IMS Bulletin



September 2020

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Read it online: imstat.org/news

Call for 2021 JSM Proposals

IMS Calls for Invited Session Proposals

The 2020 Virtual JSM may have just finished, but thoughts are turning to next year's meeting.

Starting from the 2021 Joint Statistical Meetings, which will take place in Seattle from August 7–12, 2021, the **IMS now requires half of our invited session allocation to be competitive**, in odd-numbered years when the JSM is also the IMS Annual Meeting.

We need your submission!



Invited sessions — which includes invited papers, panels, and posters — showcase some of the most innovative, impactful, and cutting-edge work in our profession. Invited paper sessions consist of 2–6 speakers and discussants reporting new discoveries or advances in a common topic; invited panels include 3–6 panelists providing commentary, discussion, and engaging debate on a particular topic of contemporary interest; and invited posters consist of up to 40 electronic posters presented during the Opening Mixer. Anyone can propose a session, but someone from the program committee must accept the proposal for it to be part of the invited program. Of particular interest are sessions that appeal to diverse audiences and are closely related to the theme, which is "Statistics, Data, and the Stories They Tell." To have the best chance of receiving an invited session slot, you need to:

- Have solid new work in an important field
- Know some of your competitors working in the same field

• Be willing to reach out to your competitors and forge a session with energy in it. To submit a session to be considered by the IMS at the 2021 JSM, please read the instructions and guidelines at https://ww2.amstat.org/meetings/jsm/2021/. Be sure to check the IMS as your first choice of sponsor. Submissions are open now, and close September 8, 2020. Decisions are due October 9, 2020.

The IMS Invited Session Chair is Bodhisattva Sen, Columbia University (bodhi@ stat.columbia.edu). The overall 2021 JSM Program Chair is Nicole Lazar, University of Georgia. Nicole has some advice and further information on choosing a topic in an article at https://magazine.amstat.org/blog/2020/08/01/invited-session-jsm-2021/. See you in Seattle next year!

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IMS Members' News

COPSS Presidents' Award to Rina Foygel Barber

The Committee of Presidents of Statistical Societies (COPSS) sponsors and presents the COPSS Presidents' Award annually to a young member of the statistical community in

recognition of outstanding contributions to the profession of statistics. The 2020 COPSS Presidents' Award was announced at the Virtual JSM to Rina Foygel Barber, University of Chicago: *"For fundamental* contributions to statistical sparsity and selective inference in high-dimensional problems, for the creative and novel knockoff filter to cope with correlated coefficients, for contributions to compressed sensing, the jackknife, and conformal predictive inference; for the encouragement and training of graduate and undergraduate students."

Rina, who is also this year's IMS Tweedie Award winner, says her research interests are in "developing and analyzing



Rina Foygel Barber

estimation, inference, and optimization tools for structured high-dimensional data problems such as sparse regression, sparse nonparametric models, and low-rank models. I work on developing methods for false discovery rate control in settings where we may have under-sampled data or misspecified models, and for scalable optimization techniques for nonconvex problems. I also collaborate on modeling and optimization problems in image reconstruction for medical imaging."

Daniela Witten selected for 2021 Leo Breiman Award

Daniela Witten, professor of statistics and biostatistics at the University of Washington, and Dorothy Gilford Endowed Chair of Mathematical Statistics, has been selected to receive the ASA's 2021 Leo Breiman Junior Award. The Breiman Award recognizes Daniela's



outstanding contributions to statistical learning, computational statistics, and their practical applications.

Daniela's contributions to the field of statistical learning span methodology, theory, and application. Her research focuses on developing principled statistical ways to make sense of complex data sets, and in particular, high-dimensional data that is characterized by having more features than observations. She is also very interested in developing practical approaches to allow scientists to "safely" perform the types of analyses that they routinely conduct

Daniela Witten

on their data, but that are not allowable from a classical statistical perspective. She is also committed to the dissemination of key ideas in statistical machine learning to a broad audience. She is a co-author of the textbook *Introduction to Statistical Learning*, originally published in 2013; the second edition will be released soon.

As an award recipient, Witten will receive a monetary prize and a plaque, and is invited to give an invited lecture at the Joint Statistical Meetings to be held in Seattle in 2021.

Nominate for IMS Awards

Nominations are invited for the **Carver Medal**, created by the IMS in honor of Harry C. Carver, for exceptional service specifically to the IMS. Nominations must be received by February 1, 2021. 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; or 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—Elyse Gustafson erg@imstat.org can 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, 2021. See https://www.imstat.org/honored-imsfellows/nominations-for-ims-fellow/.

Early-Career Awards

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**: https://www.imstat.org/ims-awards/peter-gavin-hall-ims-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 degree in one of the eight calendar years preceding the year of nomination, or in the year of nomination—so, for the 2021 prize, that means any of the years 2013–2020. 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 nomination deadline is **December 1, 2020**. The award consists of a plaque, a citation, and a cash honorarium.

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. Nominations should be received by December 1, 2020: see the instructions at https://imstat.org/ims-awards/tweedie-new-researcher-award/

Travel Awards

Applications are open for our two travel awards. The **IMS Hannan Graduate Student Travel Award** funds travel and registration to attend (and possibly present a paper/poster at) an IMS sponsored or co-sponsored meeting. This award is for graduate students (Masters or PhD) in statistics or probability. If you are a New Researcher (awarded your PhD in 2015–20), you should apply for the **IMS New Researcher Travel Award** to fund travel, and possibly other expenses, to present a paper or a poster at an IMS sponsored or co-sponsored meeting. Applicants must be members of IMS, though joining as you apply is allowed (student membership is free and new graduate membership discounted!). The deadline for both is February 1, 2021. See https://www.imstat.org/ims-awards/ims-hannan-graduatestudent-travel-award/ and https://www.imstat.org/ims-awards/ims-new-researcher-travelaward/.

access published papers online

IMS Journals and Publications

Annals of Statistics: Ming Yuan, Richard Samworth https://imstat.org/aos @https://projecteuclid.org/euclid.aos

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

Annals of Probability: Amir Dembo https://imstat.org/aop ¤https://projecteuclid.org/aop

Annals of Applied Probability: Francois Delarue, Peter Friz https://imstat.org/aap @https://projecteuclid.org/aoap

Statistical Science: Sonia Petrone https://imstat.org/sts @https://projecteuclid.org/ss

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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 https://imstat.org/ejs @https://projecteuclid.org/ejs

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

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

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Journal of Computational and Graphical Statistics: Tyler McCormick https://www.amstat.org/ASA/ Publications/Journals.aspx © log into members' area at imstat.org

Statistics Surveys: David Banks https://imstat.org/ss @https://projecteuclid.org/euclid.ssu

Probability Surveys: Ben Hambly https://imstat.org/ps @https://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): Grégory Miermont, Christophe Sabot https://imstat.org/aihp @https://projecteuclid.org/aihp

Bayesian Analysis: Michele Guindani Mhttps://projecteuclid.org/euclid.ba

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

Brazilian Journal of Probability and Statistics: Enrico Colosimo https://imstat.org/bjps @https://projecteuclid.org/bjps

IMS-Affiliated Journal

Observational Studies: Dylan Small Mhttps://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

More Members' News

American Statistical Association awards

The American Statistical Association has announced its annual awards at the Virtual JSM. Among the winners of the various awards are these IMS members/Fellows:

Deming Lecturer Award: Dennis K. J. Lin, The Pennsylvania State University, for significant contributions to major policy decisions of diverse industries around the globe and contributions to the American Society for Quality. Like Deming, Professor Dennis Lin has been a true ambassador of statistics to business and industry and has inspired many.

Noether Senior Scholar Award: Art Owen, Stanford University, for outstanding contributions to the theory, methods, applications, and teaching of nonparametric statistics.

Karl E. Peace Award for Statistical Contributions for the Betterment of Society: Francesca Dominici, Harvard University, for her high-quality, innovative, and policy-relevant science; for her commitment to transparency and reproducibility in science; and for her work in developing statistical methods for evaluating health effects of exposure to air pollution.

Outstanding Statistical Application Awards: Mei-Cheng Wang, Johns Hopkins School of Public Health, and co-authors, for their paper, "Joint Modeling of Competing Risks Data and Current Status Data: An Application to Spontaneous Labour Study." Also, Hongyu Zhao, Yale School of Public Health, and co-authors, for their paper, "A Statistical Framework for Cross-Tissue Transcriptome-Wide Association Analysis."

Samuel S. Wilks Memorial Award: Malay Ghosh, University of Florida, for his outstanding contribution to small area estimation, his contribution to the theory and practice of Bayesian statistics, and for his superb teaching and mentoring of PhD students.

W. J. Youden Award in Inter-laboratory Testing: Andrew Gelman, Columbia University, and co-authors, for their paper, "Bayesian Aggregation of Average Data: An Application in Drug Development."

You can read the ASA awards booklet (view or download) at https://ww2.amstat.org/ meetings/jsm/2020/.

Emmanuel Candès receives Princess of Asturias Award

Along with Yves Meyer, Ingrid Daubechies and Terence Tao, Emmanuel Candès was selected to receive the 2020 Princess of Asturias Award for Technical and Scientific Research.

Read more about the Laureates and their work: https://www.fpa.es/en/ princess-of-asturias-awards/laureates/2020yves-meyer-ingrid-daubechies-terencetao-and-emmanuel-candes.html?texto=tra yectoria&especifica=0

Fellow of the Australian Academy of Science

Aurore Delaigle, University of Melbourne, joins 23 other newly-elected scientists to the Australian Academy of Science. AAS Fellows represent some of Australia's most outstanding scientists, and are elected by their peers for their scientific achievement, national and international profile, as well as leadership and mentorship capabilities. Read more about Aurore's achievements at https://www.science.org.au/profile/auroredelaigle.

NOMINATE AN IMS SPECIAL LECTURER

Submit a nomination: https://www.imstat.org/ims-special-lectures/nominations/

The IMS Committee on Special Lectures is currently accepting nominations for these IMS Named and Medallion Lectures:

- the 2022 Neyman Lecturer
- the 2022 Rietz Lecturer
- eight 2023 Medallion Lecturers

Send your nomination by October 1, 2020. Information on all lectures is available at https://www.imstat.org/ims-special-lectures/



ASA elects Fellows

Among the 57 ASA Fellows elected this year are the following 15 IMS members and/or Fellows:

Edoardo M. Airoldi, Temple University: For contributions to foundations of network data analysis, to causal inference and experimental design in complex settings, and to statistical computing; for promoting statistics and data science across disciplinary boundaries; and for exceptional mentoring of students and postdocs.

- Robert Brandon Gramacy, Virginia Tech: For contributions to research on surrogate modeling of computer experiments, uncertainty quantification, and Gaussian processes; for service to the society and broader statistical community; and for educational contributions through academic mentoring and workshops.
- Sergei Leonov, CSL Behring: For methodological contributions to optimal experimental design, adaptive designs, and pharmacokinetics in the context of drug development; for leading interdisciplinary project teams in the pharmaceutical industry; and for service to the profession. Jialiang Li, National University of
 - Singapore: For outstanding contributions to statistical methodology, including diagnostic medicine, nonparametric regression, and personalized medicine; for outstanding mentoring of students; and for sustained research and collaboration involving statistical analysis of medical data.
- Liang Li, MD Anderson Cancer Center: For excellent and sustained statistical research and collaboration in the analysis of observational longitudinal cohort studies and chronic disease research and for outstanding service to the profession.
- Qizhai Li, Chinese Academy of Sciences: For outstanding contributions to statistical methodology in cancer genetics and genetic epidemiology, particularly in genome-wide association studies and candidate gene

analysis, and for key contributions to diagnostic medicine and high-dimensional data analysis in biomedical research. Jinchi Lv, University of Southern California: For fundamental contributions to highdimensional statistics, large-scale inference, and machine learning, as well as for outstanding editorial service.

- Louis T. Mariano, RAND Corporation: For excellence in the application of modern statistical methods to novel application, particularly in education and military personnel policy; for outstanding contributions to statistics in public policy; and for leadership in education research.
- Robert A. Oster, University of Alabama at Birmingham: For notable contributions to the health science research community in the field of statistics through diverse collaborations; for furthering statistics education in the health sciences; and for service and exceptional leadership to the ASA and other professional societies.
- Xiaofeng Shao, University of Illinois at Urbana-Champaign: For pioneering nonparametric inference for time series and high-dimensional inference using nonlinear dependence metrics, especially in developing self-normalization for dependent data and bootstrapping time series, and for excellence in student mentoring and service to the profession.
- Yiyuan She, Florida State University: For novel and sustained contributions to high-dimensional and robust statistics; for promotion of sound application of statistical theory and optimization in signal processing and machine learning; and for excellence in mentoring, instruction, and service to the profession.
 Haonan Wang, Colorado State University: For pioneering work in object-oriented data analysis; for fundamental

contributions to statistical learning, spatial statistics, and model selection; and for service to the profession.

- Daniela M. Witten, University of Washington: For pioneering work in statistical learning; for developing new and impactful statistical methods for analysis of data from diverse fields; and for innovation in teaching and communicating statistical machine learning to a broad non-technical audience.
- Victor J. Yohai, Universidad de Buenos Aires: For outstanding research contributions in robustness for linear models, multivariate methods, and time series; for leadership in statistics in Latin America; and for creating a group of excellence in robustness in Argentina.
- Zhengyuan Zhu, Iowa State University: For excellence in survey practice; for superb contributions to statistical theory and methods in spatial statistics, spatial sampling design, survey statistics, and functional data analysis; and for service to the profession.

You can read the complete list of ASA Fellows, and the other awards given this year, in the awards booklet that you can view or download at https://ww2.amstat. org/meetings/jsm/2020/.



SSC Gold Medal: Paul Gustafson

This year's recipient of the Gold Medal of the Statistical Society of Canada is Paul Gustafson, University of British Columbia (UBC). The SSC's prestigious award is bestowed upon a person who has made outstanding contributions to statistics or probability, either to mathematical developments or in applied work. It is intended to honor current leaders in their field. Paul was selected *"in recognition of his seminal contributions to the foundations of inference, particularly Bayesian robustness, sensitivity analysis, and model identifiability; for excep-*

tional advances to recognize the limitations of observational studies due to mis-measurement and other inherent obstacles, along with effective statistical tools to counter those limitations; for fundamental contributions to methodology for biomedical applications and epidemiology; and for his outstanding record of mentorship and service to the statistical science community in Canada and internationally."

You can read more about Paul's life and work at https://ssc.ca/ en/awards/2020/paul-gustafson-ssc-gold-medalist-2020, primarily written by Will Welch. The following is extracted from that profile.

Paul was born in the UK in 1968, but moved to Canada when he was 10. He enjoyed his BSc (Mathematics) and MSc (Statistics) at UBC so much that, after completing his PhD at Carnegie Mellon in 1994 under Larry Wasserman, he returned to the campus, first as a postdoctoral fellow and then as an Assistant Professor.

Paul has been a Bayesian since his MSc studies; his PhD thesis proposed formal schemes to assess the sensitivity of posterior inferences to the choice of prior distribution. Currently he is interested in Bayesian approaches within the domains of causal inference, evidence synthesis, measurement error and partial identification.



Paul's publications range from deep theoretical insights to important applied work, often in the same paper. Much of his research program is inspired by biostatistical and epidemiological applications, and he frequently collaborates with health scientists on a range of medical conditions. His two books, *Measurement Error and Misclassification in Statistics and Epidemiology: Impacts and Bayesian Adjustments* (2004) and *Bayesian Inference in Partially Identified Models: Exploring the Limits of Limited Data* (2015), reflect Paul's

interest in understanding what combinations of modelling assumptions and prior information will yield inferences that are usefully narrow, rather than uselessly wide.

At UBC, Paul has been an important mentor. He has supervised or co-supervised 13 PhD students, 24 MSc students and four postdoctoral fellows; many have gone on to academic positions. He has also taught at all levels. His considerable service to the department includes two stints as Acting Head and the current Headship since 2019. Paul also played a pivotal role as founding Co-Director of UBC's Master of Data Science program, which welcomed its first cohort of students in 2016 and is now heavily subscribed.

Beyond UBC, Paul has taken on a variety of editorial and service commitments, nationally and internationally. His work has previously been recognized with the CRM–SSC Prize in 2008 and an ASA Fellowship in 2011. Additionally, he is a two-time recipient of an NSERC Discovery Grant Accelerator Supplement.

Paul is enduringly grateful for "support and foolishness-filtering" from his wife, public health physician *extraordinaire* and occasional collaborator, Reka Gustafson.



SSC Presidential Address by David Donoho

David Donoho, the Anne T. and Robert M. Bass Professor of Humanities and Sciences and Professor of Statistics at Stanford University, was selected by the Statistical Society of Canada to deliver the Presidential Address, given online June 1 2020 as part of the SSC2020 virtual meeting. The lecture was called "A Statistical Perspective on COVID-19 Testing". It can be viewed online at https://youtu.be/ziT9aphxsHE. The Pierre Robillard Address by Shixiao Zhang can also be viewed on YouTube, at https://youtu.be/IZFRIv_PIY.

Schramm Lectures

The Schramm Lecture, named in honor of Oded Schramm (1961–2008), is an annual IMS–Bernoulli Society joint lecture. Omer Angel (University of British Columbia)



is going to give the Schramm Lecture at the Bernoulli–IMS 10th World Congress in Probability and Statistics, in Seoul, July 19–23, 2021.

Louigi Addario-Berry

The following year, Louigi Addario-Berry (McGill) will give the Schramm Lecture at the 42nd Conference on Stochastic Processes and their Applications (SPA) in Wuhan, China, June 27–July I, 2022.

Royal Society's Faraday Prize and Lecture

The UK's Royal Society has selected Sir David Spiegelhalter OBE FRS as their Michael Faraday Prize and Lecture winner 2020, "for bringing key insights from the disciplines of statistics and probability vividly home to the public at large, and to key decision-makers, in entertaining and accessible ways, most recently through the COVID-19 pandemic." Sir David will be awarded a medal and a gift of £2,500 at the associated prize lecture in 2021. The Michael Faraday Prize is awarded annually to the scientist or engineer whose expertise in communicating scientific ideas in lay terms is exemplary. The award is named after Michael Faraday FRS, the influential inventor and electrical pioneer who was prominent in the public communication of science and founded the Christmas lectures at the Royal Institution.

Fellow of the Royal Society

Elected a Fellow of the Royal Society this year is **Wendelin Werner**, one of the plenary speakers at the Bernoulli–IMS One World Symposium.

Call for Nominations for the Ethel Newbold Prize

The Bernoulli Society's Newbold Prize Committee invites nominations for the fourth Ethel Newbold Prize.

The Ethel Newbold Prize for excellence in statistics is awarded every two years, next time in spring 2021. The name of the prize recognizes a historically important role of women in statistics. The prize itself is for excellence in statistics without reference to the gender of the recipient. The Ethel Newbold Prize is generously supported by Wiley.

The Ethel Newbold Prize is to be awarded to an outstanding statistical scientist for a body of work that represents excellence in research in mathematical statistics and/or excellence in research that links developments in a substantive field to new advances in statistics.

In any year in which the award is due, the prize will not be awarded unless the set of all nominations includes candidates from both genders.

The award consists of the prize amount of 2,500 \in together with an award certificate.

For this call, the prize winner will be selected in spring 2021. The prize will be awarded at a following Bernoulli World Congress, Bernoulli-sponsored major conference, or ISI World Statistics Congress. The awardee will also be invited to present a talk at one of these conferences.

Further information about the Ethel Newbold Prize (and other prizes of the Bernoulli Society) may be found at http://www.bernoulli-society.org/index.php/prizes.

Submission of nominations

Each nomination should include a letter outlining the case in support of the nominee, along with a curriculum vitae. Nominations as well as any inquiries about the award should be sent to Prof. Jon Wellner, Department of Statistics, University of Washington, email: jonw@uw.edu. The deadline for accepting nominations is November 30, 2020.

About Ethel Newbold

Ethel May Newbold (1882–1933) was an English statistician and the first woman to be awarded the Guy Medal in Silver by the Royal Statistical Society, in 1928. A detailed biography of Ethel Newbold may be found in her obituary: Greenwood, M. (1933). Ethel May Newbold. *Journal of the Royal Statistical Society*, 96, No. 2 (1933), 354–357. http://www.jstor.org/stable/2341811

The Newbold Prize Committee

The committee members are Gesine Reinert, Adrian Röllin, and Jon A. Wellner (chair).

Thanks to our Donors

The IMS would like to thank the following individuals for contributing to the IMS. Further contributions are welcome! Please see https://www.imstat.org/contribute-to-the-ims/

Blackwell Lecture Fund

An endowment fund used to support a lecture in honor of David Blackwell, in order to honor Blackwell, to keep his name alive and to inspire young people to emulate his achievements. The first lecture was presented in 2014. David Aldous, Anon., Anon., Kenneth and Selma Arrow, David Banks, Alicia and Robert Bell, Peter and Nancy Bickel, Estate of David Blackwell, Karl and Aimee Broman, Linda Zhao and Lawrence Brown, Erhan Çinlar, Anirban DasGupta, Joan Fujimura and Kjell Doksum, Jianging Fan, Arnoldo Frigessi, Joseph Gastwirth, Andrew and Caroline Gelman, Kenneth Griffin, Allan Gut, Donald and Janet Guthrie, Ben Hansen, Barry and Kang Ling James, Iain Johnstone, Barbara Rosario and Michael Jordan, Joseph and Caroline Ann Mitchell Kadane, Karen Kafadar, Su Yeon Kim, Jing Lei, Susan and Terrance Murphy, Richard Olshen, Walter Rosenkrantz, George G and Mary L Roussas, Tom Salisbury, Mary Jennings and Donald Sarason, Venkatraman E. Seshan, Juliet Shaffer, S. and D. Shreve, Terence and Freda Speed, Virginia and Stephen Stigler, CJ Stone, William Sudderth, Guo-Qiang Zhang and Jiayang Sun, Richard Tapia, HM Taylor, Steven Thomson, Edward van der Meulen, Vincent Vu, Michael Waterman, Joseph Yahav, Zhaohui and Yuhong Yang, Qiwei Yao, Bin Yu and Ke-Ning Shen, Marvin Zelen, Ji Zhu

Hannan Graduate Student Travel Fund

Used to fund travel and registration to attend and possibly present a paper or a poster at an IMS sponsored or co-sponsored meeting. Presentation of a paper/poster is encouraged, but not required. Anon.,Gerrit Draisma, Bettie and James Hannan

IMS General Fund

Donations support the IMS as a whole.

Eresen Arseven, Gopal Basak, Asit Basu, Peter Baxendale, Louis Chen, Herman Chernoff, David Collins, Joel Dubin, Subhashis Ghoshal, John Grice, William Harkness, Paul Holland, James Landwehr, Donald McClure, Greg Minshall, Edsel Peña, Gilles Pisier, Dale Preston, Stanley Sawyer, David Scott, Norman Severo, Lynne Seymour, Walter Sievers, Steven Thomson, Donald Ylvisaker, Ken-ichi Yoshihara, Marvin Zelen

IMS Gift Membership Fund (2012 onwards)

Provides IMS memberships and journals for statisticians and probabilists in regions of the world where payments in hard currency would impose a difficult financial burden.

Andrew Barbour, Gopal K Basak, Ernest Bowen, Louis Chen, Herman Chernoff, Herold Dehling, Joel Dubin, Steven Ellis, Arnoldo Frigessi, Diana Gillooly, Ramanathan Gnanadesikan, Susan Gruber, Irwin Guttman, Risto Heijmans, Estate V. Khmaladze, Ernst Linder, Ryan Machtmes, Donald McClure, Edmund McCue, Luke Miratrix, Richard A. Olshen, Walter Sievers, Charles Stein, Michael Stein, Steven Thomson, Bruce E. Trumbo, Anton Wakolbinger, Donald Ylvisaker

IMS New Researcher Travel Award Fund

Used to fund travel and possibly other expenses to present a paper or a poster at an IMS sponsored or co-sponsored meeting, for New Researchers who otherwise would not be able to attend the meeting. Amy Grady & Richard Smith, Axel Munk, Richard Olshen, Debashis Pail,Edsel Peña, David Scott

Lawrence D. Brown PhD Student Award Fund

Used to establish awards for Ph.D. candidates in honor of Lawrence David Brown (1940-2018). This award was established with funds from Brown's family and friends. Eligible applicants will compete to be one of three speakers at an invited session as part of the IMS Annual Meeting. The award will also include reimbursement for both travel and the meeting registration fee. Anon., Naomi Altman, Peter and Nancy Bickel, Eileen and Harold Brown, Jane and Marshall Brown, Lisha Chen, Anirban DasGupta, Philip Dawid, Gang, Tyre, Ramer, Brown & Passman Charitable Foundation, Constantine Gastonis, Edward George, Guestrin Family Foundation, Jianqing Fan, Xu Han, Kun He, Iain Johnstone, Roger Koenker, Katherine Kopp, Robert Kopp and Farrin Anello, Elizabeth Levin, Xufeng Li, Dongyu Lin, Yi Lin, Dorrit Lowsen, Wenxin Mao, Xiao-Li Meng, Zhanyun Zhao and Kewei Ming, Axel Munk, Forbes and Murr Families, Chaitra Nagaraja, Hui Nie, Edsel Peña, Harold Sackrowitz, Richard J. Samworth, David Scott, Paul Shaman, Haipeng Shen, Dylan Small, Daniel Solomon, Jonathan Stroud, Weijie Su, Jiayang Sun, Ryan Tibshirani, Liang Wang, Xianchao Xie, Dan Yang, Fan Yang, Yuhong Yang, Bin Yu, Anru Zhang, Kai Zhang, Li Zhang, Linjun Zhang, Mingyuan Zhang, Ren Zhang, Linda Zhao, Jintong Zheng, Wu Zhu, Wunderkinder Foundation

Le Cam Lecture Fund

An endowment fund set up by friends of Lucien Le Cam to memorialize his contributions to our field. The Le Cam lecturer is an individual whose contributions have been or promise to be fundamental to the development of mathematical statistics or probability. This lecture takes place every three years.

Charles Antoniak, Miguel Arcones, Frederick Asare, Dianne Carrol Bautista, Rudolf Beran, Thomas Billings, David Blackwell, William Brady, Karl Broman, Lawrence Brown, F Thomas Bruss, Prabir Burman, Andrew Carter, Yu-Lin Chang & Pao-Kuei Wu, Gang Chen, Louis Chen, Chin Long Chiang, Bertrand Clark, Michael Cohen, Anirban DasGupta, Roger Day, Jay Devore, Kjell Doksum, David Donoho, Richard M Dudley, Lutz Duembgen, Robert Elashoff, Jianging Fan, Kai-Tai Fang, Dorian Feldman, Thomas Ferguson, Dean Foster, Anthony Gamst, Li Gan, Jayanta Ghosh, Dennis Gilliland, Evarist Gine, Prem Goel, Alex Gottlieb, Z Govindarajulu, Priscilla Greenwood, Yuli Gu, Shanti Gupta, Peter Guttorp, Charles Hagwood, James Hannan, Paul Holland, Rafael Irizarry, Lancelot James, Paramaraj Jeganathan, Kun Jin, Iain Johnstone, Rafail Khasminski, Ja-Yong Koo, Hira Koul, Andrzej Kozek, Yury Kutoyants, Louise Le Cam, Kee-Won Lee, Erich Lehmann, Lei Li, Shili Lin, Hung-Kung Liu, Albert Lo, Richard Lockhart, VS Mandrekar, James Marron, George Martin, John McDonald, Paul Meier, Max Moldovan, Per Mykland, Peter Ney, Deborah Nolan, Richard Olshen, Michael Ostland, Edsel Peña, Mark Pinsky, Gilles Pisier, Madabhushi Raghavachari, RV

Ramamoorthi, Guilherme Rocha, Walter Rosenkrantz, George G and Mary L Roussas, Habib Salehi, Frederic Schoenberg, Richard Smith & Amy Grady, Terry Speed, James Stapleton, Philip Stark, Charles Stein, David Steinsaltz, Stephen Stigler, Shiaoyun Sun, Takeru Suzuki, Anders Rygh Swensen, Shigeo Takenaka, Michael Talagrand, Steven Thomson, Lanh Tran, Howard Tucker, Sara van de Geer, Constance van Eeden, Guenther Walther, Jane-Ling Wang, Yazhen Wang, Shaoli Wang, Jon Wellner, Robert Wijsman, Colin Wu & Li-Ping Yang, Shen X, Jian-Lun Xu, Grace Yang, Yuhong Yang, Yannis Yatracos, Bin Yu, Marvin Zelen, Ping Zhang, Hongyu Zhao

Open Access Fund

Supports the establishment and ongoing operation of IMS's open access publications: Probability Surveys, Statistics Surveys, Electronic Journal of Probability, Electronic Communications in Probability and Electronic Journal of Statistics. Also supports the posting of all IMS journal articles to ArXiv.

Dorothee Aeppli, Anon., Anon., Anon., Ersen Arseven, Frederick Asare, Arifah Bahar, Dianne Carrol Bautista, Peter Baxendale, Thomas Billings, Ernest Bowen, William Brady, Kevin Buhr, Herminia Calvete, Kathryn Chaloner, Louis Chen, Cindy Christiansen, William Cleveland, Jose Cordeiro, Louis Cote, Catherine Crespi, Angelos Dassios, Joel Dubin, Michael Fay, Raisa (Raya) Feldman, Kostas Fokianos, Anthony Gamst, Charles Geyer, Patricia Giurgescu, Charles Goldie, Christopher Green, Risto Heijmans, David Hoaglin, Robert Hoekstra, Giles Hooker, Fred Huffer, Jane Hutton, Ernesto Jardim, Brian Junker, Harry Kesten, Eric Key, Chandra Kiran Krishnamurthy, Luca La Rocca, Michael Lasarev, Zenghu Li, Yuan Liu, J Maindonald, Matthew Marler, John McDonald, Roy Mendelssohn, Maria Mendoza, William Mietlowski, Max Moldovan, Carlos Mora Gonzalez, Peter Ney, Roberto Oliveira, Richard Olshen, Edsel Peña, Ross Pinsky, Gilles Pisier, Igor Pruenster, Ruslan Pusev, Alex Reinhart, Andreas Ruckstuhl, Arusharka Sen, Walter Sievers, Jonathan Skinner, Richard Smith & Amy Grady, Charles Stein, David Steinsaltz, Jason Stover, Shigeo Takenaka, Steven Thomson, Lanh Tran, Bruce Trumbo, Shaoli Wang, Wojbor Woyczynski, Danyu Yang, Marvin Zelen, Huiming Zhu

Peter Hall Early Career Prize Fund

An endowment fund that provides a financial prize given annually to one or more active researchers in statistics, broadly construed, within 8 years of completion of a PhD. The award is intended to recognize excellence in research and research potential.

Anon., Anon., Adelchi Azzalini, David Banks, Rudolf Beran, Rabi Bhattacharya, Peter Bickel, Mary Ellen Bock, Alexandre Bouchard-Côté, Richard Bradley, Yun Yu and Tony Cai, Louis Chen, Song Xi Chen, Noel Cressie, Anirban DasGupta, Richard A. Davis, Yanming Di, Margaret Donald, Miki and David Donoho, Lutz Duembgen, Jianging Fan, Andrey Feuerverger, Turkan Gardenier, Tilmann Gneiting, Prem Goel, Charles Goldie, Amy Grady & Richard Smith, Elyse Gustafson, Jeannie Hall, James J. Higgins, Giles Hooker, Tomoyuki Ichiba, Gareth James, Jiashun Jin, Bingyi Jing, Iain Johnstone, Estate Khmaladze, Roger Koenker, Eric Kolaczyk, Luca La Rocca, Runze Li, Zenghu Li, Xinhong Lin, Shiqing Ling, Yingying Fan and Jinchi Lv, Yanyuan Ma, Yoshihiko Maesono, James Stephen Marron, Geri and Kristina Mattson, Geoffrey McLachlan, Xiao-Li Meng, Carl Mueller, Hans-Georg Müller, Boaz Nadler, Balgobin Nandram, John Nolan, Jean Opsomer, Fredos Papangelou, Layla Parast, Byeong Uk Park, Debashis Paul, Edsel Peña, Brett Presnell, Peihua Qiu, Annie Qu, Aaditya Ramdas, Nancy Reid, Philip Reiss, Johannes Ruf, David Ruppert, Richard Samworth, David Scott, Timo Seppäläinen, Paul Shaman, Qi-Man Shao, Bernard Silverman, Dylan Small, Robert Smythe, Terence Speed, Clifford Spiegelman, Stephen Stigler, Stilian Stoev, Gabor Szekely, Boxin Tang, Donatello Telesca, Ryan Tibshirani, Surya Tokdar, Howell Tong, Berwin Turlach, University of Melbourne, Handan and Matt Wand, Jane-Ling Wang, Qiving Wang, Jon Wellner, Susan Wilson, Aihua Xia, William Weimin Yoo, George Alastair Young, Harrison Zhou, Johanna F. Ziegel, Hui Zou

Schramm Lecture Fund

Created jointly by IMS and Bernoulli Society, the annual lecture in probability and stochastic processes is named in honor of Oded Schramm. The lecture is given at meetings (co)-sponsored by IMS/BS with a strong attendance by researchers in probability and stochastic processes. Anon., Anon., Anon., A Barbour, Cambridge University Press, Raisa (Raya) Feldman, Antal Jarai, Thomas Kurtz, Zenghu Li, Russell Lyons, John McDonald, Marina Meila, Microsoft, Roberto Oliveira, Richard Olshen, Ross Pinsky, Gilles Pisier, Thomas Salisbury, Timo Seppalainen, Jeffrey Steif, David Steinsaltz, Kenneth Stephenson, Edward C. Waymire

Scientific Legacy Fund

Supports the IMS Scientific Legacy Database, which is dedicated to ensuring the preservation of valuable historical information on IMS members and leaders of our fields. The IMS uses the funds to cover the costs of the development and maintenance of the database. Anon., William Mietlowski, Springer

Tweedie New Researcher Fund

Originally set up with funds donated by Richard L. Tweedie's friends and family. Funds the travel of the Tweedie New Researcher Award recipient to attend the IMS New Researchers Conference and to present the Tweedie New Researcher Invited Lecture.

William Anderson, Elja Arjas, Dianne Carrol Bautista, William Brady, Peter Brockwell, Bradley Carlin, Alicia Carriquiry, Kathryn Chaloner, Louis Chen, John Connett, Keith Crank, William Dunsmuir, Gary & Carol Gadbury, Joseph Gani, Charles Geyer, Ramanathan Gnanadesikan, Jay & Anne Goldman, Peter Hall, Yu Hayakawa, James Hodges, Iain Johnstone, Thomas Louis, Robert Lund, Roy Mendelssohn, Sean Meyn, William Mietlowski, Max Moldovan, Philippe Naveau, Deborah Nolan, Esa Nummelin, Daniel Ocone, Roberto Oliveira, Gilles Pisier, Jeffrey Rosenthal, Kenneth Russell, J. Andrew & Lynn Eberly Scherrer, David Scott, Arusharka Sen, Lynne Seymour, David Smith, Richard Smith & Amy Grady, Terence Speed, David Steinsaltz, Naftaly & Osnat Stramer, Shigeo Takenaka, William Thomas, Surya Tokdar, Lanh Tran, Marianne Tweedie, Nell Tweedie, Cathy Tweedie, Xuan Yang, Marvin Zelen, Huiming Zhu

Thank you all!

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—novelty and correctness are not sufficient for publication. The Annals also publishes authoritative review papers and surveys of areas in vigorous development. Access papers: **https://projecteuclid.org/aop**

Volume 48, number 4, July 2020

New: Co-Editors for Annals of Probability

From next year, *AOP* will have two Editors, as the *Annals of Statistics* has had for some years. The next *AOP* Co-Editors (2021–23) will be **Alice Guionnet** and **Christophe Garban**.

Planar Brownian motion and Gaussian multiplicative chaos.	
Bounding the number of self-avoiding walks: Hammersley–Welsh with polygon insertion	.HUGO DUMINIL-COPIN, SHIRSHENDU GANGULY, ALAN HAMMOND, AND IOAN MANOLESCU; 1644–1692
Elliptic stochastic quantization	
Growth-fragmentation processes in Brownian motion indexed by the Brownian tree \ldots	JEAN-FRANÇOIS LE GALL AND ARMAND RIERA; 1742–1784
Points of infinite multiplicity of planar Brownian motion: Measures and local times	ELIE AÏDÉKON, YUEYUN HU, AND ZHAN SHI; 1785–1825
Averaging dynamics driven by fractional Brownian motion	
Confluence of geodesics in Liouville quantum gravity for $\gamma \in (0,2)$	
From nonlinear Fokker–Planck equations to solutions of distribution dependent SDE	VIOREL BARBU AND MICHAEL RÖCKNER; 1902–1920
Periodic Pólya urns, the density method and asymptotics of Young tableaux.	CYRIL BANDERIER, PHILIPPE MARCHAL, AND MICHAEL WALLNER; 1921–1965
Finitary isomorphisms of Brownian motions	
Near-critical spanning forests and renormalization	
Random walks on dynamical random environments with nonuniform mixing $\ldots \ldots \ldots$	ORIANE BLONDEL, MARCELO R. HILÁRIO, AND AUGUSTO TEIXEIRA; 2014–2051
Algorithmic thresholds for tensor PCA.	
Finitely dependent processes are finitary	

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 **http://projecteuclid.org/euclid.aoap**

Volume 30, number 4, August 2020

Sensitivity analysis for rare events based on Rényi divergence	PAUL DUPUIS, MARKOS A. KATSOULAKIS, YANNIS PANTAZIS, AND LUC REY-BELLET; 1507–1533
Nonasymptotic bounds for sampling algorithms without log-concavity	MATEUSZ B. MAJKA, ALEKSANDAR MIJATOVIĆ, AND ŁUKASZ SZPRUCH; 1534–1581
Hydrodynamic limit and propagation of chaos for Brownian particles reflecting from a Newtonian be	arrier
Random walk on random walks: Low densities ORIANE BLONDEL, MARCELO R.	HILÁRIO, RENATO S. DOS SANTOS, VLADAS SIDORAVICIUS, AND AUGUSTO TEIXEIRA; 1614–1641
High-dimensional limits of eigenvalue distributions for general Wishart process	
Conditional optimal stopping: A time-inconsistent optimization	MARCEL NUTZ AND YUCHONG ZHANG; 1669–1692
On the convergence of closed-loop Nash equilibria to the mean field game limit.	DANIEL LACKER; 1693–1761
On Bayesian consistency for flows observed through a passive scalar	JEFF BORGGAARD, NATHAN GLATT-HOLTZ, AND JUSTIN KROMETIS; 1762–1783
Approximation schemes for viscosity solutions of fully nonlinear stochastic partial differential equation	onsBENJAMIN SEEGER; 1784–1823
A threshold for cutoff in two-community random graphs	ANNA BEN-HAMOU; 1824—1846
Mixing time and cutoff for the weakly asymmetric simple exclusion process	CYRIL LABBÉ AND HUBERT LACOIN; 1847–1883
Particles systems and numerical schemes	
for mean reflected stochastic differential equations	BRIAND, PAUL-ÉRIC CHAUDRU DE RAYNAL, ARNAUD GUILLIN, AND CÉLINE LABART; 1884–1909
Statistical thresholds for tensor PCA	AUKOSH JAGANNATH, PATRICK LOPATTO, AND LÉO MIOLANE; 1910–1933
Exact formulas for two interacting particles and applications in particle systems with duality \ldots .	
Edgeworth expansion for Euler approximation of continuous diffusion processes	

Recent papers: two IMS-affiliated journals *ALEA*

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/**

Volume 16, number 2, 2019

Generalized Divide and Color Models	JEFFREY E. STEIF & JOHAN TYKESSON, 899–955
Fast-reaction limit for Glauber–Kawasaki dynamics with two components	
Subordinators which are infinitely divisible w.r.t. time:	
Construction, properties, and simulation of max-stable sequences and infinitely divisible laws	JAN-FREDERIK MAI & MATTHIAS SCHERER, 977-1005
Visibility in the vacant set of the Brownian interlacements and the Brownian excursion process	
Coalescing directed random walks on the backbone of a $1 + 1$ -dimensional oriented percolation cluster	
converge to the Brownian web	MATTHIAS BIRKNER, NINA GANTERT & SEBASTIAN STEIBER, 1029-1054
On a gateway between the Laguerre process and dynamics on partitions	
The upper threshold in ballistic annihilation	DEBBIE BURDINSKI, SHREY GUPTA & MATTHEW JUNGE, 1077-1087
Metastable behavior of bootstrap percolation on Galton-Watson trees	
Fractional iterated Ornstein–Uhlenbeck Processes	JUAN KALEMKERIAN & JOSÉ RAFAEL LEÓN, 1105-1128
Exponent for sets of frequently visited points of a simple random walk in two dimensions	IZUMI OKADA, 1129-1140
Longest increasing paths with gaps	ANNE-LAURE BASDEVANT & LUCAS GERIN, 1141-1163
Random cover times using the Poisson cylinder process	ERIK I. BROMAN & FILIPE MUSSINI, 1165-1199
On equalities of sigma-finite measures constructed from discrete recurrent Markov chains	JOSEPH NAJNUDEL & JU-YI YEN, 1201-1211
Regularity of biased 1D random walks in random environment	ALESSANDRA FAGGIONATO & MICHELE SALVI, 1213-1248

Probability and Mathematical Statistics

Probability and Mathematical Statistics is an open-access, IMS-affiliated journal. The purpose of the journal is to publish original contributions to the theory of probability and mathematical statistics. It was founded in 1980 and its establishment was a result of the initiative of the Wrocław probability and statistics communities. Papers at http://www.math.uni.wroc.pl/~pms/publications.php Volume 39, number 2, 2019

Cauchy–Stieltjes families with polynomial variance functions and generalized orthogonality	W. BRYC, R. FAKHFAKH, W. MŁOTKOWSKI, 237–258
Embedded Markov chain approximations in Skorokhod topologies	B. BÖTTCHER, 259–277
Karhunen–Loève decomposition of Gaussian measures on Banach spaces.	X. BAY, J. CROIX, 279–297
On the exact dimension of Mandelbrot measure	
On the distribution and q-variation of the solution to the heat equation with fractional Laplacian	
Wishart laws and variance function on homogeneous cones	P. GRACZYK, H. ISHI, B. KOŁODZIEJEK, 337–360
Admissible and minimax estimation of the parameters of the selected normal population	
in two-stage adaptive designs under reflected normal loss function	H. MAZAREI, N. NEMATOLLAHI, 361–383
Asymptotic behavior for quadratic variations of non-Gaussian multi-parameter Hermite random fields	T. T. D. TRAN, 385–401
Stationarity as a path property	
Estimates of the transition densities for the reflected Brownian motion on simple nested fractals.	M. OLSZEWSKI, 423–440
A two-parameter extension of Urbanik's product convolution semigroup	C. BERG, 441–458
On the carrying dimension of occupation measures for self-affine random fields	P. KERN, E. SÖNMEZ, 459–479

OBITUARY: Willem van Zwet

WILLEM RUTGER VAN ZWET, emeritus professor at the Mathematical Institute Leiden, passed away in the morning of July 2, 2020 at the age of 86 years.

Willem ("Bill") van Zwet was born in 1934 in Leiden, and attended the gymnasium (high school with classics) in The Hague. During his subsequent studies in mathematics and physics at Leiden University (1951–59; where, after three years, "his grades were okay but there were not many of them", as he revealed in the interview quoted below) he chose to specialize in statistics, a subject not taught at the university at the time. Willem took courses with David van Dantzig in Amsterdam, who, although a pure mathematician by training, is viewed as the first mathematical statistician in the Netherlands.

In 1964, he obtained a PhD with Jan Hemelrijk, an applied statistician and pupil of van Dantzig, who had passed away in 1959. While preparing his (theoretical) thesis, Willem engaged in statistical consultation during many of his working hours. In an unpublished interview in 2002, Willem mentioned van Dantzig and Hemelrijk as the greatest influences on his career, together with Peter Bickel.

After a stay at the University of Oregon in 1965, Willem returned to Leiden University and was quickly, in 1968, promoted to full professor in Statistics. He stayed in Leiden until his mandatory retirement in 1999, which he accepted with a farewell address under the title "No complaints so far". His involvement in the statistical community continued until recently.

Willem was both a renowned scientist and a powerful organizer. His work on asymptotic expansions and higher-order efficiency of non-parametric statistics is well known, but he has also worked on a wide range of other topics, including resampling methods, plant cell statistics and spatial stochastic processes; his thesis work (published as a monograph in 1964) on convex transformations of random variables is still cited. Willem was a superb lecturer and delivered the Hotelling (1988), Wald (1992), and Bahadur (2005) lectures, among many others.

Willem was skilled as an administrator: for Leiden University, where he served as dean in 1982-83, but also as chairman of the board of the National Herbarium, chairman of the scientific committee of the Leiden University Fund, and as promoter for the honorary doctorate awarded to Erich Lehmann (1985). Moreover, he will be remembered for his work at the national and international level. From 1961-96 he was almost continuously committed to the Mathematical Center (now CWI) in Amsterdam that served as a national focus point for applied mathematics, including statistics, which was novel at the time. He was co-founder and first director of EURANDOM from 1997-2000, a vibrant research institute in Eindhoven, populated by around 25 postdocs, in rolling two-year periods, and attracted many of the world's foremost statisticians and probabilists as guest lecturers and researchers. He was also the initiator of the famous Stochastics Meetings Lunteren, an annual gathering of Dutch statisticians and probabilists with prominent speakers from all over the world, picked by Willem himself (1972–99), which are still being continued. Perhaps the most impressive administrative achievements were international. Willem served as president of the IMS, of the Bernoulli Society and of the ISI, as editor-in-chief of the Annals of Statistics and of Bernoulli,



Willem (Bill) van Zwet

as board and corporation member of the National Institute for Statistical Sciences in North Carolina, as member of the board of directors of the ASA, and held many other offices and memberships of programme, prize, review, advisory, restructuring, organizing or publication committees.

From 1967–93, Willem was a frequent visiting scientist at the University of California at Berkeley, and from 1990-98 he divided his time between Leiden and Chapel Hill, where he was William Newman professor. As well as these and other close ties with the US, Willem maintained intensive contacts with statisticians in the Eastern Bloc, and played a role in the exchange between researchers on the two sides of the then "iron curtain". He loved Prague, with its named symposia and prominent statisticians. He was just as immersed in the western European statistical community, with Oberwolfach as another special meeting place.

Willem received numerous prizes and honours for his work, including an honorary doctorate from Charles University in Prague and memberships of the Royal Netherlands Academy of Sciences and the Academia Europaea. The list is too long for inclusion here. Willem himself would have been proud to mention his knighthood in the "Order of the Netherlands' Lion," a

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Obituary: Willem van Zwet

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token of appreciation by his home country (1996). Willem was instrumental in seeing similar honours bestowed on his international colleagues, including Peter Bickel, Jon Wellner and Marie Hušková.

Given the minimal presence of statistics in the Netherlands at the start of his career, it is no surprise that Willem was important for the development of statistics in the country. At one time Willem was the scientific father or grandfather of most mathematical statisticians in the Netherlands and little could proceed without his knowing. Although Willem did not form a "school" and was liberal as an advisor, his 16 PhD students took advantage of his authority, support and inspiration, and all of them pursued scientific careers at home or abroad. Willem was succeeded at Leiden University by his student Sara van de Geer (now at ETH, Zürich), next student-of-student Richard Gill (now emeritus), and currently by student Aad van der Vaart. The Netherlands Statistical Society established an annual Willem van Zwet Award (for best PhD thesis) in 2012.

Willem's career coincides with a period of major changes in statistics, but also in the world of science in general. A 2006 interview by Rudy Beran and Nick Fisher gives an interesting, and sometimes hilarious, picture of that period and Willem's vision of it, which is still relevant today. It was published in *Statistical Science* in 2009: "An Evening Spent with Bill van Zwet" (https://projecteuclid.org/euclid.

ss/1255009013).

One of Willem's hobbies emerges in his answer to Rudy and Nick's question: If you were stuck on a desert island with a limited choice of reading materials which of your papers, among those available, would you take with you? Willem van Zwet replied, "That is a strange question. Why would I take any of my papers? A crate of Dutch *jenever* [gin], or bourbon if you like, would make a lot more sense."

We remember that it had to be "oude jenever", not the more common and a little cheaper "jonge jenever". Old gin for old people, we young people used to think. And now we are old ourselves, and will miss the towering presence of Willem van Zwet.

Aad van der Vaart, Leiden University



The Canadian Journal of Statistics La revue canadienne de statistique

Société Statistical statistique Society du Canada of Canada

The Canadian Journal of Statistics

Special issue on "COVID-19: Statisticians in Action" – Call for Submissions

In response to the COVID-19 pandemic, *The Canadian Journal of Statistics (CJS)* plans to devote a special issue to "*COVID-19*: *Statisticians in Action*". We aim to showcase statistical research on the design and analysis of COVID-19 studies, discuss challenges posed by COVID-19 data, identify emerging issues, and demonstrate the importance of a strong statistical presence in collaborations with public health researchers and other scientists studying the pandemic.

We invite the submission of research articles, reviews, or focussed discussions. We welcome papers on a broad range of topics, including the design and analysis of specific types of studies, the analysis of disease surveillance data, statistical issues related to demographic, epidemiological and genetic studies of the disease, and to the evolution of the pandemic and its impact on public health and the economy.

The submission deadline is **December 31, 2020**. A speedy review will be given to all submissions according to the usual *CJS* criteria. Please submit your paper through the *CJS* submission website, specifying that the submission is for the special issue on "*COVID-19: Statisticians in Action*": http://mc.manuscriptcentral.com/cjs-wiley

The lead Guest Editor is Jerry Lawless (University of Waterloo), and co-Guest Editors are Don Estep (Simon Fraser University), Nancy Heckman (University of British Columbia), Eleanor Pullenayegum (University of Toronto), Lei Sun (University of Toronto) and Denis Talbot (Université Laval).

OBITUARY: Donald P. Gaver, Jr.

DONALD P. GAVER, JR., was born on February 16, 1926 in St. Paul, Minnesota. He spent his childhood in St. Paul with his family including his sister Nancy. He attended the St. Paul Academy where he excelled in science and mathematics. He was encouraged to apply to MIT and was admitted; however, his entry was delayed as he was drafted into the U.S. Navy to serve in WW II. He received training in electronics, some of it at Monterey, California, at a base that was destined to become the Naval Postgraduate School (NPS) where he eventually returned to spend the last 48 years of his life. He spent a year on a PT boat based in Guam and became expert in radio electronics. When he returned to the U.S., he enrolled in MIT in January 1946 with the intention of pursuing a major in electrical engineering. Nevertheless, he was invited to become a math major and was especially influenced by George Wadsworth who taught probability, and specialized in a new field, now referred to as operations research. Don also took a summer course in probability from Mark Kac, who he found to be very inspiring and furthered his interest in probability. Upon completion of his undergraduate studies, he stayed to earn a masters degree in economics. There, on the advice of Paul Samuelson, he wrote his thesis under the direction of a young economist and future Nobel Prize winner, Robert Solow.

Not only did his studies at MIT shape his future professional career, by chance his sister Nancy was a student at nearby Wellesley College, and she introduced Don to her roommate, Frances Rouse. On January 24, 1953 Don and Fran were married, and they were able to celebrate their 65th wedding anniversary before Don's passing.

After Don earned his MS degree, he joined the Operations Evaluation Group (OEG), a unit of the U.S. Defense Department in Washington DC. The period following WW II marked the birth of the field of Operations Research, and the group at OEG included Bernard Koopmans and Robert Hooke. The OEG group studied applied problems by developing mathematical and statistical models, applying appropriate techniques to solve those problems and generalizing those solutions to create policies. The OEG experience contributed greatly to Don Gaver's lifelong talent for formulating applied problems over a wide variety of disciplines and solving those problems using sophisticated techniques in probability, statistics and applied mathematics.

In 1953, Don was urged to seek a PhD degree. Koopmans urged him to go to Columbia, while Hooke urged him to attend Princeton to work with John Tukey. Princeton won out, and he enrolled there in 1953. While he originally intended to work with John Tukey, he ended up with William Feller as his advisor, and he wrote his thesis on priority queues, finishing in 1956. He published papers on priority queueing, based on a completion time analysis, with his seminal work appearing in *JRSS B* in 1963.

After his Princeton graduation, he joined the mathematics department at Westinghouse Corporation in Pittsburgh, PA, headed by Robert Hooke. There he worked on a wide range of problems that arose in the various divisions of that vast corporation, most notably reliability, power systems and elevators. In 1963, he was recruited to the business school of Carnegie Mellon University (then Carnegie Tech), and in 1968 Morris DeGroot and



Donald (Don) Gaver in 2009

Don Gaver co-founded the Carnegie Mellon Department of Statistics. One notable research contribution arising from a consulting project at Westinghouse was the development of an algorithm for the numerical inversion of Laplace transforms (*Operations Research*, 14(3), 1966, 444– 459). The Gaver algorithm was accelerated by Harald Stehfest and is known today as the Gaver–Stehfest algorithm.

Don Gaver spent three years on leave in California (Stanford in 1961, Berkeley in 1967, and NPS in 1970). The lure of northern California was great, and the leave at NPS led to his moving there in 1971, remaining for the rest of his career. Don was challenged by military problems that were, and are, the focus of NPS, and he established a 40 year collaboration with Patricia Jacobs, also at NPS. He continued his wide-ranging collaborations in many areas of Statistics and OR, traveling frequently to visit collaborators, especially at Bell Laboratories, IBM and many throughout Europe.

Don Gaver's research brought him many awards. He was a Fellow of the IMS, ASA, AAAS, INFORMS, and an elected member of the ISI. In 2009 he was awarded the U.S. Navy's Civilian Distinguished Service Medal, their highest civilian award, and he was awarded the U.S. Army Wilks Award and the INFORMS Steinhardt medal for contributions to military operations research. Most importantly, he was elected to the U.S. National Academy of

OBITUARY: Joseph (Yossi) Yahav

JOSEPH A. (YOSSI) YAHAV, Vigevani Professor Emeritus of Statistics and Agricultural Economics at the Hebrew University of Jerusalem, died in Jerusalem on August 6, 2016, at the age of 81. In addition to his highly original research contributions, Yossi was one of the founders of modern statistics in Israel.

He obtained his PhD at the University of California, Berkeley in 1963, where he was supervised by David Blackwell, following his undergraduate degree in Economics and Statistics at the Hebrew University and further studies at Stanford. After teaching at Berkeley, he returned to Israel in 1965, with an appointment at the University of Tel Aviv. Shortly after arriving, he founded the Department of Statistics at the University of Tel Aviv and became its first chair. He grew the Department, broadening it to include operations research, population genetics, mathematical economics and game theory. In 1976, after Tel Aviv graduated its first PhD student, Yossi moved to the Hebrew University where he held a chair in Statistics and Agricultural Economics. He became Dean of Social Sciences in 1980, serving until 1986. After stints as chair of both the Statistics and Agricultural Economics Departments, he was appointed Vice President for Finance of the Hebrew University in 1991 and held that position until 1993.

He became National Statistician and Head of the Central Bureau of Statistics of Israel serving from 1993 to 2001.Although his background was in theory, Yossi threw himself into this position introducing a number of important innovations including, the Social Survey which has become the main source of information on living conditions in Israel, a website and database, the first to do so among national statistical offices in the world., He developed methods for integrating administrative data with sampling in the Israeli Census, a significant

Obituary: Donald P. Gaver, Jr

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Engineering with the citation, "for contributions to reliability, maintainability and queueing concepts, with applications to telecommunications and military systems."

Don Gaver was a brilliant scholar and educator. He was also outgoing, fun-loving, sometimes mischievous, and a joy to be around. He was a natural mentor who was always interested in and successful at helping others to succeed, especially young faculty.

Don Gaver died on February 11, 2018 and left behind his widow Fran Gaver, three children (Elizabeth, William and Donald P. III) and five grandchildren.

Written by John Lehoczky, Carnegie Mellon University.

John Lehoczky notes that, in addition to personal recollections, this remembrance is drawn from obituaries and profiles in: The Minneapolis Star Tribune https://m.startribune.com/ obituaries/detail/0000244954/; The Monterey Herald https://www.legacy.com/obituaries/ montereyherald/obituary.aspx?n=donald-paul-gaver&pid=188202199&fhid=32277; The Carmel Pine Cone http://pineconearchive.com/180216PCA.pdf; INFORMS: https://www. informs.org/Explore/History-of-O.R.-Excellence/Biographical-Profiles/Gaver-Donald-P (also a video interview of Donald by Patricia Jacobs on this page)



Yossi Yahav (left), while he was Head of the Central Bureau of Statistics, presenting Israeli Prime Minister Ehud Barak with the Israel 1999 Statistical Booklet.

methodological contribution.

Among other honors, Yossi served as President of the Israel Statistical Association. He was selected as a fellow of the Institute of Mathematical Statistics and elected a member of the International Statistical Institute.

His thesis was in sequential analysis and he made several important contributions to this area. A very significant one was the introduction of the notion of asymptotic pointwise optimality of sequential procedures, which he developed, partly in collaboration with me.

He made a number of other contributions, to ranking problems, estimating the proportion of unseen species, the bootstrap, and econometrics. A paper on Renewal Theory in the Plane gained a footnote in volume II of Feller's famous *Probability Theory*.

Yossi was a man of broad interests, who had a talent for uniting theory and practice and for asking fruitful questions. In our collaborations in sequential analysis and renewal theory it was he who asked the basic questions.

Above all, Yossi had qualities which are reflected in his achievements. He was a wonderful human being, astute, broadly intelligent and caring. He continues to be mourned by me and his many other friends.

Written by Peter Bickel, University of California, Berkeley, with great assistance from Danny Pfeffermann, Isaco Meijlichson, David Gilat, and Yoav Benjamini

Treasurer's Report 2019

Introduction

This report details membership and subscription data for the calendar year end 2019. The 2019 fiscal year-end audit report will be posted online separately in the Fall of 2020, after the auditors have completed the annual process.

In 2019, the total number of IMS members increased. Subscriptions by institutions decreased this past year by 3% overall, and by 4% for IMS core journals. 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, and membership, subscription and 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: the Latin American Journal of Probability and Mathematical Statistics; Annales de l'Institut Henri Poincaré (B); Bayesian Analysis; Bernoulli journal; Bernoulli News; Brazilian Journal of Probability and Statistics

Affiliated Publications

Observational Studies; Probability and Mathematical Statistics; Stochastic Systems

Membership Data

Table I presents the membership data back to 2015. Total individual paid membership in the Institute as of December 31, 2019 increased by 15% from December 31, 2018. This is largely due to an increase in members from mainland China. The total number of paid IMS members in 2019 was 2,788. The IMS had its peak in paid membership in 2008 with 3,156 members. The IMS Executive Committee continues to look for ways to address our membership numbers.

TABLE 1: Membership, by Calendar Year

	2015	2016	2017	2018	2019	% change
Regular	1,587	1,565	1,447	1,384	1,397	0.9%
Life/Retired Life	528	541	563	613	617	0.7 %
Reduced Country/Retired/IMS China	376	337	370	331	704	100.6%
New Graduate	58	113	213	76	70	-7.9%
Student	1,236	1,094	1,022	828	722	-15.3 %
Total	3,785	3,650	3,615	3,217	3,510	7.1 %
Total excluding free members (students)	2,549	2,556	2,593	2,389	2,788	15.0%

Geographic Distribution of Members.

The IMS membership is currently distributed as follows (see pie chart, right): 59% United States; 18% Asia; 14% Europe; 4% Canada; 2% 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 2019, 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

TABLE 2. Member subscriptions, by calendar year						
PRINT (paid)	2015	2016	2017	2018	2019	% change
Annals of Applied Probability	80	68	61	54	46	-14.8%
Annals of Probability	97	75	68	57	50	-12.3 %
Annals of Applied Statistics	141	107	91	87	83	-4.6 %
Annals of Statistics	262	220	208	191	174	-8.9%
Statistical Science	464	386	382	387	325	-16.0 %
Total	1,044	856	810	776	678	-12.6%

Joint Memberships

The IMS offers joint membership opportunities with: the Association for Computing Machinery (ACM), Applied Probability Society/INFORMS (APS/INFORMS), Bernoulli Society (BS), Indian Society for Probability and Statistics (ISPS), International

Continued from page 16

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 2019 and previous years. Almost all journals experienced subscription decreases in 2019. Overall, institutional subscriptions decreased by 3.2%. The decrease to IMS journals, specifically, was 4.2%. 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 the 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 continue to go very well.

Financial and Audit Report

The fiscal year ended December 31, 2019. 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/.

IABLE 3: Institutional paid subscriptions, by calendar year						
PRINT	2015	2016	2017	2018	2019	% change
Annals of Applied Probability	591	580	558	537	519	-3.4%
Annals of Probability	779	769	735	706	673	-4.7 %
Annals of Applied Statistics	368	349	341	341	343	0.6%
Annals of Statistics	948	962	929	906	861	-5.0%
Statistical Science	717	708	671	666	629	-5.6%
IMS Bulletin	96	90	75	71	70	-1.4%
Current Index to Statistics (ceased 2016)	199	182	N/A	N/A	N/A	N/A
Annals Inst Henri Poincaré (B) ^s	305	304	300	289	288	-0.3 %
Bernoulli ^s	299	298	303	298	294	-1.3%
Brazilian J Probab Stat ^s	135	135	134	132	142	7.6%
Total	4,437	4,377	4,046	3,946	3,819	-3.2 %
Total IMS journals	3,403	3,368	3,234	3,156	3,025	-4.2 %
^s denotes IMS-supported journals.						

TABLE 4: Total sales of IMS Monographs and IMS Textbooks

Book series	2015	2016	2017	2018	2019	TOTAL
IMS Monographs (6 vols to end of 2019)	543	4,115	4,214	2,414	1,253	16,224
IMS Textbooks (11 vols to end of 2019)	1254	777	630	1,018	1,940	8,804
Total sales	1,797	4,892	4,844	3,432	3,193	25,028

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 are being felt across the market and are not unexpected. The IMS leadership began planning for these decreases over 15 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



This photo, taken in July 2019 at the Denver JSM, was the last time the Executive Committee met in person, and shows. Zhengjun Zhang, IMS Treasurer [left], with the other members of the 2019–20 IMS Executive Committee, [l-r]: Program Secretary Ming Yuan, President Susan Murphy, Past-President Xiao-Li Meng, Executive Secretary Edsel Peña, and President-Elect Regina Liu (who appears in this photo thanks to the wonders of modern software]).



The Institute of Mathematical Statistics presents

IMS TEXTBOOKS



Hardback \$105.00 Paperback \$39.99

IMS members are entitled to a 40% discount: email ims@imstat.org to request your code

Statistical Modelling by Exponential Families

Rolf Sundberg, Stockholm University

This book is a readable, digestible introduction to exponential families, encompassing statistical models based on the most useful distributions in statistical theory, including the normal, gamma, binomial, Poisson, and negative binomial. Strongly motivated by applications, it presents the essential theory and then demonstrates the theory's practical potential by connecting it with developments in areas like item response analysis, social network models, conditional independence and latent variable structures, and point process models. Extensions to incomplete data models and generalized linear models are also included. In addition, the author gives a concise account of the philosophy of Per Martin-Löf in order to connect statistical modelling with ideas in statistical physics, including Boltzmann's law. Written for graduate students and researchers with a background in basic statistical inference, the book includes a vast set of examples demonstrating models for applications and exercises embedded within the text as well as at the ends of chapters.

"Rolf Sundberg's book gives attractive properties of the exponential family and illustrates them for a wide variety of applications. Definitions are concise and most propositions look directly appealing. The writing reflects the author's experience in deriving results that are essential for good modelling and convincing inference. Thus, this book is indispensable for all data scientists, be they graduate students or experienced researchers." Nanny Wermuth, Chalmers University of Technology, Sweden

www.imstat.org/cup

Cambridge University Press, with the Institute of Mathematical Statistics, established the *IMS Monographs* and *IMS Textbooks* series of high-quality books. The series editors are Nancy Reid (Coordinating Editor, 2018–2021), Ramon van Handel (Probability, 2018–2021), Arnaud Doucet (Algorithms, 2020–2023) and Xuming He (Statistics, 2017–2020).

IMS meetings around the world

Joint Statistical Meetings: 2020-2025

IMS sponsored meeting

JSM 2021 August 7–12, 2021. Seattle, USA.

w https://ww2.amstat.org/meetings/ jsm/2021/

The theme of the 2021 JSM is **"Statistics, Data, and the Stories They Tell."** To propose an invited session sponsored by the IMS, please see the article on the cover of this issue.

IMS sponsored meetings: JSM dates for 2022-2026

2022 Joint Statistical	IMS Annual Meeting	JSM 2024
Meetings	@ JSM 2023	August 3–8, 2024
August 6–11, 2022	August 5–10, 2023	Portland, Oregon,
Washington DC	Toronto, Canada	USA

One World ABC Seminar (online): w https://warwick.ac.uk/fac/sci/ statistics/news/upcoming-seminars/abcworldseminar Following the last-minute cancellation of ABC in Grenoble, and the likely cancellation of several workshops and conferences in the near future, including the ABC sessions at ISBA 2020, members of the scientific committee and other ABC researchers decided to launch an online seminar or webinar, around the theme of approximate Bayesian (ABC) methods. This initiative is called One World ABC seminar and is currently held biweekly at 11:30 UK time (12:30 CET). This seminar is destined to aggregate people interested in ABC (approximate Bayesian computation) methods. Participation is free and unlimited but requires registration for access to the Blackboard Collaborate link, which allows for interactions from the participants. The organizers are welcoming proposals for future talks. This webinar is part of the larger One World seminar initiative, which gathers seminars in applied mathematics and data sciences. [See next page for One World Probability Seminar]

ABC in Svalbard

April 12–13, 2021, Svalbard, Norway

w https://sites.google.com/view/abcinsvalbard/home

Registration is open, and limited to 100 participants so book soon! ABC in Svalbard is the next edition of a successful workshop series around ABC methods. It aims at attracting researchers at the forefront of research on approximate Bayesian computing methods and promoting original research in that field among various disciplines. IMS Annual Meeting @ JSM 2025 August 2–7, 2025 Nashville, TN, USA

Seattle

JSM 2026 August 1–6, 2026 Boston, MA, USA

Bernoulli–IMS One World Symposium 2020 August 24–28, 2020 ONLINE

w https://www.worldsymposium2020.org/ Over 600 pre-recorded talks and 120 posters have been uploaded for this symposium, which will bring together the research community of probability and mathematical statistics and will give as many researchers as possible the opportunity to present their recent research results. The meeting will be virtual, with many new experimental features.

Participation at the symposium is free, registration is mandatory to get the passwords for the zoom sessions. Over 2,100 people have already registered!

2022 IMS Annual Meeting June 27–30, 2022 London, UK w TBA

Mark your calendars for the 2022 IMS Annual Meeting in London. Program and Local Chair: Qiwei Yao.

At a glance:

forthcoming IMS Annual Meeting and JSM dates

2021

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

2022

IMS Annual Meeting:

London, UK, **June** 27–30, 2022

JSM: Washington DC, August 6–11, 2022

2023

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

2024

IMS Annual Meeting/ 11th World Congress: Bochum, Germany, August 12–16, 2024

JSM: Portland, OR, August 3–8, 2024

2025

IMS Annual Meeting @

JSM: Nashville, TN, USA, August 2–7, 2025

Statistics, Data, and the Stories They Tell

Washington State Convention Center August 7–12, 2021

More IMS meetings around the world

These IMS sponsored or co-sponsored meetings are known to be either postponed or canceled at the time of printing. Please check for updates on the meeting websites. And if you spot something we're missing, please let us know!

7th Bayes, Fiducial and Frequentist Statistics Conference (BFF7) (http://www.fields.utoronto.ca/activities/20-21/BFF7) is moved from October 26–28, 2020 to a future date. Note new website address.

The 8th Workshop on Biostatistics and Bioinformatics (https://math.gsu.edu/yichuan/2020Workshop/) has been postponed to Fall 2020. New date coming soon.

Frontier Probability Days (http://lechen.faculty.unlv.edu/FPD20/) is now May 16–18, 2021. Registration open until March 16, 2021.

Mathematical Statistics and Learning (https://www.msl2020.org/) is moved to June 1-4, 2021.

Statistics in the Big Data Era (https://simons.berkeley.edu/ workshops/statistics-big-data-era) will now take place June 2–4, 2021, at the University of California, Berkeley.

The 2020 WNAR/IMS/KISS/JR Annual Meeting (http://www. wnar.org/event-3603109) is postponed from June 14–17, 2020, to next year in Anchorage, Alaska; dates to be confirmed.

The Bernoulli–IMS World Congress 2020 (https://www.wc2020. org/) in Seoul, South Korea, is postponed to July 19–23, 2021. Details to follow.

There won't be a physical IMS Annual Meeting this year. The next IMS Annual Meeting will take place at JSM 2021, August 7–12, 2021, in Seattle, WA, USA.

IMS Asia Pacific Rim Meeting 2022 *NEW DATES:* January 4–7, 2022 Melbourne, Australia

w http://ims-aprm2021.com/ The sixth IMS Asia Pacific Rim Meeting (IMS-APRM) was scheduled to take place in Melbourne, Australia from 5 to 8 January 2021. It is postponed until January 2022. Bernoulli–IMS 11th World Congress in Probability and Statistics (including the 2024 IMS Annual Meeting) August 12–16, 2024 Ruhr-University Bochum, Germany w TBC

Details to follow, but for now, please save the date!

FODS2020 ACM–IMS Foundations of Data Science Conference October 18–20, 2020. Online: https://fods.acm.org

Program at https://easychair.org/smart-program/FODS2020/ The Association for Computing Machinery (ACM) and the IMS have come together to launch a conference series on the Foundations of Data Science. Our inaugural event, the ACM–IMS Interdisciplinary Summit on the Foundations of Data Science, took place in San Francisco in 2019. Starting in 2020 we will have an annual conference with refereed conference proceedings. This interdisciplinary event will bring together researchers and practitioners to address foundational data science challenges in prediction, inference, fairness, ethics and the future of data science.

One World Probability Seminar (OWPS): Ongoing and Online https://www.owprobability.org/

The short term goal of the One World Probability Seminar is to provide access to a seminar for as many researchers as possible. For the indefinite future, the seminar is intended to foster ideas among our truly global research community and to help reduce our impact on climate change. Initially, the seminar will have an experimental character. We will need to understand how to work with online tools and learn how to deal with the vulnerabilities and bottlenecks of online traffic. Please join us in the long journey ahead!

22nd Meeting of New Researchers in Statistics and Probability

The IMS New Researchers Conference (http://groups.imstat.org/ newresearchers/conferences/nrc.html) will either be postponed until spring 2021 or canceled. The primary purpose of the NRC is for new researchers to meet each other, interact, share ideas and be exposed to leaders in the field. Because JSM will be online, we feel it is best to delay the NRC until it can be held in person. We are exploring options for hosting NRC in early spring 2021 but do not have a location or date selected yet; we will update the website in early September. Otherwise, see you at the 2021 IMS NRC, the first week of August in Seattle before the Joint Statistical Meetings.



IMS sponsored meeting ENAR dates, 2021–2022 March 14–17, 2021: Baltimore, MD, USA March 27–30, 2022. Houston, TX, USA w www.enar.org/meetings/future.cfm

Other meetings and events around the world

COVID-19: KEEP CHECKING

Please check for updates on the websites of any meetings you are planning to attend in the coming months: the situation is *still* changing. The information here may be out of

date by the time you read this! Let us know if you have any updates: email bulletin@imstat.org.



SanDAL Winter School on Mathematical Statistics December 7–11, 2020

Esch-sur-Alzette, Luxembourg

w https://sandal.uni.lu/winter-school/ Offering three courses for PhD students and early Postdocs: Non-parametric Inference under Local Differential Privacy (Cristina Butucea); Principal Component Analysis: some recent results and applications (Karim Lounici), and Statistical inference of incomplete data models to analyse ecological networks (Stéphane Robin).

64th ISI World Statistics Congress July 15–20, 2023. Ottawa, Canada w TBC

The Congress will be held in the Shaw Centre, in the heart of the city. The venue was chosen after competitive bids from a number of venues in Canada were assessed. We are grateful to the Statistical Society of Canada and to Statistics Canada for their support. We are confident that the Congress will build on the experience of WSC 2021 and will be able to include a virtual element. We look forward to meeting up with colleagues and friends again in Canada!

63rd ISI World Statistics Congress 2021 July 2021, dates TBC *NOW ONLINE*

w https://www.isi2021.org/

The International Statistical Institute is pleased to announce that its flagship biennial 'World Statistics Congress 2021 - The Hague', will be a virtual event in July 2021. In line with many other events, it is not possible to confidently plan an in-person congress. By going virtual in 2021, ISI will have the opportunity to host a more inclusive conference than ever before. It will allow us to have the widest ever participation, reaching out to a greater range of current and potential members who would not otherwise be able to afford to attend an international conference. In addition to not incurring travel and accommodation costs, there is a positive environmental impact with a substantially lower carbon footprint. We hope to see a large number of first time participants, including many from developing countries: capacity building will continue to be an important part of this conference. Some aspects of next year's event will differ from previous WSCs, but we are working to provide ample opportunities for virtual networking along with a rich scientific program. We are confident it will be a unique and professionally enriching experience for all participants. Holding a WSC in 2021 as planned will maintain the continuity of WSCs which began in 1887. There will still be a strong link with The Hague, the original venue, in the virtual conference. The ISI will take the opportunity to develop new formats and harness new technology to modernize our meeting. Further details, including a call for papers will be announced in due course.

Chaotic Modeling & Simulation International Web-Conference (CMSIM2020) October 22–24, 2020 NOW ONLINE

w http://www.cmsim.org/cmsim2020webconference.html

You are invited to contribute by a presentation a special session or workshop and suggest a keynote talk. We already have done the appropriate provisions for an important meeting following the successful Virtual 13th CHAOS2020 web-conference in June.

The deadline for Abstract submissions and Special and Invited session and Workshop proposals is set to **September 18, 2020**, see the website above.

We have already invited papers for the Conference Proceedings and the CMSIM Journal (www.cmsim.eu) where selected papers will be included along with Book publications (submit following the conference paper guidelines to Secretariat@cmsim1.org).

On behalf of the Conference Committee,

Prof. Christos H Skiadas, Conference Chair

Over the years several Books from leading publishers emerged from the CMSIM and CHAOS Conferences and events. To see a list of the main publications further to the Conference Proceedings visit the first page of the Conference website at http://www. cmsim.org/chaos2020.html. Last year's book was published by Springer: *11th Chaotic Modeling and Simulation International Conference*, 2019, https://www.springer.com/gp/ book/9783030152963 and *12th Chaotic Modeling and Simulation International Conference*, 2020, https://www.springer.com/gp/book/9783030395148

Employment Opportunities around the world

Canada: Toronto, ON

University of Toronto

Department of Statistical Sciences

Assistant Professor, Teaching Stream https://jobs.imstat.org/job//54229931

Canada: Toronto, ON

University of Toronto

Department of Statistical Sciences

Assistant Professor, Teaching Stream https://jobs.imstat.org/job//54229925

Germany: Heidelberg

Heidelberg University

Tenure-Track Professorship Mathematical Statistics https://jobs.imstat.org/job//54434292

The Netherlands: Enschede

Universiteit Twente

Assistant Professor in Mathematical Statistics https://jobs.imstat.org/job//54299353

Switzerland: Lausanne

EPFL

Tenure-Track Assistant Professor of Applied Mathematics https://jobs.imstat.org/job//54440039

Taiwan: Taipei City

Institute of Statistical Science Academia Sinica, Taiwan

Tenure-Track Faculty Positions https://jobs.imstat.org/job//54387703

United States: Hayward, CA

California State University East Bay

Assistant Professor of Statistics and Biostatistics , Tenure-Track Faculty (two positions) 2020–21 https://jobs.imstat.org/job//54323565

Singapore

Professor and Head of Department of Statistics and Applied Probability National University of Singapore

The Department of Statistics and Applied Probability (DSAP), National University of Singapore (NUS) invites applications for the position of the Head of the Department. The position will be available from July 2021 onward.

About the National University of Singapore [http://www.nus.edu.sg/]: Established in 1905, NUS is a comprehensive university with intensive research and teaching programmes.

About the Faculty of Science [https://www.science.nus.edu.sg/]: DSAP is one of the 8 departments of the Faculty.

About DSAP [https://www.stat.nus.edu.sg/]: The Department has about 35 faculty members and teaching staff supported by 8 administrative and IT staff. It offers BSc Programmes with major in Statistics and major in Data Science and Analytics as well as double majors in Statistics with Business Analytics, Computer Science, Economics, Information Security and Management. The Department also runs MSc Programmes by Coursework and by Research and a PhD Programme in Statistics. It is a partner in the MSc Programme in Data Science and Machine Learning. An active Data Analytics Consulting Centre is affiliated with the Department. The research interests of faculty members cover all major areas of statistics and probability, and the Department has fared well in recent QS Rankings.

About the Headship: We are seeking a distinguished candidate to be appointed as tenured full Professor and Head of Department. The candidate must have demonstrated leadership and management experience in a major university and be a world-class researcher in an active area of contemporary statistics or probability. He/she should have the ability, vision and commitment to lead the Department to be among the world's best.

NUS offers an internationally competitive salary, housing benefits, relocation allowance and research start-up funding that are commensurate with experience and qualifications.

Application Procedure

Please submit your curriculum vitae in confidence to the Head Search Committee at the following address, with your list of publications, and a vision statement and executive plan, as well as full contacts and CV of at least 3 referees. We will approach the nominated referees of shortlisted candidates for confidential reports. All applications are welcomed, until such a time when the position is filled. Shortlisted candidates will be invited for an online interview.

Mailing address: DSAP Head Search Committee c/o TAN Shu Wei (Ms) Faculty of Science, Dean's Office, National University of Singapore Blk S16 Level 9 6 Science Drive 2 Singapore 117546 Email address: swtan@nus.edu.sg

Taiwan: Taipei

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

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, 2021 or as soon as possible thereafter. Applicants should possess a Ph.D. 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 Ph.D. degree recipients may also be included. Electronic submissions are encouraged. Applications should be submitted to

Dr. Henghsiu Tsai 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 E-mail:<u>recruit@stat.sinica.edu.tw</u>

Application materials should be received by December 27, 2020 for consideration, but early submissions are encouraged.

United States: Chicago, IL

University of Chicago

Senior Instructional Professor (open rank) in Data Science https://jobs.imstat.org/job//54385028

United States: Lemont, IL

Argonne National Laboratory Maria Goeppert Mayer Fellowship https://jobs.imstat.org/job//54317274

United States: Bloomington, IN

IU School of Public Health Department of Epidemiology/Biostatistics Chair & Full Professor https://jobs.imstat.org/job//54405625

United States: Beltsville, MD

Information Management Services, Inc. Statistician/Programmer https://jobs.imstat.org/job//54309788

International Calendar of Statistical Events

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

At the time of writing, some meetings are known to be **POSTPONED** or canceled. Where new dates are known, they are included here. Some meetings, marked **ONLINE**, are offering a virtual format. Please check meeting websites for updates.

Online and Ongoing

ONLINE One World ABC Seminar w https://warwick.ac.uk/fac/sci/statistics/news/upcomingseminars/abcworldseminar

ONLINE One World Probability Seminar w https://www.owprobability.org/one-world-probability-seminar

September 2020

POSTPONED September 20–23 [NOW September 19-22, 2021]: Ribno (Bled), Slovenia. Applied Statistics 2020 (AS2020) w http://conferences.nib.si/AS2020

CONLINE September 23–25: ASA Biopharmaceutical Section Regulatory-Industry Statistics Workshop (Biopharm 2020) w https://ww2.amstat.org/meetings/biop/2020/

October 2020

ONLINE October 1–3: Women in Statistics and Data Science Conference w https://ww2.amstat.org/meetings/wsds/2020/

ONLINE Control Contr

Simulation (CMSIM) web conference w http://www.cmsim.org/ cmsim2020webconference.html

POSTPONED October 26–28: Toronto, Canada. 7th Bayes, Fiducial and Frequentist Statistics Conference, BFF7 w https://www.fields.utoronto.ca/activities/20-21/BFF7

November 2020

ONLINE November–December: Fridays in November and December 2020. Big Data Meets Survey Science (BigSurv20) w https://www.bigsurv20.org/

December 2020

December 7–11: Atlantic City, USA. 76th Annual Deming Conference on Applied Statistics w https://demingconference.org

Winter School for PhD students & Postdocs w https://sandal.uni. lu/winter-school/

December 15–17: Manipal, India. 28th International Workshop on Matrices and Statistics (IWMS 2020) w https://carams.in/events/ international-workshop-on-matrices-and-statistics/

January 2021

January 4–5: Tokyo, Japan. 3rd International Conference on Computational Mathematics and Applied Physics (ICCMAP 2021) w http://www.iccmap.iisrc.org

Melbourne, Australia. IMS Asia Pacific Rim Meeting (IMS-APRM2021) w http://ims-aprm2021.com/

March 2021

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



April 2021

Lims April 12–13: Svalbard, Norway. **ABC in Svalbard w** https://sites.google.com/view/abcinsvalbard/home

April 22–23: Birmingham, UK. 3rd IMA and OR Society Conference on Mathematics of Operational Research w https:// ima.org.uk/14347/14347/

April 25–27: Gainesville, FL, USA. Conference on Applied Statistics in Agriculture and Natural Resources w https://conference.ifas.ufl. edu/applied-stats/

May 2021

May 16–18: Las Vegas, USA. Frontier Probability Days w http://lechen.faculty.unlv.edu/FPD20/

June 2021

Lims June (dates TBA): Anchorage, Alaska, USA. **WNAR/IMS/JR** Meeting **w** https://www.wnar.org/page-18098

*L*ims June 1–4: Barcelona, Spain. Mathematical Statistics and Learning w https://www.msl2020.org

June 2–4: Berkeley, CA, USA. Statistics in the Big Data Era w https://simons.berkeley.edu/workshops/statistics-big-data-era

June 14–17: New Orleans, USA. Sixth International Conference on Establishment Statistics (ICES VI) w https://ww2.amstat.org/ meetings/ices/2021/index.cfm

June 14–18: Paphos, Cyprus. International Symposium on Nonparametric Statistics 2020 w http://cyprusconferences.org/ isnps2021/

June 20–26: Portoroz, Slovenia. 8th European Congress of Mathematics w http://www.8ecm.si/

June 28-July 2: Kunming, China. ISBA 2021: World Meeting of the International Society for Bayesian Analysis w https://bayesian.org/isba2020-home/ June 28–July 2: Edinburgh, UK. Extreme Value Analysis w https://www.maths.ed.ac.uk/school-of-mathematics/eva-2021

June 28–July 2: Nový Smokovec, Slovakia. LinStat 2021 w https:// linstat2020.science.upjs.sk/

June 29–July 1: Nottingham, UK. MIMAR (11th Modelling in Industrial Maintenance and Reliability) w https://ima.org. uk/12183/11th-ima-international-conference-on-modelling-inindustrial-maintenance-and-reliability-mimar/

July 2021

World Statistics Congress 2021 w http://www.isi2021.org/

July 5–9: Gold Coast, QLD, Australia. 2020 Australian and New Zealand Statistical Conference w https://anzsc2020.com.au

July 15–18: Montreal, Canada. Statistics 2021 Canada w https://www.concordia.ca/artsci/events/statistics-2021.html

August 2021

August 5–7: Prague, Czech Republic. 3rd International Conference on Statistics: Theory and Applications (ICSTA'21) w https://2021. icsta.net/

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

September 2021

September 8–9: Cambridge, UK. Induction Course for New Lecturers in the Mathematical Sciences w https://ima.org. uk/13572/induction-course-for-new-lecturers-in-the-mathematicalsciences-2021/

September 19–22: Ribno (Bled), Slovenia. Applied Statistics 2020 (AS2020) w http://conferences.nib.si/AS2020

International Calendar continued

January 2022

Melbourne, Australia. IMS Asia Pacific Rim Meeting (IMS-APRM2021) w http://ims-aprm2021.com/

March 2022

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

May 2022

May 12–18: Erice, Italy. 7th Workshop on Stochastic Methods in Game Theory w https://sites.google.com/view/erice-smgt2020/ the-workshop

June 2022

June 27–30: London, UK. IMS Annual Meeting w TBC

June 27–July 1: Darwin, Australia. Joint Southern Statistical Meetings 2022 (JSSM2022) w https://statsoc.org.au/event-3529236

July 2022

July 10–15: Riga, Latvia. XXXI International Biometric Conference (IBC2022) w www.biometricsociety.org/meetings/conferences

August 2022

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

July 2023

July 15–20: Ottawa, Canada. 64th ISI World Statistics Congress w TBC

August 2023

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

August 2024

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

Lims August 12–16: Bochum, Germany. Bernoulli/IMS World Congress in Probability and Statistics w TBC

August 2025

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

August 2026

Lims August 1–6: Boston, MA, USA. **JSM 2026 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/

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4:	June/July	May 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

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