

IMS

Bulletin



December 2023

CONTENTS

- 1 **MacArthur Fellowships**
- 2 **Members' news:** Richard Olshen; Jian Ding; Thomas Mikosch; Lester Mackey; Mark Girolami; Tengyao Wang; Marc Genton
- 4 **IMS lecturers in 2024**
- 5 **IMS awards**
- 6 **COPSS nominations**
- 7 **Behind the scenes at the IMS**
- 8 **Celebrating Herman Chernoff at 100**
- 10 **Treasurer's & Auditor's reports; Waksberg Award**
- 11 **Thanks to IMS Donors**
- 14 **Obituaries:** Peter Brockwell; Ruben Zamar; Ehsanes Saleh
- 17 **Student Puzzle 47** (extended deadline); **Clara-fications seeks your questions**
- 18 **New issue of *Journal of Data Science***
- 19 **Recent papers:** *Statistical Science*; Bernoulli; *Journal of Computational and Graphical Statistics*
- 22 **Meetings (including online)**
- 27 **Employment Opportunities**
- 33 **Calendar of Meetings**
- 35 **Information for Advertisers**

Read it online:
imstat.org/news



Fellows win MacArthur grants

The MacArthur Fellowship is a five-year \$800,000 grant, awarded annually by the John D. and Catherine T. MacArthur Foundation, to individuals who show exceptional creativity in their work and the prospect for still more in the future. The Fellowship is designed to provide recipients with the flexibility to pursue their own artistic, intellectual, and professional activities in the absence of specific obligations or reporting requirements. Grants are given to typically 20–30 individuals each year, working in any field, who have shown “extraordinary originality and dedication in their creative pursuits and a marked capacity for self-direction” and are citizens or residents of the United States. Among the 20 MacArthur Fellows this year are two of our 2023 IMS Fellows, **Rina Foygel Barber** and **Lester Mackey**.

Rina Foygel Barber is Louis Block Professor in the Department of Statistics at the University of Chicago. She is interested in developing and analyzing estimation, inference, and optimization tools for structured high-dimensional data problems such as sparse regression, sparse nonparametric models, and low-rank models. She works on developing methods for false discovery rate control in settings where there may be under-sampled data or misspecified models, and for distribution-free inference in settings where the data distribution is unknown. She also collaborates on modeling and optimization problems in image reconstruction for medical imaging. Previous honors include a Sloan Fellowship, the COPSS Presidents' Award, the IMS Tweedie New Researcher Award, and the inaugural Peter Gavin Hall Early Career Prize. Read more at <https://www.macfound.org/fellows/class-of-2023/rina-foygel-barber>



Rina Foygel Barber



Lester Mackey

Photos: John D. and Catherine T. MacArthur Foundation

Lester Mackey, Principal Researcher at Microsoft Research, is a computer scientist and statistician advancing solutions to data science problems with practical applications. Mackey's research in machine learning and statistics focuses on techniques to improve efficiency and predictive performance in computational statistical analysis of very large data sets. He applies his theoretical insights to develop scalable learning algorithms with direct benefit for society. Mackey was part of the team that won the 2009 Netflix Prize and the 2012 ALS Prize4Life, an elected member of the COPSS Leadership Academy, and the recipient of the 2023 Ethel Newbold Prize [see page 3]. Read more at <https://www.macfound.org/fellows/class-of-2023/lester-mackey>.

Contact information

IMS Bulletin Editor: Tati Howell
bulletin@imstat.org

Managing Editor: Dan Nordman

Contributing Editors: Radu Craiu, Anirban DasGupta, Ruobin Gong, Clara Grazian, David Hand, Takis Konstantopoulos, Xiao-Li Meng, Layla Parast, Daniela Witten

Find us online:

w <https://imstat.org/news>

f <https://www.facebook.com/IMSTATI>

t <https://twitter.com/InstMathStat>

IMS Dues and Subscriptions Office

Contact the IMS regarding your dues, membership, subscriptions, orders or change of address:

t 877-557-4674 [toll-free in USA]

t +1 216 295 2340 [international]

f +1 216 295 5661

e dues.subs@imstat.org

IMS Business Office

Executive Director, Elyse Gustafson

Contact the IMS regarding any other matter, including advertising, copyright permission, offprint orders, copyright transfer, societal matters, meetings, fellows nominations and content of publications:

t 877-557-4674 [toll-free in USA]

t +1 216 295 2340 [international]

f +1 216 295 5661

e erg@imstat.org

Executive Committee

President: Michael Kosorok
president@imstat.org

President-Elect: Tony Cai
president-elect@imstat.org

Past President: Peter Bühlmann
president-past@imstat.org

Treasurer: Jiashun Jin
jiashun@stat.cmu.edu

Program Secretary: Annie Qu
aqu2@uci.edu

Executive Secretary: Peter Hoff
peter.hoff@duke.edu

IMS Members' News

Richard Olshen, 1942–2023

IMS Fellow **Richard Olshen** passed away on November 8. He was Emeritus Professor of Biomedical Data Science at Stanford Medicine. Among his honors and awards, he was a Fellow of ASA, IEEE, and the AAAS, and was a Guggenheim Memorial Foundation Fellow. Olshen's research was applications of statistics to medicine and biology, focusing on tree-structured algorithms for classification, regression, survival analysis, and clustering.

An obituary will appear in a forthcoming issue.



Richard Olshen in 2010

Jian Ding wins 2023 Loève Prize

Jian Ding, professor in the School of Mathematical Sciences at Peking University, has been awarded the 2023 Liné and Michel Loève International Prize in Probability (known as the Loève Prize).

Jian Ding earned his PhD in Statistics, focusing on probability theory, at UC Berkeley in 2011. His research area is probability theory, focusing on interactions with statistical physics and computer science theory. Recent research topics include random constraint satisfaction problems, random planar geometry, Anderson localization, and disordered spin models.



Jian Ding

"I have received tremendous help and generous support from the Berkeley community of professors, fellow students and staff members. It is such warmth that encouraged me to keep struggling in research, which then turned into a struggle with pleasure and eventually into a pleasure despite struggling," said Ding. "I hope I can pass such warmth to the next generation, and to the generation after that."

Ding was previously part of the faculty at the University of Pennsylvania and the University of Chicago, and served as Szegő Assistant Professor at the Department of Mathematics at Stanford. Ding also had a post-doctoral position at the University of Washington. He was a Research Intern at Microsoft, mentored by Jennifer Chayes. He has received numerous awards and prizes, including the International Congress of Chinese Mathematicians (ICCM) Gold Medal, The Rollo Davidson Prize, and the NSF Career Award.

The Liné and Michel Loève International Prize in Probability was created in 1992 in honor of Michel Loève by his widow, Liné. The prize, awarded every two years, is intended to recognize outstanding contributions by mathematical probability researchers under 45 years old, and comes with a \$30,000 award.

Michel Loève (1907–79) was a French-American probabilist and mathematical statistician who taught at Berkeley from 1955 until his death. A pioneer of probability theory, he authored the textbook *Probability Theory I & II*, which served as the standard textbook on advanced probability theory. Loève is also credited with creating the Kosambi–Karhunen–Loève theorem, which is widely used in image processing and data analysis in many fields.

Read more about Jian Ding and the Loève Prize at <https://statistics.berkeley.edu/about/news/jian-ding-phd-2011-wins-loeve-prize>.

Bernoulli Society's Willem van Zwet Medal

Adam Jakubowski presented the Willem van Zwet Medal to **Thomas Valentin Mikosch** (University of Copenhagen, Denmark) in a ceremony during the opening of the 34th European Meeting of Statisticians in Warsaw, on July 3, 2023. More details about this award can be found at <https://www.bernoullisociety.org/prizes/53-general/323-willem-van-zwet-medal>, and an interview with Thomas Mikosch can be read in the current issue of *Bernoulli News* at https://www.bernoullisociety.org/files/Bernoulli_News_30-1.pdf.

Winner of Ethel Newbold Prize 2023

As well as receiving a MacArthur Fellowship [see cover article], **Lester Mackey** (Microsoft Research, New England) has become the fifth Ethel Newbold Prize Winner. The Ethel Newbold Prize is awarded biennially to an outstanding statistical scientist in early or mid-career 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. The Prize Committee consisted of Gesine Reinert (Chair), Adrian Röllin and Susan Murphy. During the 63th ISI WSC in Ottawa, on July 20, 2023, Lester Mackey gave a lecture entitled “Advances in Distribution Compression.”

Royal Statistical Society 2023 Guy Medals

The UK Royal Statistical Society (RSS) awarded Guy Medals in Silver and Bronze this year. The 2023 Guy Medal in Silver was awarded to **Mark Girolami** for his contributions to computational statistics and machine learning—in particular, his work on differential geometric approaches to stochastic simulation for statistical inference, published in the paper “Riemann manifold Langevin and Hamiltonian Monte Carlo methods” (with co-author Ben Calderhead), which was read to the Society in 2011. The Guy Medal in Bronze was awarded to **Tengyao Wang** for his contributions to high-dimensional statistics, including changepoint estimation, dimension reduction and missing data.

Read more at <https://rss.org.uk/news-publication/news-publications/2023/general-news/announcing-our-honours-recipients-for-2023/>

Marc Genton receives Royal Statistical Society's Barnett Award

The RSS Barnett Award and named lecture was established in memory of the environmental statistician, Professor Vic Barnett. It is awarded annually to encourage and promote the recognition of outstanding contributions to the field of environmental statistics.


The 2023 Barnett Award was presented to **Marc Genton**, Al-Khawarizmi Distinguished Professor of Statistics at King Abdullah University of Science and Technology (KAUST) in Saudi Arabia. The award is for his international impact in the area of environmental statistics. He is recognized for his work in spatial and spatio-temporal statistics with applications in environmental problems, with almost 300 publications garnering 14,600 citations.

Genton received the prestigious award during the Royal Statistical Society's annual conference, which was held in Harrogate, UK, from September 4–7, 2023 (<https://rss.org.uk/training-events/conference-2023/>).

Currently, Genton's research focuses on developing high-performance computing tools for spatial statistics and expanding the capabilities of ExaGeoStat (<https://github.com/ecrc/exageostat>), the software developed by his Spatio-Temporal Statistics & Data Science research group and the Extreme Computing Research Center at KAUST.


 = access published papers online


IMS Journals and Publications

Annals of Statistics: Enno Mammen, Lan Wang
<https://imstat.org/aos>
 <https://projecteuclid.org/aos>

Annals of Applied Statistics: Ji Zhu
<https://imstat.org/aoas>
 <https://projecteuclid.org/aoas>

Annals of Probability: Christophe Garban, Alice Guionnet
<https://imstat.org/aop>
 <https://projecteuclid.org/aop>

Annals of Applied Probability: Kavita Ramanan, Qiman Shao: <https://imstat.org/aap>
 <https://projecteuclid.org/aoap>

Statistical Science: Moulinath Bannerjee
<https://imstat.org/sts>
 <https://projecteuclid.org/ss>


IMS Collections


 <https://projecteuclid.org/imsc>


IMS Monographs and IMS Textbooks: Mark Handcock
<https://www.imstat.org/journals-and-publications/ims-monographs/>

IMS Co-sponsored Journals and Publications

Electronic Journal of Statistics: Grace Yi & Gang Li
<https://imstat.org/ejs>
 <https://projecteuclid.org/ejs>

Electronic Journal of Probability: Bénédicte Haas
 <https://projecteuclid.org/euclid.ejp>

Electronic Communications in Probability: Siva Athreya
 <https://projecteuclid.org/euclid.ecp>

Journal of Computational and Graphical Statistics: Galin Jones, Faming Liang <https://www.amstat.org/ASA/Publications/Journals.aspx>
 log into members' area at imstat.org

Probability Surveys: Mikhail Lifshits
<https://imstat.org/ps>
 <https://projecteuclid.org/ps>


Statistics Surveys: Yingying Fan
<https://imstat.org/ss>
 <https://projecteuclid.org/euclid.ssu>


IMS-Supported Journals

ALEA: Latin American Journal of Probability and Statistics: Daniel Remenik
 <http://alea.impa.br/english>

Annales de l'Institut Henri Poincaré (B): Giambattista Giacomin, Yueyun Hu
<https://imstat.org/aihp>
 <https://projecteuclid.org/aihp>


Bayesian Analysis: Mark Steel
 <https://projecteuclid.org/euclid.ba>

Bernoulli: Davy Paindaveine
<https://www.bernoullisociety.org/>
 <https://projecteuclid.org/bj>

Brazilian Journal of Probability and Statistics: Mário de Castro
<https://imstat.org/bjps>
 <https://projecteuclid.org/bjps>

IMS-Affiliated Journals

Observational Studies: Nandita Mitra
 <https://obs.pennpress.org/>

Probability and Mathematical Statistics: Krzysztof Bogdan, Krzysztof Dębicki
 <http://www.math.uni.wroc.pl/~pms/>

Stochastic Systems: Shane Henderson
 <https://pubsonline.informs.org/journal/stsy>

IMS Special Invited Lecturers in 2024

Next year there will be an impressive list of invited speakers at a range of IMS sponsored and co-sponsored meetings.

First up in 2024, **Sébastien Roch** will give a Medallion Lecture at the **Seminar on Stochastic Processes**. SSP2024 takes place in Houston, TX, from March 14–16. See <https://ssp2024.rice.edu/home>.

The 2024 **Joint Statistical Meetings** (August 3–8, 2024, in Portland, Oregon) will feature the IMS Grace Wahba lecture by **Nancy Reid**, and three IMS Medallion lectures, by **Alicia Carriquiry**, **Jing Lei**, and **Annie Qu**. See <https://ww2.amstat.org/meetings/jsm/2024/index.cfm> for information about the meeting.

Finally for 2024, at the **11th Bernoulli–IMS World Congress** (August 12–16, 2024, in Bochum, Germany), there will be a range of named and special lectures. The two Wald lectures will be given by **Peter Bühlmann** and the Le Cam lecture by **Peter Bickel**; the four IMS Medallion lectures will be delivered by **Moulinath Banerjee**, **Marc Hallin**, **Remco van der Hofstad**, and **Chunming Zhang**.

The Lawrence D. Brown PhD Student award winners, **Filippo Ascolani**, **Chanwoo Lee**, and **Yuling Yan** [see last issue's cover article] will give their talks at the special session, as will those chosen by the IMS New Researchers Group (whose names

are to be confirmed). The IMS Presidential Address will be given by the 2023–24 President, **Michael Kosorok**.

There will also be three IMS/BS lectures: the Doob lecturer will be **Pablo Ferrari**, as well as two IMS/Bernoulli Society Schramm Lectures, by **Patricia Gonçalves** (rearranged from 2023) and **Nina Holden**. Read more about the World Congress at <https://www.bernoulli-ims-worldcongress2024.org/>

Look out for previews from these special invited lecturers in the forthcoming issues of the *IMS Bulletin*.

The IMS special invited lecturers, and where you can hear them



Filippo Ascolani:
World Congress



Moulinath Banerjee:
World Congress



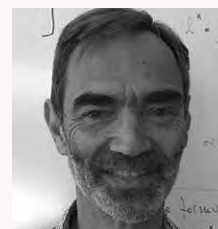
Peter Bickel:
World Congress



Peter Bühlmann:
World Congress



Alicia Carriquiry:
JSM



Pablo Ferrari:
World Congress



Patricia Gonçalves:
World Congress



Marc Hallin:
World Congress



Nina Holden:
World Congress



Michael Kosorok:
World Congress



Chanwoo Lee:
World Congress



Jing Lei:
JSM



Annie Qu:
JSM



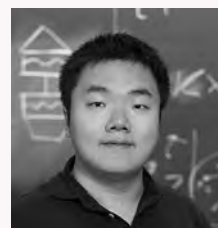
Nancy Reid:
JSM



Sébastien Roch:
SSP



Remco van der Hofstad:
World Congress



Yuling Yan:
World Congress



Chunming Zhang:
World Congress

IMS Early-Career Awards: apply now

As well as the IMS awards seeking nominations [*see panel, right*], applications are also open for these awards for early-career researchers.

IMS New Researcher Travel Award

<https://www.imstat.org/ims-awards/ims-new-researcher-travel-award/>

The purpose of the IMS New Researcher Travel Award is to fund travel and possibly other expenses to present a paper or a poster at an IMS sponsored or co-sponsored meeting for those who otherwise would not be able to attend the meeting. The travel awards are available to IMS members who are New Researchers (i.e. PhD awarded in 2020–2024). The application deadline is February 1, 2024.

IMS Hannan Graduate Student Travel Award

<https://www.imstat.org/ims-awards/ims-hannan-graduate-student-travel-award/>

The purpose of the IMS Hannan Graduate Student Travel Award is 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. The travel awards are available to IMS members who are graduate students (seeking a Masters or PhD degree) studying some area of statistical science or probability who have not yet received a PhD degree. The application deadline is February 1, 2024.

IMS Lawrence D. Brown PhD Student Award

<https://www.imstat.org/ims-awards/ims-lawrence-d-brown-ph-d-student-award/>

Lawrence D. Brown had a distinguished academic career with groundbreaking contributions to a range of fields in theoretical and applied statistics. Moreover, he was an enthusiastic and dedicated mentor to many graduate students. Eligible applicants for this award 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—up to \$2,000 in total for each winner. Application deadline is May 1, 2024.

"IMS Awards: Why Your Nomination is Important"

* Did you read this article, by IMS Past-President **Peter Bühlmann** and the former Chair of the Committee on Equality and Diversity **Nicole Lazar**, in the previous issue? They wrote about the **crucial importance of a broad and diverse nomination pool for each of the IMS awards**, and what you can do about this. Read their article online at <https://imstat.org/2023/09/30/ims-awards-why-your-nomination-is-important/>

The IMS Awards and Honors

The Institute of Mathematical Statistics recognizes and celebrates excellence in our members at all stages of their careers. We encourage you to **consider diversity and breadth*** when you nominate for these awards.

The **Peter Gavin Hall IMS Early-Career Prize** was created to honor the significant role Peter Hall played in mentoring young colleagues at work and through professional society activities. The Prize recognizes early-career research accomplishments and research promise in statistics, broadly construed. Next deadline **December 1, 2023**: <https://www.imstat.org/ims-awards/peter-gavin-hall-ims-early-career-prize/>

The **Tweedie New Researcher Award** funds travel to present the Tweedie New Researcher Invited Lecture at the IMS New Researchers Conference. It was created in memory of Richard Tweedie, who mentored many young colleagues. New researchers (PhD awarded in 2019–23) who are members of IMS are eligible. The next deadline is **December 1, 2023**: <https://www.imstat.org/ims-awards/tweedie-new-researcher-award/>

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 and appreciation of these areas. Deadline **January 31, 2024**: <https://imstat.org/honored-ims-fellows/nominations-for-ims-fellow/>

The **Carver Medal**, created by the IMS in honor of Harry C. Carver, is for exceptional service to the IMS. Nominations deadline **February 1, 2024**: <https://www.imstat.org/ims-awards/harry-c-carver-medal/>

There are several **IMS Named and Medallion Lectures**: **Wald Memorial Award & Lecture**; **IMS Grace Wahba Award & Lecture**; **the Neyman, Rietz, Blackwell and Le Cam Awards and Lectures**; and the eight **Medallion Awards & Lectures**. Next nomination deadline is **October 1, 2024**. See <https://imstat.org/ims-special-lectures/>

Nominations Sought for 2024 COPSS Awards

Each year, the statistical profession recognizes outstanding members at the Joint Statistical Meetings in an awards ceremony organized by the Committee of Presidents of Statistical Societies (COPSS).

Nominations are an important part of the process, and everyone can contribute—from the newest to most senior members of our societies. We recognize excellence in our mentors, colleagues, and friends, and it is important to single out those who have made exceptional contributions to the profession. So take a few minutes, review the various COPSS Awards, and see if you can identify worthy individuals.

Nominations are being sought for the following COPSS awards, which will be presented at the 2024 Joint Statistical Meetings which will take place in Portland, Oregon, from August 3–8, 2024: <https://ww2.amstat.org/meetings/jsm/2024/>.

The 2024 COPSS Awards

The Committee of Presidents of Statistical Societies will select winners for these awards in 2024:

- **Presidents' Award**
- **COPSS Distinguished Achievement Award and Lectureship (DAAL)**
- **Elizabeth Scott Award and Lectureship**
- **Emerging Leader Awards**

The deadline for nominations for all these awards is December 15. Details below and at <https://community.amstat.org/copss/awards/awards>

Presidents' Award

The Presidents' Award (<http://community.amstat.org/copss/awards/presidents>) is presented yearly in recognition of outstanding contributions to the statistics profession. It is typically granted to an individual who has not yet reached his or her 41st birthday. In the special case of an individual who has received his or her statistically related terminal degree fewer than 12 years prior to the nomination deadline, the individual will be eligible if he or she has not yet reached his or her 46th birthday during the year of the award. Nominations should be sent in PDF format by December 15, 2023, to the Presidents' Award Committee Chair (Bo Li: libo@illinois.edu).

Distinguished Achievement Award and Lectureship

The Distinguished Achievement Award and Lectureship, or DAAL (<https://community.amstat.org/copss/awards/copss-lecture>) is given yearly to an individual in recognition of outstanding contributions to statistical methods that have had significant impact on scientific investigations. The award winner will deliver a lecture at JSM. Eligible nominations should be sent in PDF format by December 15, 2023, to the DAAL Award Committee Chair (Limin Peng: lpeng@emory.edu).

Elizabeth L. Scott Award and Lectureship

The Elizabeth L. Scott Award and Lectureship (<http://community.amstat.org/copss/awards/scott>) is presented biennially, in even-numbered years, to an individual, male or female, who has helped foster opportunities in statistics for women. Nominations should be submitted in PDF format by December 15, 2023, to the E.L. Scott Lecture and Award Committee Chair (Li Hsu: lih@fredhutch.org).

COPSS Emerging Leader Awards

The COPSS Emerging Leader Award (<https://community.amstat.org/copss/awards/leadership-academy>) was established in 2020 to recognize early career statistical scientists who show evidence of and potential for leadership and who will help shape and strengthen the field. The award is designed both to call attention to the efforts of these individuals and to provide a mechanism for them to share their vision for the field with each other and the statistical community. Nominations should be submitted in PDF format by December 15, 2023, to the Emerging Leader Award Committee Chair (David Corliss: davidjcorliss@gmail.com).

These awards are jointly sponsored by the American Statistical Association (ASA), Institute of Mathematical Statistics (IMS), Eastern and Western Regions of the International Biometric Society (ENAR and WNAR), and the Statistical Society of Canada (SSC). They represent a discipline-wide acknowledgment of the outstanding contributions of statisticians, regardless of their affiliations with any professional society.

Behind the scenes at the IMS

Meet the people behind the emails and communications you might receive as an IMS member. You might even catch us in person at an IMS meeting!

Elyse Gustafson, Executive Director

Elyse says, “I have been honored to serve as the IMS Executive Director since 1997. Because the IMS is a smaller society, I get to do a little bit of everything from committees to publications and all the items in between. If you have a question about anything IMS, ask me [email erg@imstat.org]. When I am not working, you can find me on the tennis court or hanging out with my family.”

Laila Lunderman, Webmaster

Laila says, “I am a front-end developer and web consultant who has been proudly working with the Institute of Mathematical Statistics since 2005. My role includes maintaining the IMS website and providing assistance with email queries. I live in Minnesota with my daughter and German Shepherd, baking and playing video games in my spare time.”

Tati Howell, IMS Bulletin Editor

Tati says, “I’ve been working on the *IMS Bulletin* since 2001, first as Assistant Editor and more recently as Editor. I consider myself very lucky that I love my job! I work from home, in London, UK, and when I’m not at my desk I’m usually out walking, singing, or running round a hockey pitch. I love to hear your news for the *Bulletin*, so do get in touch!”

Patrick Kelly, IMS Production Editor

Patrick says, “I joined the IMS as the production editor in 1990 and have been happily ensconced in helping produce some of the world’s best journals ever since. I feel lucky to work with such a great team and to meet some of the most interesting people working in the field. And yes, I have read your paper. The next issue will be out soon.”

Larissa Puryear, Dues and Subscriptions, LP Society Services

Larissa says, “I have worked with IMS for over 10 years. I provide membership and subscription support to the members and institutions. If I’m not working you can find me outdoors gardening, hiking, kayaking, or walking my dogs.”

Geri and Krissi Mattson, of Mattson Publishing Services

Geri Mattson has been part of IMS journal production for the past 25 years. In 2001, she started Mattson Publishing Services (MPS). Kristina Mattson began working with MPS 15 years ago and together with VTEX have been providing services to the IMS from the review process (EJMS) through publication. They say, “Over the years we have developed a very close relationship with authors, referees, editors, and the IMS staff, and very much feel a part of the IMS family.”



Members of the “IMS family” at JSM 2023. L-R: Elyse Gustafson, Krissi Mattson Gray, Patrick Kelly, Gaynor Harper, Geri Mattson, Larissa Puryear, and Tati Howell



Celebrating **Herman Chernoff** at 100

Emily Palmer, Harvard Department of Statistics

Administrative Coordinator writes: On May 5, Professor Joe Blitzstein from the Harvard University Department of Statistics launched the centennial celebration of emeritus faculty Herman Chernoff, and his research and teaching legacy. The day featured a full program, including a tribute video from former colleagues and students; an interview with professor Xiao-Li Meng; and research presentations from professor emeritus Joseph (Jay) Kadane of Carnegie Mellon University, professor Tian Zheng of Columbia University, and professor Joseph Gastwirth of The George Washington University. The event recognized Chernoff's contributions as a statistician, educator, and mentor.

Herman Chernoff, who turned 100 on July 1, 2023, started his career in 1943 with a BS in mathematics and a minor in physics from City College in New York. For a year and a half, he worked as a physicist with the US Navy, building and fixing electronics. According to John Bather in "A Conversation with Herman Chernoff," published in *Statistical Science*, Chernoff's use of statistical ideas in the Navy convinced him to return to school to pursue a master's and PhD in applied math at Brown University, where he was supervised by Abraham Wald. Chernoff held faculty positions at the University of Illinois (1949–52), Stanford University (1952–74), MIT (1974–85), and Harvard University (1985–1997).

Chernoff's contributions to the field include work on large sample theory, experimental design, sequential analysis, presenting statistical data in visual form, and statistical decision-making. He is also known for his enthusiasm for mentoring. He proposed creating the annual New England Statistics Symposium to support young researchers and, in honor of his contribution to the symposium and profession in general, the New England Statistical Society established the Chernoff Excellence in Statistics Award in 2019.

In recognition of his work, Chernoff has received honors from the National Academy of Sciences and American Academy of Arts and Sciences and been elected fellow of the American Statistical Association and Institute of Mathematical Statistics.

During a conversation with Xiao-Li Meng, Chernoff shared why he changed focus from mathematics and physics to statistics. He described a pivotal moment in his graduate student career when he read a paper by Wald about generalizing the testing of hypotheses and estimation.

"Wald's paper struck me because [...] it confronted the fundamental idea that the test of a hypothesis or an estimation of a parameter leads to a conclusion and that conclusion should have an economic, real-world consequence." He concluded, "And that's what converted me to being a statistician!"

Chernoff added that reading papers by Jerzy Neyman and Karl Pearson exposed him to the idea that it was important to consider alternatives to a hypothesis when evaluating it. Those experiences highlighted what drew Chernoff to statistical thinking: his interest in connecting theory to applications and solving and quantifying problems of uncertainty. Although he was trained as a mathematician and physicist, Chernoff relished the opportunity to tackle a new field. In his career as a statistician, Chernoff embraced working in applied and theoretical areas, a rare feat today because of how specialized statistics has become. Blitzstein emphasized Chernoff's multi-faceted work in statistics, pointing out his applied and theoretical, Bayesian and frequentist, and parametric and nonparametric approaches.

The research talks given by Chernoff's colleagues showcased the span of his research interests and influence. While Kadane's talk focused on using probability theory to analyze handwriting in a court case, Zheng's talk covered methods for detecting influential variables in high-dimensional data, specifically genetic data. Additionally, Gastwirth spoke about his collaboration with Chernoff on the use of L -statistics to measure economic inequality.

In his interview with Meng, Chernoff explained why the manifold applications of statistics have motivated his career. He reflected, "People regard me as a theoretical statistician, but I've decided in recent years that I'm really an applied statistician. My theoretical insights have relied upon my work in thinking about applied problems."

An example of Chernoff taking inspiration from applied problems was when he created Faces, a data visualization tool he developed to help researchers analyze multivariate data (by presenting data as faces), while at Stanford.

The centennial celebration illustrated Chernoff's love of learning. The curiosity that drove him to study statistics also motivated him to study R. Blitzstein said, "I was pretty impressed that he was still coding. Usually, brilliant mathematicians get their PhD students to do all the coding, but Herman wanted to test out his methods by carrying

out the simulations himself.” He added, “One day, Herman came into my office and asked for a book on C because R was ‘too slow’ for him, and I was even more impressed with that!”

Having taught statistics for many years, Chernoff still encouraged and mentored undergraduates once he became an emeritus faculty. Blitzstein reminisced about when their offices faced each other and he would routinely return to his office to find Chernoff in conversation with a student. “My students from Stat 110 would receive homework help from this friendly man in his 80s without even realizing he had pioneered some of the methods they were using 60 years before,” marveled Blitzstein. Chernoff demonstrated his interest in supporting students’ intellectual growth by publishing books such as *Elementary Decision Theory* in 1959 and *Algebra I for Students Comfortable with Arithmetic* in 2001. Holding his autographed version of the former, Blitzstein commended the book for being accessible to high-school students and addressing some of the most pressing questions in statistics.

Some of the most memorable moments of the centennial celebration were when colleagues and former students shared their stories about Chernoff’s tips and coaching. For example, when Gastwirth was a junior colleague at Stanford, he was thrilled to be asked to review an article and willing to offer a tight turnaround with his comments. He shared advice from Chernoff that he’s adhered to ever since. “When I told Herman about finishing the review within a week, he said, ‘No, no—you have to think about the worst possible thing that can happen to delay you (e.g., you get sick), and then you double that amount of time!’”

Harvard statistics professors Meng and Jun Liu shared anecdotes about Chernoff’s mentorship. Shortly after Liu arrived as a junior faculty at Harvard, he was drafting the first paper in which he was a first author and Chernoff offered to read it. Liu recalled, “I felt a little intimidated by such a renowned statistician offering to read my paper, but Herman read it and provided such useful, line-by-line comments that it was ultimately accepted into the *Annals of Statistics*.”

During his interview with Chernoff, Meng highlighted an episode that occurred early in his career as a PhD student. In preparation for his qualifying exam, Meng printed a copy of his paper to read to his committee. Chernoff paused the perusal with a question Meng glossed



Photo by Sally Thurston

over. Chernoff interjected, “Xiao-Li, you are not answering my question.” Meng learned it wasn’t sufficient to pursue important research questions; he had to learn how to communicate effectively in order to succeed as a researcher.

During a tribute video and toasts, friends, family, former colleagues, students, and post-docs acknowledged Chernoff’s impact on them. They reminisced about grad student lunches at a pizza parlor and cozy gatherings at the Chernoff home, and they shared some of Chernoff’s favorites: politics, travel, dogs, and Swiss orange chip ice-cream. Many also paid tribute to the late Judith Chernoff by reflecting on her warmth and humor and lauding the couple’s marriage of more than 75 years.

Throughout the celebration, there were many moments that brought Chernoff’s sense of humor to the foreground. An example was when he narrated a story about his analysis of the Massachusetts lottery. When he arrived in Boston, the lottery had only been in place for about 500 days. After a statistician showed the lottery was likely to have had some repetitions but didn’t, Chernoff realized the lottery was probably fixed. He elaborated, “When I realized that the lottery was fixed, I thought that I should announce it, but then maybe the gangsters would not like that and would assassinate me. On the other hand, when I told the area chair at MIT, Harvey Greenspan, he suggested that if it was fixed, I should take advantage of it!”

Chernoff’s words are emblematic of his approach to life and relationships with others. Despite his serious career pursuits, he appreciates humor and enjoys interacting with friends, family, and colleagues.

See more photos from the event at <https://statistics.fas.harvard.edu/news/harvard-department-statistics-celebrates-professor-herman-chernoff%E2%80%99s-100th>

Herman Chernoff (left) and Xiao-Li Meng chat during Chernoff’s birthday celebration

Treasurer's & Auditor's Reports 2022

The IMS Treasurer's annual report is published on the Council Reports page at <https://imstat.org/council-reports-and-minutes/>. The report details membership and subscription data for 2022. The total number of IMS members increased, but the total number of paying members decreased, in particular reduced dues payers and new graduates. We think this is a lingering effect of the pandemic and are encouraged that our numbers could bounce back in 2023. Subscriptions by institutions decreased by 2.5%. The financial status of the Institute continues to be stable and strong, and actions are in place to ensure its long-term stability.

The 2022 auditor's report is also posted online at the same link.

On the right is a page of the auditor's report, which gives an overview of the IMS's financial position. The rest of the report can be downloaded from <https://imstat.org/council-reports-and-minutes/>

Institute of Mathematical Statistics

Statement of Financial Position

December 31, 2022 (with comparative totals for 2021)

	<u>Assets</u>	
	2022	2021
Cash and cash equivalents	\$ 169,722	\$ 79,847
Cash held for others	9,504	10,384
Accounts receivable, net	194,779	184,893
Interest receivable	5,875	1,634
Investments	9,833,995	11,710,960
Investments held for others	250,447	321,491
Prepaid expenses	66,694	56,317
Certificates of deposit	1,734,089	1,699,338
Investments restricted for endowment	480,539	597,271
Total assets	\$ <u>12,745,644</u>	\$ <u>14,662,135</u>
	<u>Liabilities and Net Assets</u>	
Liabilities:		
Accounts payable and accrued expenses	\$ 181,929	\$ 36,242
Fiscal agent liability	259,951	331,875
Unearned memberships, subscriptions, and meeting revenues	1,416,114	1,355,546
Total liabilities	1,857,994	1,723,663
Net assets:		
Without donor restrictions:		
Undesignated	7,438,597	10,176,210
Council-designated	2,920,475	2,118,505
Total net assets without donor restrictions	10,359,072	12,294,715
With donor restrictions	528,578	643,757
Total net assets	10,887,650	12,938,472
Total liabilities and net assets	\$ <u>12,745,644</u>	\$ <u>14,662,135</u>

Call for nominations: 2025 Waksberg Award

Survey Methodology is a peer-reviewed statistical journal published twice a year by Statistics Canada. The journal established in 2001 an annual invited paper series in honor of the late Joseph Waksberg to recognize his outstanding contributions to survey statistics and methodology. Each year a prominent survey statistician is chosen by a four-person selection committee appointed by *Survey Methodology* and the American Statistical Association. The selected statistician is invited to write a paper for *Survey Methodology* that reviews the development and current state of an important topic in the field of survey statistics and methodology. The paper reflects the mixture of theory and practice that characterized Joseph Waksberg's work. The recipient of the Waksberg Award is also invited to give the Waksberg Invited Address, usually at the Statistics Canada Symposium, and receives an honorarium.

Nomination of individuals to be considered should be sent by email before February 15, 2024 to the chair of the committee, Denise Silva (denisebritz@gmail.com). Nominations should include a CV and a nomination letter. Nominations remain active for 5 years.

Read more at <https://www150.statcan.gc.ca/n1/pub/12-001-x/award-prix-eng.htm>



Joseph Waksberg (1915–2006), as Chairman of the Board of Westat, in 1998. You can read "A Conversation with Joseph Waksberg" by David Morganstein and David Marker, in *Statistical Science*, 2000, 15(3), at <http://projecteuclid.org/euclid.ss/1009212819>

IMS thanks Donors to our Funds

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 & Selma Arrow; David Banks; Alicia & Robert Bell; Shankar Bhamidi; Peter & Nancy Bickel; Estate of David Blackwell; Karl & Aimee Broman; Linda Zhao & Lawrence Brown; Erhan Çinlar; Donald Cohn; Anirban DasGupta; Joan Fujimura & Kjell Doksum; Jianqing Fan; Arnoldo Frigessi; Joseph Gastwirth; Andrew & Caroline Gelman; Kenneth Griffin; Allan Gut; Donald & Janet Guthrie; Ben Hansen; Pierre Jacob; Barry & Kang Ling James; Iain Johnstone; Barbara Rosario & Michael Jordan; Joseph & Caroline Ann Mitchell Kadane; Karen Kafadar; Robert Kass; Su Yeon Kim; Hira Koul; Michael Lasarev; Jing Lei; Richard Lockhart; Joshua Loftus; John Lu; Sayan Mukherjee; Susan & Terrance Murphy; Michael Newton; Robert Nowak; Richard Olshen; Eugenio Regazzini; Walter Rosenkrantz; George G & Mary L. Roussas; Tom Salisbury; Mary Jennings & Donald Sarason; Christopher Saunders; Venkatraman E. Seshan; Juliet Shaffer; S. & D. Shreve; Terence & Freda Speed; David Steinsaltz; Virginia & Stephen Stigler; CJ Stone; William Sudderth; Guo-Qiang Zhang & Jiayang Sun; Richard Tapia; H.M. Taylor; Steven Thomson; Edward van der Meulen; Vincent Vu; Michael Waterman; Edward Waymire; Peter Wollan; Joseph Yahav; Zhaohui & Yuhong Yang; Qiwei Yao; Bin Yu & Ke-Ning Shen; Marvin Zelen; Ji Zhu

IMS General Fund

Donations support the IMS as a whole.

Eresen Arseven; Gopal Basak; Asit Basu; Peter Baxendale; Louis Chen; Herman Chernoff; Donald Cohn; David Collins; Joel Dubin; Josee Dupuis & Eric Kolaczky; Joseph Gastwirth; Subhashis Ghoshal; John Grice; William Harkness; Klaus Hinkelmann; Paul Holland; Fred Huffer; Lynn LaMotte; James Landwehr; Ray-Shine Lee; Thomas Louis; Donald McClure; Greg Minshall; Edsel Peña; Eswar Phadia; Gilles Pisier; Dale Preston; Laurent Saloff-Coste; Stanley Sawyer; John

& Carol Schoenfelder; David Scott; Norman Severo; Lynne Seymour; Walter Sievers; Michael Stein; Steven Thomson; Daniela Witten; Donald Ylvisaker; Ken-ichi Yoshihara; Marvin Zelen; Alan Zimmerman

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; Fred Huffer; Estate Khmaladze; Ernst Linder; Ryan Machtmes; Donald McClure; Edmund McCue; Luke Miratrix; Richard Olshen; John & Carol Schoenfelder; Walter Sievers; Charles Stein; Michael Stein; Steven Thomson; Bruce E Trumbo; Anton Wakolbinger; Donald Ylvisaker

IMS Grace Wahba Award and Lecture Fund

Used to fund an annual lecture at JSM that honors Grace Wahba's contributions to statistics and science; including pioneering work in mathematical statistics, machine learning, and optimization; broad and career-long interdisciplinary collaborations that have had a significant impact in the fields of epidemiology, bioinformatics, and climate sciences; as well as outstanding mentoring.

Pegah Afshar; Candace Berrett; Arwen Bradley; David Callan; Bokyung Choi; Xiaowu Dai; Jianqing Fan; Feng Gao; Andrew Gelman; Zhigeng Geng; Charles Geyer; Chong Gu; Giles Hooker; Hui-Nien Hung; Hongkai Ji; Bai Jiang; Hui Jiang; Iain Johnstone; Robert Kass; Hyunki Kim; Ryung Kim; Roger Koenker; Jing Kong; Yoonkyung Lee; Faming Liang; Xihong Lin; Yi Lin; Linxi Liu; Joshua Loftus; Fan Lu; John Lu; Li Ma; Wenxiu Ma; Susan Murphy; Robert Nowak; Douglas Nychka; Richard Olshen; Tai Qin; Nancy Reid; Richard Samworth; Christopher Saunders; Bernard Silverman; Christopher Sims; Michael Stein; Daniela Witten & Ari Steinberg;

Paul Switzer; Chien-Cheng Tseng; Bernard Viort; Duzhe Wang; Naisyin Wang; Shulei Wang; Wing Hung Wong; Xianhong Xie; Kun Yang; Bin Yu; Ming Yuan; Anru Zhang; Hao Zhang; Min Zhang; Sheng Zhong; Qing Zhou

IMS 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.; Anon.; Gerrit Draisma; Bettie & James Hannan; Giles Hooker; Joshua Loftus; John Lu; Daniel Roy; Naisyin Wang

Lawrence D. Brown PhD Student Award Fund

Used to establish awards for PhD 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 & Nancy Bickel; Eileen & Harold Brown; Franklin Brown; Jane & Marshall Brown; Louis Brown; Junhui Ca; Yun Yu & Tony Cai; Alicia Carriquiry; Lisha Chen; Michael Cohen; Anirban DasGupta; Philip Dawid; Gang, Tyre, Ramer, Brown & Passman Charitable Foundation; Constantine Gastonis; Joseph Gastwirth; Edward George; Guestrin Family Foundation; Jianqing Fan; Xu Han; Kun He; Iain Johnstone; Roger Koenker; Katherine Kopp; Robert Kopp & Farrin Anello; Arun Kuchibhotla; James Landwehr; Elizabeth Levin; Xufeng Li; Dongyu Lin; Yi Lin; Joshua Loftus; Thomas Louis; Dorrit Lowsen; John Lu; Yaakov Malinovsky; Wenxin Mao; Xiao-Li Meng; Zhanyun Zhao & Kewei Ming; Axel Munk; Forbes & Murr Families; Chaitra Nagaraja; Hui Nie; Richard Olshen; Edsel Peña; Nancy Reid; Daniel Roy; Harold Sackrowitz; Richard Samworth; David Scott; Paul Shaman; Haipeng Shen; Dylan Small; Daniel Solomon; Jonathan Stroud; Weijie Su; Jiayang Sun; Yves Thibaut; Ryan Tibshirani; Liang Wang; Xianchao Xie; Min Xu; Dan Yang;

Continues on page 12

Donors to IMS Funds continued

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

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.

Moulinath Banerjee; Amy Grady & Richard Smith; Pierre Jacob; Axel Munk; Richard Olshen & Amy Grady; Eric Laber; Debashis Paul; Edsel Peña; David Scott; David Steinsaltz; Bin Yu

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.

Charles Antoniak; Miguel Arcones; Frederick Asare; Dianne Carrol Bautista; Rudolf Beran; Peter Bickel; 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; Jianqing Fan; Kai-Tai Fang; Dorian Feldman; Thomas Ferguson; Dean Foster; Anthony Gamst; Li Gan; Jayanta Ghosh; Dennis Gilliland; Evarist Giné; 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; Yuri Kutoyants; Louise Le Cam; Kee-Won Lee; Ray-Shine Lee; Erich Lehmann; Lei Li; Shili Lin; Hung-Kung Liu; Albert Lo; Richard Lockhart; John Lu; VS Mandrekari; James Marron; George Martin; Deborah Mayo; John McDonald; Paul Meier; Max Moldovan; Per Mykland; Peter Ney; Deborah Nolan; Richard Olshen; Michael Ostland; Davy Paindaveine; Edsel Peña; Mark Pinsky; Gilles

Pisier; Madabhushi Raghavachari; RV Ramamoorthi; Guilherme Rocha; Walter Rosenkrantz; George G & Mary L Roussas; Habib Salehi; Frederic Schoenberg; Richard Smith & Amy Grady; Terry Speed; James Stapleton; Philip Stark; Charles Stein; David Steinsaltz; Stephen Stigler; Shiaoyn 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; Krzysztof Burdzy; 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; Subhashis Ghosal; 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; Ed Perkins; Sonia Petrone; 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 & Tony Cai; Louis Chen; Song Xi Chen; Noel Cressie; Anirban DasGupta; Richard A Davis; Aurore Delaigle; Yanming Di; Margaret Donald; Miki & David Donoho; Lutz Duembgen; Jianqing Fan; Andrey Feuerverger; Turkan Gardenier; Joseph Gastwirth; 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; Claudia Kirch; Roger Koenker; Eric Kolaczyk; Luca La Rocca; Runze Li; Zenghu Li; Xinhong Lin; Shiqing Ling;

Continues on page 13

Donate
here →

<https://imstat.org/shop/donation/>



Peter Hall Early Career Prize Fund continued

Yingying Fan & Jinchi Lv; Yanyuan Ma; Yoshihiko Maesono; James Stephen Marron; Geri & Kristina Mattson; Geoffrey McLachlan; Xiao-Li Meng; Carl Mueller; Hans-Georg Müller; Boaz Nadler; Balgobin Nandram; John Nolan; Richard Olshen; Jean Opsomer; Fredos Papangelou; Layla Parast; Byeong Uk Park; Juhyun 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; Richard Smith/Amy Grady; 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 & Matt Wand; Jane-Ling Wang; Qiyang Wang; Edward Waymire; Jon Wellner; Susan Wilson; Aihua Xia; William Weimin Yoo; George A. Young; Bin Yu; 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.; Anon.; A Barbour; Cambridge University Press; Raisa (Raya) Feldman; Thomas Kurtz; Zenghu Li; Russell Lyons; John McDonald; Marina Meila; Microsoft; Sayan Mukherjee; Roberto Oliveira; Richard Olshen; Ross Pinsky; Gilles Pisier; Thomas Salisbury; Timo Seppäläinen; 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; Paul Shaman; 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; A Barbour; Dianne Carroll Bautista; William Brady; F Breidt; 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; Klaus Hinkelmann; 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; Bin Yu; Marvin Zelen; Huiming Zhu.

Thank you all!

STATA 18

Fast. Accurate. Easy to use.

See how Stata 18 can power your analyses.

Powerful statistical analyses, customizable visualizations, easy data manipulation, and automated reproducible reporting—all in one complete package.

stata.com/ims-power18

© 2023 StataCorp LLC
Stata is a registered trademark of StataCorp LLC
4905 Lakeway Drive, College Station, TX 77845, USA

OBITUARY: Peter J. Brockwell

1937–2023

Peter J. Brockwell, a leading figure in applied probability and time series, passed away on 5 July 2023, in Melbourne, Australia. He was Professor Emeritus of Colorado State University and Honorary Professorial Fellow in Mathematics and Statistics at the University of Melbourne. He was 85.

Peter was born and raised in Melbourne and although he spent most of his professional life overseas, primarily in the USA, he was a proud Melburnian who rarely missed an opportunity to extol the virtues of the city. He earned a BA in Electrical Engineering, a BA(Hons), and an MA in Statistics, at the University of Melbourne. While tutoring there, he had the good fortune of meeting Pam Carr, whom he later married. After completing these degrees, he began his PhD studies in 1962 at the Australian National University (ANU).

At the ANU, Peter worked under the direction of Jo Moyal on problems related to scattering/movement of particles. The research caught the eye of the Argonne National Laboratory in Chicago who hired Peter as Research Associate in 1966 and later Assistant Mathematician (1967–70). Peter and Pam travelled to the USA as newlyweds to take this position. While at Argonne, Peter completed his dissertation, *Stochastic problems in transport theory*, which he defended in 1967. During his stint at Argonne, Peter took leave to become a visiting research associate at Michigan State University (MSU). He subsequently became an Associate Professor at MSU while taking short leaves to Stanford where he was supported by the probabilists Samuel Karlin and Kai Lai Chung. With this exposure, Peter's research career was well on its way. While most of Peter's 39 years in academia was spent at Colorado State University

(1976–2007), he held short posts at MSU, La Trobe University, the University of Melbourne, and the Royal Melbourne Institute of Technology.

Peter's research interests were shaped by his strong background in electrical engineering and applied mathematics. Australia's developing expertise in applied probability in the 1960s was also a major influence on the problems that Peter would choose to pursue. His early work focused on the application of discontinuous Markov processes and population processes to the problem of scattering of particles. He studied properties of various queuing models, storage theory, and population models. In the early 1980s his research shifted more towards stochastic processes and time series. He developed an interest in Lévy processes. He developed theory for existence of stationary solutions to nonlinear time series models that were based on emerging theory of stationarity of Markov chains. Since the 1990s, Peter's most cited work is related to the embedding problem in time series. For example, it is natural to ask when a discrete-time ARMA process can be embedded in a continuous-time ARMA process (CARMA). First one needs to give a clear definition of a continuous-time ARMA process. Peter basically answered these questions. He also considered long memory (or fractionally integrated) versions of CARMA processes and Lévy-driven CARMA processes. In order to make these processes useful in practice, Peter also developed inference procedures for continuous-time models. Much of the continuous-time work arose out of a 2001–02 visit to the Mathematics Department at Technical University of Munich (TUM); he developed a number of fruitful collaborations here, notably with Professor Claudia Klüppelberg



Peter Brockwell

and many of her students/assistants including Tina Marquardt and Alex Lindner. A book with Alex on continuous-time processes is scheduled to be published early next year.

Peter received many accolades and awards for his path-breaking research. He was Fellow of the IMS and the American Statistical Association, and was von Neumann Guest Professor at the TU Munich. He had an impressive record of mentoring and advising PhD students; 22 wrote their dissertations under Peter's direction.

Aside from Peter's research contributions, he is perhaps best known for the two Brockwell–Davis books: *Time Series: Theory and Methods* and *Introduction to Time Series and Forecasting*. These books became the standard textbooks and research primers in time series during the past 30 years. *Time Series: Theory and Methods* was a family affair with Pam typing out the initial manuscript using an IBM Selectric typewriter and son Anthony writing much of the computer code for the computer package that accompanied the book.

Peter is survived by his wife Pam, three sons, Anthony, Matthew, and Harry, and five grandchildren. Peter was one of the kindest and nicest individuals that one will come across. He served as a role model to many and was the epitome of a true scholar.

By Anthony Brockwell,
and Richard Davis, Columbia University

OBITUARY: Ruben X. Zamar

1949–2023

Ruben H. Zamar, professor of statistics at the University of British Columbia, passed away on June 28, 2023. Ruben's inquisitive mind combined with his innovative ideas expanded and improved the field of Robust Statistics making it more relevant.

Ruben was born in San Pedro, Province of Jujuy, Argentina, on December 20, 1949. After graduating as an Accountant from the National University of Cordoba in 1973, he began teaching at the National University of Rio Cuarto (Cordoba, Argentina). He completed two Master's degrees, in Statistics (Chile, 1977) and in Mathematics (Brazil, 1981), before moving with his family to Seattle to continue his studies at the University of Washington. In 1985, Ruben completed his PhD in Statistics under the supervision of Professor Douglas Martin. In 1986, he joined the recently created Department of Statistics at the University of British Columbia (Vancouver, Canada), which became his academic home for the rest of his fruitful career.

Ruben's career started at the peak of development and growth in the then-emerging field of Robust Statistics. Ruben first worked on the general theory of quantitative robustness. Despite many exciting foundational contributions in the field, Ruben was unsettled by the limited tools available to assess the degree of robustness of different estimators. During his PhD studies, Ruben was enthused by the concept of maximum asymptotic bias (maxbias), originally proposed by Peter Huber for the simple location model (1964) but not fully examined in other scenarios. In his doctoral thesis, Ruben derived and studied maxbias functions and minimax bias estimators for more complex models, including linear and orthogonal regression. Ruben's pioneering work in minimax bias

theory was established as a very important theoretical tool in quantitative robustness which enabled the development of globally robust inference tools.

Ruben's research contributions are notable both in breadth and depth. He published more than 80 peer-reviewed articles, most with distinguished collaborators and graduate students. He maintained a prolific network of national and international collaborations that produced trailblazing contributions to the field. Examples include the development of a robust bootstrapping method for linear regression estimators, robust estimators for measurement error models, and a robust model selection method for complex high-dimensional settings. Ruben's research spanned many other challenging problems such as robust clustering, image processing, bioinformatics, and covariance matrix estimation.

In 2009, Ruben and colleagues introduced what quickly became a new paradigm in Robust Statistics: the independent contamination model, which describes the independent propagation of outliers as observed in modern high-dimensional data. Their ground-breaking paper in the *Annals of Statistics* opened a new path for theoretical and computational contributions in the field. In Ruben's own words, "Outlier propagation is a serious statistical problem and our model may become an important tool in the context of the robust analysis of high dimensional datasets." Ruben's high research standards were also recognized with associate editorships in the *Annals of Statistics* (2004–07), *Test* (1998–2001) and the *Journal of the American Statistical Association* (1991–93). Among many important awards, in 2021 Ruben was named a Fellow of the IMS for his fundamental contributions in Robust Statistics.



Ruben H. Zamar

His relentless commitment to research went hand-in-hand with his full dedication to his graduate students and the statistics community. During one of our last conversations, Ruben said, "I always did what I thought was important". He was a dedicated educator and an exemplary advisor and mentor who worked tirelessly to support and stimulate his students' ideas. He supervised eight postdoctoral fellows, 10 PhDs, and 16 MSc's and also maintained a tight academic bond with researchers in his native Argentina, which resulted in many collaborations and the co-supervision of graduate students. Ruben is remembered by his students and collaborators as a talented, humble and joyful person to work with.

Ruben was a kind colleague, generous with his time and ideas, and also a great mentor and friend. He had an uncanny ability to identify and foster unique qualities in everyone, and inspired many of us to be the best version possible of ourselves. The poet Patrick Lane wrote in *There is a Season*: "Whether or not the cairn is gone, the stones remain like ghosts in my hands and that is enough." Ruben's countless lessons and discussions, his contagious excitement for research, and his friendly laughs will always remain in our hearts. Ruben is survived by his wife Magui, sons Ruben Jr. and David, and grandchild Sebastian. They have always been at Ruben's side. He will be greatly missed.

By Gabriela V. Cohen Freue, UBC Statistics,
& Matías Salibián-Barrera, UBC Statistics

OBITUARY: A.K.Md. Ehsanes Saleh

1932–2023

A.K. Md. Ehsanes Saleh, Professor Emeritus and Distinguished Research Professor of Statistics at the School of Mathematics and Statistics, Carleton University, Ottawa, Canada, passed away on September 3, 2023. Professor Saleh died at the age of 91 with his family beside him. Born in the Munshigonj district in Dhaka, Bangladesh, in 1932, Ehsanes Saleh received his BSc (1951) and MSc (1953) degrees in Statistics from the University of Dhaka, Bangladesh, and PhD (1965) degree in Statistics from the University of Western Ontario, Canada. He worked at Carleton University since 1966.

Professor A.K. Md. Ehsanes Saleh is a prominent name in the international statistics space for his groundbreaking research, pioneering academic role, outstanding professional contributions, thought-provoking supervision and mentoring in his discipline. Colleagues and peers of Professor Saleh across the globe have acknowledged and recognized his great contributions in many ways. This includes the Honorary Membership of SSC, Canada; Fellow of IMS, ASA, RSS, and the Bangladesh Academy of Sciences; Elected Member of ISI, Netherlands; and Life Member of the Bangladesh Statistical Association and Islamic Countries Society of Statistical Sciences (ISOSS). He was awarded the highly prestigious QM Hossain Gold Medal by Bangladesh Statistical Association in 1992; the ISESCO–ISOSS Gold Medal in 1999 in recognition of his best research in statistical sciences among the OIC member countries; the ISOSS Gold Medal in 2005 for his book on *Mathematical Statistics*; the

Dhaka University (ISRT) Gold Medal in 2006 for his outstanding editorial services to the *Journal of Statistical Research*; and the SSC Gold Medal in 2007 for his exceptional research and services.

Professor Saleh made seminal contributions in many areas of statistics, specifically in order statistics, L -estimation, preliminary test and shrinkage estimation, non-parametric estimation and auto-regression quantiles. He pioneered the work on optimum spacing for the ABLUE and test of hypothesis for the location /scale and quantile functions of location-scale families of distributions, preliminary test approach to Stein-type estimation in non-parametric settings. He also became the foremost scholar merging two diverse areas of robust statistics and shrinkage estimation to the benefit of us all. In addition, his path-breaking work on auto-regression quantiles has opened the door for many fundamental researches in time-series. He is considered a world leader in nonparametric statistics for his outstanding contributions establishing the area of “Preliminary Test Approach to Shrinkage Estimation” in a nonparametric setting. His major research contributions are documented in his recent books, *Theory of Preliminary Test and Stein-type Estimation with Applications* (2006), *Statistical Inference for Models with Multivariate t -Distributed Errors* (2014), and *Theory of Ridge Regression Estimation with Applications* (2019), all published by Wiley & Sons. He was intellectually active until his death, and was seriously pursuing his research producing his last book on *Rank-Based Methods for Shrinkage and Selection: With Application to*



Ehsanes Saleh with his wife

Machine Learning (2022).

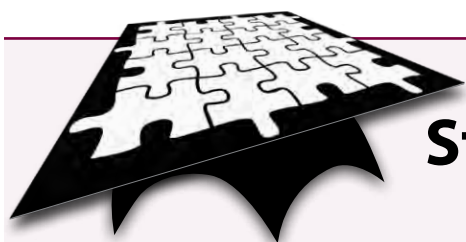
Professor Saleh trained many young statisticians and presented many keynotes and invited addresses in various conferences in many countries around the globe. He will remain as a man with high distinction and long vision in the arena of Statistics. He was a visiting professor at Stanford University, MIT, UC Berkeley, Michigan State University, Banach Centre in Poland, and University of Toronto. He was also an adjunct Professor in the department of Biometry at Kansas University Medical Centre since 1984. He was the third Eugene Lukacs Distinguished (visiting) Professor (1992–93) in the Department of Mathematics and Statistics at Bowling Green State University, Ohio, USA.

He is survived by his wife, two sons, one daughter and several grandchildren.

Compiled by Emeritus Professor Dr Shahjahan Khan, University of Southern Queensland, Australia, and Vice Chancellor, Asian University of Bangladesh, Dhaka; Dr Mina Norouzirad, Center for Mathematics & Applications, Universidade Nova de Lisboa, Portugal; Professor Mohammad Arashi, Ferdowsi University of Mashhad, Iran; and Professor B.M. Golam Kibria, Florida International University, USA.

Forthcoming obituaries

The following obituaries are in preparation: Theo Gasser, Albert (Al) Madansky, Brenda MacGibbon, Colin Mallows, and Richard Olshen. If you hear of the death of a member of our community, please contact us: bulletin@imstat.org. We'd rather hear twice than not at all.



Student Puzzle Corner 47 (again)

We've **extended the deadline** for these puzzles to **December 4**.

These statistics problems and the probability problem are both based on the same story, and both are somewhat non-standard versions of the birthday problem. Send us your answers for either or both.

Puzzle 47.1a A six-sided fair die is repeatedly rolled until each of the six faces appears twice.

Let W be the number of rolls needed to stop the experiment. Find $E(W)$ explicitly.

Puzzle 47.1b Next, suppose that the die is repeatedly rolled until one of the six faces appears three times. Let Z be the number of rolls needed to stop the experiment. Find $E(Z)$ explicitly.

Puzzle 47.2. Provide a test of the hypothesis that a six-sided die is fair by using W , or Z , or both, and indicate exactly when you will reject the hypothesis of fairness.

Student members of IMS are invited to submit solutions to bulletin@imstat.org (with subject "Student Puzzle Corner"). The names of student members who submit correct solutions to either or both of these puzzles, and the answer, will be published in the issue following the deadline.

The Puzzle Editor is Anirban DasGupta. His decision is final.

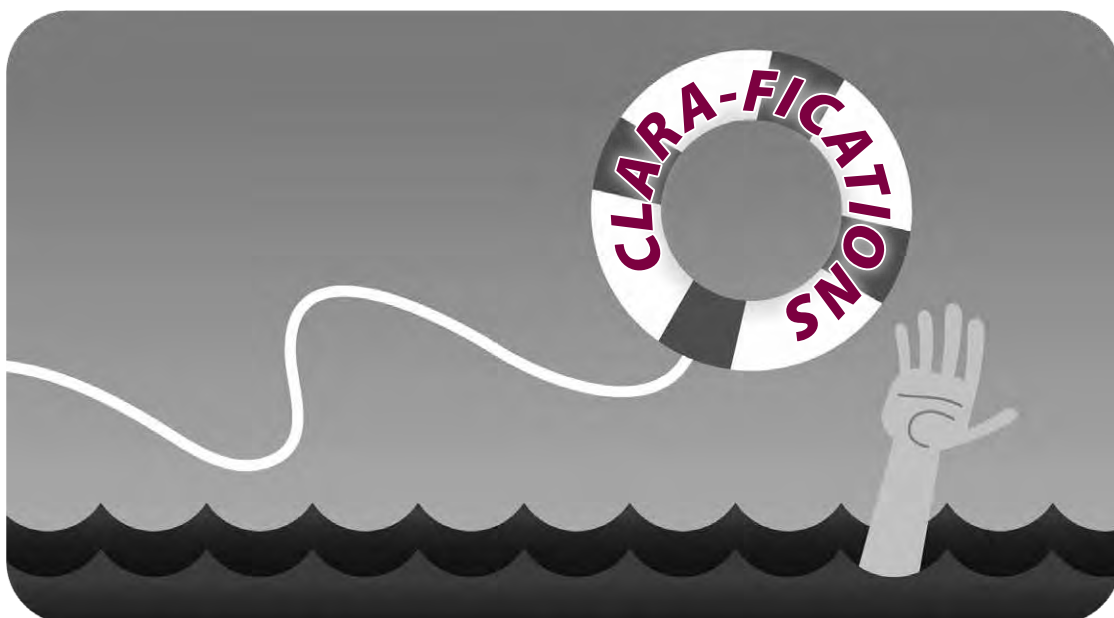
NEW deadline: December 4, 2024

Do you have a problem in need of... *Clara-fication*?

Do you sometimes feel like your fellow students or colleagues seem to be swimming, while you're drowning in uncertainty? Let us help! Early-career researchers are invited to send their **questions about the life of a researcher or ask for career advice**, and *Clara-fications* columnist Clara Grazian will try to find an answer...

We'll publish the question and answer in the next available issue [**anonymized** to avoid awkwardness!].

Send your questions for Clara to bulletin@imstat.org.





Volume 1 issue 2 online now!



jds.acm.org

Editors

Jelena Bradic, UC San Diego
Stratos Idreos, Harvard University
John Lafferty, Yale University

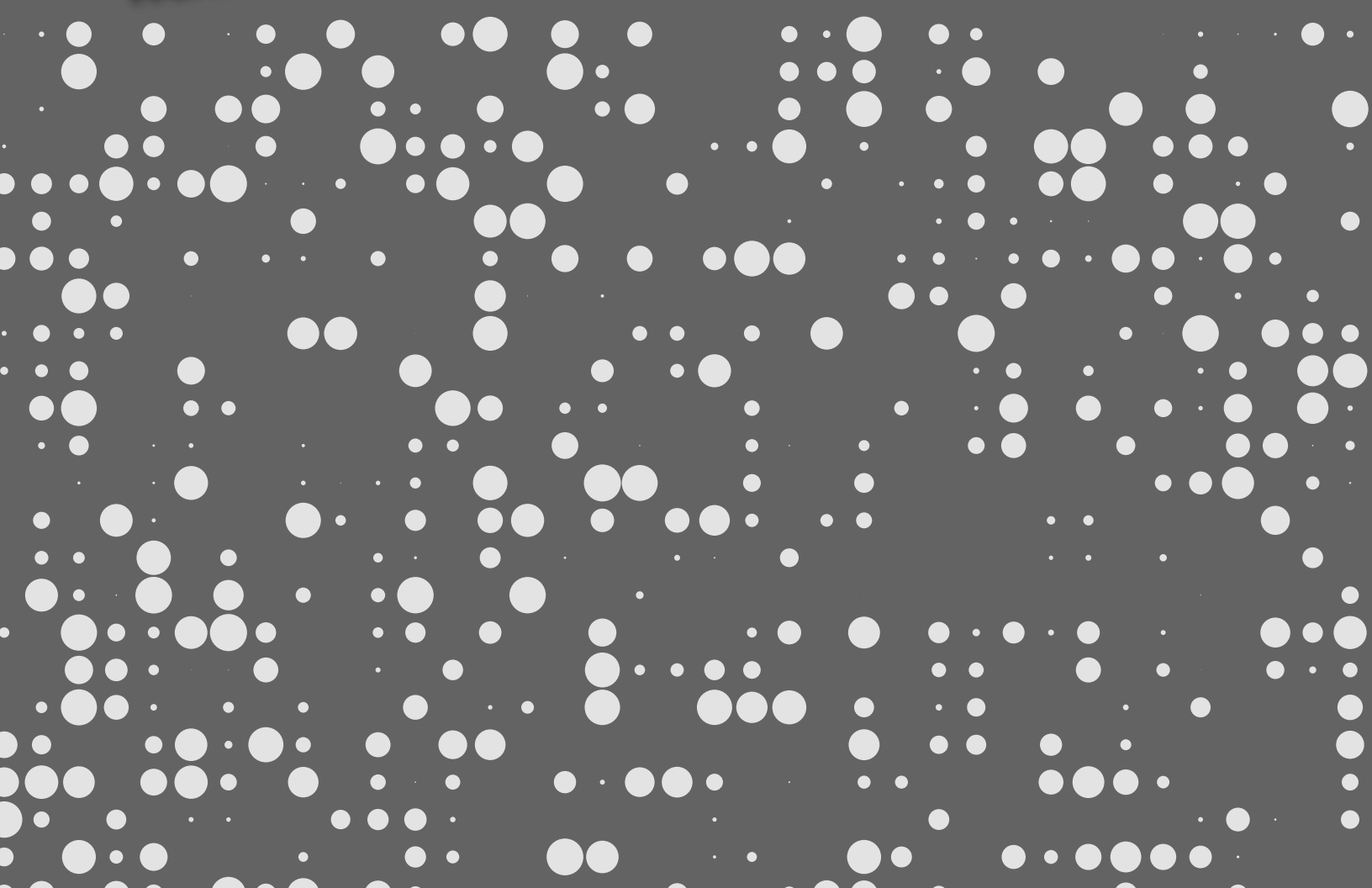
Call for Papers

JDS follows a timetable with
three fixed submission deadlines.
Visit the JDS website for details.

Bridging Research Communities

JDS is a new journal established to bridge research communities, jointly published by the Association of Computing Machinery (ACM) and the Institute of Mathematical Statistics (IMS). The journal publishes high-impact research from all areas of data science, across foundations, applications and systems. By combining elements of journal and conference publishing, JDS aims to serve the needs of a rapidly evolving research landscape.

Next deadline January 15



Recent papers

Statistical Science

The central purpose of *Statistical Science* is to convey the richness, breadth and unity of the field by presenting the full range of contemporary statistical thought at a moderate technical level, accessible to the wide community of practitioners, researchers and students of statistics and probability. The Editor is Moulinath Banerjee.

Access papers at <https://projecteuclid.org/journals/statistical-science>



Volume 38, No. 4, November 2023

Special Issue on Reproducibility and Replicability

Editorial: Special Issue on Reproducibility and Replicability	ALICIA L. CARRIQUIRY, MICHAEL J. DANIELS AND NANCY REID; 525
Distributionally Robust and Generalizable Inference	DOMINIK ROTHENHÄUSLER AND PETER BÜHLMANN; 527
Defining Replicability of Prediction Rules	GIOVANNI PARMIGIANI; 543
Online Multiple Hypothesis Testing	DAVID S. ROBERTSON, JAMES M. S. WASON AND AADITYA RAMDAS; 557
Game-Theoretic Statistics and Safe Anytime-Valid Inference	AADITYA RAMDAS, PETER GRÜNWARD, VLADIMIR VOVK AND GLENN SHAFER; 576
Replicability Across Multiple Studies	MARINA BOGOMOLOV AND RUTH HELLER; 602
Replication Success Under Questionable Research Practices—a Simulation Study	FRANCESCA FREULI, LEONHARD HELD AND RACHEL HEYARD; 621
Methods for Integrating Trials and Non-experimental Data to Examine Treatment Effect Heterogeneity	CARLY LUPTON BRANTNER, TING-HSIUAN CHANG, TRANG QUYNH NGUYEN, HWANHEE HONG, LEON DI STEFANO AND ELIZABETH A. STUART; 640
Tracking Truth Through Measurement and the Spyglass of Statistics	ANTONIO POSSOLO; 655

Bernoulli

Bernoulli is the journal of the Bernoulli Society for Mathematical Statistics and Probability. It is an IMS-supported journal, providing a comprehensive account of important developments in the fields of statistics and probability. The Editor-in-Chief is Davy Paindaveine.

Access papers at <https://projecteuclid.org/journals/bernoulli>

Volume 30, No. 1, February 2024

Identifiability in robust estimation of tree structured models	MARTA CASANELLAS, MARINA GARROTE-LÓPEZ, PIOTR ZWIERNIK; 1-21
Flexible-bandwidth needles	CLAUDIO DURASTANTI, DOMENICO MARINUCCI, ANNA PAOLA TODINO; 22-45
Statistics for heteroscedastic time series extremes	AXEL BÜCHER, TOBIAS JENNSENSEN; 46-71
A note on the empty balls of a critical super-Brownian motion	SHUXIONG ZHANG, JIE XIONG; 72-87
On Lasso and Slope drift estimators for Lévy-driven Ornstein–Uhlenbeck processes	NIKLAS DEXHEIMER, CLAUDIA STRAUCH; 88-116
Estimation of functional ARMA models	THOMAS KUENZER; 117-142
Supermartingale shadow couplings: The decreasing case	ERHAN BAYRAKTAR, SHUOQING DENG, DOMINYKAS NORGILAS; 143-169
Two-sample contamination model test	XAVIER MILHAUD, DENYS POMMERET, YAHIA SALHI, PIERRE VANDEKERKHOVE; 170-197
Concentration of measure bounds for matrix-variate data with missing values	SHUHENG ZHOU; 198-226
On bivariate distributions of the local time of Itô–McKean diffusions	JACEK JAKUBOWSKI, MACIEJ WIŚNIEWOLSKI; 227-251

Continues on **page 20**

Bernoulli, Volume 30, No. 1, February 2024 continued

The infinite Viterbi alignment and decay-convexity	NICK WHITELEY, MATT W. JONES, ALEKS P.F. DOMANSKI; 252-277
Central limit theorem and near classical Berry-Esseen rate for self normalized sums in high dimensions	DEBRAJ DAS; 278-303
Statistical inference for function-on-function linear regression	HOLGER DETTE, JIAJUN TANG; 304-331
Large deviation principles for SDEs under locally weak monotonicity conditions	JIAN WANG, HAO YANG, JIANLIANG ZHAI, TUSHENG ZHANG; 332-345
Logarithmic law of large random correlation matrices	NESTOR PAROLYA, JOHANNES HEINY, DOROTA KUROWICKA; 346-370
Refined behaviour of a conditioned random walk in the large deviations regime	SØREN ASMUSSEN, PETER W. GLYNN; 371-387
Entrywise limit theorems for eigenvectors of signal-plus-noise matrix models with weak signals	FANGZHENG XIE; 388-418
Limit theorems for Fréchet mean sets	STEVEN N. EVANS, ADAM Q. JAFFE; 419-447
Tracy-Widom law for the extreme eigenvalues of large signal-plus-noise matrices	ZHIXIANG ZHANG, YIMING LIU, GUANGMING PAN; 448-474
Convergence rates for shallow neural networks learned by gradient descent	ALINA BRAUN, MICHAEL KOHLER, SOPHIE LANGER, HARRO WALK; 475-502
Tail inverse regression: Dimension reduction for prediction of extremes	ANASS AGHBALOU, FRANÇOIS PORTIER, ANNE SABOURIN, CHEN ZHOU; 503-533
Non-asymptotic bounds for the ℓ_∞ estimator in linear regression with uniform noise	YUFEI YI, MATEY NEYKOV; 534-553
Central limit theorems for semi-discrete Wasserstein distances	EUSTASIO DEL BARRIO, ALBERTO GONZÁLEZ SANZ, JEAN-MICHEL LOUBES; 554-580
Explicit bounds for spectral theory of geometrically ergodic Markov kernels and applications	LOIČ HERVÉ, JAMES LEDOUX; 581-609
Minimax estimation of low-rank quantum states and their linear functionals	SAMRIDHA LAHIRY, MICHAEL NUSSBAUM; 610-635
Linear and nonlinear signal detection and estimation in high-dimensional nonparametric regression under weak sparsity	KIN YAP CHEUNG, STEPHEN M.S. LEE, XIAOYA XU; 636-665
Normality of smooth statistics for planar determinantal point processes	ANTTI HAIMI, JOSÉ LUIS ROMERO; 666-682
Dimension-agnostic inference using cross U-statistics	ILMUN KIM, AADITYA RAMDAS; 683-711
Central limit theorems for high dimensional dependent data	JINYUAN CHANG, XIAOHUI CHEN, MINGCONG WU; 712-742
A central limit theorem for the Benjamini-Hochberg false discovery proportion under a factor model	DAN M. KLUGER, ART B. OWEN; 743-769
Limiting distributions of graph-based test statistics on sparse and dense graphs	YEJIONG ZHU, HAO CHEN; 770-796
On estimators of the mean of infinite dimensional data in finite populations	ANURAG DEY, PROBAL CHAUDHURI; 797-824
High dimensional Bernoulli distributions: Algebraic representation and applications	ROBERTO FONTANA, PATRIZIA SEMERARO; 825-850

Journal of Computational and Graphical Statistics

The *Journal of Computational and Graphical Statistics (JCGS)* presents the very latest techniques for improving and extending the use of computational and graphical methods in statistics and data analysis. Established in 1992, this journal contains cutting-edge research, data, surveys, and more on numerical graphical displays and methods, and perception. Articles are written for readers who have a strong background in statistics but are not necessarily experts in computing. Published in March, June, September, and December. The Co-Editors are Galin Jones, University of Minnesota, and Faming Liang, Purdue University. *Journal of Computational and Graphical Statistics* is an official publication of the American Statistical Association (ASA). Members of the Institute of Mathematical Statistics receive complementary online access to *JCGS*. Access papers at <https://www.tandfonline.com/loi/ucgs20>

Volume 32, Issue 3, 2023**Special Editorial Discussion on Policy**

Lessons from West Virginia's Pandemic Response	BRADLEY S. PRICE, JOHN P. SALDANHA, DARIANE DRAKE & KATHERINE KOPP; 763-764
Challenges in Interpreting Epidemiological Surveillance Data — Experiences from Germany	CORNELIUS FRITZ, GIACOMO DE NICOLA, FELIX GÜNTHER, DAVID RÜGAMER, MARTJE RAVE, MARC SCHNEBLE, ANDREAS BENDER, MAXIMILIAN WEIGERT, RALPH BRINKS, ANNIKA HOYER, URSULA BERGER, HELMUT KÜCHENHOFF & GÖRAN KAUERMANN; 765-766
Sensitivity Analysis of Pandemic Models Can Support Effective Policy Decisions.	EMANUELE BORGONOVO, XUEFEI LU & GIOVANNI RABITTI; 767-768

Approximations

Implicit Copula Variational Inference	MICHAEL STANLEY SMITH & RUBÉN LOAIZA-MAYA; 769-781
An Approximated Collapsed Variational Bayes Approach to Variable Selection in Linear Regression	CHONG YOU, JOHN T. ORMEROD, XIANGYANG LI, CHENG HENG PANG & XIAO-HUA ZHOU; 782-792
Variational Bayes in State Space Models: Inferential and Predictive Accuracy	DAVID T. FRAZIER, RUBÉN LOAIZA-MAYA & GAEL M. MARTIN; 793-804

Continues on **page 21**

Journal of Computational and Graphical Statistics, Volume 32, Issue 3, 2023 continued

The Integrated Nested Laplace Approximation

for Fitting Dirichlet Regression Models JOAQUÍN MARTÍNEZ-MINAYA, FINN LINDGREN, ANTONIO LÓPEZ-QUÍLEZ, DANIEL SIMPSON & DAVID CONESA; 805-823

Vecchia-Approximated Deep Gaussian Processes for Computer Experiments ANNIE SAUER, ANDREW COOPER & ROBERT B. GRAMACY; 824-837

Hybrid Kronecker Product Decomposition and Approximation CHENCHENG CAI, RONG CHEN & HAN XIAO; 838-852

Distributed Computation and Applications

Beyond Linear Dynamic Functional Connectivity: A Vine Copula Change Point Model XIN XIONG & IVOR CRIBBEN; 853-872

A General Framework for Identifying Hierarchical Interactions and Its Application to Genomics Data XIAO ZHANG, XINGJIE SHI, YIMING LIU, XU LIU & SHUANGGE MA; 873-883

Distributed Decoding From Heterogeneous 1-Bit Compressive Measurements CANYI CHEN & LIPING ZHU; 884-894

Asynchronous and Distributed Data Augmentation for Massive Data Settings JIAYUAN ZHOU, KSHITIJ KHARE & SANVESH SRIVASTAVA; 895-907

Monte Carlo

On Data Augmentation for Models Involving Reciprocal Gamma Functions YASUYUKI HAMURA, KAORU IRIE & SHONOSUKE SUGASAWA; 908-916

Efficient Posterior Sampling for Bayesian Poisson Regression LAURA D'ANGELO & ANTONIO CANALE; 917-926

Global Likelihood Sampler for Multimodal Distributions SI-YU YI, ZE LIU, MIN-QIAN LIU & YONG-DAO ZHOU; 927-937

Bayesian Trend Filtering via Proximal Markov Chain Monte Carlo QIANG HENG, HUA ZHOU & ERIC C. CHI; 938-949

Statistical Learning

Fast Marginal Likelihood Estimation of Penalties for Group-Adaptive Elastic Net MIRRELIJN M. VAN NEE, TIM VAN DE BRUG & MARK A. VAN DE WIEL; 950-960

Robust Multivariate Lasso Regression with Covariance Estimation LE CHANG & A. H. WELSH; 961-973

Stability Approach to Regularization Selection for Reduced-Rank Regression CANHONG WEN, QIN WANG & YUAN JIANG; 974-984

Locally Sparse Function-on-Function Regression MAURO BERNARDI, ANTONIO CANALE & MARCO STEFANUCCI; 985-999

A Reproducing Kernel Hilbert Space Framework for Functional Classification PEIJUN SANG, ADAM B. KASHLAK & LINGLONG KONG; 1000-1008

Optimal Integrating Learning for Split Questionnaire Design Type Data CUNJIE LIN, JINGFU PENG, YICHEN QIN, YANG LI & YUHONG YANG; 1009-1023

Scaled Torus Principal Component Analysis PAVLOS ZOUBOULOGLU, EDUARDO GARCÍA-PORTUGUÉS & J. S. MARRON; 1024-1035

Transfer Learning of Individualized Treatment Rules from Experimental to Real-World Data LILI WU & SHU YANG; 1036-1045

Gibbs Priors for Bayesian Nonparametric Variable Selection with Weak Learners ANTONIO R. LINERO & JUNLIANG DU; 1046-1059

Computationally Efficient Learning of Gaussian Linear Structural Equation Models with Equal Error Variances GUNWOONG PARK; 1060-1073

Regularized Linear Programming Discriminant Rule with Folded Concave Penalty

for Ultrahigh-Dimensional Data CHANGCHENG LI, RUNZE LI, JIAWEI WEN, SONGSHAN YANG & XIANG ZHAN; 1074-1082

An Asymptotic Analysis of Random Partition Based Minibatch Momentum Methods

for Linear Regression Models YUAN GAO, XUENING ZHU, HAOBO QI, GUODONG LI, RIQUAN ZHANG & HANSHENG WANG; 1083-1096

Algorithms for Sparse Support Vector Machines ALFONSO LANDEROS & KENNETH LANGE; 1097-1108

Cost-based Feature Selection for Network Model Choice LOUIS RAYNAL, TILL HOFFMANN & JUKKA-PEKKA ONNELA; 1109-1118

ClusteringProbabilistic K -means with Local Alignment for Clustering and Motif Discovery in Functional Data MARZIA A. CREMONA & FRANCESCA CHIAROMONTE; 1119-1130

clusterMLD: An Efficient Hierarchical Clustering Method for Multivariate Longitudinal Data JUNYI ZHOU, YING ZHANG & WANZHU TU; 1131-1144

A Dirichlet Model of Alignment Cost in Mixed-Membership Unsupervised Clustering XIRAN LIU, NAAMA M. KOPELMAN & NOAH A. ROSENBERG; 1145-1159

Meta Clustering for Collaborative Learning CHENGLONG YE, REZA GHANADAN & JIE DING; 1160-1169

Spectral Clustering via Adaptive Layer Aggregation for Multi-Layer Networks SIHAN HUANG, HAOLEI WENG & YANG FENG; 1170-1184

Bayesian Tree-Structured Two-Level Clustering for Nested Data Analysis YINQIAO YAN & XIANGYU LUO; 1185-1194

Graphical and Computational Tools to Guide Parameter Choice

for the Cluster Weighted Robust Model ANDREA CAPPOZZO, LUIS ANGEL GARCÍA-ESCUADERO, FRANCESCA GRESELIN & AGUSTÍN MAYO-ISCAR; 1195-1214

Finite Mixtures of Multivariate Wrapped Normal Distributions for Model Based Clustering of p -Torus Data LUCA GRECO, PIER LUIGI NOVI INVERARDI & CLAUDIO AGOSTINELLI; 1215-1228**Short Technical Note**

New and Simplified Manual Controls for Projection and Slice Tours,

With Application to Exploring Classification Boundaries in High Dimensions URSULA LAA, ALEX AUMANN, DIANNE COOK & GERMAN VALENCIA; 1229-1236

IMS meetings around the world

Joint Statistical Meetings

2024 Joint Statistical Meetings
August 3–8, 2024
Portland, Oregon, USA

w <https://ww2.amstat.org/meetings/jsm/2024/>

Submit your idea for a Topic-Contributed Session
A topic-contributed session is planned in advance by one or more organizers and includes speakers presenting on a shared topic.
Topic-contributed sessions include papers, panels, and posters:

- Topic-contributed paper sessions** consist of five speakers, made up of at least three presenters and, at most, two discussants; each speaker has 20 minutes to present.
 - Topic-contributed panels** consist of three to six members providing commentary or a point of view on the panel topic. Note: There are no individual abstracts/presentations in a panel session.
 - Topic-contributed poster sessions** have 10–15 participants with posters addressing a common topic.
- A topic-contributed session proposal includes a session title, general description of the session, list of participants, and tentative talk titles.

To propose a topic-contributed session (by December 7, 2023), please read the instructions on the JSM website at <https://ww2.amstat.org/meetings/jsm/2024/topiccontributed.cfm>.

- Key dates are:
- Topic-Contributed Session proposal submission deadline: December 7, 2023
 - Computer Technology Workshop proposal submission deadline: January 15, 2024
 - Contributed Abstract Submission: December 1, 2023 – February 1, 2024
 - Registration & Housing reservations open May 1, 2024.

JSM dates for 2025–2029 (no information yet for JSM2027)

IMS Annual Meeting @ JSM 2025 August 2–7, 2025 Nashville, TN, USA	JSM 2026 August 1–6, 2026 Boston, MA, USA	IMS Annual Meeting @ JSM 2027 Dates and location to be confirmed	JSM 2028 August 5–10, 2028 Philadelphia, PA, USA	IMS Annual Meeting @ JSM 2029 August 4–9, 2029 Seattle, WA, USA
--	--	---	---	--

IMS Asia Pacific Rim Meeting (IMS–APRM) 2024
January 4–7, 2024. Melbourne, Australia

w <https://ims-aprm2024.com/>

IMS–APRM will provide an excellent forum for scientific communications and collaborations for researchers in Asia and the Pacific Rim, and promote communications and collaborations between the researchers in this area and those from other parts of the world. **Plenary speakers:** Ruth Williams (UC San Diego); Bin Yu (UC Berkeley); Jianqing Fan (Princeton). **Distinguished Lecturers:** Siva Athreya (Indian Stat. Inst.); Hsien-Kuei Hwang (Academia Sinica); Jaeyong Lee (Seoul Nat’l Univ.); Yasumasa Matsuda (Tohoku Univ.); Kerrie Mengersen (Queensland Univ. Tech.); Annie Qu (UC Irvine); Liza Levina (Univ. Michigan); Judith Rousseau (Oxford); Jane-Ling Wang (UC Davis); Qi-Man Shao (Southern Univ. of Science and Technology); Yingcun Xia (Nat’l Univ. Singapore); Fang Yao (Peking Univ.); Lixing Zhu (Beijing Normal Univ.). **Registration** is open: <https://ims-aprm2024.com/registration/>



At a glance:
forthcoming
IMS Annual
Meeting and
JSM dates

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**

2026

IMS Annual Meeting: TBC

JSM: Boston, MA, **August 1–6, 2026**

2027

IMS Annual Meeting @ JSM: Location TBA, **August [dates TBA], 2027**



More IMS meetings

IMS annual meeting 2024: Bernoulli–IMS 11th World Congress in Probability and Statistics

August 12–16, 2024

Ruhr-University Bochum, Germany

[w https://www.bernoulli-ims-worldcongress2024.org/](https://www.bernoulli-ims-worldcongress2024.org/)

The Institute of Mathematical Statistics Annual Meeting will be held at the 11th World Congress. Look out for a call for papers soon.

The plenary speakers have been announced. The Wald lectures will be given by **Peter Bühlmann**, ETH Zurich, and the Le Cam lecturer is **Peter Bickel**, University of California, Berkeley. Four IMS Medallion lectures will be given by **Moulinath Banerjee**, University of Michigan, Ann Arbor; **Marc Hallin**, Université Libre de Bruxelles; **Remco van der Hofstad**, TU Eindhoven; and **Chunming Zhang**, University of Wisconsin–Madison.

There will be two IMS–BS Schramm lectures, from **Patricia Gonçalves**, Instituto Superior Técnico, Lisbon, and **Nina Holden**, Courant Institute, New York University. The IMS–BS Doob lecture will be given by **Pablo Ferrari**, University of Buenos Aires. The BS lectures are as follows: **Emmanuel Candès**, Stanford (Bernoulli lecture); **Victor Chernozhukov**, MIT (Cox lecture); **Rafal Latala**, University of Warsaw (Kolmogorov lecture); **Xihong Lin**, Harvard (Laplace lecture); **Mihaela van der Schaar**, Univ. Cambridge (Tukey lecture); and **Rongfeng Sun**, National University of Singapore (Lévy lecture).

2023 IMS International Conference on Statistics and Data Science (ICSDS2023)

UPDATED

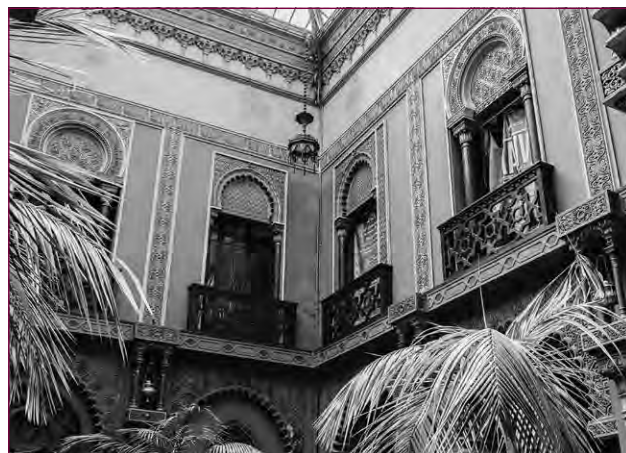
December 18–21, 2023

Lisbon, Portugal

[w https://sites.google.com/view/icsds2023/](https://sites.google.com/view/icsds2023/)

The IMS ICSDS 2023 (International Conference on Statistics and Data Science) will take place December 18–21, 2023 in Lisbon, Portugal. We have received a tremendous response, including many outstanding invited speakers from different countries and continents, covering a wide range of subjects in statistics and data science, in theory, methodology and applications. In particular, we are pleased to announce the **four confirmed plenary speakers**: **David Donoho**, **Michael Jordan**, **Gábor Lugosi** and **Caroline Uhler**. For titles and abstracts, see <https://sites.google.com/view/icsds2023/plenary-speakers>

Registration is still open via the 2023 ICSDS site at <https://sites.google.com/view/icsds2023/registration>



ICSDS Banquet will be a three course dinner & reception at Casa do Alentejo.

Theory and Foundations of Statistics in the Era of Big Data

NEW

April 19–21, 2024

Florida State University in Tallahassee, FL, USA

[w https://sites.google.com/view/theory-and-foundations-of-stat/](https://sites.google.com/view/theory-and-foundations-of-stat/)

Theory and Foundations of Statistics in the Era of Big Data is a conference hosted by the Department of Statistics, Florida State University, in coordination with the International Indian Statistical Association (IISA), to celebrate the birth centenary of Debabrata Basu and Raghu Raj Bahadur and to honor their fundamental contributions to statistics.

Plenary speakers are Tony Cai, Wharton School of the University of Pennsylvania; Merlise A. Clyde, Duke University; and Xiao-Li Meng, Harvard University.

There will be a Student Paper Competition. Students who are enrolled in an MS/PhD (or equivalent) program in Statistics, Data Sciences, or related fields by the deadline (to be announced) are eligible. Women and under-presented minorities are strongly encouraged to apply.

Registration will open soon.

Statistics in the Age of AI

NEW

May 9–11, 2024

Washington DC, USA

[w https://statistics.columbia.gwu.edu/statistics-age-ai](https://statistics.columbia.gwu.edu/statistics-age-ai)

The conference “Statistics in the Age of AI” aims to unite established academics, young researchers, and industry professionals in the field of Statistics to explore the impact of the new AI, especially Large Language Models, on both research and education in Statistics, and how Statistics can contribute to the new AI development. Some topics of the conference include efficient handling of data, uncertainty quantification, and responsible decision-making.

The conference offers multiple oral sessions, a poster session, a panel discussion, and two short courses on causal inference and conformal inference respectively.

More IMS meetings

International Symposium on Nonparametric Statistics (ISNPS 2024)

June 25–29, 2024

Braga, Portugal

[w https://w3.math.uminho.pt/ISNPS2024/](https://w3.math.uminho.pt/ISNPS2024/)

We are pleased to announce that the next International Symposium on Nonparametric Statistics will be held in Braga, Portugal, from June 25–29, 2024. The venue is Altice Forum Braga, a conference site which is situated 15 minutes walk from the city center of Braga.

Inspired by the success of the previous Nonparametric conferences in Chalkidiki (Greece, 2012), Cadiz (Spain, 2014), Avignon (France, 2016), Salerno (Italy, 2018) and Paphos (Cyprus, 2022), the conference will bring forth recent advances and trends in several areas of nonparametric statistics, in order to facilitate the exchange of research ideas, promote collaboration among researchers from all over the world, and contribute to the further development of the field.

The program will include plenary talks, special invited talks, invited talks, contributed talks and a poster session on all areas of nonparametric statistics.

Asia-Pacific Seminar in Probability and Statistics Ongoing and online

[w https://sites.google.com/view/apsp/home](https://sites.google.com/view/apsp/home)

The Asia-Pacific Seminar in Probability and Statistics (APSPS) is a monthly online seminar, broadcast on a mid-month Wednesday via Zoom. The seminar series was created as a permanent forum for good research in the field. Topics include: probabilistic models for natural phenomena, stochastic processes and statistical inference, statistical problems in high-dimensional spaces, asymptotic methods, statistical theory of diversity. The organizers—Sanjay Chaudhuri, Mark Holmes, Estate Khmaladze (chair), Krishanu Maulik, Spiro Penev, Masanobu Taniguchi, Lijiang Yang, and Nakahiro Yoshida—seek an emphasis on novelty, beauty, and clarity. Presentations are intended to be accessible to good postgraduate students in probability and mathematical statistics.

If you are interested in receiving email announcements about the next speakers, send an email to any of the Board members listed above.

WNAR / IMS / Graybill 2024

June 9–12, 2024

Fort Collins, Colorado, USA

[w https://wnar.org/wnar2024](https://wnar.org/wnar2024)

The 2024 meeting of the Western North American Region of the IBS will be held jointly with the 2024 Graybill Conference.

Call for Invited Session proposals: deadline January 10, 2024

See link at meeting website to submit your idea. Each invited session can include 4 speakers, or 3 speakers and 1 discussant. Initial submissions



2024 ENAR/IMS Spring Meeting

March 10–13, 2024

Baltimore, MD, USA

[w https://www.enar.org/meetings/spring2024/](https://www.enar.org/meetings/spring2024/)

The 2024 ENAR/IMS Spring meeting has the theme *ENAR – A Home for Every Biostatistician*. René H. Moore, ENAR 2024 President, says, “No matter whether you are a first-time attendee, a first-time attendee since the pandemic, or too-many-times-to-count attendee, our goal is that you find something exciting and relevant in the scientific and educational programs.”

The meeting takes place at the Baltimore Marriott Waterfront which is now accepting room reservations. See <https://www.enar.org/meetings/spring2024/hotel.cfm>

require a title, description/ motivation of the session, names, affiliations, and emails of session chair and speaker. WNAR/IMS/ Graybill believes that diverse perspectives increase the quality of sessions and the conference overall. As such, we would like to highlight sessions that showcase diversity in their speakers or topics. We encourage session organizers to include a diverse set of speakers or topics.

The local organizer is Wen Rick Zhou, Colorado State University.

Email wnar@wnar.org with any questions.

One World ABC Seminar: Ongoing and online

[w https://warwick.ac.uk/fac/sci/statistics/news/upcoming-seminars/abcworldseminar](https://warwick.ac.uk/fac/sci/statistics/news/upcoming-seminars/abcworldseminar)

The One World Approximate Bayesian Computation (ABC) Seminars are **monthly** seminars that take place via Zoom on Thursdays, typically 9.30am or 1.30pm [UK time]. Register to receive the webinar link via email. The organizers welcome proposals for future talks. This webinar is part of the larger One World seminar initiative [see below].

One World Probability Seminar (OWPS): Ongoing and online

[w https://www.owprobability.org/one-world-probability-seminar/](https://www.owprobability.org/one-world-probability-seminar/)

Thursdays, 14:00 UTC/GMT [resuming in September]. Please subscribe to the mailing list for updates about the upcoming seminars and other events: <https://www.owprobability.org/ mailing-list>

2024 Seminar on Stochastic Processes**March 13–16, 2024****Houston, TX, USA****w** <https://ssp2024.rice.edu/>

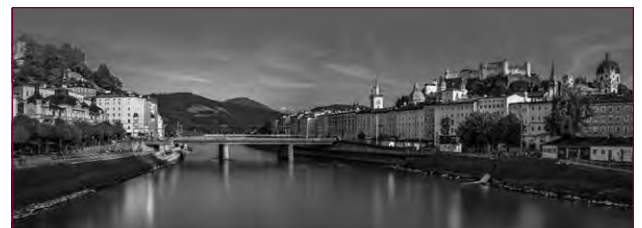
The Seminar on Stochastic Processes is a series of annual conferences devoted to stochastic analysis, Markov processes and other topics in probability theory of current interest. Every conference features five invited speakers and provides opportunity for short informal presentations of recent results and open problems.

Apart from informal presentations by conference participants, there will be plenary talks by Tom Hutchcroft, Etienne Pardoux, Sébastien Roch [IMS Medallion Lecture], Ludovic Tangpi, and Yilin Wang. The main conference will be held on March 14–16, 2024, on the campus of Rice University in Houston, TX, USA. On March 13, there will be a special set of tutorial lectures and discussions targeted at early-career researchers; the tutorial lecturer will be announced shortly.

We expect this conference will be supported with funds to allow reimbursement of travel expenses. Graduate students, early-career researchers, women, and members of underrepresented groups are especially encouraged to register and apply for funds. Applications will be accepted soon on the conference website. SSP 2024 will be held in person, though remote participation may be made available for mobility accommodation. Further information on funding, accommodations, and other details, including the registration form, will be available soon at <https://ssp2024.rice.edu/>

Fifth International Workshop on the Statistical Analyses of Multi-Outcome Data**July 9–10, 2024. Salzburg, Austria****w** https://sam-workshop.github.io/SAM_2024/

The fifth international workshop on Statistical Analyses of Multi-Outcome Data (SAM 2024), will take place in Salzburg, Austria, on July 9–10, 2024. Salzburg, renowned as Mozart's birthplace and the picturesque setting for the film *The Sound of Music*, is a spectacularly scenic city and an ideal destination for a summer visit. Our workshop covers a broad range of topics, such as complex longitudinal and survival data analysis, high-dimensional data analysis, precision medicine, and artificial intelligence/ machine learning methods, among others. The workshop will have two plenary sessions (speakers TBA), 24 invited sessions, and a poster session. A banquet will be held on July 9.



Scenic Salzburg hosts SAM 2024

Other meetings and events around the world

2024 IAOS–ISI Mexico Conference**May 15–17, 2024****Mexico City, Mexico****w** <https://www.isi-next.org/conferences/iaos-isi-2024/>

The Mexican National Institute of Statistics and Geography (INEGI), the International Association of Official Statistics (IAOS) and the International Statistical Institute (ISI) invite you to the 19th IAOS Conference and the 4th ISI Regional Statistical Conference, to be held jointly as the IAOS–ISI 2024 conference in Mexico. Join us in Mexico, May 15–17, 2024.

Contributed paper/poster deadline November 30. More details on the website.

Royal Statistical Society (RSS) Discussion Meeting**Wednesday, 6 December 2023, 4 pm (UK time)****London, UK / online****w** <https://rss.org.uk/training-events/events/key-events/discussion-papers/>

Please join us at Errol Street or online for the presentation and discussion of the paper ‘Root and community inference on the latent growth process of a network’ to be published in Journal of the Royal Statistical Society, Series B. Authors: Harry Crane, Rutgers University, and Min Xu, Rutgers University; Chair: Shirley Coleman, Honorary Officer and chair, Discussion Meetings Committee

The event is free to attend for members and non-members and there will be ample networking opportunities at Errol St. with receptions both before and after the meeting.

The preprint and full details are available from our website, where you can also register. Registration is essential: <https://rss.org.uk/training-events/events/key-events/discussion-papers/>

Everyone is welcome to come and listen to the speakers and discussion. We also keenly encourage comments on the paper following the presentation. These can be written up afterwards for publication with the paper in the journal. Please let Judith Shorten (j.shorten@rss.org.uk) know in advance if you would like to reserve a speaking slot of up to five minutes, so that your name can be called. Alternatively, you can decide on the day.

Other meetings and events around the world

BIRS Workshop on Causal Inference and Prediction for Network Data

August 18–23, 2024

Banff, Canada

[w https://www.birs.ca/events/2024/5-day-workshops/24w5244](https://www.birs.ca/events/2024/5-day-workshops/24w5244)

The Banff International Research Station will host the Causal Inference and Prediction for Network Data workshop in Banff, Canada, co-sponsored by the Bernoulli Society through its Committee on Statistical Network Science.

The workshop will bring researchers from theory, computation, and different applications together, to help theoreticians and methodologists focus on real problems, and to alert application researchers to the newest developments in methods.

Virtual access to the workshop will be available via Zoom. Spaces will be limited. If interested in an invitation to attend, please contact Tianxi Li at tianxili@umn.edu.

Future ISI World Statistics Congresses

The International Statistical Institute's World Statistics Congresses (WSC) take place every two years in different countries and cities/venues. Although the ISI organizes them, they are in close collaboration with the host country's National Statistics Office and statistics society. The ISI WSCs are the flagship events of the ISI, characterized by a rich scientific programme, a unique social and cultural programme, an administrative programme, short courses programme, satellite meetings, and awards ceremony. The next two WSCs are in the planning stages.

WSC 2025 will be in The Netherlands. The 65th World Statistics Congress will take place in The Hague, July 13–17, 2025. The website will be [w https://www.isi-wsc.org/](https://www.isi-wsc.org/) (currently under construction; please check it nearer the time!)

WSC 2027 is planned for Busan, South Korea. Details to follow in due course.

SAE (Small Area Estimation) 2023–2024 Conference

June 3–7, 2024

Lima, Peru

[w https://sae2023.pucp.edu.pe/](https://sae2023.pucp.edu.pe/)

Abstract submission deadline: 15 March 2024.

A conference celebrating the 65th birthday of Prof. Partha Lahiri will be held on 3–7 June 2024 at Pontificia Universidad Católica del Perú.

This international conference will serve as a bridge between statisticians, survey methodologists, engineers, mathematicians, computer scientists, and others interested in combining information from multiple databases in developing reliable inferences at granular levels. In addition to traditional topics in Small Area Estimation (SAE), the conference will cover a few emerging topics in survey and official statistics (e.g., non-probability sampling, probabilistic record linkage, data fusion, etc.)

The keynote speakers are Jiming Jiang, Denise Britz, and Julie Gershunskaya.

Speakers are expected to attend the conference in person, following the Pontificia Universidad Católica del Perú Covid-19 guidelines. Please send an email to sae.peru2023@gmail.com if you have any questions. International attendees who are not presenting may join the conference virtually or in person.

Call for Nomination: 2024 Award for Outstanding Contribution to Small Area Estimation (SAE Award)

The Scientific Program and Local Organization Committees of SAE 2024 are jointly inviting nominations for the 2024 Award for Outstanding Contribution to Small Area Estimation (SAE Award).

Selection Criteria. The Award is in recognition of an individual who has made an outstanding contribution to the research, application, and education of small area estimation (SAE). The selection of the winner is worldwide.

Selection Process and Deadline. A nomination consists of a nomination letter (limited to two double-spaced pages), in which the nominator should highlight the major achievements of the nominee in small area estimation. All nominations should be sent by email to Professor J.N.K. Rao, Chair of the 2024 SAE Award Committee (jrao34@rogers.com). Nominations submitted last year need not be submitted again. They will be considered along with new nominations. The deadline for receiving the nomination is **March 15, 2024**.

Previous winners are J.N.K. Rao (2017), Danny Pfeffermann (2018), Malay Ghosh (2019), Partha Lahiri (2020), Wayne Fuller (2021), Robert Fay (2022).

Employment Opportunities

Australia: Sydney

The University of Sydney

0110379 Lecturer/Senior Lecturer (Teaching and Research) in Business Analytics

<https://jobs.imstat.org/job//70933663>

China: Guangzhou

Hong Kong University of Science and Technology (in Guangzhou)

Open-rank faculty positions in Fintech, Financial Engineering, Mathematical Finance, Quantitative Finance, Operations Research, and Information

<https://jobs.imstat.org/job//71060079>

China: Shanghai

School of Mathematical Sciences, Shanghai Jiao Tong University

All-level Tenured/Tenure-track Professors

<https://jobs.imstat.org/job//70845574>

India: Mohali

Plaksha University

Professor / Associate Professor / Assistant Professor of Applied Mathematics

<https://jobs.imstat.org/job//70988614>

Switzerland: Bern

Faculty of Science

Professorship in Applied Stochastics

<https://jobs.imstat.org/job//71330177>

Taiwan: Taipei City

Institute of Statistical Science, Academia Sinica, Taiwan

Tenure-Track Faculty Positions

<https://jobs.imstat.org/job//54387703>

United Arab Emirates: Abu Dhabi

New York University Abu Dhabi

Clinical Assistant/Associate/Full Professor, Fixed-Term Contract - Stern at NYUAD

<https://jobs.imstat.org/job//70896067>

United Arab Emirates: Abu Dhabi

New York University Abu Dhabi

Professor of Statistics and Analytics, Tenured/Tenure Track, Open Rank - Stern at NYUAD

<https://jobs.imstat.org/job//70895879>

United Kingdom: Coventry

University of Warwick

Assistant Professor x2, Computational Statistics or Machine Learning (31514-1023)

<https://jobs.imstat.org/job//71248872>

United Kingdom: Coventry

University of Warwick

Assistant Professor, Statistics x3 (78716-1023)

<https://jobs.imstat.org/job//71248847>

United Kingdom: Warwick

University of Warwick

Associate Professor (100797-1023)

<https://jobs.imstat.org/job//71248743>

United States: Tempe, AZ

Arizona State University

Presidential Postdoctoral Fellowships in Data Science (Job #125513)

<https://jobs.imstat.org/job//71067502>

United States: Tempe, AZ

Arizona State University

Postdoctoral Research Scholar

<https://jobs.imstat.org/job//71387375>

United States: Berkeley, CA

University of California, Berkeley - Department of Statistics

Assistant Professor - Statistics, Data Science, Computational or Theoretical Neurosciences - Statistics Department and Helen Wills Neuroscience Institute

<https://jobs.imstat.org/job//70908807>

United States: Berkeley, CA

University of California, Berkeley - Department of Statistics

Assistant/Associate/Full Professor - Statistics and Data Science - Department of Statistics

<https://jobs.imstat.org/job//71005473>

United States: Berkeley, CA

University of California, Berkeley - Department of Statistics

Assistant/Associate/Full Teaching Professor - Data Science and Statistics - Department of Statistics

<https://jobs.imstat.org/job//71033336>

United States: Berkeley, CA**University of California Berkeley**

Assistant Professor - Public Health Data Science - School of Public Health

<https://jobs.imstat.org/job//71302163>

United States: Berkeley, CA**University of California Berkeley**

Neyman Visiting Assistant Professor - Statistics

<https://jobs.imstat.org/job//71302147>

United States: Berkeley, CA**University of California, Berkeley - Department of Statistics**

Lecturer - Statistics - Department of Statistics - College of Computing, Data Science and Society

<https://jobs.imstat.org/job//70466260>

United States: Davis, CA**University of California, Davis**

Assistant Professor of Statistics

<https://jobs.imstat.org/job//70933389>

United States: Davis, CA**University of California, Davis**

Assistant Professor in Linguistics / Statistics: - Natural Language Processing and Data Science

<https://jobs.imstat.org/job//70933418>

United States: La Jolla, CA**University of California San Diego**

Assistant, Associate, or Full Professor of Mathematics

<https://jobs.imstat.org/job//70919088>

United States: La Jolla, CA**University of California San Diego**

Assistant Professor in Mathematical Physics

<https://jobs.imstat.org/job//70919044>

United States: La Jolla, CA**University of California San Diego**

Assistant Professor in Mathematical Biology (EXC)

<https://jobs.imstat.org/job//70919013>

United States: La Jolla, CA**University of California San Diego**

Assistant Professor in Math Data Science/Statistics

<https://jobs.imstat.org/job//70918955>

United States: La Jolla, CA**University of California San Diego**

Assistant Professor: Statistical Foundations of Data Science (HDSI)

<https://jobs.imstat.org/job//71111758>

United States: La Jolla, CA**University of California San Diego**

Assistant Professor - Chancellor's Joint Initiative: Data Science and Public Policy (HDSI/GPS)

<https://jobs.imstat.org/job//71220223>

United States: La Jolla, CA**University of California San Diego**

Assistant Teaching Professor - HDSI

<https://jobs.imstat.org/job//71242078>

United States: Los Angeles, CA**University of California Los Angeles**

Tenured Professor position in Pure Mathematics 2024–2025

<https://jobs.imstat.org/job//71187874>

United States: Los Angeles, CA**University of California Los Angeles**

Assistant Adjunct Professorship 2024–2025

<https://jobs.imstat.org/job//71187798>

United States: Los Angeles, CA**University of California Los Angeles**

Hedricks Assistant Adjunct Professor 2024–2025

<https://jobs.imstat.org/job//71187605>

United States: Los Angeles, CA**University of California Los Angeles**

Tenure-Track Assistant Professor in Applied Mathematics 2024–25

<https://jobs.imstat.org/job//71187548>

United States: Los Angeles, CA**University of California Los Angeles**

Tenure-Track Assistant Professor in Pure Mathematics 2024-2025

<https://jobs.imstat.org/job//71240851>

United States: Los Angeles, CA**University of Southern California, Department of Mathematics**

Faculty Positions

<https://jobs.imstat.org/job//71067829>

United States: Riverside, CA**University of California Riverside**

Assistant Professor in Statistics

<https://jobs.imstat.org/job//70929708>**United States: Riverside, CA****University of California Riverside**

Assistant Professor of Teaching in Statistics

<https://jobs.imstat.org/job//71188454>**United States: Santa Barbara, CA****University of California, Santa Barbara**

Associate/Full Professor

<https://jobs.imstat.org/job//71067225>**United States: Fort Collins, CO****Colorado State University**

Instructor

<https://jobs.imstat.org/job//70855181>**United States: New Haven, CT****Yale School of Public Health**

Assistant Professor Investigator Track Position in Biostatistics

<https://jobs.imstat.org/job//70974963>**United States: New Haven, CT****Yale School of Public Health**

Assistant Professor Position in Biostatistics

<https://jobs.imstat.org/job//70974986>**United States: New Haven, CT****Yale University Department of Statistics and Data Science**

Associate/Full Professor, Statistics and Data Science

<https://jobs.imstat.org/job//71151478>**United States: New Haven, CT****Yale University**

Assistant/Associate/Full Professor in Interdisciplinary Neuroscience, Cognitive Science, or Computational Neuroscience

<https://jobs.imstat.org/job//70983537>**United States: New Haven, CT****Yale University**

Assistant/Associate/Full Professor in Interdisciplinary Neuroscience, Cognitive Science, or Computational Neuroscience

<https://jobs.imstat.org/job//70983537>**United States: Storrs, CT****University of Connecticut**

Assistant or Associate Professor, Statistics

<https://jobs.imstat.org/job//71252681>**United States: Storrs, CT****University of Connecticut**

Assistant Professor, Statistics

<https://jobs.imstat.org/job//71386347>**United States: Newark, DE****Department of Mathematical Sciences**

Tenure Track Assistant Professor in Data Science

<https://jobs.imstat.org/job//71187789>**United States: Newark, DE****Department of Mathematical Sciences**

Tenure Track Assistant Professor in Data Science

<https://jobs.imstat.org/job//71187789>**United States: Gainesville, FL****University of Florida, Department of Statistics**

Assistant Professor in Statistics

<https://jobs.imstat.org/job//71074070>**United States: Atlanta, GA****Emory University Dept of Quantitative Theory and Methods**

Assistant or Associate Teaching Professor of Quantitative Theory and Methods

<https://jobs.imstat.org/job//71177464>**United States: Champaign, IL****Department of Statistics, University of Illinois Urbana-Champaign**

Teaching-Clinical Assistant/Associate Professors, Lecturers, Instructors

<https://jobs.imstat.org/job//71086830>**United States: Chicago, IL****University of Chicago**

Preceptor in Data Science

<https://jobs.imstat.org/job//71087907>**United States: Chicago, IL****University of Chicago**

Senior Instructional Professor (open rank) Data Science

<https://jobs.imstat.org/job//71162088>

Employment Opportunities continued

United States: New York, NY

Columbia University Department of Statistics Assistant Professor (Tenure Track)

Position Description

The Department of Statistics invites applications for a tenure-track Assistant Professor position to begin July 1st, 2024. A Ph.D. in statistics or a related field by July 1st, 2024 is required. Candidates will be expected to sustain an active research and publication agenda and to teach in the departmental undergraduate and graduate programs. The field of research is open to any area of statistics and probability.

The Department, like the University itself, is an extraordinarily vibrant academic community. We are especially interested in candidates who through their research, teaching and/or service will contribute to the diversity and excellence of the academic community. Women and minorities are especially encouraged to apply. For further information about the Department and our programs, please go to our webpage at: <http://www.stat.columbia.edu>

Qualifications

Ph.D. in statistics or a related field by the date of appointment, as is a commitment to high quality research and teaching in statistics and/or probability.

Application Instructions

All applications must be submitted through Columbia's online Recruitment of Academic Search and Recruitment portal (ARS) <http://apply.interfolio.com/132238> and must include the following materials: cover letter, curriculum vitae, statement of teaching philosophy, research statement and the names of 3 references, who will be asked to upload letters of recommendation on their behalf.

Salary Range or Pay Grade

\$120,000-\$135,000

Pay Transparency Disclosure

The salary of the finalist selected for this role will be set based on a variety of factors, including but not limited to departmental budgets, qualifications, experience, education, licenses, specialty, and training. The above hiring range represents the University's good faith and reasonable estimate of the range of possible compensation at the time of posting.

Inquiries may be made to Dood Kalicharan at dk@stat.columbia.edu

Review of applications begins on **November 15, 2023**, and will continue until the position is filled.

Columbia University is an Equal Opportunity Employer / Disability / Veteran

United States: Chicago, IL**UChicago Data Science Institute**

Postdoctoral Scholar - Data Science

<https://jobs.imstat.org/job//71177452>**United States: Wichita, KS****Wichita State University**

Assistant Professor in Statistics

<https://jobs.imstat.org/job//70983723>**United States: Baton Rouge, LA****Louisiana State University**

Assistant Professor

<https://jobs.imstat.org/job//70919616>**United States: Amherst, MA****University of Massachusetts, Amherst**

Tenure Track Position in Statistics

<https://jobs.imstat.org/job//71148875>**United States: College Park, MD****The University of Maryland, Department of Mathematics**

Open Rank Positions in Statistics

<https://jobs.imstat.org/job//70857255>**United States: Rolla, MO****Missouri University of Science and Technology, College of Arts, Sciences, and Education**

Kummer Endowed Professor of Data Science

<https://jobs.imstat.org/job//70870458>**United States: Rolla, MO****Missouri University of Science and Technology, Department of Mathematics and Statistics**

Assistant Professor of Statistical Data Analysis and Applications

<https://jobs.imstat.org/job//70870449>**United States: Camden, NJ****Rutgers, The State University of New Jersey**

Assistant Professor

<https://jobs.imstat.org/job//71073587>**United States: New Brunswick, NJ****Department of Statistics Rutgers University–New Brunswick, School of Arts & Sciences**

Department of Statistics - Faculty Positions

<https://jobs.imstat.org/job//71326262>**United States: Princeton, NJ****Princeton University, Operations Research and Financial Engineering**

Associate or Full Professor

<https://jobs.imstat.org/job//71141770>**United States: Binghamton, NY****Binghamton University, Department of Mathematics and Statistics**

Assistant Professor

<https://jobs.imstat.org/job//71262698>**United States: New York, NY****NYU Stern School of Business**

Assistant Professor of Statistics (Tenure-Track)

<https://jobs.imstat.org/job//70665245>**United States: Poughkeepsie, NY****Marist College**

Professional Lecturer, Quantitative Reasoning

<https://jobs.imstat.org/job//70931029>**United States: Upton, NY****Brookhaven National Laboratory**

Postdoc - Computational Science

<https://jobs.imstat.org/job//71262834>**United States: Akron, OH****The University of Akron**

Assistant Professor Statistics

<https://jobs.imstat.org/job//71228418>**United States: Columbus, OH****The Ohio State University, Department of Statistics**

Four tenure-track positions (various ranks)

<https://jobs.imstat.org/job//70901491>**United States: Philadelphia, PA****University of Pennsylvania, Wharton Department of Statistics and Data Science**

Assistant, Associate, or Full Professor (tenure-track or tenured)

<https://jobs.imstat.org/job//65943714>**United States: Philadelphia, PA****University of Pennsylvania, Wharton Department of Statistics and Data Science**

Assistant, Associate, or Full Professor (tenure-track or tenured)

<https://jobs.imstat.org/job//65943714>

Employment Opportunities continued

United States: Pittsburgh, PA

University of Pittsburgh, Department of Statistics

Statistics Professor

<https://jobs.imstat.org/job//71164305>

United States: Pittsburgh, PA

University of Pittsburgh, Department of Statistics

Statistics Professor

<https://jobs.imstat.org/job//71164305>

United States: University Park, PA

Pennsylvania State University

Department Head (Academic Administrator)

<https://jobs.imstat.org/job//71176961>

United States: Columbia, SC

University of South Carolina

Assistant Professor

<https://jobs.imstat.org/job//70995543>

United States: Brookings, SD

South Dakota State University

Assistant Professor of Statistics

<https://jobs.imstat.org/job//71253187>

United States: Brookings, SD

South Dakota State University

Assistant Professor of Statistics

<https://jobs.imstat.org/job//71253187>

United States: Knoxville, TN

University of Tennessee, Department of Mathematics

Two open positions in science-informed artificial intelligence.

<https://jobs.imstat.org/job//70909432>

United States: Austin, TX

University of Texas at Austin, Department of Statistics and Data Sciences

Multiple Tenured/Tenure-Track and Professional Track Faculty Positions in Statistics and Data Sciences

<https://jobs.imstat.org/job//70983014>

United States: College Station, TX

Texas A&M University, Department of Statistics

Full Professor Position Available

<https://jobs.imstat.org/job//70974534>

United States: College Station, TX

Texas A&M University, Department of Statistics

Assistant Professor Positions Available

<https://jobs.imstat.org/job//70974521>

United States: Houston, TX

Rice University

Assistant Professor in Statistics

<https://jobs.imstat.org/job//71293382>

United States: Houston, TX

Rice University

Assistant or Associate Professor in Statistics

<https://jobs.imstat.org/job//71316189>

United States: Charlottesville, VA

University of Virginia, Department of Statistics

Two positions: one Tenure-Track Assistant Professor and one Tenured Associate Professor

<https://jobs.imstat.org/job//71230765>

United States: Seattle, WA

University of Washington, Department of Statistics

Acting Assistant Professor in Statistics

<https://jobs.imstat.org/job//71331821>

United States: Seattle, WA

University of Washington, Department of Statistics (Box 354322)

Assistant Teaching Professor

<https://jobs.imstat.org/job//71330494>


United States: Madison, WI

UW Madison

Assistant Professor / Associate Professor / Professor in Statistics

<https://jobs.imstat.org/job//71220286>

International Calendar of Statistical Events



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



Online and Ongoing series


  Asia-Pacific Seminar in Probability and Statistics
w <https://sites.google.com/view/apsp/home>

  COPSS–NISS COVID-19 Data Science
Webinar series w <https://www.niss.org/COPSS–NISS-covid-19-data-science-webinar-series>


  One World ABC Seminar
w <https://warwick.ac.uk/fac/sci/statistics/news/upcoming-seminars/abcworldseminar>

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

  One World YoungStatS Webinar series
w <https://youngstats.github.io/categories/webinars/>

 Video series: *The Philosophy of Data Science*
w <https://www.podofasclepius.com/philosophy-of-data-science>

December 2023

 December 6, 2023: HYBRID in London, UK, and online.
RSS Discussion Meeting w <https://rss.org.uk/training-events/events/key-events/discussion-papers/>

December 11–15: Bayesian Statistics and Statistical Learning:
New Directions in Algebraic Statistics w <https://www.imsi.institute/activities/bayesian-statistics-and-statistical-learning-new-directions-in-algebraic-statistics/>

December 12–14: London, UK. 19th IMA International
Conference on Cryptography & Coding w <https://ima.org.uk/21435/19th-ima-international-conference-on-cryptography-and-coding/>

 December 18–21: Lisbon, Portugal. 2023 IMS International
Conference on Statistics and Data Science (ICSDS) w <https://sites.google.com/view/icsds2023>

January 2024

 January 4–7: Melbourne, Australia. IMS Asia Pacific Rim

Meeting (IMS-APRM2024) w <http://ims-aprm2024.com/>

January 10–12: Teaching and Evaluating Data Communication
at Scale w <https://www.imsi.institute/activities/teaching-and-evaluating-data-communication-at-scale/>

January 22–24: Soesterberg, The Netherlands. 21st Winter School
on Mathematical Finance w <https://staff.fnwi.uva.nl/a.khedher/winterschool/winterschool.html>

February 2024

February 5–9: Decision Making and Uncertainty w <https://www.imsi.institute/activities/decision-making-and-uncertainty-2024>



February 27–March 1: Trieste, Italy. SIAM Conference on
Uncertainty Quantification w <https://www.siam.org/conferences/cm/conference/uq24>

March 2024

 March 10–13: Baltimore, USA. 2024 ENAR/IMS Spring
Meeting w <http://www.enar.org/meetings/future.cfm>


March 13–16: Houston TX, USA. 2024 Seminar on Stochastic
Processes w <https://depts.washington.edu/ssproc/>

April 2024

  April 19–21: Tallahassee, USA. Theory and Foundations
of Statistics in the Era of Big Data w <https://sites.google.com/view/theory-and-foundations-of-stat/>

May 2024

  May 9–11: Washington DC, USA. Statistics in the Age
of AI w <https://statistics.columbian.gwu.edu/statistics-age-ai>

 May 15–17: Mexico City, Mexico. 2024 IAOS–ISI
Conference w <https://www.isi-next.org/conferences/iaos-isi-2024/>

May 21–24: Utah Valley University, Orem, UT, USA. Eighth
International Workshop in Sequential Methodologies w <https://www.uvu.edu/math/events/iwsm2024/index.html>

International Calendar *continued*

June 2024

NEW June 3–7: Lima, Peru. SAE 2023–2024 Conference **w** <https://sae2023.pucp.edu.pe/>

ims June 9–12: Fort Collins, Colorado, USA. WNAR2024, joint with Graybill Conference **w** <https://wnar.org/meetings>

ims June 25–29: Braga, Portugal. International Symposium on Nonparametric Statistics (ISNPS 2024) **w** <https://w3.math.uminho.pt/ISNPS2024/>

July 2024

Dates TBC: Venice, Italy. ISBA World Meeting 2024 **w** <https://bayesian.org/2024-world-meeting/>

July 7–14: Sydney, Australia. 15th International Congress on Mathematics Education **w** <https://icme15.com/home>

ims July 9–10: Salzburg, Austria. Fifth International Workshop on the Statistical Analyses of Multi-Outcome Data **w** https://sam-workshop.github.io/SAM_2024/

August 2024

ims August 3–8: Portland, OR, USA. JSM 2024 **w** <https://ww2.amstat.org/meetings/jsm/2024/>



ims August 12–16: Bochum, Germany. Bernoulli/IMS World Congress in Probability and Statistics **w** <https://www.bernoulli-ims-worldcongress2024.org/>

NEW August 18–23: Banff, Canada. BIRS Workshop on Causal Inference and Prediction for Network Data **w** <https://www.birs.ca/events/2024/5-day-workshops/24w5244>

July 2025

NEW July 13–17: The Hague, The Netherlands. 65th ISI World Statistics Congress **w** <https://www.isi-wsc.org/>

August 2025

ims August 2–7: Nashville, TN, USA. IMS Annual Meeting at JSM 2025 **w** www.amstat.org/meetings/joint-statistical-meetings

August 2026

ims August 1–6: Boston, MA, USA. JSM 2026 **w** www.amstat.org/meetings/joint-statistical-meetings

August 2027

ims Dates TBA: Location TBA. IMS Annual Meeting at JSM 2027 **w** www.amstat.org/meetings/joint-statistical-meetings

August 2028

ims August 5–10: Philadelphia, PA, USA. JSM 2028 **w** www.amstat.org/meetings/joint-statistical-meetings

August 2029

ims August 4–9: Seattle, WA, USA. IMS Annual Meeting at JSM 2029 **w** www.amstat.org/meetings/joint-statistical-meetings

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 ims@imstat.org, or you can submit the details yourself at <https://www.imstat.org/ims-meeting-form/>. We'll list them here in the Bulletin, and on the IMS website too, at imstat.org/meetings-calendar/

Membership and Subscription Information: 2023

Journals

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

Individual Memberships

Each individual member receives the *IMS Bulletin* (print and/or electronic) and may elect to receive one or more of the five scientific journals. Members pay annual dues of \$105. An additional \$130 is added to the dues of members for each scientific journal selected (\$87 for *Stat Sci*). **Reduced membership dues** are available to full-time students, new graduates, permanent residents of countries designated by the IMS Council, and retired members.

Individual and General Subscriptions

Subscriptions are available on a calendar-year basis.

Individual subscriptions are for the personal use of the subscriber and must be in the name of, paid directly by, and mailed to an individual. Individual subscriptions for 2023 are available to *The Annals of Applied Probability* (\$245), *The Annals of Applied Statistics* (\$245), *The Annals of Probability* (\$245), *The Annals of Statistics* (\$245), *Statistical Science* (\$202), and *IMS Bulletin* (\$115). **General subscriptions** are for libraries, institutions, and any multiple-readership use. Institutional subscriptions for 2023 are available to *The Annals of Applied Probability*, *The Annals of Applied Statistics*, *The Annals of Probability*, and *The Annals of Statistics* (each title \$563 online only / \$707 print+online), *Statistical Science* (\$324/\$403), and *IMS Bulletin* (\$167 print). Airmail delivery is no longer offered.

IMS Bulletin

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

The *IMS Bulletin* (ISSN 1544-1881) is published eight times per year, in January/February, March, April/May, June/July, August, September, October/November and December, by the Institute of Mathematical Statistics, 9760 Smith Rd, Waite Hill, Ohio 44094, USA. Periodicals postage paid at Cleveland, Ohio, and at additional mailing offices. Postmaster: Send address changes to 9760 Smith Rd, Waite Hill, Ohio 44094, USA or dues.subs@imstat.org. Copyright © 2023 by the Institute of Mathematical Statistics. Printed by The Sheridan Press, 450 Fame Avenue, Hanover, PA 17331, USA.

Information for Advertisers

General information: The *IMS Bulletin* and webpages are the official news organs of the Institute of Mathematical Statistics. The *IMS Bulletin*, established in 1972, is published 8 times per year. Print circulation is around 3,500 paper copies, and it is also free online in PDF format at <https://www.imstat.org/ims-bulletin-archive/>, posted online about two weeks before mailout (average downloads over 8,000). Subscription to the *IMS Bulletin* costs \$115; call 877-557-4674 (US toll-free) or +1 216 295 2340 (international), or email dues.subs@imstat.org. The IMS website, <https://imstat.org>, established in 1996, receives over 30,000 visits per month.

Advertising job vacancies: A single 60-day online job posting costs just \$355.00. We will also include the basic information about your job ad (position title, location, company name, job function and a link to the full ad) in the *IMS Bulletin* at no extra charge. See <https://jobs.imstat.org>

Advertising meetings, workshops and conferences: Meeting announcements here and on the IMS website at <https://imstat.org/meetings-calendar/> are free. Submit your meeting details at <https://www.imstat.org/ims-meeting-form/>

Rates and requirements for display advertising: Display advertising allows for placement of camera-ready ads for journals, books, software, etc. A camera-ready ad should be sent as a grayscale PDF (min. 300dpi, with all fonts embedded). Email your advert to Elyse Gustafson ims@imstat.org or see <https://imstat.org/advertise>

	Dimensions: width x height	Rate
1/3 page horizontal	4.93" wide x 4.0" high (125.5 x 102 mm)	\$320
1/3 page vertical	2.39" wide x 9.42" high (60.7 x 239.1 mm)	\$320
1/2 page horizontal	7.5" wide x 4.7" high (190.5 x 119.4 mm)	\$400
1/2 page vertical	3.67" wide x 9.42" high (93.1 x 239.1 mm)	\$400
Full page (to edge, including 1/8" bleed)	8.75" wide x 11.25" high (222 mm x 286 mm)	\$545
Full page (within usual Bulletin margins)	7.5" wide x 9.42" high (190.5 mm x 239.1 mm)	\$545

Deadlines and mailing dates for *IMS Bulletin*

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

the
next
issue is
**January/
February
2024**

Read IMS Bulletin
articles online at
<https://imstat.org/news>



DEADLINES
for
submissions

**December 1,
then February 1**

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

**Journal
alerts**

For email alerts when
new IMS journal issues
are released, sign up at
[https://imstat.org/
portal/login](https://imstat.org/portal/login)

The purpose of the Institute is to foster the
development and dissemination
of the theory and applications of
statistics and probability

ims

IMS: Organized September 12, 1935

THE ANNALS of PROBABILITY

AN OFFICIAL JOURNAL OF THE
INSTITUTE OF MATHEMATICAL STATISTICS

Articles

- Parking on Cayley trees and frozen Erdős-Rényi
ALICE CONTAT AND NICOLAS CURIEN 1993
- On the (non)stationary density of fractional-driven stochastic differential equations
XUE-MEI LI, FABIEN PANLOUP AND JULIAN SIEBER 2056
- Loewner evolution driven by complex Brownian motion
EWAIN GWYNNE, JOSHUA PFEFFER AND MINJAE PARK 2086
- Multisource invasion percolation on the complete graph
LOUIGI ADDARIO-BERRY AND JORDAN BARRETT 2131
- Isomorphisms of Poisson systems over locally compact groups AMANDA WILKENS 2158
- On the rightmost eigenvalue of non-Hermitian random matrices . . . GIORGIO CIPOLLONI,
LÁSZLÓ ERDŐS, DOMINIK SCHRÖDER AND YUANYUAN XU 2192
- Essential enhancements in Abelian networks: Continuity and uniform strict monotonicity
LORENZO TAGGI 2243
- The critical 2d stochastic heat flow is not a Gaussian multiplicative chaos
FRANCESCO CARAVENNA, RONGFENG SUN AND NIKOS ZYGOURAS 2265
- Particle density in diffusion-limited annihilating systems
TOBIAS JOHNSON, MATTHEW JUNG, HANBAEK LYU AND DAVID SIVAKOFF 2301
- Scaling limit of the Fleming-Viot MultiColor process OLIVER TOUGH 2345

Erratum

- Erratum to "An optimal regularity result for Kolmogorov equations and weak uniqueness
for some critical SPDEs" ENRICO PRIOLA 2387

Vol. 51, No. 6—November 2023

Ann. Probab. Nov 2023
<https://projecteuclid.org/aop>