IMS Bulletin

June/July 2024

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Peter Hall Early Career Prize

Edgar Dobriban chosen to receive 2024 IMS Peter Gavin Hall Early Career Prize

The Institute of Mathematical Statistics is pleased to announce **Edgar Dobriban** as the 2024 IMS Hall Prize recipient. Edgar Dobriban is an Associate Professor of Statistics and Data Science, with secondary appointment in Computer and Information Science, at the University of Pennsylvania. His prize citation reads, *"For deep, fundamental, and wide-ranging contributions to mathematical statistics and statistical machine learning, including high-dimensional asymptotics (ridge regression, PCA), multiple testing, randomization tests, scalable statistical learning via random projections and distributed learning, uncertainty quantification for machine learning (calibration, prediction sets), robustness, fairness, and Covid-19 pooled testing via hypergraph factorization."*

Edgar Dobriban

On hearing of the award, Edgar said, "I am incredibly honored and humbled to receive the Peter Gavin Hall IMS Early Career Prize. Peter Hall's work is truly legendary and inspiring, and it's wonderful to contribute to honoring his legacy."

His research interests include the statistical analysis of large-scale data, including dimension reduction and high-dimensional statistics, and the theoretical foundations of machine learning, including uncertainty quantification, the use of symmetry, and fairness, among other topics.

Among his honors and awards, last year alone he received the ICSA Outstanding Young Researcher Award, for "remarkable contributions to contemporary statistical and machine learning theory and methods"; the Army Research Office's Early Career Program Award; the COPSS Emerging Leader Award; a Sloan Research Fellowship in Mathematics; and a Bernoulli Society New Researcher Award.

Edgar received his BA in Mathematics (*summa cum laude*) from Princeton University in 2012, an MS degree in electrical engineering from Stanford University in 2015, and a PhD in Statistics from Stanford in 2017, advised by David Donoho. His doctoral thesis won the Theodore W. Anderson Award for the best thesis in theoretical statistics from Stanford's Department of Statistics. Edgar grew up in Romania, and speaks Hungarian as a first language (the real spelling of his name is Dobribán Edgár).

Peter Hall (1951–2016) played a significant role throughout his professional career in mentoring young colleagues at work and through professional society activities. In his honor, the prize was set up to recognize early-career research accomplishments and research promise in statistics, broadly construed. The award consists of a plaque and a cash honorarium of $2500.

IMS Members' News

Bhramar Mukherjee receives 2024 Marvin Zelen Leadership Award in Statistical Science

Bhramar Mukherjee, the John D. Kalbfleisch Distinguished University Professor and chair of Biostatistics at the University of Michigan School of Public Health, received the 2024 Marvin Zelen Leadership Award in Statistical Science from the Harvard T.H. Chan School of Public Health. Recipients of the annual award demonstrate their exemplary commitment to statistical science theory and practice.

"It would not have been possible to receive this leadership award without the many opportunities I received in the Department of Biostatistics over the past 18 years. This award really goes to my department," says Mukherjee, who is also

Bhramar Mukherjee

the assistant vice president of research in research data services strategy at the University of Michigan. "The University of Michigan has exceptional talents in statistics and biostatistics. I was so fortunate to be the first woman chair of the biostatistics department, and it has been a spectacular journey to see the department grow and reach new heights."

Mukherjee is an influential figure in public health globally. She led crucial disease modeling research during the COVID-19 pandemic, has co-authored more than 380 publications, has supervised over 20 PhD students and actively mentors a new generation of data scientists through initiatives like the School of Public Health's Big Data Summer Institute. The program introduces undergraduate students to the intersection of big data and human health and has trained over 320 undergraduate students since first established in 2015. During her term as department chair, the department witnessed major expansion and growth in terms of number of faculty and students.

Jemar Bather received Penn State Alumni Award

IMS member **Jemar R. Bather** has been awarded the Penn State Alumni Association's 2024 Alumni Achievement Award. The Alumni Achievement Award recognizes alumni 35 years of age and younger for their extraordinary professional accomplishments. Jemar Bather graduated from The Pennsylvania State University with a Bachelor's degree in statistics in 2014 and embarked on a career in data analytics within nonprofit organizations, assisting charter schools in New York, New Jersey, and Connecticut. He pursued a Master's in applied statistics for social science research at New York University and earned a PhD in biostatistics from Harvard University. Currently, Bather is part of a cross-functional team at Merck, where he applies his statistical expertise to developing new medications that enhance health outcomes for those affected by infectious diseases. In addition to the Penn State award, Bather was honored in 2023 with the Albert Schweitzer Award from the Harvard T. H. Chan School of Public Health. View the award ceremony on YouTube at https://bit.ly/3x0XMtx

ISI elected members

Congratulations to IMS members **Adrian Dobra** and **Tanujit Dey**, who were among the 12 ISI Elected Members in the first round of the 2024 International Statistical Institute's membership elections. See the list at https://isi-web.org/article/first-round-newly-elected-members-2024

University of Melbourne confers Honorary Doctorate on Ruth Williams

Australian-born **Ruth Williams** is a Distinguished Professor at the University of California, San Diego (UCSD). Her current research involves developing mathematical models of congestion in networks subject to random 'traffic' fluctuations, including transport, computing, communications, manufacturing, and biological systems.

Ruth Williams studied mathematics at the University of Melbourne, where she earned her Bachelor of Science (Honours) and Master of Science degrees. Her early research concerned mathematical models of evolving tactical situations, an aspect of game theory, with applications in defence, engineering, and economics. She completed her PhD in Mathematics at Stanford University, studying reflected Brownian motion to develop mathematical models that can be applied to a range of systems including traffic queuing. After postdoctoral research at the Courant Institute of Mathematical Sciences in New York, she became an Assistant Professor at UCSD, where she is now a Distinguished Professor of the Graduate Division, and of Mathematics Emerita.

Professor Williams is an IMS Fellow and an elected member of many prestigious academies including the US National Academy of Sciences. In 2018, she became a Corresponding Member of the Australian Academy of Science. She has also been a strong international advocate of the Australian Mathematical Research Institute, MATRIX, a partnership between the University of Melbourne, Monash University, the Australian National University, and the University of Queensland. In 2016, she was joint winner of the John von Neumann Theory Prize from the Institute for Operations Research and the Management Sciences (INFORMS); she received the Award for the Advancement of Women in Operations Research and the Management Sciences in 2017.

Professor Ruth Williams after the conferral of her Doctor of Science (honoris causa)

The University of Melbourne's highest honour was conferred on Professor Williams at the Faculty of Science graduation ceremony on 11 December, 2023. Professor Duncan Maskell, University of Melbourne Vice-Chancellor, congratulated Professor Williams and the five other eminent scholars who received honorary doctorates, saying, "These remarkable people have made enormous contributions to research and public life in their respective fields. Their bold thinking, innovation and creativity has helped reshape our understanding of the world around us. We celebrate their achievements, and we are proud to honour them this way."

Dean of the Faculty of Science, Professor Moira O'Bryan, also extended her congratulations to Professor Williams, saying she has made "awe-inspiring contributions to mathematical theory and helped alleviate many real-world problems, including Internet congestion, choked factory lines, customer service queues, crowded freeways, and even gene regulation." She added, "She is an important role model for girls and women, organising networking, academic and social events."

⌨ = 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: Paul Bourgade & Julien Dubedat   *UPDATED*
  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 Banerjee
  https://imstat.org/sts
  ⌨ https://projecteuclid.org/ss

IMS Collections
  ⌨ https://projecteuclid.org/imsc

IMS Monographs and *IMS Textbooks:* Yingying Fan
  https://www.imstat.org/journals-and-   *UPDATED*
  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: Cristina Toninelli
  ⌨ https://projecteuclid.org/euclid.ejp

Electronic Communications in Probability: Patrícia Gonçalves
  ⌨ 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: Adam Jakubowski
  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: Francisco José A. Cysneiros
  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: Devavrat Shah
  ⌨ https://pubsonline.informs.org/journal/stsy

IMS Travel Award winners

New Researcher Travel Awards: 16 winners

The Institute of Mathematical Statistics (IMS) has announced the recipients of its New Researcher Travel Awards for 2024. The award provides funding to IMS members who have received their PhD within the past five years, to attend any IMS-sponsored or co-sponsored meeting where they will present a paper or poster. The following IMS members received the 2024 IMS New Researcher Travel Awards:

Neha Agarwala
National Cancer Institute, National Institute of Health

Satarupa Bhattacharjee
Pennsylvania State University

Biao Cai
University of Cincinnati

Michele Caprio
University of Pennsylvania

Kan Chen
Harvard University

Mingyue Du
Jilin University

Beatrice Franzolini
Bocconi University

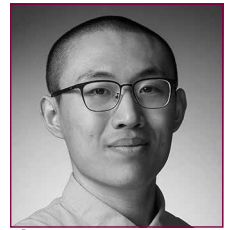**Andrea Gilardi**
Politecnico di Milano

Siyu Heng
New York University

Heishiro Kanagawa
University of Newcastle upon Tyne
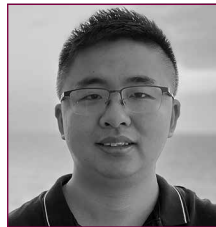
Bingkai Wang
University of Michigan

Shuoyang Wang
University of Louisville

Haihan Yu
University of Rhode Island

Mengxin Yu
University of Pennsylvania

Yuchen Zhou
University of Pennsylvania

Tijana Zrnic
Stanford University

Apply for next year's travel award

If you a New Researcher (i.e. received your PhD in the past five years), you can apply for a 2025 IMS New Researcher Travel Award, to attend any IMS-sponsored or co-sponsored meeting where you will present a paper or poster. Applications for the 2025 IMS New Researcher Travel Awards are due by February 1, 2025. Further details about the award can be found on the IMS website: https://imstat.org/ims-awards/ims-new-researcher-travel-award/

2024 Hannan Graduate Student Travel Awards

The Institute of Mathematical Statistics (IMS) is pleased to announce the 2024 Hannan Graduate Student Travel Awards recipients. The award recipients, who are IMS members, can use the funds to attend any IMS-sponsored or co-sponsored meeting.

The Hannan Graduate Student Travel Award is open to all IMS student members. Applications for next year's awards must be submitted by February 1, 2025.

The 2024 IMS Hannan Graduate Student Travel Award recipients are pictured on the next page.

Congratulations to all these awardees! For more information about the Hannan Graduate Student Travel Award and other IMS awards, please visit the IMS awards page at https://imstat.org/ims-awards/ims-hannan-graduate-student-travel-award/

Hannan Travel Awards: 26 winners

Lujia Bai
Tsinghua University

Hengchao Chen
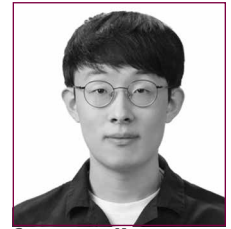University of Toronto

Juncheng Dong
Duke University

Yihong Gu
Princeton University

Qirui Hu
Tsinghua University

Seungwoo Kang
Seoul National University

Dohyeong Ki
University of California,
Berkeley

Dongwoo Kim
University of Pennsylvania

Changwoo Lee
Texas A&M University

Seunghyun Lee
Columbia University

Kwangmoon Park
University of Wisconsin–
Madison

Anne N. Shapiro
Boston University

Songhua Tan
Shanghai University of
Finance and Economics

Fan Wang
University of Warwick

Zhong Wang
National University of
Singapore

Max Welz
Erasmus University
Rotterdam
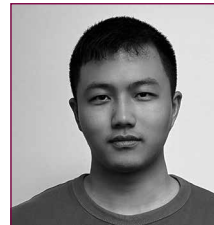
Shihao Wu
University of Michigan,
Ann Arbor

Xintao Xia
Iowa State University

Wan Zhang
University of North
Carolina at Chapel Hill

Yikun Zhang
University of Washington

Yuming Zhang
University of Geneva

Pan Zhao
Inria / Université de
Montpellier

Yidong Zhou
University of California,
Davis

Junhao Zhu
University of Toronto

Wanrong Zhu
University of Chicago

Zihan Zhu
Duke University

Seminar on Stochastic Processes 2024

SSP Moderator Frederi Viens rites:

Some 150 scholars in mathematics, statistics, and related disciplines, in great majority doctoral students and postdocs from across the US, came to Rice University in Houston, Texas, to attend the annual Seminar on Stochastic Processes (SSP), a conference series sponsored by the Institute of Mathematical Sciences (IMS).

"This was a pretty hardcore crowd. They came to hear about cutting-edge research in stochastic processes and other aspects of probability theory and its applications," said Frederi Viens, Professor of Statistics at Rice, one of the event's organizers, who has been the conference series' moderator since 2017.

Held annually since 1981 and rotating among various universities, the seminar took place March 13-16 in Duncan Hall on the Rice campus. Historically envisioned by its founders as a North American analogue of the venerable Séminaire des probabilités, which started in Strasbourg, France, in the 1960s, SSP soon became the premier conference on stochastic processes in North America.

"The seminar is really about the students and early-career researchers. Some are interested in finance or business, or genetics and evolution, or health and medicine, many are just looking to learn more about the theory of stochastic processes, and it gives them an opportunity to network and make connections," said Guodong Pang, Professor of Computational Applied Mathematics and Operations Research at Rice, and another of SSP's organizers.

Featured were some 35 lightning talks devoted to research by students, postdocs, and early-career researchers from across the USA and locations as far as Australia, Thailand, and Hong Kong, coupled with 40 poster presentations. All conference sessions, including the main talks, the lightning talks, and the poster sessions, are plenary, giving SSP a strong cultural identity where all participants feel included.

As part of a long-standing tradition at SSP, this year's conference featured two sessions where participants are free to go up to the blackboard and present open problems for discussion among all participants. This year, SSP continued a new tradition, started in 2017, of a career panel session for early-career researchers, where a diverse group of five successful academics working in various aspects of stochastic processes fielded questions from the participants about how to set oneself up for academic success in the field. The panelists included Rice Stat department's own Profs. Kathy Ensor (Rice), Phanuel Mariano (Union College), Robert Neel (Lehigh University), Patricia Ning (Texas A&M University), and Alejandra Quintos (University of Wisconsin). Ensor was one of the local members of the SSP 2024 scientific committee, along with Rice Stat Professor Marek Kimmel, University of Houston Math Professor Robert Azencott, plus Pang and Viens.

Each conference features five invited speakers along with tutorial lectures. The speakers at this year's SSP were: Tom Hutchcroft (Cal Tech); Étienne Pardoux (Aix-Marseille University, France); Sébastien Roch (University of Wisconsin, Madison); Perla Sousi (University of Cambridge); Ludovic Tangpi (Princeton University); and Yilin Wang (Institut des Hautes Études Scientifiques, Bures-sur-Yvette, France).

The organizers of this year's SSP received many unsolicited positive elements of feedback from participants and from members of the scientific committee during and after the event. Prof. Steve Evans from U.C. Berkeley noted: "The lecture hall was packed with enthusiastic, mainly young, attendees and I thought the talks were all of a uniformly high standard." A sentiment echoed during the conference by a number of early-career researchers was summarized later in an e-mail by Dr. Linh N. Huynh from Dartmouth College: "It was a wonderful experience and I greatly appreciate the opportunity to meet and discuss math with the Stochastic Processes/Probability community."

While one can always aspire to improving on how conferences are managed, many participants shared with Pang and Viens that they thought this was a well-organized SSP. And while the focus of the conference was entirely on making sure that all students and early-career researchers got ample opportunities to network with each other and with the six extraordinary scholars who were the main speakers, some participants benefited from a true Texas cultural experience, by attending events at the annual Houston Livestock Show and Rodeo, the biggest of its kind in the US.

By all accounts, SSP 2024 at Rice University was successful. "I look forward to **the next edition of SSP, which will be held at Indiana University in Bloomington from March 19 to 22, 2025,**" said Viens, the SSP Moderator.

SSP2024 attendees

COPSS–NISS Leadership Webinar Series

The COPSS–NISS Leadership Webinar Series is co-organized by the Committee of the Presidents of Statistical Societies (COPSS) Emerging Leaders in Statistics, and the National Institute of Statistical Sciences (NISS). The purpose is to promote leadership skills for members of the statistical societies at any stage in their careers. The series features conversations with leaders throughout the discipline, from major academic and government institutions, and companies. Invited speakers share their leadership stories and answer questions about their experiences. Each webinar is moderated by a member of the COPSS Emerging Leaders in Statistics program.

View full details about each event at https://www.niss.org/copss-niss-leadership-webinar-series

The most recent webinar, for example, on the topic of *"Leadership in Translational Statistical Research,"* took place on April 30, 2024. The speakers were Sherri Rose, Stanford University, and Taki Shinohara, University of Pennsylvania Perelman School of Medicine; the moderator was Jeff Goldsmith, Columbia University Mailman School of Public Health. You can watch this webinar at https://youtu.be/zzinqBFmHBQ

Previous webinars in the series have covered the following topics:

- *Leadership at the Intersection of Statistics & Genomics* (March 29, 2024)
- *Leadership in Statistical Methods for Electronic Health Records Data* (Nov. 28, 2023)
- *Leadership at the Intersection of Tech & Academia* (Oct. 17, 2023)
- *Leadership in National Scientific Societies* (Sept. 19, 2023)
- *Leadership in Government* (Apr. 28, 2023)
- *Leadership in Statistical Research* (March 28, 2023)
- *Social Justice and Community Leadership* (Feb. 28, 2023)
- *Leadership in Academia* (Feb. 2, 2023)

You'll find all the videos on YouTube.

IMS Special Lecture Previews

Nancy Reid: Grace Wahba Lecture

Nancy Reid is University Professor in the Department of Statistical Sciences at the University of Toronto. Her research interests include statistical theory, likelihood inference, design of studies, and statistical science in public policy. She is a former President of the IMS, and is President-Elect of the Bernoulli Society. Nancy was the COPSS Distinguished Achievement Award Lecturer at JSM 2022. She is a Fellow of the ASA and IMS, and a Foreign Associate of the National Academy of Sciences. The IMS Grace Wahba Lecture will be given at the Joint Statistical Meetings in Portland, Oregon.

Models and Parameters: Inference under model misspecification

Parametric models for statistical inference are often very helpful for isolating particular features of the system under study, even if the model is at best an idealized abstraction. Inference for sufficiently well-behaved parametric models is relatively straightforward, and often has the advantage of providing interpretable conclusions.

However, the choice of a model and parametrization that allows for incisive conclusions is more difficult than it may seem. Even the meaning of a parameter may not be straightforward, a point emphasized in McCullagh (2002). One solution is to use methods that give valid conclusions with minimal model assumptions, although this may come at the expense of relevance or interpretability. Another is to identify stable estimands under a wide range of models, and target estimation on these parameters, as in, for example Vansteelandt & Dukes (2022). Inference derived from some forms of composite likelihood has a similar flavour, as does the development of doubly-robust estimators of causal effects.

In this talk we consider inference for a parameter of interest, in models that share a common interpretation for that parameter but that may differ appreciably in other respects. We study the general structure of models for which the maximum likelihood estimator of the parameter of interest is consistent, under arbitrary misspecification of the nuisance part of the model. A specialization of the general results to matched-comparison and two-groups problems gives a more explicit condition in terms of a new notion of symmetric parametrization. This generalizes a result derived in Battey & Cox (2020), and sheds light on the role of orthogonal parametrizations.

The work is joint with Heather Battey, Imperial College London.

Pablo Ferrari: Doob Lecture

Pablo Ferrari is Researcher of the Consejo Nacional de Investigaciones Científicas y Técnicas, CONICET, in Argentina, and Emeritus Professor at the Universidad de Buenos Aires. He is Licenciado en Matemática at the same university, and Doutor em Estatística at the Universidade de São Paulo, Brazil; he joined their Department of Statistics, where he was a professor for many years. Pablo works in interacting particle systems, cellular automata, point processes and statistical mechanics models. Pablo was associate editor of the *Annals of Probability*, *Probability Theory and Related Fields* and a few other probability journals. He is a member of the Brazilian Academy of Sciences, the Academia de Ciencias Exactas, Físicas y Naturales and Academia Nacional de Ciencias, Argentina. He is an honored IMS Fellow and elected member of the ISI.

This Bernoulli–IMS Doob Lecture will be given at the 11th World Congress in Probability and Statistics, August 12–16, 2024, in Bochum, Germany: https://www.bernoulli-ims-worldcongress2024.org. Doob lectures are co-sponsored by the Bernoulli Society and IMS.

Soliton decomposition of the box-ball system and the Pitman transformation

The box-ball system is a one-dimensional, discrete time, transport cellular automaton introduced by Takahashi and Satsuma in 1990. Each box-ball configuration can be associated with a one-dimensional walk, and a dynamical step of the configuration is equivalent to the reflection of the excursions in the walk, an operation known as Pitman's transformation. The evolution preserves pieces of the walk called solitons because they propagate conserving shape and speed, even after colliding with another such piece. By associating each soliton with the vector of its position and its height, one obtains a discrete (multi)set of points in the upper half plane, called the soliton decomposition of the walk. The position is measured in a "slot metric" determined by the walk for each soliton's height. After one step of the dynamics, each point in the decomposition preserves its height, while its position is incremented by its height. In the continuous case, the walk is a continuous piecewise linear function; for the classic Markovian zig-zag random walk, the decomposition is a Poisson process. This approach is used to construct a large family of invariant measures for the dynamics, perform generalized hydrodynamic limits, and study limiting Gaussian fields. In this talk, I will survey the above results.
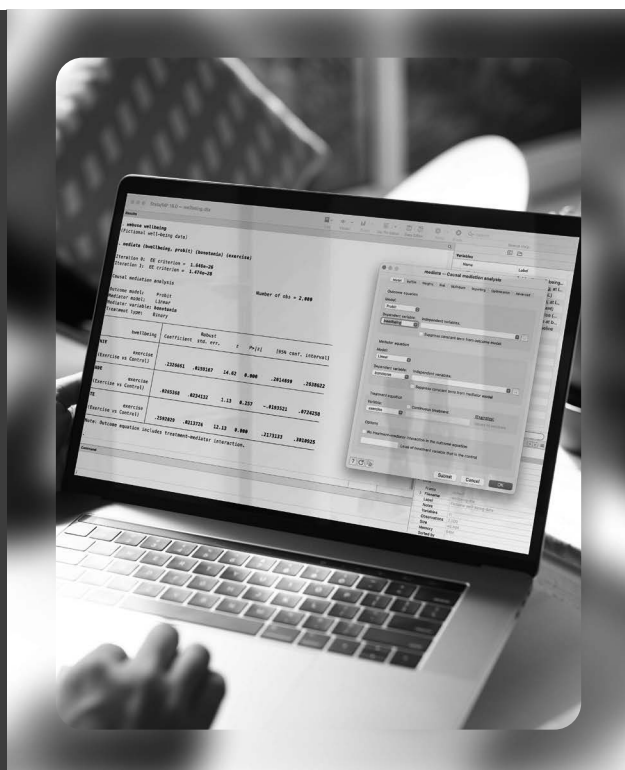
Chunming Zhang: Medallion Lecture

Chunming Zhang is a Professor in the Department of Statistics at the University of Wisconsin-Madison. She earned her Ph.D. in Statistics from the University of North Carolina at Chapel Hill in 2000. Her research interests encompass statistical methods in computational neuroscience, biostatistics, and financial econometrics, along with the analysis of neuroimaging, spatial, and temporal data. Additionally, her work delves into multiple hypotheses testing, large-scale simultaneous inference, dimension reduction, high-dimensional inference, non-parametric and semi-parametric modeling and inference, functional and longitudinal data analysis, and robust statistics. She is an elected Fellow of the Institute of Mathematical Statistics and the American Statistical Association. Dr. Zhang serves on the editorial boards of Annals of Statistics and the Journal of the American Statistical Association. In 2016, she delivered the Keynote Address at the Third Center for Information and Neural Networks Conference on Neural Mechanisms of Decision Making in Japan. This Medallion Lecture will be presented at the 11th World Congress in Probability and Statistics in Bochum, Germany, August 12-16, 2024.

Learning Network-Structured Dependence from Multidimensional Temporal Point Processes

In this lecture, I will present recent work on developing interpretable generative models tailored for temporally non-stationary and spatially dependent sequences of 'event data' across various domains. Real-world examples include (a) recordings of spike firing from multiple neurons in the brain, and (b) emerging infectious disease incidents like the COVID-19 pandemic, with cases reported globally across different countries and regions over time. The primary objective of the study is to develop predictive models, either short-term or long-term, to capture dynamic patterns of event occurrence likelihood in real-time and uncover 'network-structured' dependencies across geographic locations to identify potential security risks, quantify uncertainties, and guide regional resource allocation.

More broadly, a probabilistic approach for capturing event occurrence likelihood over time and space can leverage the 'multi-dimensional temporal point process'. This process refers to random occurrences of a specific type of event (e.g., contagious disease incidents) over time, represented as sequences of time points recorded at multiple nodes (locations). While the linear self-exciting Hawkes process remains prevalent for modeling the 'conditional intensity function,' its reliance on a non-negative triggering function limits its capacity to exclusively capture excitatory effects among nodes. Additionally, current methodologies face challenges stemming from computational constraints and a lack of probabilistic insights. These limitations include the incapacity to integrate structural constraints or network features, such as the crucial acyclicity constraint for recovering the acyclic causal structure, as well as the absence of external covariates.

We develop new continuous-time stochastic models of conditional intensity functions, dependent on event history of parent nodes, to uncover the network structure within an array of non-stationary multivariate counting processes. The stochastic mechanism is crucial for statistical inference of graph parameters relevant to structure recovery but does not satisfy the key assumptions of commonly used processes like the Poisson process, Cox process, Hawkes process, queuing model, and piecewise deterministic Markov process. We introduce a new marked point process for intensity discontinuities, derive compact representations of their conditional distributions, and demonstrate the cyclicity property of the multivariate counting process, driven by recurrence time points. These new theoretical properties enable us to establish statistical consistency and convergence properties of the proposed estimators for graph parameters under mild regularity conditions. Simulation evaluations demonstrate computational simplicity and increased estimation accuracy compared to existing methods. Real multiple neuron spike train recordings are analyzed to infer connectivity in neuronal networks.

Remco van der Hofstad: Medallion Lecture

Remco van der Hofstad is professor in probability at Eindhoven University of Technology (TU/e). Remco was scientific director of Eurandom from 2011–2019. He received the Prix Henri Poincaré 2003 jointly with Gordon Slade, and the Rollo Davidson Prize in 2007. He is a laureate of prestigious VIDI 2003 and VICI 2008 grants, and is a PI in the 10-year Gravitation program NETWORKS. In 2018, he was elected in the Netherlands Royal Academy of Science and Arts, where he currently is the chair of the Mathematics Section. He is the author of three monographs on random graphs and percolation.

Remco is editor-in-chief of the *Network Pages*, an interactive website by the networks community for everyone interested in networks (see https://www.networkpages.nl/), contact person for Grip on Complexity at the TU/e Institute for Complex Molecular Systems, and the chair of the Board of Trustees of the Applied Probability Trust.

This Medallion Lecture will be given at the 11th World Congress in Probability and Statistics.

Critical percolation on scale-free random graphs

Empirical findings have shown that many real-world networks are scale free, in the sense that there is a high variability in the number of connections of the elements of the networks. Spurred by these empirical findings, models have been proposed for such networks. Mathematically, scale-free networks have degree sequences whose second moments diverge.

Percolation on networks is one of the simplest models for network functionality. It can be interpreted as describing the effect of random attacks on the network, where edges are removed independently with a fixed probability called the percolation threshold, or the result of a simple epidemic on the network. On finite networks, it is unclear how to define the percolation critical value, and definitions are often ad hoc. Remarkably, percolation on scale-free networks is robust, in the sense that a giant component containing a positive proportion of the vertices exists for every positive percolation threshold.

We investigate the percolation critical behavior for a popular model of complex networks, the Poisson random graph, which can be interpreted either as a model with multiple edges between vertex pairs, or as a model with single edges by collapsing the multiple edges between vertex pairs. We identify what the percolation critical values in both settings are, and how they scale with the graph size. Interestingly, this scaling turns out to be rather different for the multi-edge case compared to the single-edge case in the scale-free regime. This clears up some confusion in the physics literature. Furthermore, the single-edge case has a surprising phase transition at the appropriate scale of the percolation parameter. Here the size of the largest component jumps from a random value to a much larger almost deterministic value that is proportional to the square root of the graph size. This phase transition is virtually impossible to detect using simulations.

This is joint work with Shankar Bhamidi and Souvik Dhara.

Award nominations

IMS Thelma and Marvin Zelen Emerging Women Leaders in Data Science Award

NEW for 2024

This new IMS award will be given annually to **three women data scientists who are within 10 years of completing their PhD (or similar degree)** during the year of the award. The award, consisting of a plaque, a citation, and a cash honorarium, will be presented at the IMS Presidential Awards Ceremony held at the IMS Annual Meeting. The deadline for nominations is **November 1**. https://imstat.org/ims-awards/ims-thelma-and-marvin-zelen-emerging-women-leaders-in-data-science-award/

International Prize in Statistics

The International Prize in Statistics—one of the highest honors in statistics—is awarded every two years to **an individual or team for major achievements using statistics to advance science, technology, and human welfare**. See https://www.statprize.org. Deadline **October 1, 2024**.

IMS special invited lectures

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**. The next nomination deadline is **October 1, 2024**. See https://imstat.org/ims-special-lectures/

Student Puzzle Corner 51

Anirban DasGupta says, "We are continuing with our contest model as in the previous puzzles. Each correct answer receives 3 points, each incorrect answer receives -2 points, and each item left unanswered receives -1 point. The top three scorers will be recognized. You can answer just one of the two problems, 51.1 and 51.2, although answering both will be very welcome. The *bonus problem* is to excite your scientific curiosity, and it will be a joy to hear your opinion.."

Puzzle 51.1 Let r be a standard normal variable, and A a cube in d-dimensions with side lengths equal to $|r|$. Find the expected volume, as analytically as you can, of the largest ball that can be put inside the cube A, and compute it for $d = 2, 3, 5$.

Puzzle 51.2 For our contest problem, answer True or False, without the need to provide a proof. But reasoned answers are especially welcome. Here are the items.

(a) The total variation distance between a binomial distribution with parameters $n = 50$ and $p = 0.01$ and the Poisson distribution with mean 0.5 is no more than 0.01.

(b) If X is a Cauchy distributed variable with a location parameter μ, then there is no unbiased estimator $\delta(X)$ of μ.

(c) If T_m denotes a symmetric t distributed variable on m degrees of freedom, then one can write T_1 as T_2+W where W is independent of T_2.

(d) If $\{S_n\}_0^\infty$ with $S_0 = 0$ stands for the simple symmetric random walk on the line, then there exist functions $f(S_n)$ such that f is not one–one, but $\{f(S_n)\}_0^\infty$ is a Markov chain.

(e) For n i.i.d. observations from a univariate normal distribution with an unknown mean and a known variance of 1, the $N(\bar{X}, 1)$ density is a minimax estimator of the true density among all normal density estimators under an ℓ_2 loss.

(f) Given i.i.d. samples $X_1, \ldots, X_n$ from a d-dimensional normal distribution for general $n \geq 2, d \geq 2$, with a general mean vector and a general covariance matrix, the sample variance-covariance matrix can be written as A_1+A_2 where A_1, A_2 are nonsingular matrices.

Puzzle 51.3: Bonus Problem for Your Independent Exploration. A point in the plane is called a Gaussian position if its Cartesian coordinates (X, Y) are i.i.d. standard normals. Consider a triangle T with vertices chosen as independent Gaussian positions. Argue for or against the motion that we should predict that the slope of the Euler line of T is zero.

Solution to Puzzle 50

Deborshi Das

Well done to **Deborshi Das** (ISI Delhi, pictured here) for his correct (and what Anirban described as "nifty") solutions! You'll find a reminder of Puzzles 50.1 and Puzzle 50.2 at https://imstat. org/2024/03/30/student-puzzle-corner-50/

Puzzle 50.1

Since the normal distribution with a known variance is in the one-parameter exponential family, the posterior mean of the mean μ is an increasing function of $\bar{X}$ for any prior G. Hence the negative of the posterior mean is a decreasing function of $c\bar{X}$ for any $c > 0$. Now apply the Brouwer fixed-point theorem.

Puzzle 50.2

(a) The sample median is an inadmissible estimator of a one-dimensional normal mean μ if the loss function is $(\mu - a)^4$. **True**; use the Rao–Blackwell theorem.

(b) If $X_1, X_2, \ldots, X_n$ are i.i.d. standard exponential, then $\limsup [E(\max(X_1, X_2, \ldots, X_n)) - \log n] < .50$. **False**; actually, a limit exists and the limit equals the Euler constant γ which is larger than 0.5.

(c) If $F(x)$ is the CDF of an absolutely continuous distribution on the real line with a completely unknown density $f(x)$, then it is possible to construct an unbiased estimate of f provided the sample size is 5 or more. **False**; no unbiased estimates exist for any value of n. This is a famous result of Murray Rosenblatt.

Student Puzzle Corner: Solution to Puzzle 50
Continued from previous page

(d) If Z has a standard normal distribution, then one can find independent random variables X and Y, each possessing a density, such that $Z = X Y$ in law.
True; a simple example is the Box–Muller transformation.

(e) If $F(x)$ is the CDF of an absolutely continuous distribution on the real line with a continuously differentiable density $f(x)$, and $|f'(x)| \leq 100$ for all x, then f is bounded above by 20.
True; this follows from the Kolmogorov–Landau inequality on intermediate derivatives.

(f) The Jeffrey prior on a multinomial probability vector $(p_1, \ldots, p_k)$, where $p_k = 1 - \sum_{i=1}^{k-1} p_i$, is improper if $k \geq 3$.
False; in fact, the Jeffreys prior is a Dirichlet with all parameters equal to ½, and so proper by definition of a Dirichlet.

(g) If X has a Poisson distribution with mean 1, then $E(X^X) < \infty$.
False; since $\sum_{x=1}^{\infty} \frac{(\lambda e)^x}{\sqrt{x}} < \infty$ i.f.f. $\lambda e < 1$, one has that for X distributed as Poisson with mean λ, $E(X^X) < \infty$ i.f.f. $\lambda < 1/e$.

(h) Suppose X, Y each has a finite variance, that $E(X|Y) = Y$ and $E(Y|X) = 0$. Then $Y = 0$ with probability 1.
True; this follows by using the iterated expectation formula on $E(XY)$ by conditioning once on Y and once on X.

(i) Pick a permutation of $\{1, 2, \ldots, n\}$ at random. Then the probability that the cycle containing 1 has length k is the same for all k.
True; this follows from the cycle structure of random permutations.

Written by Witten: **Just the Way You Are**

Daniela Witten writes: I recently read a blog post by a (non-statistical) science professor whose opinions I respect and value. Paraphrasing a bit, the thesis was this: *If you are a professor, then you should not be surprised that the majority of your trainees (PhD students and postdocs) are less talented/hard-working/brilliant/extraordinary than you were at their career stage. In fact, you should logically* expect this to be the case: if you have been successful then you are — almost by definition — exceptional.

Superficially, this argument makes sense, and I certainly cannot speak to whether it is an accurate representation of other areas of science, or of other statisticians' experiences. But on a fundamental level it does not describe my lived experience as (bio)statistics faculty for almost 14 years.

I believe that academic success in our field requires two things: **hard skills** and **soft skills**.

Hard skills are the technical skills that you learn in your academic coursework and employ in your PhD qualifying exams. You continue to develop, expand, refine, and apply these hard skills in your dissertation research, and over the course of your career. These hard skills include proof techniques, programming skills, data analysis experience… whatever it takes for you to go from "Point A: here is a statistical task" to "Point B: that statistical task is now completed".

It would be hard (read: *impossible*) to have a successful academic career without hard skills. It goes without saying that if you want to be an applied biostatistician, then you'd better be good at data analysis. And if you want to publish in the *Annals of Statistics*, then I hope you're great at proving theorems.

But I'm going to let you in on a secret: *you don't need to have all of the hard skills to have a successful academic career* (assuming you can pass quals, of course). If you're an applied biostatistician then it's probably okay if you're not big into measure theory. And if you publish regularly in the *Annals of Statistics* then there's no need for you to be even marginally competent at statistical consulting. If you happen to have all of the hard skills, then yay for you!!! But most of us don't, and that's 100% fine.

And know that *hard skills are learned*. Nobody comes out of the womb proving theorems or knowing how to program. Figure out which hard skills align with your interests and abilities, and then develop those skills. And recognize that you will continue to hone those skills over the course of your career: by reading papers, attending seminars and conferences, etc.

What, then, are the *soft skills* of the job? Everything else. They include the *written communication skills* to craft a paper that is both clear and interesting; the *verbal communication skills* to give a good talk; the *salesmanship* to write a grant proposal or convince a department to hire you; the *creativity* to pose a good research problem; the *vision* to know which statistical pursuits will have the

highest return on investment; and the *grit* to see a project through.

Soft skills are often undervalued in our field, and I can understand why: they are difficult to teach via formal coursework, and they are hard to quantify. But they are incredibly important, since the hard skills can only get you so far: what good is proving the theorem if you can't give an interesting talk about it; if you can't package it into a paper that other people can understand; and if you can't follow through on the painstaking (and often multi-year) review process required to shepherd the paper to publication?

What's that I'm seeing: an eye roll from a reader who thinks that proving minimax bounds is all you need? Well, I'm going to double down. You can *never* have too many soft skills, and the stronger your soft skills, the better. And guess what: if all you care about are hard skills, *then you should really work a bit more on your soft skills*, because strong soft skills enable you to quickly and effectively complete the "other" parts of the job so that you can get back to using your hard skills.

Just as we develop and improve our hard skills over the course of our careers, our soft skills are also a work in progress. The first draft of the first paper that I wrote in grad school was a literal mess, and I still cringe when I think about the first talk I gave in my PhD advisor's group meeting. But I have worked on improving my soft skills alongside my hard skills, and I continue to do so to this day.

Given the huge number of hard and soft skills that go into a successful academic career, it seems clear to me that nobody will "uniformly dominate" anyone else at all of the skills: instead, each person has skills at which they particularly excel, and other skills that remain an area for growth.

So this brings me back to that blog post, which said that as a professor, I should expect that none of my trainees are as talented as I was at their career stage. *That is not my experience.* My trainees come to me with a variety of skills. Without exception, each has been extraordinary — far better than I was at their career stage — at one or more of these skills. It is my job as an advisor to help each of my trainees further develop their existing strengths, and improve the skills that are not their strengths (yet).

If you are a professor, then every day is a great day to celebrate your trainees' current strengths, and to help them build up their "not-yet-strengths" (but let's not call them weaknesses), both hard and soft. And if you are a trainee, then know that there is no one way to build a successful career in (bio)statistics. While there's always room to improve, *you're amazing, just the way you are.*

Any call for *Clara-fication?*
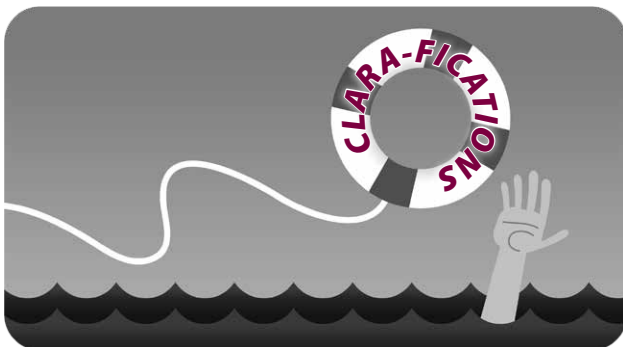
Do you need some friendly advice? Are you unsure how to go about something? Does everyone around you look like they know exactly what they're doing? (*They really don't!*). We're inviting early-career researchers to send their **questions about the life of a researcher or ask for career advice**, and *Clara-fications* columnist Clara Grazian will try to find an answer. We'll publish the question and answer in the next available issue. **Don't worry, we won't publish your name.** Your question might even be what someone else has been secretly wondering… Send your questions for Clara to **bulletin@imstat.org**.

Radu's Rides: **Ideas to the Rescue**

Radu Craiu writes: Writing for this column can really be a pain in the neck, especially when I think a good idea is coming to fruition and then I lose momentum once things get a little more complicated. Sounds familiar? I thought I should write about statistical ideas, how their life is sometimes great and how sometimes they should just curl up and die with or without honour. What makes an idea live is pretty evident, or I thought it was. A living, thriving idea should excite, motivate and animate whatever audience witnesses it. Among other things, a healthy idea will tend to have many babies and some of these will grow strong, perhaps even stronger than their parent. One can think of a good idea as a strong tree that in time nurtures an entire forest around it. In this ecosystem, like in most of them, there is room to grow, and also to grow old. This would be a natural evolution, except that old ideas tend to cling on to us (or we to them) because we fail to see their wrinkles, emboldened, perhaps, by grant agencies that seem fond of keeping an old flame on artificial life support. That is indeed unfortunate because old good ideas could do so much to fertilize the future.

Speaking of manure, one must take into consideration also those thoughts that should have been chased by better ones, if not for poorly conceived incentives, menacing tenure deadlines, or predatory journals that turn them into… *zombie ideas*. The latter are kept alive by whatever ails our profession, and not unlike their Netflix counterparts can infect a healthy ecosystem to the point where evacuation of an entire area is needed. Pushing this tired metaphor to its logical limits, please look at the nearest respectable statistics editor as the Mila Jovovich [*Resident Evil*] or Matt Damon [*World War Z*] of our profession. Obviously, one wants to know where ill-conceived, or

merely obsolete, zombie statistical ideas go to die, and I was about to write something about that. The problem, I soon realized, is that they rarely die. Granted, some fall out of favour, but from exile they continue to show resilience and the ability to create mini-them versions that are not better, merely better costumed. The zombie ideas that we thought died with that paper's tenth rejection are not really gone and, moreover, hang around like cryogenized bodies waiting for a magical future cure. One can think of a bad idea's future as that bank with endless credit that justifies present and past foolishness indefinitely. Whether my pessimistic view is justified or not, only the future will tell and therein lies the catch. If the future doesn't provide answers, I thought the past would and I had this cool thought about the ancient world's belief that a person's death was as important, perhaps even more important than that person's life. Obviously, this doesn't apply to ideas, because no ancient believed that waiting in a suspended state to become relevant again is an honorable way to go (or stay). Sometimes the future and the past shake hands on a rotten deal. For instance, in a really twisted time-warped cosmic joke, some probability ideas born in the '90s— some of them good—went to die in some Soviet journal from the '60s or '70s, but that's neither here nor there.

Clearly, in my delirious conceptualization, I have momentarily forgotten that an idea's fate depends on us, those who deal in this supposedly rare currency and really have power of life and death over it. Experience shows that few are willing to wield the executioner's hatchet and many are ready to squeeze the last drop out of an idea until all it wants is to bask in the slowly dying glory of Google Scholar.

But not everything is about life and death, there is always the hope of beauty
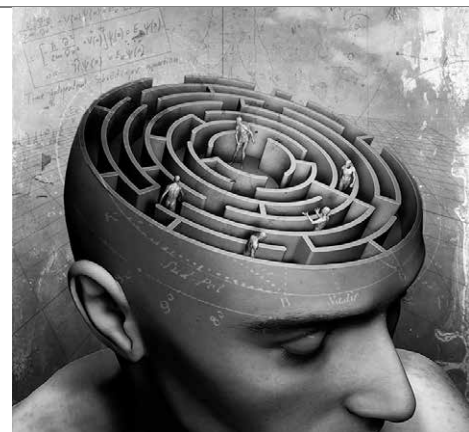
in between. We think of immutable truths as beautiful—if nothing else, at least the Law of Large Numbers deserves a crown and the chance to tell us how it will achieve world peace—and the same applies to all ideas sustained by elegant mathematics. There is poetry in mathematical statistics, but when was the last time a poet fixed your sink? There is another hidden beauty in statistics, that may have mathematical crutches but ends being much more than that[1]. While an idea that has a beautiful a mathematical construction behind it will never be completely buried—nor should it be—we should also recognize the utilitarian beauty in ideas that solve a problem that's staring us in the face or kicking us in the… bilateral hippocampus. There is room for beautiful mathematics and useful statistics and there is a throne available for each of their offspring.

I like to think of Academia as this maze we enter in search of Big Ideas. But the maze is devilishly complicated and it keeps challenging us at every turn until we lose sight of what motivated us to begin this adventure in the first place. So, while you patch the leaking faucet of your grant account or the endless flow of teaching-related complaints, remember the time-honored method to orient oneself when lost: keep an eye on the starry sky.

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[1] We give several examples in "Six Statistical Senses," *Annual Review of Statistics & Its Application*, 10:699–725.

Recent papers: supported and affiliated journals

Annales de l'Institut Henri Poincaré (B), Probabilités et Statistiques

The Probability and Statistics section of the *Annales de l'Institut Henri Poincaré* is an international journal that publishes high-quality research papers. The journal, supported by the IMS, deals with all aspects of modern probability theory and mathematical statistics, and their applications. The editors are Giambattista Giacomin and Yueyun Hu. Access papers at **https://projecteuclid.org/aihp**

Volume 60, Number 1, February 2024

Observational Studies

Observational Studies, an IMS affiliated journal, is an open-access, peer-reviewed journal that publishes manuscripts on all aspects of observational studies, including study protocols, methodologies, descriptions of data sets, software and analyses of observational studies. The editor is Nandita Mitra. Read it at **http://obs.pennpress.org/**

Volume 9, Issue 4, 2023

OBITUARY: Wolfgang Wefelmeyer

1949–2024

We are saddened to report that Wolfgang Wefelmeyer lost his life after a road accident in January 2024, at the age of just 74.

Wolfgang Wefelmeyer spent most of his career at the University of Cologne in Germany. He studied Mathematics there and stayed on as a postgraduate under the supervision of Johann Pfanzagl. After completing his doctoral dissertation in 1979, he remained at Cologne for 15 years before moving to a professorship at the University of Siegen. He returned to Cologne as Professor of Mathematical Statistics in 2003, and retired from teaching in 2014.

Wolfgang made many professional and personal friends at conferences and during research visits, including a year at Johns Hopkins University (1987–88) and a year at Binghamton University (2002–03).

He was an expert in asymptotically efficient estimation in the Hájek–Le Cam sense. He always stressed the importance of incorporating the structure of a model into decision-making. Thus his research dealt in large part with the study of plug-in estimators, but he also addressed issues of misspecification.

In September 1987, Wolfgang began a visit to Johns Hopkins University's Department of Applied Mathematics at the invitation of then-Chair Robert Serfling. Visiting at the same time was Priscilla (Cindy) Greenwood. Cindy was a probabilist with experience in the area of sample path properties of stochastic processes, Wolfgang was an expert in efficiency. The question naturally arose: what about efficient estimation for stochastic processes?

Baltimore was the starting point for a collaboration and friendship that lasted for decades. Wefelmeyer and Greenwood initially looked at asymptotically efficient estimation in the context of semi-martingales.

Wolfgang Wefelmeyer

This family encompasses all sorts of stochastic processes. Resonance among statisticians was cool, however, so the pair shifted their focus to efficient estimation for particular processes under particular conditions. This included counting processes, Markov chains, multivariate point processes, semi-Markov processes, random fields, partially specified models in various contexts, estimation near critical points, misspecified models, estimation from Markov Chain Monte Carlo data (with Ian McKeague), and estimating equations (at the instigation of Vidyadhar Godambe). Over the years this joint endeavour led to 25 journal papers, as well as book chapters and numerous conference contributions.

In 1997 a group around Greenwood at the University of British Columbia was awarded a major, three-year "large topic grant" to study "Crisis points and models for decision" — in our terms, stochastic models with critical points — and Wefelmeyer was a major participant. Among the postdocs taking part was Ursula (Uschi) Müller. The "Crisis Points Group" including Wefelmeyer, Greenwood, and Müller, published a number of joint papers, including work on stochastic resonance.

Most of Wolfgang's other contributions to mathematical statistics arose within his deep and long collaboration with Anton Schick. They began with the estimation of the invariant laws of semiparametric Markov chains and linear processes, then focused on the estimation of densities of sums of independent random variables and of stationary and higher order transition densities for time series models with independent innovations. They established root-n consistency of plug-in estimators of such densities in various norms such as supremum and L_1 norms, obtained
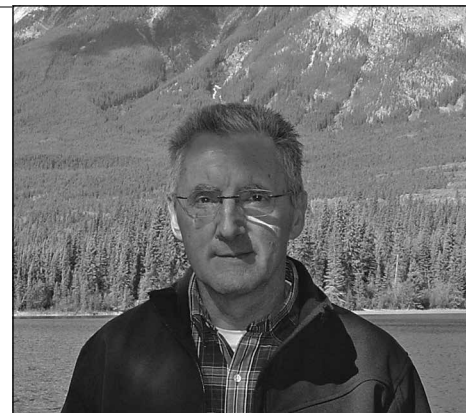
functional central limit theorems for these estimators in corresponding function spaces, and addressed efficiency issues. This work also led to more efficient predictions for related time series models. Together with Uschi Müller they focused on residual based inference, which was motivated by the Crisis Points Group research on stochastic resonance at UBC in the late 1990s. This work led to the construction of efficient estimators of error distributions and functionals thereof in various regression and autoregression models.

Wolfgang Wefelmeyer wrote over 100 journal articles and co-authored two books. He remained active until his death and further papers are still to appear. He was associate editor for several respected journals and a longstanding member of national and international professional associations.

Wolfgang leaves behind his partner, Martina, and his brother Thomas. His colleagues, collaborators and friends around the world will also miss him sorely. He was a modest and mostly quiet man who had a keen eye for both the sublime and the absurd. He was a tenacious researcher, an inspiring teacher, a generous mentor, and a dependable friend.

Written by Priscilla (Cindy) Greenwood, University of British Columbia; Anton Schick, Binghamton University; Ursula (Uschi) Müller-Harknett, Texas A&M; and Ian Harknett

OBITUARY: Anant M. Kshirsagar

1931–2023

Dr. Anant Madhav Kshirsagar, Professor Emeritus in the Department of Biostatistics, School of Health Sciences, University of Michigan, Ann Arbor, died on June 20, 2023, at Ann Arbor. His career was exceptional from the beginning. He passed his matriculation examination at the age of 12 from Sangli, a small town in Maharashtra, India. At the age of 16, he passed his BSc in Mathematics from Fergusson College, Pune, and stood "First Class First" in Bombay University. While he was a postgraduate student at Bombay University, the head of the statistics department Professor Chakravarti recognized the potential of this student who came from a family of very modest economic background in a small town, and encouraged him to fulfill his strong ambition to reach greater heights in the field of Statistics.

He completed his PhD (1961) in just one and a half years under the guidance of M.S. Bartlett, who had done pioneering work on multivariate analysis, at Manchester University, UK. After working briefly as faculty in the Statistics Department of Bombay University and as a senior scientific officer in the Defence Science Organisation, Delhi, he moved to the USA in 1968 to work as an Associate Professor at the Southern Methodist University (SMU) in Dallas, Texas (1968–71). He was invited by Prof. Hartley in 1971 to work as a professor at Texas A&M University, College Station (1971–77), then joined the Department of Biostatistics in the School of Health Sciences of the University of Michigan, Ann Arbor, where he remained until retirement, becoming Professor Emeritus.

In 1972 he was awarded a DSc by Manchester University for his sustained publication record after PhD and quality of research. Even when Kshirsagar was a PhD student, Maurice had great confidence in his knowledge and judgment. Once, Bartlett was asked by *Biometrika*'s editor to referee a paper submitted by a very senior Statistics professor from Harvard University; Bartlett instructed them to "send it to my student Kshirsagar." Dr. Kshirsagar found a serious flaw in it, and gave his opinion that it should not be published. *Biometrika* accepted his decision. (Knowing this, Kshirsagar's student J.N.K. Rao, used to call Kshirsagar "a giant-killer.")

Books written by Prof. Kshirsagar on multivariate analysis, growth curves, and linear models have been widely used by students and teachers in American universities. Design of experiments, Markov renewal processes, response surfaces, discriminant analysis, and linear models were other areas of his specialization.

When C.R. Rao, doyen of Indian statistics, was to publish a revised edition of his book *Statistics,* called him and asked, "Kshirsagar, in your book, on which page have you given a simple proof of one of my statistics and called it 'Rao's U-statistic'?". Rao also recommended in his book that readers should refer to Kshirsagar's book for derivation of distribution.

Excellent researchers are not necessarily good teachers but Kshirsagar was an exception to this. When he was about to leave SMU to join Texas A&M, his SMU students pleaded with the Dean to give Kshirsagar tenure or a raise.

Two of his former students, Dr. Mason, who later became ASA President, and Dr. Eubank, wrote in the preface of their book, "Credit for all that we have done so far in the field of Statistics goes to the teaching of Prof. Kshirsagar." Another two former students, Luisa Sia and Ersen Arseven,
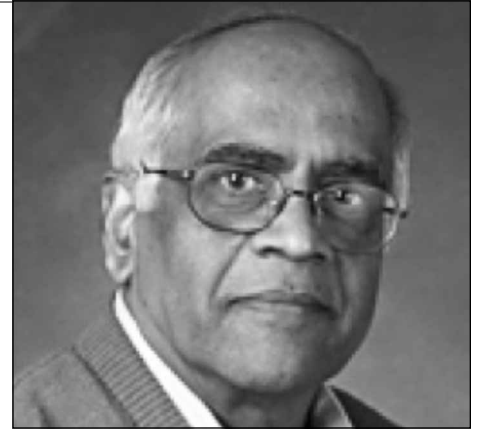
A.M. Kshirsagar

instituted in 2010 the "Anant M. Kshirsagar Endowed Fellowship in Statistics" at Texas A&M University. The School of Public Health, University of Michigan, also instituted the "Kshirsagar/Wolfe Endowed Scholarship" in his honor.

Despite spending half of his life in the US, he had retained a great love for literature in Marathi, his mother tongue and whenever he liked any work in Marathi, he used to write the authors letters in chaste Marathi in his beautiful handwriting, which was appreciated by many Marathi writers.

More than his happiness, he always thought of the well-being of his family, the happiness of his siblings, and the achievements of his students. A collection of letters written by his past students was presented to him on the occasion of his farewell party given by his department on the day of his superannuation from the University of Michigan. He used to say, "During the eve of my life, whenever I feel sad and depressed due to some difficult situations, I read those letters and that gives me a lot of peace and hope."

As per his last wish his body was donated to the anatomy department of Michigan University. May his soul rest in peace.

Written by Sumati Kshirsagar-Kulkarni (Retired) Professor, International Institute for Population Sciences, Mumbai, India. [Prof. Kshirsagar-Kulkarni is the younger sister of A.M. Kshirsagar.]

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/

Your **Late-Breaking Session proposal** is invited: A late-breaking session covers one or more technical, scientific, or policy-related topics that has arisen in the one-year period before the JSM in which the session is proposed to appear. Proposals are accepted by Debashis Ghosh, JSM 2024 program chair, via the online system (https://ww3.aievolution.com/JSMAnnual2024) until April 15, 2024, and should include the following:

- Session title
- Session description, including a summary of its statistical and scientific content, an explanation of its timeliness, and comments about the specific audiences for which it will be of principal interest
- Format of the session (paper or panel)
- Names of the session organizer; chair; and all speakers, panelists, and/or discussants (prospective session participants should agree to participate in the session before the session proposal is submitted)
- Complete affiliation and contact information (mailing address, phone, email) for organizer, chair, and all participants
- Title for each presentation (if paper session)
- Web links to relevant technical reports, if applicable

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 |

Stochastic Networks
July 1–5, 2024
KTH, Stockholm, Sweden

w https://www.kth.se/sn2024

Over the last three decades, this conference has become the most prestigious venue for mathematicians and applied researchers who share an interest in stochastic network models. It began with the workshop organized by Peter Glynn and Tom Kurtz in Madison Wisconsin in 1987 and is now a biannual conference. The conference typically gathers 200 invited participants and consists of 21 invited talks (each one hour long, including questions) and poster sessions.

Poster submission deadline: April 15, 2024. Please use the form on the website.

2024 IMS China Meeting
July 6–8, 2024
Yinchuan City, Ningxia, China

w https://conferences.koushare.com/2024IMS

The next IMS China meeting will be held in Yinchuan City, in Ningxia, China, from July 6–8, 2024. All talks will take place at Yinchuan BaoShiLiDe Hotel.

The theme of the 2024 IMS-China International Conference on Statistics and Probability is *"Statistics in the Age of GenAI and LLM."* Submit your abstract by May 6. Registration deadline June 6.

More IMS meetings

Bocconi Summer School in Statistics and Probability
July 8–18, 2024, Como, Italy

w https://bss2024.lakecomoschool.org/
The Bocconi Summer School in Advanced Statistics and Probability is hosted by the Lake Como School of Advanced Studies (https://lakecomoschool.org/) at Villa del Grumello. The summer school is open to all interested researchers, but is especially designed for PhD students.

Since 2021, the school is organized in collaboration with the University of Oxford and Imperial College, London, and is held in alternating years in the UK and in Como. The 2024 edition of the school will be held at Villa del Grumello, Como, on July 8-18, 2024.

The topic of the 2024 edition is *Statistical Science for Understanding Climate and the Earth System*, and the main instructors are Claudia Tebaldi (Earth Scientist Joint Global Change Research Institute, Pacific Northwest National Lab USA) and Douglas Nychka (Colorado School of Mines, Golden, Colorado, USA).

Thirty Years of Women in Probability
August 5–6, 2024. UNC Chapel Hill, USA

https://services.math.duke.edu/~rtd/wwp30yr/wwp30y.html
Marking 30 years since the Ithaca Workshop for Women in Probability, this meeting will be hosted by the probability group in the department of Statistics and Operations Research at UNC–Chapel Hill. Speakers include Jasmine Foo (Minnesota), Tai Melcher (U. of Virginia), Tamara Broderick (MIT), Ivana Bozic (Washington), Dana Randall (Georgia Tech), Samantha Petti (Tufts), and Lea Popovic (Concordia).

24th IMS Meeting of New Researchers in Statistics and Probability
August 1–3, 2024
Oregon State University, Corvallis, Oregon USA

w https://nrc2024.github.io/index
The Institute of Mathematical Statistics (IMS) sponsors the New Researchers Conference (NRC; more formally the Meeting of New Researchers in Statistics and Probability) every year. It is organized by the IMS New Researchers Group (NRG). NRC takes place the week before JSM to promote networking and interaction among new researchers in the field of statistics, biostatistics, and probability, including those who expect to hold tenure-track positions in the near future. The application deadline for this year's meeting has passed.

IMS–CANSSI joint event: Navigating different stages of a successful career in academia, industry, and beyond
August 2024 (exact date TBD), at JSM Portland, USA

w https://www.eventbrite.ca/e/navigating-different-stages-of-a-successful-career-tickets-861667800587
The IMS and the Canadian Statistical Sciences Institute (CANSSI) are pleased to announce their first joint event, *"Navigating different stages of a successful career in academia, industry, and beyond,"* at JSM 2024 in Portland, Oregon. A panel of statisticians from different areas and stages, ranging from junior to senior, will discuss their career path, offer advice, and answer Q&A. This mentoring/networking event is suitable for statisticians and data scientists in all sectors and at all stages of their careers. This will be a lunch-time event (with specific date TBD once the JSM program is confirmed), and free boxed lunch will be provided to the first 75 registered participants.

There is no cost for the event itself, but **participants must be registered for JSM 2024**, and attendance will be capped at 75. If you register after the cap, you will be wait-listed. Details will be sent to registrants in late May or early June. Reserve your spot now via the Eventbrite link above.

IMS annual meeting 2024:
Bernoulli–IMS 11th World Congress in Probability & Statistics
August 12–16, 2024, at Ruhr-University Bochum, Germany

w https://www.bernoulli-ims-worldcongress2024.org/
The Institute of Mathematical Statistics Annual Meeting will be held at the 11th World Congress. The plenary speakers have been announced: see https://www.bernoulli-ims-worldcongress2024.org/plenary-lectures. With 51 invited paper sessions, 55 contributed sessions, and poster sessions, there's something for everyone.

Submissions and registration are now open.
Registration of speakers/presenters of contributed talks/ posters by April 30, 2024. Early registration deadline is May 31, 2024. Note that the registration fee includes a local public transportation pass (the *VRR Preisstufe D*, valid from August 11–17), and which includes trains from Düsseldorf airport. A list of hotels is now available on the congress website, including several that are close to Bochum central station (*Bochum Hbf*).
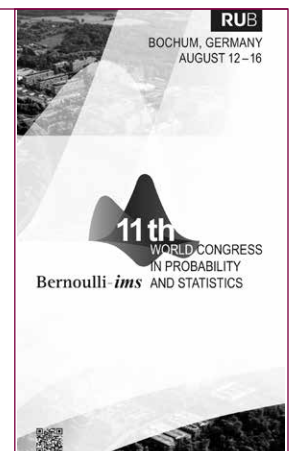
More IMS meetings

International Symposium on Nonparametric Statistics (ISNPS 2024)
June 25–29, 2024
Braga, Portugal

w 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, 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.

Submissions and registration are now open. The deadline for submission of keynotes, invited talks, contributed talks and contributed posters is April 4, 2024. The early registration deadline is April 29, 2024.

Asia-Pacific Seminar in Probability and Statistics
Ongoing and online

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

IMS International Conference on Statistics and Data Science (ICSDS 2024)
December 16–21, 2024
Nice, France

w https://sites.google.com/view/ims-icsds2024/

The third IMS International Conference on Statistics and Data Science will take place in beautiful Nice, on the south coast of France, December 16–21, 2024.

The objective of ICSDS is to bring together researchers in statistics and data science from academia, industry, and government in a stimulating setting to exchange ideas on the developments of modern statistics, machine learning, and broadly defined theory, methods, and applications in data science. There will be a student paper award competition, in addition to plenary sessions, and invited, contributed and poster sessions. Young researchers are particularly encouraged to participate, as a portion of the invited sessions will be designated for young researchers.

Stochastic Processes and their Applications 2025
July 14–18, 2025
Wrocław, Poland

w https://spa.pwr.edu.pl/

The 44th Conference on Stochastic Processes and their Applications (SPA 2025) will be held in Wrocław, Poland, from 14 to 18 July, 2025.

SPA Conferences, organised by the Bernoulli Society and co-sponsored by IMS, are the most important series of international meetings on the theory and applications of stochastic processes.

Organizing committee members are Krzysztof Bogdan (Wrocław University of Science and Technology) and Krzysztof Dębicki (University of Wrocław).

You can pre-register at https://spa.pwr.edu.pl/preregistration.

One World ABC Seminar: Ongoing and online

w 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/

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

13th Cornell Probability Summer School
July 22–August 2, 2024, Ithaca, NY, USA

w https://math.cornell.edu/13th-cornell-probability-summer-school
CPSS 2024 is organized by the Dynamics, Probability and PDE's in Pure and Applied Research Training Group. The main lecturers will be **Antonio Auffinger**, Northwestern University: title/abstract forthcoming; **Hao Shen**, University of Wisconsin, Madison: tentative title "Stochastic PDEs from quantum field theory"; and **Tianyi Zheng**, University of California, San Diego: title/abstract forthcoming. The Junior Speakers (problem sessions) will be **Curtis Grant**, collaborating with Antonio Auffinger; **Wenhao Zhao**, collaborating with Hao Shen; and **Laszlo Marton Toth**, collaborating with Tianyi Zheng. The schedule will be available as we get closer to the event. There will be a reception on July 23, and an event barbecue on July 26.

Fifth 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 scenic Salzburg (Mozart's birthplace and the picturesque setting for *The Sound of Music*). 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 keynotes (Ian McKeague and Markus Pauly), 24 invited sessions, and a poster session. A banquet will be held on July 9.

WNAR / IMS / Graybill 2024
June 9–12, 2024
Fort Collins, Colorado, USA

w 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. There will be five short courses on June 9, a plenary lecture, Graybill keynote speech and keynote panels from international regulators, invited and contributed sessions, young investigator events, and a Student Paper Award with oral sessions. The theme of the Graybill Conference (https://statistics.colostate.edu/graybill-conference-2024/) is "Rare Disease Drug Development."

Writing Workshop for Junior Researchers 2024
July 19 & July 26 *online* & August 4, 2024 *in-person* at JSM in Portland, OR

w https://www.niss.org/events/writing-workshop-junior-researchers-2024
This popular short course is hosted by NISS. This year it will be hybrid with virtual lectures and meetings with your mentor prior to JSM on Fridays 7/19 and 7/26, and an in-person session at JSM to be held on Sunday, August 4, 2024. For recent doctoral graduates who want to improve communication skills. Pre-registration deadline: June 30.

Other meetings and events around the world

International Day of Women in Statistics and Data Science: *"Empowering the Next Generation of Women Statisticians and Data Scientists"*
October 8, 2024, Online (24 hours)

https://www.idwsds.org/

Dong-Yun Kim and Jessica Kohlschmidt, co-chairs for 2024 IDWSDS conference, invite you to attend the Third Annual International Day of Women in Statistics and Data Science on October 8, 2024 all day in UTC time to celebrate women statisticians and data scientists around the world. It is hosted by the Caucus for Women in Statistics and Data Science.

We invite you to be part of a transformative movement! Last year, IDWSDS 2023 was an extraordinary celebration of knowledge, diversity, and empowerment. Our event had a global reach with 24 hours of virtual conference transcended borders, uniting professionals from 22 different countries across six continents. There were 72 speakers, trailblazers, visionaries, and experts. They delved into topics ranging from the rich history of women in statistics to the intricacies of classical and Bayesian statistics. With 980 registrations from 60 countries, our conference exemplified true global solidarity. Around 350 attendees actively engaged, exchanged ideas, and forged connections.

Women are often minorities in statistics and data science. IDWSDS highlights the pressing need for more opportunities, mentorship, and recognition. We are helping provide a brighter future for women in these fields.

There will be both live and recorded presentations. Submit your session ideas and register via the website. We have opportunities for sponsorship as well: email **idwsds@cwstat.org** and follow updates on Twitter.

By supporting IDWSDS, you become a catalyst for change—a force that amplifies the voices of women in statistics and data science. Join us as we pave the way for innovation, collaboration, and empowerment within our global community.

More meetings and events around the world

BASS XXXI
November 4–6, 2024
Savannah, GA, USA
www.bassconference.org
The 31st Biopharmaceutical Applied Statistics Symposium will be held November 4–6 at the Embassy Suites in Savannah, Georgia's, historic district. One-hour tutorials about diverse topics related to the research, clinical development, and regulation of pharmaceuticals will be presented by speakers from academia, the pharmaceutical industry, and the US Food and Drug Administration. There will also be a poster session and FDA/industry session. Registration, hotel, and program information can be found at the website above.

2024 CMI–HIMR Summer School on Symmetry and Randomness
July 15–19, 2024
Bristol, UK
https://heilbronn.ac.uk/2023/10/27/cmi-himr-summer-school-2024/
This year the summer school will focus on the mathematics of symmetry and randomness, where probability theory comes together with analysis, geometry and group theory to help understand highly symmetric structures. The mini-courses will present aspects of random walks on infinite graphs and groups in connection with geometric group theory; the mathematics of percolation theory especially on large transitive graphs; as well as spectral and mixing time estimates for finite Markov chains with an emphasis on the cut-off phenomenon, and much more. Students will have the opportunity to be introduced to these topics as well as to hear lectures by leading figures in the area.

Conference on New Developments in Probability (CNDP)
September 26–28, 2024
Montréal, Canada
w http://womeninprobability.org/CNDP.html
The Conference on New Developments in Probability (CNDP) is a series hosted by Women in Probability (http://womeninprobability.org).

The third CNDP will be held September 26–28, 2024 at the Centre de Recherches Mathématiques (CRM) at Université de Montréal, organized by Louigi Addario-Berry (McGill), Raluca Balan (Ottawa), Héléne Guérin (UQAM), Jessica Lin (McGill), Tai Melcher (U Virginia), Lea Popovic (Concordia), and Jing Wang (Purdue).

The conference will feature talks by David Herzog (University of Iowa); Rohini Kumar (Wayne State University); Benjamin Landon (University of Toronto); Natasha Morrison (University of Victoria); Kavita Ramanan (Brown University); Firas Rassoul-Agha (University of Utah); Si Tang (Lehigh University); and Samy Tindel (Purdue University).

Partial support is available for graduate students, postdocs, and junior researchers to attend the workshop, thanks to the CRM and the NSF. See website for application form.

International Total Survey Error Workshop (ITSEW)
September 18–20, 2024
George Washington University, Washington DC, USA
https://www.niss.org/events/international-total-survey-error-workshop-itsew
The goal of ITSEW is to promote discussion of questions of research, methodology and practice relating to Total Survey Error (TSE) and Total Survey Quality, and Blended Data. Workshop sessions are comprised of relatively short presentations and catalyzing discussion by a designated discussant. These presentations are followed by floor discussion among all participants. See website for abstract, panel and poster submission.

The plenary speakers are Robert M. Groves (Georgetown University); Jerry Reiter (Duke University); Sallie Ann Keller (US Census Bureau); and Paul Biemer (RTI International).

Workshop: Information, Value, Modeling and Inference
September 12–13, 2024
Washington DC, USA
https://www.american.edu/cas/economics/info-metrics/workshop/information-value-modeling-inference.cfm
Info-Metrics Institute is excited to announce the upcoming Fall 2024 Workshop taking place on Thursday and Friday, September 12-13, 2024, at American University in Washington DC. The workshop will focus on exploring fundamental concepts of information theory and their applications in inference, modeling, and theory construction across various disciplines, as well as concepts related to the value of information. We encourage all interested researchers from across disciplines to participate by submitting papers related to info-metrics. Students are also invited to submit papers for a special Students' Poster/Short Presentation Session, providing an excellent opportunity to showcase research and engage with peers and experts in the field. For detailed information about the workshop, including submission guidelines, please visit the workshop webpage.

Induction Course for New Lecturers in the Mathematical Sciences 2024
September 16–17, 2024, Cambridge, UK

https://ima.org.uk/24056/induction-course-for-new-lecturers-in-the-mathematical-sciences-2024/

Through a community initiative supported by the Institute of Mathematics and its Applications, the Isaac Newton Institute for Mathematical Sciences, and the Heads of Departments of Mathematical Sciences, and endorsed by the Royal Statistical Society, the London Mathematical Society, and the Edinburgh Mathematical Society, this two-day Induction Course for lecturers new to teaching mathematics and statistics within Higher Education will once again take place. The Induction Course is delivered as an in-person activity to maximise the opportunities for informal networking and discussion that have long formed a highly-valued part of this meeting.

The course is ideally suited for anyone who is new to or has limited experience teaching mathematics or statistics within UK higher education. It will be delivered by individuals with significant experience of teaching in the mathematical sciences and will focus upon the specific details and issues that arise in mathematics and statistics teaching/learning within higher education. Topics include: Lecturing; Supporting student learning; Making teaching interactive; Assessment, examinations and feedback; Linking teaching & research; Using technology to enhance teaching and learning; Using examples and mathematical problem solving; Teaching statistics and its applications.

8th African International Conference: June 24–28, Tunisia

https://aic2024.utm.com.tn/wp

The eighth UMBC–ASA African International Conference in Statistics is set to take place in Hammamet in Tunisia, June 24–28. Hosted by the University of Tunis El Manar, the theme, *"Empowering Innovation: Advanced Statistics and Data Science for Sustainable Development in Africa,"* underscores the importance of statistical education in driving progress across the continent. For more information, email Yehenew Kifle at yehenew@umbc.edu or visit the conference website.

The 13th Workshop on High Dimensional Data Analysis (HDDA-XIII)
August 27–30, 2024, Singapore

https://sites.google.com/essec.edu/hdda-xiii/

In recent times, data analysis has been undergoing a profound transformation due to the rapid expansion of datasets and the proliferation of data sources. From social media networks to public health, bioinformatics to personalized medicine, environmental studies to nanoscience and financial analysis, diverse domains are facing new challenges. This surge has not only been confined to academic research; rather, it has permeated the practical spheres of businesses and governmental entities. As a response to this evolving landscape, there is an imperative to craft novel algorithms that can effectively scale with the dimensions of these datasets. In parallel, the development of new theoretical tools is essential to comprehend the statistical properties inherent to these algorithms. Promising breakthroughs in this realm encompass techniques such as variable selection, penalized methods, and variational inference, marking the frontier of advancements in data analysis and interpretation.

RSS Discussion Meeting
June 3, 2024, London, UK and online

https://rss.org.uk/training-events/events/key-events/discussion-papers/

Everyone is welcome to attend this online presentation with discussion of the paper 'Inference for extreme spatial temperature events in a changing climate with application to Ireland' by Dáire Healy, Jonathan Tawn, Peter Thorne and Andrew Parnell. The event is free for RSS members and non-members. The preprint and full details are available from our website; registration is essential.

Contributing to the discussion: everyone is welcome to submit discussion contributions for any discussion paper, which are all published in the journal along with the paper. There is no requirement to be an RSS member, a statistician or at a particular career stage; it is open to everyone worldwide and a great way to bring the community together over a common topic of interest.

DDQCIII: Data-driven techniques in Operations Research
November 11–13, 2024, Eindhoven, The Netherlands

https://www.ddqc.io

The Data-Driven Queueing Challenges conference, DDQC III, will bring together researchers with backgrounds in operations management, statistics, stochastic modelling, data science and control to discuss contemporary queueing-related challenges. The increasing availability of empirical data in the operation of large computer networks and in the management of human service systems is creating new opportunities for study in queueing theory. The objective of the conference is to highlight and discuss future directions in data-driven queueing that arise in modelling, monitoring and controlling queues, and in dealing with parameter uncertainty, when there is access to operational data. After two online conferences, held in 2021 and 2022, this year will be the first in-person edition of the conference, held at Eurandom in Eindhoven. In addition to the main conference, on November 14 a satellite workshop will focus on problems at the interface of statistics, decision & control, and complex networks.

Employment Opportunities

United States: La Jolla, CA

University of California San Diego

Associate/Full Professor (tenured): Broad Area in Data Science (HDSI)

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=72854834

United States: Moscow, ID

University of Idaho

Instructor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=72914857

United States: Boston, MA

Northeastern University

Data Engineer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=73225643

United States: New York, NY

NYU Stern School of Business

Open Rank Clinical Professor (non tenure-track); Technology, Operations and Statistics (Statistics Group)

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=72842432

United States: Cleveland, OH

Department of Quantitative Health Sciences

Faculty Biostatistics & Epidemiology Collaborates with Center for Value-Base Care Research

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=72841598

::: *Search our online database of the latest jobs around the world for free at https://jobs.imstat.org* :::

International Calendar of Statistical Events

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

Online and Ongoing series

ONLINE *ims* **Asia-Pacific Seminar in Probability and Statistics w** https://sites.google.com/view/apsps/home

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

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

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

ONLINE *ims* **One World YoungStatS Webinar series w** https://youngstats.github.io/categories/webinars/

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

June 2024

NEW June 3: London, UK. **RSS Discussion Meeting w** https://rss.org.uk/training-events/events/key-events/discussion-papers/

June 3–5: Clemson, SC, USA. **SRCOS Summer Research Conference w** https://www.srcos.org/conference

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

June 14–16: Nassau, Bahamas. **Statistical Network Analysis and Beyond (SNAB2024). w** https://sites.google.com/view/snab2024

NEW June 24–28: Tunisia. **8th African International Conference w** https://aic2024.utm.com.tn/wp

ims June 25–29: Portugal. **International Symposium on Non-parametric Statistics w** https://w3.math.uminho.pt/ISNPS2024/

International Calendar *continued*

June 30–July 3: Dijon, France. **44th International Symposium on Forecasting w** https://isf.forecasters.org/

July 2024

July 1–4: Valletta, Malta. **Control, Decision and Information Technologies** (CoDIT 2024) **w** https://codit2024.com

July 1–5: Stockholm, Sweden. **Stochastic Networks w** https://www.kth.se/sn2024

July 1–7: Venice, Italy. **ISBA World Meeting 2024** *NEW WEBSITE* **w** https://www.unive.it/web/en/2208/home

July 1–26: Montreal, Canada. **CRM–PIMS Summer School in Probability w** https://secure.math.ubc.ca/Links/ssprob24/

July 6–8: Yinchuan City, China. **2024 IMS China Meeting w** https://conferences.koushare.com/2024IMS

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

July 8–18: Como, Italy. **Bocconi Summer School in Statistics and Probability w** https://bss2024.lakecomoschool.org/

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

July 15–19: Bristol, UK. **Summer School on Symmetry and Randomness w** https://heilbronn.ac.uk/2023/10/27/cmi-himr-summer-school-2024/

July 19 & July 26 & August 4: online & at JSM Portland, USA. **Writing Workshop for Junior Researchers 2024 w** https://www.niss.org/events/writing-workshop-junior-researchers-2024

July 22–August 2: Ithaca, NY, USA. **13th Cornell Probability Summer School w** https://math.cornell.edu/13th-cornell-probability-summer-school

August 2024

August 1–3: Oregon State University, Corvallis, USA. **24th IMS Meeting of New Researchers in Statistics and Probability w** https://nrc2024.github.io/index

August (exact date TBD): at JSM Portland, USA. *IMS–CANSSI joint event:* **Navigating different stages of a successful career in academia, industry, and beyond w** https://www.eventbrite.ca/e/navigating-different-stages-of-a-successful-career-tickets-861667800587

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

August 5–6: UNC Chapel Hill, USA. **Thirty Years of Women in Probability w** https://services.math.duke.edu/~rtd/wwp30yr/wwp30y.html

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

August 12–17: Toronto, Canada. **Forward From The Fields Medal 2024 (FFFM2024) w** http://www.fields.utoronto.ca/activities/24-25/FFFM-2024

August 18–23: Waterloo, Canada. **MCQMC 2024 w** https://uwaterloo.ca/monte-carlo-methods-scientific-computing-conference/

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

NEW **August 27–30**: Singapore. **13th Workshop on High Dimensional Data Analysis (HDDA-XIII) w** https://sites.google.com/essec.edu/hdda-xiii/

September 2024

September 2–5: Brighton, UK. **Royal Statistical Society 2024 International Conference w** https://rss.org.uk/training-events/conference-2024/

September 2–6: Poprad, Slovakia. **LinStat 2024 w** https://linstat2024.science.upjs.sk/

September 4–5: Birmingham, UK. **Unlocking the potential: The IMA AI/ML Congress 2024 w** https://ima.org.uk/23193/unlocking-the-potential-the-ima-ai-ml-congress-2024/

September 8–13: Ascona, Switzerland. **Spatial and Temporal Statistical Modeling in Molecular Biology w** https://spatialbio.net

September 11–13: Bath, UK. **4th IMA Conference on Inverse Problems from Theory to Application w** https://ima.org.uk/23503/4th-ima-conference-on-inverse-problems-from-theory-to-application/

International Calendar *continued*

September 2024 continued

NEW September 12–13: Washington DC, USA. **Information, Value, Modeling and Inference w** https://www.american.edu/cas/economics/info-metrics/workshop/information-value-modeling-inference.cfm

NEW September 16–17: Cambridge, UK. **Induction Course for New Lecturers in the Mathematical Sciences 2024 w** https://ima.org.uk/24056/induction-course-for-new-lecturers-in-the-mathematical-sciences-2024/

September 16–December 13: iMSI, Chicago, USA. Long Program: **Statistical Methods and Mathematical Analysis for Quantum Information Science w** https://www.imsi.institute/activities/statistical-methods-and-mathematical-analysis-for-quantum-information-science/

NEW September 18–20: Washington DC, USA. **International Total Survey Error Workshop (ITSEW) w** https://www.niss.org/events/international-total-survey-error-workshop-itsew

NEW September 26–28: Montréal, Canada. **Conference on New Developments in Probability (CNDP) w** http://womeninprobability.org/CNDP.html

November 2024

NEW November 4–6: Savannah, GA, USA. **31st Biopharmaceutical Applied Statistics Symposium (BASS XXXI) w** www.bassconference.org

NEW November 11–13: Eindhoven, The Netherlands. **DDQCIII: Data-driven techniques in Operations Research w** https://www.ddqc.io

December 2024

December 16–21: Nice, France. **IMS International Conference on Statistics and Data Science (ICSDS) w** https://sites.google.com/view/ims-icsds2024/

March 2025

March 3–May 23: iMSI, Chicago, USA. Long Program: **Uncertainty Quantification and AI for Complex Systems w** https://www.imsi.institute/activities/uncertainty-quantification-and-ai-for-complex-systems/

June 2025

June 23–27: Verona, Italy. **12th General AMaMeF conference w** https://sites.google.com/view/amamef2025/

July 2025

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

July 14–18: Wrocław, Poland. **Stochastic Processes and their Applications 2025 w** https://spa.pwr.edu.pl/

August 2025

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

July 2026

July 6–9: Salzburg, Austria. **IMS Annual Meeting. w** TBD

August 2026

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

August 2027

Dates TBD: Location TBD. **IMS Annual Meeting at JSM 2027 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/**

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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.

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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

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