eventos.ucm.es/go/sysorm19

June 9–15: West Greenwich, RI, USA. **Stochastic Spatial Models**, AMS MRC summer conference **w** http://www.ams.org/programs/research-communities/2019MRC-Stochastic

June 10–14: Toronto, Canada. **Workshop on Theory and Applications of Stochastic Partial Differential Equations**
w http://www.fields.utoronto.ca/activities/18-19/SPDEs

June 11–14: Florence, Italy. **Applied Stochastic Models and Data Analysis International Conference (ASMDA2019)** and **Demographics2019 Workshop**
w http://www.asmda.es/asmda2019.html

June 12–14: Delft, The Netherlands. **DYNSTOCH 2019**
w http://web.math.ku.dk/~michael/dynstoch/

IMS June 15: San Francisco, CA, USA. **ACM–IMS Interdisciplinary Summit on the Foundations of Data Science** **w** https://acct-www.acm.org/data-science-summit

June 16–19: Thessaloniki, Greece. **39th International Symposium on Forecasting** **w** https://isf.forecasters.org/

NEW June 16–21: Ascona, Switzerland. **2019 Ascona Workshop: "Statistical Challenges in Medical Data Science"** **w** https://www.bsse.ethz.ch/cbg/cbg-news/ascona-2019.html

IMS June 17–21: Leiden, The Netherlands. **Statistics Conference in Honor of Aad van der Vaart's 60th Birthday** **w** http://pub.math.leidenuniv.nl/~schmidthieberaj/aadbirthday/index.html

IMS June 18–21: Binghamton, USA. **7th International Workshop on Sequential Methodologies (IWSM)**
w http://sites.google.com/view/iwsm2019

June 18–21: Chania, Greece. **12th Chaotic Modeling & Simulation Conference (CHAOS2019)** **w** http://www.cmsim.org/

June 19–21: Lima, Peru. **VI Congreso Bayesiano de América Latina / Bayesian Congress of Latin America (VI COBAL)** **w** https://sites.google.com/site/cobal2019/

June 19–22: Manizales, Colombia. **3rd International Congress on Actuarial Science and Quantitative Finance** **w** http://icasqf.org/

June 23–26: Portland, OR, USA. **2019 WNAR/IMS meeting** **w** http://www.wnar.org/event-3013994

June 24–27: Uppsala, Sweden. **Perspectives on high-dimensional data analysis (HDDA-IX)** **w** https://indico.uu.se/event/526/overview

June 24–28: Oxford, UK. **12th International Conference on Bayesian Nonparametrics** **w** http://www.stats.ox.ac.uk/bnp12/

June 29–July 2: Warwick, UK. **O'Bayes 2019: Objective Bayes Methodology Conference** **w** https://warwick.ac.uk/fac/sci/statistics/staff/academic-research/robert/0bayesconference/

July 2019

July 1–9: Zagreb, Croatia. **11th International Conference on Extreme Value Analysis** **w** http://web.math.hr/eva2019

July 3–5 [**NOTE CORRECTED DATES**, not July 13–15 as previously listed]: Brisbane, Australia. **20th INFORMS Applied Probability Conference** **w** http://informs-aps.smp.uq.edu.au/

July 6–10: Dalian, China. **2019 IMS-China Conference** **w** http://www.ims-china.org

July 8–12: Evanston, IL, USA. **41st Conference on Stochastic Processes and their Applications (SPA)** **w** http://sites.math.northwestern.edu/SPA2019/

July 8–12: Guimarães, Portugal. **International Workshop on Statistical Modelling (IWSM2019)** **w** http://www.iwsm2019.org/

July 8–19: Lake Como, Italy. **Bocconi Summer School in Advanced Statistics and Probability** **w** http://bocconi2019.lakecomoschool.org

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

July 15–19: Valencia, Spain. **ICIAM 2019** **w** https://iciam2019.org/index.php

July 22–26: Palermo, Italy. **European Meeting of Statisticians 2019** **w** http://www.ems2019.palermo.it

July 23–25: Kuantan, Malaysia. **2nd International Conference on Applied & Industrial Mathematics and Statistics 2019 (ICoAIMS 2019)** **w** http://icoaims.ump.edu.my/index.php/en/

July 27–August 1: Denver, CO, USA. **IMS Annual Meeting at JSM 2019** **w** http://ww2.amstat.org/meetings/jsm/2019/index.cfm

August 2019

August 17–19: St. Louis, USA. **4th Workshop on Higher-Order Asymptotics and Post-Selection Inference (WHOA-PSI)** **w** https://www.math.wustl.edu/~kuffner/WHOA-PSI-4.html

August 18–23: Kuala Lumpur, Malaysia. **ISI2019: 62nd International Statistical Institute World Statistics Congress 2019** **w** http://www.isi2019.org/

September 2019

September 22–26: Hannover, Germany. **29th European Safety and Reliability Conference (ESREL 2019)** **w** https://esrel2019.org/

September 23–25: Washington DC. **ASA Biopharmaceutical Section: Regulatory-Industry Statistics Workshop** **w** https://ww2.amstat.org/meetings/biop/2019/

October 2019

October 3–5: Bellevue, WA, USA. **2019 Women in Statistics and Data Science Conference** **w** https://ww2.amstat.org/meetings/wsds/2019

October 10–12: Grand Rapids, USA. **3rd International Conference on Statistical Distributions and Applications (ICOSDA 2019)** **w** http://people.cst.cmich.edu/lee1c/icosda2019/

November 2019

November 15: Boston, MA, USA. **Statistics and the Life Sciences: Creating a Healthier World** **w** TBD

December 2019

December 2–6: Mérida, México. **XV CLAPEM: Latin American Congress of Probability and Mathematical Statistics** **w** http://clapem2019.eventos.cimat.mx/

January 2020

January 6–8: San Diego, CA, USA. **International Conference on Health Policy Statistics (ICHPS)** **w** http://ww2.amstat.org/meetings/ices/2020/index.cfm

Continues on **page 26**

International Calendar *continued*

February 2020

NEW February 20–22: Sacramento, CA, USA. **Conference on Statistical Practice 2020**
w https://ww2.amstat.org/meetings/csp/2020/

March 2020

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

June 2020

June 15–18: New Orleans, LA, USA. **Sixth International Conference on Establishment Statistics (ICES-VI)**
w http://ww2.amstat.org/meetings/ices/2020/

June 22–26: Sydney, Australia. **International Statistical Ecology Conference (ISEC2020)** **w** http://www.isec2020.org/

June 24–27: Brno, Czech Republic. **Fifth International Workshop on Functional and Operatorial Statistics (IWFOS 2020)** **w** https://iwfos2020.sci.muni.cz/

July 2020

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

NEW July 6–10: Gold Coast, QLD, Australia. **2020 Australian and New Zealand Statistical Conference (ANZSC 2020)** **w** https://anzsc2020.com.au

July 6–10: Seoul, South Korea. **30th International Biometric Conference (IBC2020)** **w** https://www.biometricsociety.org/2018/07/ibc-2020-seoul-preview/

August 2020

August 1–6: Philadelphia, PA, USA. **JSM 2020** **w** http://www.amstat.org/ASA/Meetings/Joint-Statistical-Meetings.aspx

August 17–21: Seoul, Korea. **Bernoulli/IMS World Congress in Probability and Statistics** **w [NEW]** http://www.wc2020.org

March 2021

March 14–17: Baltimore, MD, USA. **ENAR Spring Meeting**
w http://www.enar.org/meetings/future.cfm

August 2021

August 7–12: Seattle, WA, USA. **IMS Annual Meeting at JSM 2021** **w** http://www.amstat.org/ASA/Meetings/Joint-Statistical-Meetings.aspx

March 2022

March 27–30: Houston, TX, USA. **ENAR Spring Meeting**
w http://www.enar.org/meetings/future.cfm

July 2022

July/August: Location TBC. **IMS Annual Meeting** **w** TBC

August 2022

August 6–11: Washington DC, USA. **JSM 2022**
w http://www.amstat.org/ASA/Meetings/Joint-Statistical-Meetings.aspx

August 2023

August 5–10: Toronto, ON, Canada. **IMS Annual Meeting at JSM 2023** **w** http://www.amstat.org/ASA/Meetings/Joint-Statistical-Meetings.aspx

August 2024

August 3–8: Portland, OR, USA. **JSM 2024**
w http://www.amstat.org/ASA/Meetings/Joint-Statistical-Meetings.aspx

August 2025

August 2–7: Nashville, TN, USA. **IMS Annual Meeting at JSM 2025** **w** http://www.amstat.org/ASA/Meetings/Joint-Statistical-Meetings.aspx

Meeting organizers: to get a free listing in this calendar, please submit the details at https://www.imstat.org/ims-meeting-form/ Or you can email the details to Elyse Gustafson at erg@imstat.org We'll list them here in the Bulletin, and on the IMS website too, at imstat.org/meetings-calendar/

Membership and Subscription Information

Journals

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

Individual Memberships

Each individual member receives the *IMS Bulletin* (print and/or electronic) and may elect to receive one or more of the five scientific journals. Members pay annual dues of $105. An additional $101 is added to the dues of members for each scientific journal selected ($63 for *Stat Sci*). **Reduced membership** dues are available to full-time students, new graduates, permanent residents of countries designated by the IMS Council, and retired members.

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Subscriptions are available on a calendar-year basis. **Individual subscriptions** are for the personal use of the subscriber and must be in the name of, paid directly by, and mailed to an individual. Individual subscriptions for 2019 are available to *The Annals of Applied Probability* ($216), *The Annals of Applied Statistics* ($216), *The Annals of Probability* ($216), *The Annals of Statistics* ($216), *Statistical Science* ($178), and *IMS Bulletin* ($115). **General subscriptions** are for libraries, institutions, and any multiple-readership use. Institutional subscriptions for 2019 are available to *The Annals of Applied Probability*, *The Annals of Applied Statistics*, *The Annals of Probability*, and *The Annals of Statistics* (each title $515 online only / $589 print+online), *Statistical Science* ($295/$335), and *IMS Bulletin* ($139 print). Airmail rates for delivery outside North America are $154 per title.

IMS Bulletin

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

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Advertising job vacancies

A single 60-day online job posting costs just $305.00. We will also include the basic information about your job ad (position title, location, company name, job function and a link to the full ad) in the *IMS Bulletin* at no extra charge. See http://jobs.imstat.org

Advertising meetings, workshops and conferences

Meeting announcements here and on the IMS website at https://imstat.org/meetings-calendar/ are free. Submit your announcement at https://www.imstat.org/ims-meeting-form/

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

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Full page (to edge, including ⅛" bleed)	8.75" wide x 11.25" high (222 mm x 286 mm)	$465
Full page (within usual *Bulletin* margins)	7.5" wide x 9.42" high (190 mm x 239 mm)	$465

Deadlines and Mail Dates for *IMS Bulletin*

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

Volume 48 · Issue 3

the next issue is

June/July 2019

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DEADLINES for submissions

May 1, then
July 1

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Articles

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