# IMS Bulletin



#### September 2019

#### **CONTENTS**

- 1 Loève Prize for Allan Sly
- 2 Members' news: Peter Donnelly, Sylvia Richardson, Daniela Witten; JSM plenary session videos
- 3 **IMS Awards:** nominate for Peter Hall Early Career Prize or Tweedie New Researcher **Award**
- 4-5 JSM in photos
  - **6 COPSS Presidents' Award** interview; nominations
  - 8 Treasurer's Report 2018
- 10 IMS Awards
- 10-11 **Obituaries:** Marc Moore, Joseph (Joe) Heyse
  - 12 **Recent papers:** Ann Appl Probab, Ann Appl Probab, ALEA
  - 14 Reports: WNAR/IMS/JR in Portland, SPA in Evanston
  - 15 Apply for IMS Travel Awards
  - 16 Meetings
  - 22 **Employment Opportunities**
  - 24 International Calendar of Meetings
  - 27 Information for Advertisers

### **Read it online:** bulletin.imstat.org

## Allan Sly awarded Loève Prize



Award announced at the Stochastic Processes and their Applications meeting (see the report on page 15)

The 2019 Line and Michel Loève International Prize in Probability is awarded to Allan Sly of Princeton University. The prize, which carries a monetary award of \$30,000, will be presented at a ceremony at the University of California, Berkeley, in early 2020.

Allan Sly received his PhD in 2009 under Elchanan Mossel at U.C. Berkeley, and was a postdoc in the

Theory Group at Microsoft Research before moving to Princeton University, where he is a Professor in the Department of Mathematics. He is best known for the use of deep probabilistic methods to solve long-standing problems at the interface of probability, the theory of algorithms and statistical physics. Three areas in which he has made major advances, and illustrative papers, are:

- The stochastic block model: in papers such as "A proof of the block model threshold conjecture" and "Belief propagation, robust reconstruction and optimal recovery of block models" (both with Elchanan Mossel and Joe Neeman).
- Formalizations of the one-step replica symmetry breaking heuristic: in papers such as "Proof of the satisfiability conjecture for large k" and "Maximum independent sets on random regular graphs" (both with Jian Ding and Nike Sun).
- Sharp analysis of Glauber dynamics: in papers such as "Critical Ising on the square lattice mixes in polynomial time" and "Cutoff for the Ising model on the lattice" (both with Eyal Lubetzky).

#### **About the Loève Prize:**

The Prize commemorates Michel Loève, Professor at the University of California,

Berkeley, from 1948 until his untimely death in 1979. The Prize was established by his widow, Line, shortly before her death in 1992. Awarded every two years, it is intended to recognize outstanding contributions by researchers in probability who are under 45 years old. A list of the 14 recipients since 1993 is at https:// www.stat.berkeley.edu/~aldous/Loeve/ index.html.

Allan Sly gave an IMS Medallion Lecture last year at the annual meeting in Vilnius (pictured here with Christina Goldschmidt, who presented the medallion)



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2 · IMS Bulletin Volume 48 · Issue 6

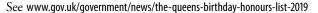
## **IMS Members' News**

#### IMS Fellows recognized in British Honours list

Two IMS Fellows, Peter Donnelly and Sylvia Richardson, have been included in the The Queen's Birthday Honours List.

Peter Donnelly, Chief Executive of Genomics plc, and Professor of Statistical Science at the University of Oxford, received a knighthood (making him Professor Sir Peter Donnelly FRS), for services to the understanding of human genetics in disease.

Professor Sylvia Richardson is Director of the Medical Research Council Biostatistics Unit at the University of Cambridge. She received the Commander of the Order of the British Empire (CBE) award, for her services to medical statistics.







Sylvia Richardson CBF

#### Daniela Witten receives 2019 Mortimer Spiegelman Award

The American Public Health Association (APHA) has named Daniela Witten, professor



Daniela Witten

in statistics and biostatistics at the University of Washington and the Dorothy Gilford Endowed Chair in Mathematical Statistics, the winner of the 2019 Mortimer Spiegelman Award. This award honors a statistician who has made outstanding contributions to statistical methodology and its applications in public health.

Daniela Witten's work focuses on statistical learning from complex high-dimensional data. Her methodological work is motivated by collaborations in a number of fields, including genomics, neuroscience, microbial ecology, and pathology.

Rob Tibshirani, professor of biomedical data science and statistics at Stanford University, who has collaborated with Witten, said, "Daniela is a rare researcher with the creativity to invent new statistical tools, and the scientific sense to know how and when to apply them in a way that can impact public health."

Daniela Witten is invited to present her research at this year's APHA conference, to be held November 2-6 in Philadelphia (https://www.apha.org/events-and-meetings/annual), where she will be presented with the award by last year's recipient.

#### JSM plenary session webcasts

If you weren't at the Joint Statistical Meetings this year, you can still watch four of the plenary sessions. These videos are at https://ww2.amstat.org/meetings/jsm/2019/webcasts/

- ASA President's Address: Reinforcing the Impact of Statistics on Society, Karen Kafadar, University of Virginia
- ASA President's Invited Address: Coming to Our Census: How Social Statistics Underpin Our Democracy (and Republic), Teresa A. Sullivan, University of Virginia (Emerita)
- ASA Deming Lecture: Walking with Giants: A Research Odyssey, Nicholas Fisher, University of Sydney
- COPSS Fisher Lecture: An Observational Study Used to Illustrate Methodology for Such Studies, Paul Rosenbaum, University of Pennsylvania.

You can also download slides from more than 1,500 other JSM2019 presentations via the online program: https://ww2.amstat.org/meetings/jsm/2019/onlineprogram/index.cfm.

## **IMS Awards**

#### Nominations open for 2020 Peter Gavin Hall Early Career Prize

Peter Hall (1951–2016) played a significant role throughout his professional career in mentoring young colleagues at work and through professional society activities. With funds donated by his friends and family, the IMS created the Peter Gavin Hall Early Career Prize. Its purpose is to recognize early-career research accomplishments and research promise in statistics, broadly construed.

An early-career researcher is one who received their doctoral



Peter Hall

degree in one of the eight calendar years preceding the year of nomination, or in the year of nomination—so, for the 2020 prize, that means any of the years 2012–2019.

The nomination deadline is December 1, 2019.

The IMS gives the award committee latitude to consider nominees with extenuating circumstances that may have delayed professional achievements. Nominations may be made by any member of the IMS, and nominees do not need to be IMS members.

The award consists of a plaque, a citation, and a cash honorarium. The inaugural award will be presented at the IMS Presidential Awards ceremony held at the IMS annual meeting, part of the 10th World Congress in Probability and Statistics (WC2020), jointly organized by the Bernoulli Society and IMS, hosted by Seoul National University from August 17–21, 2020.

Electronic submission is required. See the instructions at https://www.imstat.org/ims-awards/peter-gavin-hall-ims-early-career-prize/

## Tweedie New Researcher Award

Richard Tweedie (1947-2001) played a significant role throughout his career as a mentor. The Tweedie New Researcher Award, created in his memory, provides funds for travel to present the Tweedie New Researcher Invited Lecture at the IMS New Researchers Conference. Nominate by December 1, 2019: https://www.imstat. org/ims-awards/

#### **Travel Awardees at JSM**

Eight of this year's IMS travel award recipients were able to come to the Presidential Address and Awards session at JSM (in total there were 10 Hannan Graduate Student awards and 11 New Researcher awards this year, funding travel to a wide range of meetings). They are pictured below with Xiao-Li Meng. More photos from JSM Denver overleaf. Read comments from some travel award recipients on page 15.



IMS Journals and Publications

Annals of Statistics: Ming Yuan, Richard Samworth http://imstat.org/aos

Mhttp://projecteuclid.org/aos

□ = access published papers online

Annals of Applied Statistics: Karen Kafadar http://imstat.org/aoas http://projecteuclid.org/aoas

Annals of Probability: Amir Dembo http://imstat.org/aop @http://projecteuclid.org/aop

Annals of Applied Probability: Francois Delarue, Peter Friz http://imstat.org/aap

Mhttp://projecteuclid.org/aoap

Statistical Science: Cun-Hui Zhang http://imstat.org/sts Mhttp://projecteuclid.org/ss

IMS Collections

Mhttp://projecteuclid.org/imsc

IMS Monographs and IMS Textbooks: Nancy Reid https://www.imstat.org/journals-andpublications/ims-monographs/

IMS Co-sponsored Journals and Publications

Electronic Journal of Statistics: Domenico Marinucci http://imstat.org/ejs Mhttp://projecteuclid.org/ejs

Electronic Journal of Probability: Andreas Kyprianou 
Mhttps://projecteuclid.org/euclid.ejp

Electronic Communications in Probability:
Giambattista Giacomin
Mhttps://projecteuclid.org/euclid.ecp

Journal of Computational and Graphical Statistics:
Tyler McCormick

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

©log into members' area at imstat.org

Statistics Surveys: David Banks http://imstat.org/ss http://projecteuclid.org/ssu

Probability Surveys: Ben Hambly http://imstat.org/ps ぬhttp://www.i-journals.org/ps/

IMS-Supported Journals

ALEA: Latin American Journal of Probability and Statistics: Roberto Imbuzeiro Oliveira Mhttp://alea.impa.br/english

Annales de l'Institut Henri Poincaré (B): Gregory Miermont, Christophe Sabot http://imstat.org/aihp Mhttp://projecteuclid.org/aihp

Bayesian Analysis: Michele Guindani

Mhttps://projecteuclid.org/euclid.ba

Bernoulli: Mark Podolskij, Markus Reiß http://www.bernoulli-society.org/ ぬhttp://projecteuclid.org/bj

Brazilian Journal of Probability and Statistics: Enrico Colosimo http://imstat.org/bjps

mhttp://projecteuclid.org/bjps

IMS-Affiliated Journals

Observational Studies: Dylan Small Mttps://obsstudies.org/

Probability and Mathematical Statistics: K. Bogdan, M. Musiela, J. Rosiński, W. Szczotka, & W.A. Woyczyński

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

Stochastic Systems: Shane Henderson

Mhttps://pubsonline.informs.org/journal/stsy



Some photos from one of the biggest gathering of statisticians in the world, the Joint Statistical Meetings



Medallion Lecturer Liza Levina was introduced by Eric Kolaczyk



This 40-foot blue bear, by Lawrence Argent, looks into the convention center



Rob Tibshirani [left] introduced Wald Lecturer Trevor Hastie



Medallion Lecturer Yee-Whye Teh



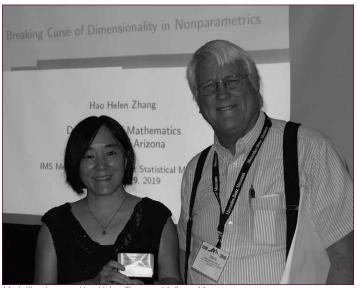
A packed audience waiting for the first Wald lecture



Some of the IMS journal editors and associate editors, at the luncheon IMS provides to say "thank you!"



Yoav Benjamini [left]gave the Rietz lecture, introduced by Tony Cai



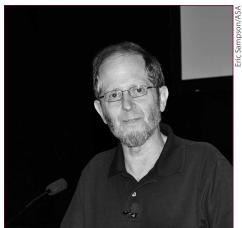
Medallion Lecturer Hao Helen Zhang, with Steve Marron



Marina Vanucci introduced Medallion Lecturer David Dunson



The inaugural COPSS FN David Lecture was given by Susan Ellenberg [center, with COPSS Chair Bhramar Mukherjee and Lynne Billard, who received the FN David award in 2013]



Fisher Lecturer Paul Rosenbaum



GW Snedecor Award winner Sudipto Banerjee



COPSS Presidents' Award winner Hadley Wickham (see interview on the next page)

## COPSS Presidents' Award: Hadley Wickham

#### Hadley Wickham wins the prestigious 2019 COPSS Presidents' Award

Hadley Wickham, Chief Scientist at RStudio, is the recipient of the 2019 COPSS Presidents' Award. This award is presented annually to a young member of one of the participating societies of COPSS in recognition of outstanding contributions to the profession of statistics. The award citation recognized Wickham "for influential work in statistical computing, visualization, graphics, and data analysis; for developing and implementing an impressively comprehensive computational infrastructure for data analysis through R software; for making statistical thinking and computing accessible to large audience; and for enhancing an appreciation for the important role of statistics among data scientists."



Dr. Wickham graciously agreed to be interviewed by Huixia Judy Wang, Secretary/Treasurer of COPSS:

#### Which part of your job do you like the most?

I love the freedom to work on problems that I think are the most important. I love the mix of thinking, programming, and educating that enables me to discover problems, propose solutions, and then get them into the hands of real people. I love working from home, and having the ability to spend focused hours on challenges that need deep attention. I love working with a talented team with diverse skills and backgrounds. Compared to my previous job in academia, I love that I don't have to write grants or attend faculty meetings!

## What advice would you give to young people who are entering the profession as PhD students and Assistant Professors at this time?

Consciously work to improve your programming and marketing skills. In your career, you are likely to receive little (or no!) formal training in these areas but they are force multipliers: writing software allows many others to take advantage of your ideas, and learning how to market yourself and your work ensure that people know that you're making something that can help them. Academics sometimes see marketing as something dirty, but if people don't know that your work exists, it can't help them!

## What one aspect of your research do you wish was more widely known in the scientific community?

The importance of tidying your data: regardless of how you have recorded your data, your analysis will go much more smoothly if you first "tidy" it up, making sure that each column is a variable (and hence each row is an observation). Getting your data into this form up front will save you a bunch of time if you're using the tidyverse, R in general, or pretty much any other data analysis tool.

## Who are your most significant mentors? How did/do they impact your career?

Di Cook (Professor of Business Analytics at Monash University) was my PhD advisor, and I have the rare privilege of knowing that there's nowhere in the world that would have been a better fit for me. As well as giving me the freedom to work on topics that were pretty weird for statistics, Di also taught me pretty much everything I know about the art and science of data analysis. Di has done groundbreaking work in visualization, including tools for interactive graphics and graphical inference. She is a wonderful mentor and many of her students have gone on to be very influential. Di is a role model for me as she has a passion for learning, and has continued to master new skills throughout her career.

Also, JJ Allaire (CEO of RStudio). Soon after I joined RStudio, I decided that I need to really learn C++ so that I could write faster code, and JJ was a skilled and enthusiastic mentor. One of the greatest compliments I've ever received is JJ telling me that I'm a more-than-intermediate C++ programmer! JJ is not just an amazing programmer; he's also a skilled technical writer, and a savvy entrepreneur. JJ has helped me substantially improve my ability to make an impact on the world through software.

## Why were you drawn to statistical computing and software development?

I was drawn to computing at a young age, particularly using computers to help organize data. When I was in high school, I converted my mum's handwritten recipes into a database (which still exists today at http://recipes.had.co.nz) and throughout my career I've fascinated by how to turn raw data into rich, informative displays that lead to better decisions. Trying to help people make better visualizations with less pain and more joy has lead me to push my work further and further towards the raw data.

#### Anything else you'd like to share about our profession?

I have found data science to be a deeply rewarding field. These days I spend most of my time developing tools for others to do data science, but I still love getting my hands dirty with real data. I really enjoy the combination of technical and human skills that are required to be an effective data scientist.

#### Finally, what are your hobbies/interests beyond statistics?

Outside of statistics, I love to bake, barbecue, and make cocktails. I also read a lot of science fiction and fantasy, and practice yoga.

#### A little (more) about Hadley Wickham

Hadley is Chief Scientist at RStudio, a member of the R Foundation, and Adjunct Professor at Stanford University, the University of Auckland, and Rice University. He builds tools (both computational and cognitive) to make data science easier, faster, and more fun. His work includes packages for data science (the tidyverse: including ggplot2, dplyr, tidyr, purrr, and readr) and principled software development (roxygen2, testthat, devtools). He is also a writer, educator, and speaker promoting the use of R for data science. Learn more on his website, http://hadley.nz.

## 2020 COPSS Awards: Nominations open now

#### Nominations are open for three awards, to be presented next year at JSM in Philadelphia.

Please visit https://community.amstat.org/copss/home for details of eligibility and nomination requirements for all these awards. Please send nominations, preferably by email in PDF format, to the committee chairs. The deadline for nominations for all three awards is December 15, 2019.

#### Presidents' Award

The Presidents' Award is presented annually to a young member of one of the participating societies of COPSS in recognition of outstanding contributions to the statistics profession. It is typically granted to an individual who either (i) has not yet reached his or her 41st birthday during the calendar year of the award or (ii) will be under age 46 throughout the award calendar year and will have received a terminal statistically-related degree no more than 12 years prior to that year (see COPSS website for more details on eligibility criteria). Nominations must be sent by December 15, 2019, preferably by email in PDF format, to:

Susan Halabi, Chair of the COPSS Presidents' Award Committee Professor, Department of Biostatistics and Bioinformatics Duke University

Email: susan.halabi@duke.edu Phone: 919-681-5430

Homepage: https://scholars.duke.edu/

display/per8088852

#### R.A. Fisher Award and Lectureship

The Fisher Award and Lectureship, awarded annually, was established in 1963 by COPSS to honor the outstanding contributions of the late Sir Ronald Aylmer Fisher, and those of a current statistician, on aspects of statistics and probability that closely relate to the scientific collection and interpretation of data. The award exists to recognize the importance of statistical methods for scientific investigations. Nominations must be sent by December 15, 2019, preferably by email in PDF format, to:

Sharon-Lise Normand, Chair of the COPSS Fisher Lecture and Award Committee

Professor, Department of Health Care Policy & Department of Biostatistics

Harvard University

Email: sharon@hcp.med.harvard.edu

Phone: 617-432-3260

Homepage: https://hcp.hms.harvard.

edu/people/sharon

#### **Elizabeth Scott Award and Lectureship**

The Elizabeth L. Scott Award and Lectureship are presented biennially (even-numbered years) to an individual, male or female, who has helped foster opportunities in statistics for women. The 2020 award winner will deliver the first E.L. Scott Lecture at the JSM in Philadelphia. Nominations must be sent by **December 15**, 2019, preferably by email in PDF format, to:

#### Elizaveta Levina

Chair, COPSS Scott Lecture and Award Committee

Professor, Department of Statistics University of Michigan Email: elevina@umich.edu Phone: 734-764-3235

Homepage: http://dept.stat.lsa.umich.

edu/~elevina/

## **Treasurer's Report** 2018

#### Introduction

This report details membership and subscription data for the calendar year end 2018. The 2018 fiscal year-end audit report will be published separately in the Fall of 2019 after the auditors have completed the annual process.

In 2018, the total number of IMS members decreased. Subscriptions by institutions also decreased this past year. The financial status of the Institute continues to be stable and strong, and actions are in place to ensure its long-term stability.

Details of the events of the past year, membership and subscription data, sales data are given below..

#### **Publications**

The following is a list of all current IMS core, co-sponsored, supported and affiliated journals:

#### IMS Core Print/Electronic Publications

Annals of Applied Probability; Annals of Probability; Annals of Applied Statistics; Annals of Statistics; Statistical Science; IMS Monographs; IMS Textbooks; IMS Bulletin Co-sponsored Print/Electronic Publications

Electronic Communications in Probability; Electronic Journal of Probability; Electronic Journal of Statistics; Journal of Computational and Graphical Statistics; NSF—CBMS Series in Probability and Statistics; Probability Surveys; Statistics Surveys

#### **Supported Publications**

ALEA: Latin American Journal of Probability and Mathematical Statistics; Annales de l'Institut Henri Poincaré (B); Bayesian Analysis; Bernoulli; Bernoulli News; Brazilian Journal of Probability and Statistics

#### **Affiliated Publications**

Observational Studies; Probability and Mathematical Statistics; Stochastic Systems

#### **Membership Data**

Total individual paid membership in the

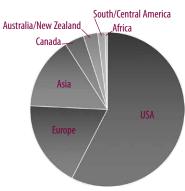
Institute as of December 31, 2018 decreased 11% from December 31, 2017. Table 1 presents the membership data back to 2014. The IMS had a peak in paid membership of 3,156 in 2008, and has been decreasing since then. This trend is similar to that of other professional societies. Nevertheless, this is clearly an area of concern, and the IMS Executive Committee continues to look for ways to address this issue.

TABLE 1: Membership, by Calendar Year

	2014	2015	2016	2017	2018	% change
Regular	1,616	1,587	1,565	1,447	1,369	-5.4%
Life/Retired Life	516	528	541	563	613	8.9%
Reduced Country/Retired/IMS China	364	376	337	370	331	-10.5%
New Graduate	87	58	113	213	76	-64.3%
Student	1,187	1,236	1,094	1,022	828	-19.0%
Total	3,770	3,785	3,650	3,615	3,217	-11.0%
Total excluding free members (students)	2,583	2,549	2,556	2,593	2,389	-7.9%

#### Geographic Distribution of Members.

The IMS membership is currently distributed as follows (see pie chart, right): 57% United States; 18% Europe; 15% Asia; 4% Canada; 3% Australia and New Zealand; <2% South America, Mexico and the Caribbean; <1% Africa.



#### **Subscription Data**

#### Selection of Journals by Members:

Print subscriptions by members continued to decrease in 2018, as expected, because members are opting to reduce their use of print while enjoying free electronic access to all journals. Members are charged actual cost for print copies of journals, so there is no net loss or gain to the bottom line from changes in print subscriptions by members. Table 2 (below) shows the current selection of print journals by members.

TABLE 2: Member subscriptions, by calendar year

PRINT (paid)	2014	2015	2016	2017	2018	% change
Annals of Applied Probability	100	80	68	61	54	-11.5%
Annals of Probability	108	97	75	68	57	-16.2%
Annals of Applied Statistics	171	141	107	91	87	-4.4%
Annals of Statistics	284	262	220	208	191	-8.2%
Statistical Science	534	464	386	382	387	1.3%
Total	1,197	1,044	856	810	776	-4.2%
ELECTRONIC (free)	2014	2015	2016	2017	2018	% change
Members setting up electronic access to IMS journals	1,234	1,226	1,183	1,144	1,175	2.7%

#### Joint Memberships

The IMS offers joint membership opportunities with: the Association for Computing

#### Continued from page 8

Machinery (ACM), Applied Probability Society/INFORMS (APS/INFORMS), Bernoulli Society (BS), Indian Society for Probability and Statistics (ISPS), International Chinese Statistical Association (ICSA), International Society for Bayesian Analysis (ISBA), International Statistical Institute + Bernoulli Society (ISI/BS), and New England Statistical Society (NESS).

#### Institutional Subscription Data

Table 3 (right) presents comparative subscription data for institutions to each of our scientific journals for 2018 and previous years. Almost all journals experienced subscription decreases in 2018. Overall, institutional subscriptions decreased by 2.5%. The decrease to IMS journals, specifically, was 2.4%. We are continuing to see usage of our bundled offerings which are discounted on the whole.

Approximately 60% of the institutional subscribers to IMS journals are in USA and Canada, with the remaining subscribers distributed throughout the world.

#### **Book Sales Data**

Table 4 (right) presents sales data for IMS book series. In 2010, the IMS published its first volumes in a cooperative arrangement with Cambridge University Press to publish two series, *IMS Monographs* and *IMS Textbooks*. Sales of these volumes are going very well.

#### **Financial and Audit Report**

The fiscal year ended December 31, 2018. The external audit of the IMS will be completed shortly; the full auditor's report will then be posted online at https://www.imstat.org/council-reports-and-minutes/.

**Zhengjun Zhang**, IMS Treasurer [left], with the other members of the 2019–20 IMS Executive Committee [I-r]: Program Secretary **Ming Yuan**, President **Susan Murphy**, Past-President **Xiao-Li Meng**, Executive Secre tary **Edsel Peña**, and President-Elect **Regina Liu** (who appears in this photo thanks to the wonders of modern software!)

TABLE 3: Institutional paid subscriptions, by calendar year

PRINT	2014	2015	2016	2017	2018	% change
Annals of Applied Probability	600	591	580	558	237	-3.8%
Annals of Probability	795	779	769	735	706	-3.9%
Annals of Applied Statistics	346	368	349	341	341	0.0%
Annals of Statistics	985	948	962	929	906	-2.5%
Statistical Science	753	717	708	671	666	-0.7%
IMS Bulletin	102	96	90	75	71	-5.3%
Current Index to Statistics (ceased 2016)	216	199	182	N/A	N/A	N/A
Annals Inst Henri Poincaré (B) s	297	305	304	300	289	-3.7%
Bernoulli <sup>s</sup>	292	299	298	303	298	-1.7%
Brazilian J Probab Stat <sup>s</sup>	124	135	135	134	132	-1.5%
Total	4,510	4,437	4,377	4,046	3,946	-2.5%
Total IMS journals	3,479	3,403	3,368	3,234	3,156	-2.4%

denotes IMS-supported journals.

TABLE 4: Total sales of IMS Monographs and IMS Textbooks

Book series	2014	2015	2016	2017	2018	TOTAL
IMS Monographs (5 vols to end of 2018)	1046	543	4,115	4,214	2,414	14,971
IMS Textbooks (11 vols to end of 2018)	1093	1254	777	630	1,018	6,864
Total sales	2,139	1,797	4,892	4,844	3,432	21,835

#### **Conclusion**

The IMS Executive Committee has reviewed all data in this report. A long-term financial plan is already in place and the IMS continues to be strong and stable financially.

The decreases in institutional subscriptions and memberships are being felt across

the market and are not unexpected. The IMS leadership began planning for these decreases over 14 years ago and has ensured that IMS resources are shored up to protect the long-term stability and growth of the society.

Zhengjun Zhang, IMS Treasurer



## **Nominate for IMS Awards**

It's time to think about nominating your outstanding colleagues and collaborators for these IMS awards: **Hall and Tweedie awards** (see page 3), Carver Medal and IMS Fellowship.

Nominations are invited for the **Carver Medal**, created by the IMS in honor of Harry C. Carver, for exceptional service specifically to the IMS.



All nominations must be received by February 1, 2020. Please visit https://www.imstat.org/ims-awards/harry-c-carver-medal/.

A candidate for **IMS Fellowship** shall have demonstrated distinction in research in statistics or probability, by publication of independent work of merit. This qualification may be partly or wholly waived in the case of either a candidate of well-established leadership whose contributions to the field of statistics or probability other than original research shall be judged of equal value; or a

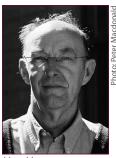
candidate of well-established leadership in the application of statistics or probability, whose work has contributed greatly to the utility of and the appreciation of these areas. Candidates for fellowship should be members of IMS when nominated—email Elyse Gustafson erg@imstat. org to check this before you start). [See Philip Protter's article in the Oct/Nov 2018 issue for some words of advice]. The nomination deadline is January 31, 2020. For nomination requirements, see https://www.imstat.org/honored-ims-fellows/nominations-for-ims-fellow/.



The IMS Fellows who were presented at JSM

## **OBITUARY: Marc Moore (1942–2019)**

Canadian statistician Marc Moore passed away on July 26, 2019, following a long illness. He was 77. A graduate of Université de Montréal, Canada, he was a professor at École Polytechnique de Montréal from 1971 to his retirement at the end of 2002. He was Chair of the Applied Mathematics Department there for six years, in addition to teaching probability and statistics to several generations of engineers. His research interests included spatial statistics, pattern reconstruction, and iceberg trajectory modeling. He authored close to 30 research papers and a probability textbook (in French); he also edited two collective works, including one in the *IMS Lecture Notes–Monograph Series*. He was Editor-in-Chief of *The Canadian Journal of Statistics* (1989–91) and President of the Statistical Society of Canada (SSC) in 1995–96. He was a member of the IMS, an elected member of the International Statistical Institute since 1987, and an honorary member of the SSC since 2003.



Marc Moore

After retirement, he had a second career as a very talented cabinetmaker. He is survived by his wife Monique, his sons François and Benoît, and four grandchildren.

## **OBITUARY: Joseph F. Heyse**

#### 1952-2019

JOSEPH F. HEYSE, a respected and influential leader in biopharmaceutical statistics, passed away May 31, 2019. He was 67.

Joe Heyse joined Merck & Co., Inc., in 1976 as a statistician supporting preclinical research and immediately began to develop statistical methods that subsequently became industry standards. In 1987, Joe began supporting clinical pharmaceutical research, providing technical oversight for health economics studies to support the marketing of Merck products. In 1990, he was named the director of a newly established department of health economic statistics. Three years later, Joe assumed responsibility for the clinical biostatistics group at Merck's Pennsylvania site—including vaccine biostatistics, which was undergoing unprecedented growth. His impact on human health in this role is best summarized by Senior Vice President of Medical Affairs Eliav Barr, who said, "Joe led the group in an era of extraordinary challenges and productivity at Merck. At that time, Merck developed vaccines against rotavirus, a leading cause of infant morbidity and mortality; human papilloma virus, which causes most cases of cervical, genital, and head/neck cancer; and varicella zoster virus, which causes chickenpox in children and often debilitating herpes zoster in adults. Each of these programs required novel, large, complicated studies to address key efficacy and safety questions. Joe's innovative spirit, keen understanding of clinical research and the underlying disease, deep fount of statistics knowledge, and can-do attitude was instrumental in the success of these studies and the subsequent availability of these vaccines. In short, his work was instrumental to the availability of vaccines that have saved hundreds of thousands of lives and prevented untold misery."

In 2009, Joe transitioned to the head of the early development statistics group at Merck, and most recently, he was in his fifth year as a scientific associate vice president and head of the biostatistics methodology research group, which provides statistical support to research design, analysis, and reporting relating to product development through the application of existing and innovative statistical methods.

Throughout his career, Joe published books and peer-reviewed journal papers extensively. One of his early mentors, John Tukey, noted that Joe was among the most creative statisticians he ever met.

Joe earned his MS in statistics from Villanova University in 1975 and an MBA in economics from Temple University in 1979. He was selected to participate in the Merck Research Laboratories Doctoral Program in 1984 and earned his PhD in statistics from Temple University the following year. He was a Fellow of ASA and the American Association for the Advancement of Science. Joe was the founding editor of Statistics in Biopharmaceutical Research and editor of Statistical Methods in Medical Research. Joe also served on doctoral dissertation advisory committees at Temple University and the University of Maryland Baltimore County (UMBC). "I still remember his encouraging words and strong support to junior researchers," wrote Yvonne Huang, a professor of statistics at UMBC. She described him as "an inspiring leader to work with and a role model for us to follow."

In his 42 years at Merck, Joe had an extraordinary impact on human health. "Joe not only directly contributed to the successful development of dozens of pharmaceutical products, but he personally and proudly developed, mentored, coached, and



Joe Hevse

collaborated with hundreds of statisticians who have, in turn, become successful drug and vaccine developers and leaders in their profession," said Lisa Lupinacci, associate vice president of late development statistics at Merck.

Amy Gillespie, Merck's associate vice president for statistical programming, said, "Joe was indeed the catalyst for my career at Merck, [and] his encouragement and council for so many years have directly contributed to my professional and personal achievements. I will certainly miss Joe's generosity, coaching, inspirational stories, candor, integrity, wisdom, and humor."

Keaven Anderson, a distinguished scientist at Merck, recalled his interactions with Joe by noting, "His thinking always drew us into a future vision that we could not imagine on our own! I have so much to thank him for."

Joe will be remembered as a humble and kind person, who was quicker to give credit than accept it and was most willing to share his time and talents to help mentor others along the way.

Joe will be dearly missed by his wife, Lil; their daughters, Angelina and Gabby; and his many friends and colleagues at Merck and in the biopharmaceutical statistics community around the world.

Raymond Bain, Merck & Co., Inc. [Edited from a version in Amstat News]

## **Recent papers**

## Annals of Probability

The *Annals of Probability* publishes research papers in modern probability theory, its relations to other areas of mathematics, and its applications in the physical and biological sciences. Emphasis is on importance, interest, and originality—formal novelty and correctness are not sufficient for publication. The Annals also publishes authoritative review papers and surveys of areas in vigorous development. Access papers at **https://projecteuclid.org/aop** 

#### Volume 47, No 4, July 2019

Genealogical constructions of population models	
Intermittency for the stochastic heat equation with Lévy noise	CARSTEN CHONG AND PÉTER KEVEI; 1911–1948
Uniqueness of Gibbs measures for continuous hardcore models	DAVID GAMARNIK AND KAVITA RAMANAN; 1949—1981
Couplings and quantitative contraction rates for Langevin dynamics	ANDREAS EBERLE, ARNAUD GUILLIN, AND RAPHAEL ZIMMER; 1982–2010
Poly-logarithmic localization for random walks among random obstacles	JIAN DING AND CHANGJI XU; 2011—2048
The scaling limit of critical Ising interfaces is ${\rm CLE_3},\ldots$	STÉPHANE BENOIST AND CLÉMENT HONGLER; 2049–2086
A Sobolev space theory for stochastic partial differential equations with time-fractional derivatives $\ldots$	ILDOO KIM, KYEONG-HUN KIM, AND SUNGBIN LIM; 2087—2139
A general method for lower bounds on fluctuations of random variables	SOURAV CHATTERJEE; 2140–2171
Stein kernels and moment maps	MAX FATHI; 2172–2185
Large deviations and wandering exponent for random walk in a dynamic beta environment $\ldots\ldots$	MÁRTON BALÁZS, FIRAS RASSOUL-AGHA, AND TIMO SEPPÄLÄINEN; 2186—2229
Thouless—Anderson—Palmer equations for generic <i>p</i> -spin glasses	
The structure of extreme level sets in branching Brownian motion	
Metric gluing of Brownian and $\sqrt{8/3}$ - Liouville quantum gravity surfaces	
The circular law for sparse non–Hermitian matrices	ANIRBAN BASAK AND MARK RUDELSON; 2359–2416
Strong convergence of eigenangles and eigenvectors for the circular unitary ensemble	KENNETH MAPLES, JOSEPH NAJNUDEL, AND ASHKAN NIKEGHBALI; 2417—2458
On macroscopic holes in some supercritical strongly dependent percolation models	
Invariant measure for random walks on ergodic environments on a strip	
Extremal theory for long range dependent infinitely divisible processes	
Density of the set of probability measures with the martingale representation property	DMITRY KRAMKOV AND SERGIO PULIDO; 2563—2581
On the dimension of Bernoulli convolutions	

## Annals of Applied Probability

The *Annals of Applied Probability* aims to publish research of the highest quality reflecting the varied facets of contemporary Applied Probability. Primary emphasis is placed on importance and originality. Access papers at <a href="http://projecteuclid.org/euclid.aoap">http://projecteuclid.org/euclid.aoap</a>

#### Volume 29, No 4, August 2019

When multiplicative noise stymies control	JIAN DING, YUVAL PERES, GIREEJA RANADE, AND ALEX ZHAI; 1963—1992
Large deviations for fast transport stochastic RDEs with applications to the exit problem $\dots$	
Stochastic approximation with random step sizes and urn models with random replacement r	natrices having finite mean UJAN GANGOPADHYAY AND KRISHANU MAULIK; 2033—2066
Critical point for infinite cycles in a random loop model on trees	
Parking on transitive unimodular graphs	L DAMRON, JANKO GRAVNER, MATTHEW JUNGE, HANBAEK LYU, AND DAVID SIVAKOFF; 2089—2113
The hydrodynamic limit of a randomized load balancing network	
A probabilistic approach to Dirac concentration in nonlocal models of adaptation with several	resources
A version of Aldous' spectral-gap conjecture for the zero range process.	JONATHAN HERMON AND JUSTIN SALEZ; 2217—2229
	LUKASZ SZPRUCH, SHUREN TAN, AND ALVIN TSE; 2230—2265
Ergodicity of the zigzag process.	JORIS BIERKENS, GARETH O. ROBERTS, AND PIERRE-ANDRÉ ZITT; 2266—2301
On Skorokhod embeddings and Poisson equations	LEIF DÖRING, LUKAS GONON, DAVID J. PRÖMEL, AND OLEG REICHMANN; 2302—2337
A McKean—Vlasov equation with positive feedback and blow-ups	BEN HAMBLY, SEAN LEDGER, AND ANDREAS SØJMARK; 2338–2373

#### Annals of Applied Probability continued from page 12

Approximation of stochastic processes by nonexpansive flows and coming down from infinity	VINCENT BANSAYE; 2374—2438
$Mixing\ time\ estimation\ in\ reversible\ Markov\ chains\ from\ a\ single\ sample\ path\ .\ DANIEL\ HSU,\ ARYEH\ KONTOROVICH,\ DAVID\ LEVIN,\ ARYEH\ ARYEH\ KONTOROVICH,\ DAVID\ LEVIN,\ ARYEH\ LEVIN,\ ARYEH$	YUVAL PERES, CSABA SZEPESVÁRI & GEOFFREY WOLFER; 2439-80
Reduced-form framework under model uncertainty	FRANCESCA BIAGINI AND YINGLIN ZHANG; 2481—2522
A general continuous-state nonlinear branching process	PEI-SEN LI, XU YANG, AND XIAOWEN ZHOU; 2523—2555
Equilibrium interfaces of biased voter models	RONGFENG SUN, JAN M. SWART, AND JINJIONG YU; 2556—2593
Propagation of chaos for topological interactions	P. DEGOND AND M. PULVIRENTI; 2594—2612

## ALEA: an IMS-affiliated journal

ALEA, the Latin-American Journal of Probability and Mathematical Statistics, publishes research articles in probability theory, stochastic processes, mathematical statistics, and their applications. ALEA is an electronic open-access journal of the Latin-American probability and statistical community. Access papers at http://alea.impa.br/english/

#### Vol 16, number 1, 2019

A probabilistic approach to block sizes in failabili maps	
On the semimartingale property of Brownian bridges on complete manifolds	BATU GÜNEYSU; 15-31
Subdiffusivity of Brownian Motion among a Poissonian Field of Moving Traps.	MEHMET ÖZ; 33-47
The survival probability of the high-dimensional contact process with random vertex weights on the oriented lattice	XIAOFENG XUE; 49-83
Weak convergence on Wiener space: targeting the first two chaoses	
Limit theorems for random simplices in high dimensions	JULIAN GROTE, ZAKHAR KABLUCHKO & CHRISTOPH THÄLE; 141-177
Martingales and some generalizations arising from the supersymmetric hyperbolic sigma model	MARGHERITA DISERTORI, FRANZ MERKL & SILKE W. W. ROLLES; 179-209
A Gibbsian model for message routeing in highly dense multihop networks	WOLFGANG KÖNIG & ANDRÁS TÓBIÁS; 211-258
New Bernstein and Hoeffding type inequalities for regenerative Markov chains	
Connectivity properties of Branching Interlacements	EVIATAR B. PROCACCIA & YUAN ZHANG; 279-314
A result on power moments of Lévy-type perpetuities and its application to the Lp-convergence of Biggins' martings	ales in branching Lévy processes A IKSANOV & B MALLEIN; 315–331
Simply Generated Unrooted Plane Trees	LEON RAMZEWS & BENEDIKT STUFLER; 333-359
Boundary driven Brownian gas	LORENZO BERTINI & GUSTAVO POSTA; 361-388
A simple proof of a Kramers' type law for self-stabilizing diffusions in double-wells landscape	JULIAN TUGAUT; 389-398
Local interactions promote cooperation in cooperator-defector systems	NICOLAS LANCHIER; 399-427
Poisson percolation on the square lattice	IRINA CRISTALI, MATTHEW JUNGE & RICK DURRETT; 429-437
Long-memory Gaussian processes governed by generalized Fokker-Planck equations	LUISA BEGHIN; 439-461
Connection probabilities in Poisson random graphs with uniformly bounded edges	
An optimal Berry—Esseen type theorem for integrals of smooth functions	LUTZ MATTNER & IRINA SHEVTSOVA; 487-530
Viscosity solutions to Hamilton—Jacobi—Bellman equations associated with sublinear Lévy(–type) processes	FRANZISKA KÜHN; 531-559
Inference for conditioned Galton–Watson trees from their Harris path	ROMAIN AZAÏS, ALEXANDRE GENADOT & BENOIT HENRY; 561-604
Quadratic fluctuations of the symmetric simple exclusion	
Berry-Esséen bounds for parameter estimation of general Gaussian processes	SOUKAINA DOUISSI, KHALIFA ES-SEBAIY & FREDERI G. VIENS; 633-664
The first exit problem of reaction-diffusion equations for small multiplicative Lévy noise	
How sharp are classical approximations for statistical applications?	
Functional convergence for moving averages with heavy tails and random coefficients	DANIJEL KRIZMANIĆ; 729-757
Trajectories in random minimal transposition factorizations	VALENTIN FÉRAY & IGOR KORTCHEMSKI; 759-785
A construction of the Stable Web	AS MOUNTFORD, KRISHNAMURTHI RAVISHANKAR & GLAUCO VALLE; 787-807
Order of fluctuations of the free energy in the SK model at critical temperature	
Local limit theorems and mod-φ convergence	MARTINA DAL BORGO, PIERRE-LOÏC MÉLIOT & ASHKAN NIKEGHBALI; 817-853
Cone exponents of Brownian motions with particular drifts	IZUMI OKADA; 855-870
Poisson statistics at the edge of Gaussian $\beta\text{-ensemble}$ at high temperature	

## **Meeting report:** WNAR/IMS/JR

Megan Othus reports: The 2019 Annual Meeting of the WNAR/IMS was hosted by Oregon Health Science University from June 23–26, with over 280 participants. In addition to WNAR's yearly partnership with IMS, this year we also partnered with the Japanese Region (JR) of IBS to promote international collaborations. There were 29 invited sessions (24 WNAR, three IMS and two JR), two invited panels, eight student paper sessions, and five contributed sessions. We also had 20 posters during our poster session. Professor Bin Yu (University of California, Berkeley) gave the Presidential Invited Address: "Three Principles of Data

Science: Predictability, Computability, and Stability."

Three short courses were offered: "Teaching Statistics and Data Science with R/RStudio" by Nicholas Horton (Amherst College) and Kelly McConville (Reed College), "Mediation Analysis and Software with Applications to Explore Health Disparities" by Qingzhao Yu and Bin Li (Louisiana State University Health Sciences Center), and "A Gradual introduction to Shiny" by Ted Laderas and Jessica Minnier (Oregon Health and Science University).

WNAR thanks Program Chair Meike Niederhausen and Local Organizer Byung Park Kong (both from Oregon Health & Science University) for their efforts.

#### 2019 WNAR/IMS Student Paper Competition

Thirty-eight students participated in the student paper competition at the 2019 WNAR/IMS/JR conference. The winner in the written category was Tiffany Tang, University of California, Berkeley ("Integrated Principal Components Analysis"). There were three



Participants enjoying the presidential reception and poster presentations

winners (tied) in the oral category: Natalie Gasca, University of Washington ("Using dimension-reduction methods to identify interpretable diet patterns related to body mass index (BMI) in the Multi-Ethnic Study of Atherosclerosis (MESA)"), Evan Rosenman, Stanford University ("Propensity Score Methods for Merging Observational and Experimental Datasets"), and Justin Williams, University of California, Los Angeles ("Maximum Likelihood Estimation of a Truncated Normal Distribution with Censored Data"). The students received their award at the conference banquet [pictured below].

We give a special thanks to the chair of the student paper competition, Jessica Minnier from Oregon Health Sciences University and the other Student Competition judges: Harold Bae (Oregon State University), Lisa Brown (Seattle Genetics), Charlotte Gard (New Mexico State University), Chad He (Fred Hutchinson Cancer Research Center), Ying Lu (Stanford University), Camille Moore (National Jewish Hospital), John Rice (University of Colorado Anschultz Medical Campus [CU Anschutz]), Laura Saba (CU



Anschutz), Krithika Suresh (CU Anschutz), Fan Yang (CU Anschutz), and Wen Zhou (Colorado State University).

Left: WNAR Student Paper Competition participants and the Student Award reviewers and judges, at the conference banquet

## Meeting report: SPA 2019 in Evanston

Antonio (Tuca) Auffinger and Greg Lawler report: Northwestern University hosted the 41st Stochastic Processes and their Applications conference July 8 –12, 2019 with 277 registered participants coming from 34 different countries. The most represented were the USA, Canada, Germany, Mexico, and the UK. The conference program consisted of 13 plenary talks, 48 invited talks, and 86 contributed talks. All talks and coffee breaks took place in the same building on campus with beautiful views of Lake Michigan.

Four food trucks were one of the highlights of a fantastic outdoor Monday reception during which Chris Burdzy announced that Allan Sly was the recipient of the 2019 Loève prize [see cover story]. Allan was present to be congratulated as he was one of the 13 plenary speakers.

The Doob lecture was delivered by Jeremy Quastel while the Schramm lecture was given by Stanislav Smirnov. Massimilano Gubinelli, Jason Miller and Zhen-Qing Chen gave the Lévy, Doeblin, and Itô lectures respectively. The two IMS Medallion lecturers were Étienne Pardoux and Krzysztof Burdzy. The remaining plenary speakers were Béatrice de Tilière, James R. Lee, Dmitry Panchenko, Yinxia Ren, and Caroline Uhler.

Long lunch breaks provided opportunities for graduate students, junior and senior researchers to interact. There was also time for social events. On Wednesday afternoon, participants had the chance to explore both Evanston and Chicago. On Thursday evening, there was an unforgettable dinner at Tapas Barcelona with live music performances and sing-along led by Greg Lawler and Tom Alberts.

The weather was perfect the whole week but foremost it was five days of amazing and inspiring talks. You can see for yourself: for the first time in the history of SPAs the plenary talks were recorded and are available to the watch on the conference webpage (they're also on YouTube) at https://sites.math.northwestern.edu/SPA2019/SPA2019.html

## IMS Travel Awards: Why you should apply!

The IMS funds travel awards for early-career researchers, and some of this year's recipients have written about their experiences. Read about the **Hannan Graduate**Student Travel Award and IMS New

Researcher Travel Award at https://www.imstat.org/ims-awards/.

Ting Ye, University of Wisconsin—Madison, attended ENAR 2019 using a Hannan Travel Award. Ting said, "I presented my work and enjoyed many great talks. It was a wonderful and eye-opening experience. I would definitely encourage others to apply for future awards."

New Researcher Justin Strait, University of Georgia, said, "I went to O'Bayes 2019, which took place at the University of Warwick in the UK. The talks were incredibly varied and of high-quality, and left me with some interesting ideas to think about trying out within my own research. I would certainly encourage other new faculty to apply for the IMS Travel Award!"

Quan Zhou, Rice University, traveled to

the WNAR/IMS/JR meeting [see report on previous page]. Quan said, "I feel so honored to be a recipient of the New Researcher Travel Award. I used the award to present one of my recent works, "Sequential Re-randomization," at the meeting. The support from IMS means a great deal to my career and I strongly encourage other junior researchers to apply in the future."

Bo Ning, Yale University, said, "Thanks to my IMS New Researcher Award, I was able to afford my trip to attend Aad van der Vaart's 60th Birthday statistical conference in The Netherlands. It was an unforgettable experience. I learned about the frontiers of modern statistical research from talks given by famous statisticians. I met professors in person whom I had admired for a long time. I also attended a special event, where Aad van der Vaart received the royal award, Knight in the Order of the Lion of The Netherlands."

Mikołaj Kasprzak, University of Luxembourg, used his New Researcher Travel Award to participate in the Stochastic Processes and Their Applications conference in Evanston [see report above]. "Apart from presenting my own work, I had an opportunity to listen to some extremely interesting and inspiring lectures delivered by top probabilists from all around the world," he said. "I would encourage everyone to apply for future awards offered by the IMS and participate in the events organized or co-organized by the Institute."

Yuanyuan Zhang, University of Manchester, said, "I was very privileged to receive the IMS New Researcher Travel Award, which provided me with the opportunity to present at the 2019 IMS China Meeting. Participating in the conference provided me with a great chance to network with top leading experts in my research area. In addition, it enhanced and widened my ability and knowledge in the area that I am passionate about. I would definitely encourage other researchers to apply for other IMS Travel awards."

## IMS meetings around the world

Joint Statistical Meetings: 2019–2023

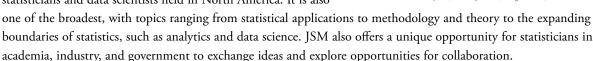
IMS sponsored meeting

**JSM 2020** 

August 1-6, 2020. Philadelphia, PA, USA.

w http://ww2.amstat.org/meetings/jsm/2020/

JSM (the Joint Statistical Meetings) is the largest gathering of statisticians and data scientists held in North America. It is also



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#### IMS sponsored meetings: JSM dates for 2020–2024

IMS Annual Meeting @ JSM 2021 August 7–12, 2021, Seattle, WA 2022 Joint Statistical Meetings
August 6–11 2022

August 6–11, 2022 Washington DC IMS Annual Meeting @ JSM 2023 August 5–10, 2023 JSM 2024

August 3-8, 2024

Portland, Oregon

Toronto, ON, Canada

IMS Annual Meeting @ JSM 2025 August 2—7, 2025

Nashville, TN, USA

#### IMS sponsored meeting

## Bernoulli/IMS 10th World Congress in Probability and Statistics [see poster on following pages] 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 village-like districts. See poster on next pages.

#### IMS co-sponsored meeting

## INDSTATS2019: "Innovations iN Data and Statistical Sciences" December 26–30, 2019. Mumbai, India

w http://www.intindstat.org/IISA2019

The aim of INDSTATS2019 is to engage leading experts and junior members in all topics related to statistics and data sciences. The four and half days of vibrant conference activities will consist of pre-conference short courses (on Dec 26th), plenary talks by eminent speakers, invited sessions, contributed sessions, panel discussions and student paper competitions. Past IISA annual conferences in India and the US have attracted over 300 participants, across academia, industry, government, regulatory agencies and non-profit organizations. Specific topics include probability and statistics, survival analysis, personalized medicine, big data and machine learning methodology, econometrics, Bayesian statistics, clinical trial data and innovations, high-dimensional data analysis, etc.

#### At a glance:

forthcoming IMS Annual Meeting and JSM dates

#### 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:**

London, UK, NEW dates TBC

JSM: Washington, August 6–11, 2022

#### 2023

#### **IMS Annual Meeting**

@ JSM: Toronto, August 5–10, 2023

#### 2024

## IMS Annual Meeting: TBC

JSM: Portland, OR, August 3–8, 2022



#### IMS sponsored meeting

#### ENAR dates, 2020–2022 March 22–25, 2020: in Nashville, TN

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 sponsored meetings

ENAR/IMS 2021 ENAR/IMS 2022
March 14–17, 2021 March 27–30, 2022
Baltimore, MD Houston, TX

#### IMS co-sponsored meeting

# Third International Conference on Mathematics and Statistics February 6–9, 2020 American University of Shariah III

#### American University of Sharjah, UAE

w https://www.aus.edu/conferences/ the-third-international-conference-onmathematics-and-statistics The conference offers a forum for researchers and scientists working in pure mathematics, applied mathematics, mathematical education and statistics to come together, discuss new research developments and network with one another. AUS-ICMS was initiated by the Department of Mathematics and Statistics at the American University of Sharjah (AUS), a high caliber young university in the Arabian Gulf region. AUS-ICMS incarnates the spirit of research fostered by AUS. Previously held in 2010 and 2015, over 250 researchers from many different countries participated in the conferences. High quality theoretical and applied work was presented at the conference through keynote lectures, special and

contributed sessions.

#### IMS co-sponsored meeting

## Statistics and the Life Sciences: Creating a Healthier World November 15, 2019

#### **Boston University School of Public Health**

**w** https://www.bu.edu/sph/news-events/signature-programs/deans-symposia/statistics-and-the-life-sciences-creating-a-healthier-world/

We are globally connected like never before, in nearly all aspects of our lives. While this fact has numerous implications, from the perspective of public health it leaves us uniquely poised to potentially overcome major challenges that have to date been out of reach. These include aging traits such as cognitive decline and Alzheimer's disease, pulmonary disease such as COPD and asthma, and cardiovascular diseases. Significant progress on any and all of these problems will be data intensive, with statistics a key element at the core. The goal of this workshop is to stage the statistical challenges and progress towards solutions in a handful of emerging and mission-critical areas of the health sciences with global impact. Specifically, focus will be on the following three areas: digital health, machine learning in causal inference, and networks for public health. Ultimately, the idea is to bring together a gathering of representatives from statistics and related domain areas, in an agile and interactive format, and use a web-based dissemination platform to bring broad visibility to these topics.

Please register now, via the website above.

#### IMS co-sponsored meeting

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

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

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.

#### IMS co-sponsored meeting



#### Bayes Comp 2020 January 7–11, 2020 University of Florida, Gainesville, FL

w http://users.stat.ufl.edu/~jhobert/
BayesComp2020/Conf\_Website/
Bayes Comp is a biennial conference
sponsored by the ISBA section of the same
name. The conference and the section
both aim to promote original research
into computational methods for inference
and decision making and to encourage
the use of frontier computational tools
among practitioners, the development of
adapted software, languages, platforms, and
dedicated machines, and to translate and
disseminate methods developed in other
disciplines among statisticians.

Bayes Comp is the current incarnation of the popular MCMSki series of conferences, and Bayes Comp 2020 is the second edition of this new conference series. The first edition was Bayes Comp 2018, which was held in Barcelona in March of 2018.

## 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

SUPPORTED BY





AUGUST 17-21, 2020

Seoul National University Seoul, Korea



Dear Colleagues and Friends,

On behalf of the local organizing committee, it is with great delight that we welcome you to Seoul National University in Seoul, South Korea for the 10th World Congress in Probability and Statistics (WC2020), jointly organized by the Bernoulli Society and IMS, from August 17 to 21, 2020. 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.

We believe WC2020 will bring transformation and further advancement to the scientific level and quality of the study of statistics and probability.

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.

We look forward to seeing you in Seoul, Korea.

Sincerely,

Hee-Seok Oh

Chair of the Local Organizing Committee Department of Statistics, Seoul National University





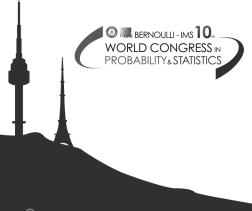


## 😂 🛞 🏶 SEOUL, KOREA

The Korean Peninsula extends about 1,000 km from the Asian continent into the Pacific Ocean with more than 3,000 islands dotting the coastline. Mountains cover almost 70 percent of the land mass, making the country one of the most mountainous regions in the world and offering abundant forest resources. Administratively, Korea consists of nine provinces with 77 small cities and 88 counties.

With a history stretching back more than two thousand years, Seoul is also a rising global star as one of the world's most wired cities, ranked first in technology readiness. In Seoul you will experience millennia of royal palaces and historic sites among a futuristic backdrop of some of the world's most innovative and daring architecture, such as the chicly designed Dior building or recently inaugurated Seoullo 7017.

WC2020 Secretariat [People-X, Inc.] 1F, Haeoreum Bldg., 16, Yeoksam-ro 17 gil, Gangnam-gu, Seoul, 06246, Korea Tel. +82 2 566 5950, 6031 Fax. +82 2 566 6087 E-mail. info@wc2020.org





#### **Named Lectures**

Kolmogorov Lecture

Persi Diaconis (Stanford University)

#### Bernoulli Lecture

Alison Etheridge (University of Oxford)

#### Levy Lecture

Massimiliano Gubinelli (University of Bonn)

#### Laplace Lecture

Tony Cai (University of Pennsylvania)

#### **Tukey Lecture**

Sara van de Geer (ETH Zurich)

#### Wald Lecture

Martin Barlow (University of British Columbia)

#### Blackwell Lecture

Gabor Lugosi (Pompeu Fabra University)

#### Doob Lecture

Nicolas Curien (Université Paris-Sud Orsay)

#### Schramm Lecture

Omer Angel (University of British Columbia)

#### IMS Medallion Lectures

Gerard Ben Arous (New York University) Andrea Montanari (Stanford University) Elchanan Mossel (MIT) Laurent Saloff-Coste (Cornell University) Daniela Witten (University of Washington)

#### **Public Lecture**

To be named

**IMS Presidential Address** Susan Murphy (Harvard University)



## Other meetings and events around the world

## 6th Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA2020) June 2–5, 2020. Barcelona, Spain



w www.smtda.net

The 6th Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA2020, 2-5 June 2020, Barcelona, Spain, www.smtda.net ) will be hosted in the UNESCO Heritage site "Casa Convalescència", Universitat Autonóma de Barcelona, Spain.



You are invited to participate in the conference and workshop and to propose an Invited Session (3–6 talks). You can also introduce Young Scientists and PhD Students to participate and give a talk or to present a poster.

The main objective of the Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA) is to welcome papers, both theoretical and practical, presenting new techniques and methodologies in the broad area of stochastic modeling and data analysis. An objective is to use the methods proposed for solving real life problems by analysing the

relevant data. Also, the use of recent advances in different fields will be promoted, such as new optimization and statistical methods, data warehouse, data mining and knowledge systems, computing-aided decision supports, neural computing and artificial intelligence.

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

For Abstract submission and special session proposals please visit the conference website at www.smtda.net or send an email to Secretariat@smtda.net .

The Data Analysis Book from ASMDA2017 Conference in London is ready in two volumes, published by ISTE-Wiley. An excellent introductory chapter by Gilbert Saporta is included. Download the books from the Wiley website: https://www.wiley.com/en-us/Data+A nalysis+and+Applications+1%3A+New+and+Classical+Approaches-p-9781119597681. The SMTDA2018 Books at ISTE-Wiley are in the last stages while we collect the updated forms of the ASMDA2019 papers for the new publications.

The SMTDA2020 event will also host the **Demographics2020 International Workshop**. The main focus is on Health State and the optimal retirement age. More information is related to a recent work on estimating the "Health Expenditure per Age Group". To join the ongoing international study send a message that you intend to contribute in a Demography publication, to Prof. Christos H Skiadas, Conference Chair: skiadas@cmsim.net

#### Conference topics

Methodological approaches: Poisson, Markov, semi-Markov processes, Point processes, Martingales, Stochastic calculus, Random evolutions, Decision and Controlled Processes, Diffusion and Poisson approximations, Asymptotic models and Weak Convergences, Statistical inference for Stochastic processes, Hidden Markov and semi-Markov processes, Fitting models for data, Reliability and survival analysis, Bayesian inference, Functional data analysis, Discriminant and Regression Analysis, Mixture model and Probabilistic approach to Clustering, Analysis of complex data (incomplete, censored, missing, spatio-temporal, imprecise, fuzzy,...), Theories of uncertainty, Graphical models and Bayesian networks, Multidimensional Scaling and Multi-way Data Analysis, Sensory Analysis, Classification and Documentation, Data and Text Mining, Chaotic and Stochastic processes, Analysis of Chaotic processes.

Special techniques and algorithms: Neural Networks, Genetic and Fuzzy Algorithms, Support Vector Machine, Monte Carlo Methods, Chaotic Simulation.



## 2020 PIMS-CRM Probability Summer School June 1–26, 2020 Vancouver, BC, Canada

whttp://www.math.ubc.ca/Links/ssprob20/ The 2020 PIMS-CRM Probability Summer School will take place at the University of British Columbia, Vancouver, BC, Canada.

The school features 4-week courses by Ivan Corwin (Interacting particle systems, growth models, stochastic PDEs and directed polymers through the lens of the stochastic six vertex model) and Frank den Hollander (Metastability for interacting particle systems).

Short courses of three lectures each will also be given by Paul Bourgade (Branching processes in random matrix theory and number theory), Jean-François Le Gall (Brownian geometry on the sphere), and Nike Sun (Statistical physics of random constraint satisfaction problems).

Support for local accommodation is available for some participants with a December 31 2019 deadline for application. Applications for support and registration may be done online at the webpage below beginning in September 2019. More information may be found at: http://www.math.ubc.ca/Links/ssprob20/

## 8th Symposium on Conformal and Probabilistic Prediction with Applications (COPA 2019) September 8–11, 2019

#### Lilia Hotel, Gold Sands, Bulgaria

w http://clrc.rhul.ac.uk/copa2019/

The main purpose of conformal prediction is to complement predictions delivered by various algorithms of Machine Learning with provably valid measures of their accuracy and reliability under the assumption that the observations are independent and identically distributed. It was originally developed in the late 1990s and early 2000s but has become more popular and further developed in important directions in recent years.

Conformal prediction is a universal tool in several senses; in particular, it can be used in combination with any known machine-learning algorithm, such as SVM, Neural Networks, Ridge Regression, etc. It has been applied to a variety of problems from diagnostics of depression to drug discovery to the behaviour of bots.

A sister method of Venn prediction was developed at the same time as conformal prediction and is used for probabilistic prediction in the context of classification. Among recent developments are adaptations of conformal and Venn predictors to probabilistic prediction in the context of regression.

The COPA series of workshops is a home for work in both conformal and Venn prediction, as reflected in its full name "Conformal and Probabilistic Prediction with Applications". The aim of this symposium is to serve as a forum for the presentation of new and ongoing work and the exchange of ideas between researchers on any aspect of Conformal and Probabilistic Prediction and their applications to interesting problems in any field.

**Invited Speakers** 

Professor Alexander Balinsky (Cardiff School of Mathematics, UK): *Mathematics of Deep Learning*. Deep Learning is another name for a set of algorithms that use a neural network as an architecture. In the past few years, Deep Learning has generated much excitement due to many breakthrough results in speech recognition, computer vision and text processing. This recent success has been due to new mathematical techniques, the availability of inexpensive, parallel hardware (GPUs, computer clusters) and massive amounts of data. This powerful way of processing data can be used to address an ever-growing number of problems, and its impact on science and society is increasing exponentially. In this talk we present mathematical foundations of Deep Learning, relations with physics, features extraction and interpretability. We also explain mathematics behind adversarial attacks and how to protect against them. Several new mathematical problems will be presented.

Professor Peter McCullagh (Department of Statistics, University of Chicago, USA): Prediction and exchangeable processes. This talk will present an overview of recent and not-so-recent work on a variety of exchangeable processes, including partition processes where the observation space is the set of partitions of [n] or equivalence relations on [n], and ordered partition processes where the observation space is the set of partial rankings of [n]. The connection with fiducial processes, Dirichlet processes and survival processes will be discussed.

## **Employment Opportunities around the world**

#### Australia: Melbourne, Victoria

#### **University of Melbourne**

Lecturer/Senior Lecturer Statistics (Data Science) https://jobs.imstat.org/job//49886904

#### Australia: Melbourne, Victoria

#### **University of Melbourne**

Lecturer/Senior Lecturer (Mathematical Statistics) https://jobs.imstat.org/job//49886748

#### Canada: Vancouver, British Columbia

#### **University of British Columbia**

Assistant Professor (Tenure Track) https://jobs.imstat.org/job//50139802

#### Macau

#### Department of Mathematics, University of Macau (UM)

Assistant/Associate Professorship in Statistics https://jobs.imstat.org/job//49213132

#### **Switzerland: Fribourg**

#### University of Fribourg, Fac SciMed, Dep Mathematics

Professor of Mathematics https://jobs.imstat.org/job//50151017

#### **Switzerland: Lausanne**

#### **EPFL**

Professorship in Statistics https://jobs.imstat.org/job//47120981

#### **Switzerland: Lausanne**

#### **EPFL**

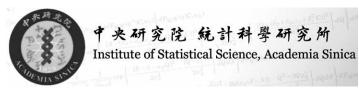
Assistant Professor of Applied Mathematics https://jobs.imstat.org/job//49973294

#### Switzerland: Lausanne

#### **EPFL**

Assistant Professor of Mathematics https://jobs.imstat.org/job//49973286

#### Taiwan: Taipei



#### Institute of Statistical Science, Academia Sinica Tenure-Track Faculty Positions

The Institute of Statistical Science, Academia Sinica, is pleased to invite applications for our tenure-track faculty positions. Academia Sinica, the most preeminent academic research institution in Taiwan, offers a secured research environment facilitated with rich collaboration opportunities as well as the freedom of conducting independent research. With a strong tradition of theoretical and interdisciplinary research, the Institute of Statistical Science is aiming for global excellence in mathematical statistics and various statistical applications.

Applications are invited for tenure-track appointments as Full/Associate/Assistant Research Fellows (equivalent to Full/Associate/Assistant Professors in Universities) in the Institute of Statistical Science, Academia Sinica, to commence on August 1, 2020 or as soon as possible thereafter. Applicants should possess a PhD degree in Statistics, Biostatistics, Computer Science, Data Science or related areas, and should submit: (1) a cover letter, (2) an up-to-date curriculum vita, (3) a detailed publication list, (4) a research proposal, (5) three letters of recommendation, (6) representative publications and/or technical reports and (7) advisers' names of master and PhD degrees. Additional supporting materials such as transcripts for new PhD degree recipients may also be included. Electronic submissions are encouraged. Applications should be submitted to

Dr. Yen-Tsung Huang, Chair of the Search Committee Institute of Statistical Science, Academia Sinica 128 Sec. 2 Academia Road, Taipei 11529, Taiwan, R.O.C.

Fax: +886-2-27886833

Email: recruit@stat.sinica.edu.tw

Application materials should be received by **December 27, 2019** for consideration, but early submissions are encouraged.

## **Employment Opportunities around the world**

#### **Taiwan: Taipei City**

#### Institute of Statistical Science, Academia Sinica

Tenure-Track Faculty Positions

[See display advertisement on previous page] https://jobs.imstat.org/job//49747539

#### **United States: Modesto, CA**

#### E. & J. Gallo Winery

Statistician

https://jobs.imstat.org/job//49606310

#### **United States: Los Angeles, CA**

#### **University of California, Los Angeles**

Tenure-Track Assistant Faculty Position in Biostatistics Department https://jobs.imstat.org/job//49767947

#### **United States: La Jolla, CA**

#### **IDA Center for Communications Research**

Research Staff Member

https://jobs.imstat.org/job//50332370

#### **United States: West Lafayette, IN**

#### **Department of Statistics, Purdue University**

Department Head/Professor

https://jobs.imstat.org/job//50389502

#### **United States: Baltimore, MD**

#### Johns Hopkins University, Whiting School of Engineering, Department of Applied Mathematics and Statistics

Department Head

https://jobs.imstat.org/job//49711818

#### **United States: Minneapolis, MN**

#### University of Minnesota, School of Statistics and Department of Psychology

Tenure Track Assistant Professor https://jobs.imstat.org/job//50075025

#### **United States: Springfield, MO**

#### Missouri State University, Department of Mathematics

Tenure Track Assistant Professor of Statistics https://jobs.imstat.org/job//50239456

#### **United States: New York, NY**

## The Herbert and Florence Irving Institute for Cancer Dynamics of Columbia University

Research Scientist (Open Rank) https://jobs.imstat.org/job//49850220

#### **United States: University Park, PA**

#### **Penn State University**

Tenure Track Faculty Positions https://jobs.imstat.org/job//49212272

#### **United States: Seattle, WA**

#### **University of Washington**

Chair, Department of Statistics https://jobs.imstat.org/job//50331839

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## International Calendar of Statistical Events

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

#### September 2019

September 4–6: London, UK. 2nd IMA Conference on Inverse Problems From Theory To Application w https://ima.org. uk/11329/2nd-ima-conference-on-inverse-problems-from-theory-to-application/

September 8–11: Gold Sands, Bulgaria. 8th Symposium on Conformal and Probabilistic Prediction with Applications (COPA 2019) w http://clrc.rhul.ac.uk/copa2019/

September 12–13: Swansea, UK. 4th IMA International Conference on Flood Risk w https://ima.org.uk/11325/4th-ima-international-conference-on-flood-risk/

September 18–19: Cambridge, UK. Induction Course for New Lecturers in the Mathematical Sciences 2019 w https://ima.org. uk/11361/induction-course-for-new-lecturers-in-the-mathematical-sciences-2019/

September 20–21: Ann Arbor, MI, USA. U-M Statistics: 50<sup>th</sup> Anniversary Symposium w https://sites.lsa.umich.edu/stats-50th-anniversary/

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

Meeting organizers: to get a FREE LISTING

in this calendar, please submit the details (as early as possible) 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/

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/

October 17–19: Knoxville, TN, USA. Design and Analysis of Experiments w https://haslam.utk.edu/dae2019

October 18–20: Kusadasi, Turkey. 5th International Researchers, Statisticians and Young Statisticians Congress w https://www.irsysc2019.com/

October 23: Storrs, CT, USA. 25th Pfizer/ASA/UConn Distinguished Statistician Colloquium: Arthur Dempster w https://events.stat.uconn.edu/pfizer/

#### **November 2019**

November 4–5: Boston, MA, USA. Quantitative Challenges in Cancer Immunology and Immunotherapy w https://www.hsph. harvard.edu/2019-pqg-conference/

November 15: Boston, MA, USA. Statistics and the Life Sciences: Creating a Healthier World w https://www.bu.edu/sph/news-events/signature-programs/deans-symposia/statistics-and-the-life-sciences-creating-a-healthier-world/

#### December 2019

ims December 2–6: Mérida, México. XV CLAPEM: Latin American Congress of Probability and Mathematical Statistics

w http://clapem2019.eventos.cimat.mx/

INDSTATS2019: "Innovations in Data and Statistical Sciences" w http://www.intindstat.org/llSA2019

December 27–29: Dhaka, Bangladesh. 2nd International Conference on Applied Statistics (ICAS) 2019 w https://www.isrt.ac.bd/icas2019

#### 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

January 6–10: Bangkok, Thailand. 4th Bangkok Workshop on Discrete Geometry, Dynamics and Statistics w http://thaihep.phys.sc.chula.ac.th/BKK2020DSCR/

USA. Bayes Comp 2020 w http://users.stat.ufl.edu/~jhobert/BayesComp2020/Conf Website/

#### February 2020

February 6–9: American University of Sharjah, UAE. Third International Conference on Mathematics and Statistics w https://www.aus.edu/conferences/the-third-international-conference-on-mathematics-and-statistics

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

#### March 2020

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

#### June 2020

June 1–26: Vancouver, BC, Canada. 2020 PIMS-CRM Probability Summer School whttp://www.math.ubc.ca/Links/ssprob20/

June 2–5: Barcelona, Spain. 6th Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA2020). Also featuring Demographics 2020 Workshop w www.smtda.net

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

June 15–19: Paphos, Cyprus. International Symposium on Nonparametric Statistics 2020 w http://cyprusconferences.org/ isnps2020/

Vims June 21–24 [tentative]: Anchorage, Alaska, USA. 2020 WNAR/IMS/JR (Japanese Region) meeting w http://wnar.org/page-18098

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/

June 29–July 3: Nový Smokovec, Slovakia. **LinStat 2020** w https://linstat2020.science.upjs.sk/

#### **July 2020**

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

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

## **International Calendar** continued

#### July 2020 continued

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

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

#### March 2021

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

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

#### **July 2022**

July/August [exact dates TBC]: London, UK. IMS Annual Meeting wTBC

July 10–15: Riga, Latvia. XXXI International Biometric Conference (IBC 2022) w https://www.biometricsociety.org/meetings-events/ibcs/

#### August 2022

w http://www.amstat.org/ASA/Meetings/Joint-Statistical-Meetings.aspx

#### August 2023

Ims 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

whitp://www.amstat.org/ASA/Meetings/Joint-Statistical-Meetings.aspx

#### August 2025

at JSM 2025 w http://www.amstat.org/ASA/Meetings/Joint-Statistical-Meetings.aspx

Are we missing something? If you know of any statistics or probability meetings which aren't listed here, please let us know.

You can email the details to Elyse Gustafson at erg@imstat.org, or you can submit the details yourself at https://www.imstat.org/ims-meeting-form/

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.

#### **Individual and General Subscriptions**

Subscriptions are available on a calendar-year basis. **Individual subscriptions** are for the personal use of the subscriber and must be in the name of, paid directly by, and mailed to an individual. Individual subscriptions for 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 for delivery outside North America costs \$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.

The *IMS Bulletin* (ISSN 1544-1881) is published eight times per year, in January/February, March, April/May, June/July, August, September, October/November and December, by the Institute of Mathematical Statistics, 3163 Somerset Dr, Cleveland, Ohio 44122, USA. Periodicals postage paid at Cleveland, Ohio, and at additional mailing offices. Postmaster: Send address changes to dues.subs@imstat.org.

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#### **Advertising job vacancies**

A single 60-day online job posting costs just \$315.00. 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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Full page (within usual <i>Bulletin</i> margins)	7.5" wide x 9.42" high (190 mm x 239 mm)	\$465

#### **Deadlines and Mail Dates for IMS Bulletin**

Issu	ıe	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	Мау 1	May 15	June 1
5:	August	July 1	July 15	August 1
6:	September	August 1	August 15	September 1
7:	Oct/Nov	September 15	October 1	October 15
8:	December	November 1	November 15	December 1

# next September 2019

Read IMS Bulletin articles online at http://bulletin\_imstat.org

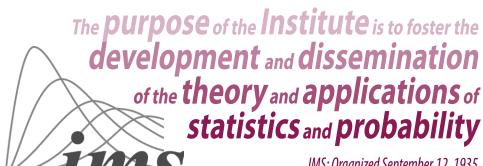
# **DEADLINES** submissions

## September 15, then November 1

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

## Journal

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



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#### Articles

When multiplicative noise stymies control	
JIAN DING, YUVAL PERES, GIREEJA RANADE AND ALEX ZHAI	1963
arge deviations for fast transport stochastic RDEs with applications to the exit problem	1993
tochastic approximation with random step sizes and urn models with random	
replacement matrices having finite mean	
KRISHANU MAULIK	2033
critical point for infinite cycles in a random loop model on trees	
ALAN HAMMOND AND MILIND HEGDE	2067
arking on transitive unimodular graphs MICHAEL DAMRON, JANKO GRAVNER,	
MATTHEW JUNGE, HANBAEK LYU AND DAVID SIVAKOFF	2089
he hydrodynamic limit of a randomized load balancing network	
REZA AGHAJANI AND KAVITA RAMANAN	2114
probabilistic approach to Dirac concentration in nonlocal models of adaptation with	
several resources	2175
version of Aldous' spectral-gap conjecture for the zero range process	
JONATHAN HERMON AND JUSTIN SALEZ	2217
erative multilevel particle approximation for McKean–Vlasov SDEs	
LUKASZ SZPRUCH. SHUREN TAN AND ALVIN TSE	2230
rgodicity of the zigzag process	2200
JORIS BIERKENS, GARETH O. ROBERTS AND PIERRE-ANDRÉ ZITT	2266
on Skorokhod embeddings and Poisson equations	2200
LEIF DÖRING, LUKAS GONON, DAVID J. PRÖMEL AND OLEG REICHMANN	2302
McKean–Vlasov equation with positive feedback and blow-ups	2302
BEN HAMBLY, SEAN LEDGER AND ANDREAS SØJMARK	2338
	2336
approximation of stochastic processes by nonexpansive flows and coming down from	2274
infinity	2314
fixing time estimation in reversible Markov chains from a single sample path DANIEL HSU, ARYEH KONTOROVICH, DAVID A, LEVIN, YUVAL PERES,	
CSABA SZEPESVÁRI AND GEOFFREY WOLFER	2/130
	2439
educed-form framework under model uncertainty FRANCESCA BIAGINI AND YINGLIN ZHANG	2491
	2401
general continuous-state nonlinear branching process	2522
PEI-SEN LI, XU YANG AND XIAOWEN ZHOU	2323
quilibrium interfaces of biased voter models  RONGFENG SUN, JAN M, SWART AND JINJIONG YU	2556
ropagation of chaos for topological interactions P. DEGOND AND M. PULVIRENTI	2594

Vol. 29, No. 4-August 2019