



October/November 2024

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## 2025 Lawrence D. Brown PhD Student Award winners

We are pleased to announce the following IMS members have been selected to receive the 2025 IMS Lawrence D. Brown PhD Student Award:

**Louis V. Cammarata**, Harvard University;

**Ying Jin**, Harvard University (previously at Stanford University); and

**George Stepaniants**, California Institute of Technology (previously Massachusetts Institute of Technology)

The award will fund their travel to next year's IMS Annual Meeting, which takes place at the 2025 Joint Statistics Meeting. They will each present a paper in the invited session of the IMS Lawrence D. Brown PhD Student Award.

Lawrence D. Brown had a distinguished academic career with groundbreaking contributions to a range of fields in theoretical and applied statistics. Moreover, he was an enthusiastic and dedicated mentor to many graduate students. Eligible applicants for this award will compete to be one of three speakers at an invited session as part of the IMS Annual Meeting. The award will also include reimbursement for both travel and the meeting registration fee—up to \$2,000 in total for each winner.

The next deadline is May 1, 2025; you can find application information at <https://www.imstat.org/ims-awards/ims-lawrence-d-brown-ph-d-student-award/>

Applications are also open for these awards for early-career researchers.

**IMS New Researcher Travel Award:** <https://www.imstat.org/ims-awards/ims-new-researcher-travel-award/> This award funds travel and possibly other expenses to present a paper or a poster at an IMS sponsored or co-sponsored meeting for those who otherwise would not be able to attend. For IMS members who are New Researchers (i.e. PhD awarded in 2021–2025). The application deadline for this award is February 1, 2025.

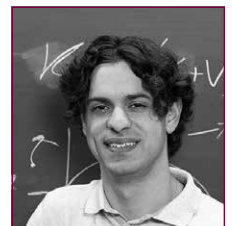
**IMS Hannan Graduate Student Travel Award:** <https://www.imstat.org/ims-awards/ims-hannan-graduate-student-travel-award/> This award funds travel and registration to attend an IMS sponsored or co-sponsored meeting. Presentation of a paper/poster is encouraged, but not required. For IMS members who are graduate students (seeking a Masters or PhD degree) studying some area of statistical science or probability, who have not yet received a PhD degree. Application deadline is February 1, 2025.



Louis V. Cammarata



Ying Jin



George Stepaniants

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## IMS Members' News

### 2024 American Statistical Association Fellows

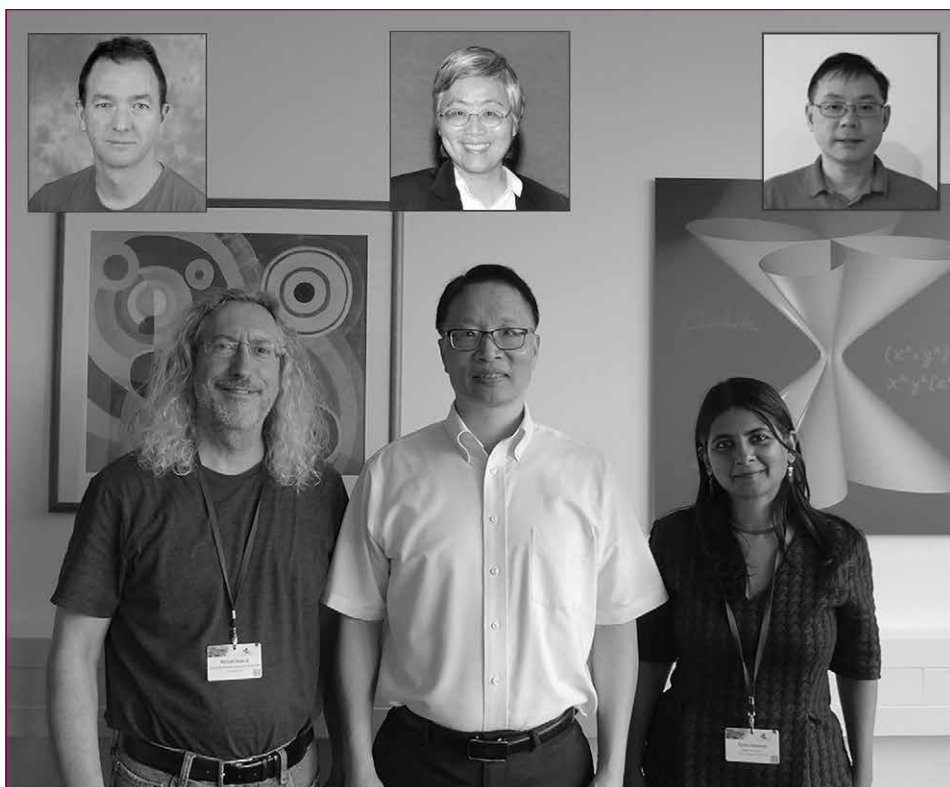
Fellows of the American Statistical Association are ASA members of established reputation who have made outstanding contributions to some aspect of statistical work. At the 2024 Joint Statistical Meetings in Portland, Oregon, 47 ASA Fellows were inducted during the ASA's President's Address and Awards.

The IMS members among that list are: **Arne C. Bathke**, University of Salzburg, Austria; **Claire McKay Bowen**, Urban Institute; **Hongyuan Cao**, Florida State University; **Yu Cheng**, University of Pittsburgh; **Tirthankar Dasgupta**, Rutgers University; **Guoqing Diao**, The George Washington University; **Konstantinos Fokianos**, University of Cyprus; **Ying Hung**, Rutgers University; **Linglong Kong**, University of Alberta; **John Kornak**, University of California at San Francisco; **Jing Lei**, Carnegie Mellon University; **Li Ma**, Duke University; **Lester Mackey**, Microsoft Research; **David S. Matteson**, Cornell University; **Xinlei Wang**, The University of Texas at Arlington; **Yuhong Yang**, University of Minnesota; **Weixin Yao**, University of California at Riverside; and **Hua Zhou**, University of California at Los Angeles.

Read the complete list of the 47 new ASA Fellows at <https://magazine.amstat.org/blog/2024/10/01/2024-asa-fellows/>

### The IMS Executive Committee for 2024–2025

The IMS Executive Committee members are pictured below. Inset left, Executive Secretary **Peter Hoff**; inset middle, Program Secretary **Annie Qu**; inset right, Treasurer **Jiashun Jin**. Standing in the main picture (which was taken at the 2024 World Congress), left–right: Past President **Michael Kosorok**, President **Tony Cai**, President-elect **Kavita Ramanan**.



### The 30th Distinguished Statistician Colloquium

**Dipak Dey** writes: The Department of Statistics at the University of Connecticut hosted the 30th Distinguished Statistician Colloquium, sponsored by ASA, Pfizer and UConn. The Pfizer colloquium series ran from 1978 until 2012, and was renewed in 2018. The colloquium series has featured C. R. Rao, Bradley Efron, D.R. Cox, Grace Wahba and many more. For a complete list, see <https://statistics.uconn.edu/pfizer-colloquium/>. The purpose of the Colloquium is to provide a forum for a distinguished statistician to share and disseminate their unique perspective and work in the theory and/or application of statistics. Starting from 2018, the series has been co-sponsored by Pfizer, the American Statistical Association, and the Department of Statistics at the University of Connecticut.

This year's speaker was Dr. **Nancy Reid** ([https://en.wikipedia.org/wiki/Nancy\\_Reid](https://en.wikipedia.org/wiki/Nancy_Reid)), Professor at the University of Toronto where she holds a Canada Research Chair in Statistical Theory. Professor Reid gave a presentation entitled, “*When Likelihood goes wrong.*” under the auspices of the Pfizer Colloquia by Distinguished Statisticians in Honor of Dr. David S. Salsburg. The abstract read: “*Inference based on the likelihood function is the workhorse of statistics, and constructing the likelihood function is often the first step in any detailed analysis, even for very complex data. At the same time, statistical theory tells us that ‘black-box’ use of likelihood inference can be very sensitive to the dimension of the parameter space, the structure of the parameter space, and any measurement error in the data. This has been recognized for a long time, and many alternative approaches have been suggested with a view to preserving some of the virtues of likelihood inference while ameliorating some of the difficulties. In this talk I will discuss some of the ways that likelihood inference can go wrong, and some of the potential remedies, with particular emphasis on model misspecification.*”

Following the lecture was a “Conversation with Distinguished Statisticians in Memory of Professor Harry O. Posten”. This Discussion with Professor Reid was led by Heather Battey, Reader in the Department of Mathematics, Imperial College London, and Ana-Maria Staicu, Professor of Statistics at North Carolina State University.

The 2023 speaker, at the 29th Colloquium, was Dr. **James O. Berger**, Arts and Sciences Distinguished Professor Emeritus of Statistics at Duke University. Professor Jim Berger gave a presentation entitled, “*Frequentist and/or Bayesian adjustment for multiple testing.*” under the auspices of the Pfizer Colloquia by Distinguished Statisticians in Honor of Dr. David S. Salsburg. Following the lecture was a “Conversation with Distinguished Statisticians in Memory of Professor Harry O. Posten”. This discussion with Professor Berger was led by Dr. Dipak Dey, Board of Trustees Distinguished Professor; Dr. Ming-Hui Chen, Board of Trustees Distinguished Professor; and Dr. Xiaojing Wang, Associate Professor, all from the Department of Statistics at the University of Connecticut. We thank Pfizer and the ASA for their generous financial support. We also thank the members of the selection committee: Dan Meyer and Demissie Alemayehu from Pfizer, Ron Wasserstein and Nancy Flournoy from the ASA, and Dipak Dey (Chair), Joseph Glaz and Ming-Hui Chen from UConn. Professor Chen also represents the New England Statistical Society (NESS). We also thank our staff and student volunteers for their continuous help for the great success of the event.

You can watch a recording of Jim Berger's 2023 lecture on the Amstat Videos YouTube channel at <https://www.youtube.com/watch?v=3gtd9-wjbBQ>. His “Conversation” interview is at <https://www.youtube.com/watch?v=M7v1c8ANZh0>. The recordings of the 2024 Pfizer Colloquium speaker Nancy Reid will be online soon.

We thank Pfizer and the ASA for their generous financial support.

 = 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

<https://imstat.org/aop>

 <https://projecteuclid.org/aop>

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

 <https://projecteuclid.org/aoap>

*Statistical Science*: Moulinath Bannerjee

<https://imstat.org/sts>

 <https://projecteuclid.org/ss>

### IMS Collections

 <https://projecteuclid.org/imsc>

*IMS Monographs and IMS Textbooks*: Yingying Fan

<https://www.imstat.org/journals-and-publications/ims-monographs/>



### IMS Co-sponsored Journals and Publications

*Electronic Journal of Statistics*: Grace Yi & Gang Li

<https://imstat.org/ejs>

 <https://projecteuclid.org/ejs>

*Electronic Journal of Probability*: 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>

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
*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/aihpb>

 <https://projecteuclid.org/aihpb>

*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>



## *Lines from Layla:* **Fledgling Freshmen in the Fall**

**Layla Parast writes:** Fall is the time for apples, pumpkin spice, crunching leaves, and—for me—freshmen. Some people strongly dislike teaching freshmen, but I love it. I feel like a summer camp counselor again, except that this time I don't have to worry about kids being pushed in pools or whacked in the head with a tennis racket. Like a mother hen, I extend my wing to shield all of my baby chicks, and teach them how to find food and escape predators. Yes, you do need to eat breakfast. No, you cannot survive on two hours of sleep every night. Yes, you should actually read the syllabus. No, please don't eat that brownie you found on the windowsill.

The freshmen I teach are Statistics and Data Science majors. They choose to take my course, Introduction to Data Science, and they are bursting with excitement to learn. I co-created this course with a colleague, Sally Ragsdale, years ago, at my department chair's request: she wanted us to design a course to introduce students to "data science" without teaching them any statistics, since the statistics curriculum begins during the second semester. After hearing this request from my chair, I returned to my office and promptly Googled: "What is data science?" (true story!).

First of all, I teach the students to code in R (they also learn Python in a different course). They learn to visualize and describe data, create R markdown reports, work with tibbles, dplyr, relational data (merging datasets), date/time formatting, reshaping data, string manipulation, for loops, functions, and simulations. At the end of the course, the students build and publish their own R Shiny app.

The course also focuses on the role of data science in our society, and on the ways in which our past experiences and perspectives can affect how we collect and analyze data, often unconsciously. In one of my favorite lectures, we read and discuss an excerpt on communicating context from Chapter 6 of the book *Data Feminism* by Catherine D'Ignazio and Lauren F. Klein (<https://data-feminism.mitpress.mit.edu>). This excerpt displays a barplot showing rates of mental health diagnoses by race among people incarcerated for the first time in NYC jails between 2011 and 2013. The figure is displayed twice, with two different titles: one title is "Mental Health in Jail: Rate of mental health diagnosis of inmates", and the other title is "Racism in Jail: People of color less likely to get mental health diagnosis". D'Ignazio and Klein argue that in the first title, the use of the word "inmates" is dehumanizing and fails to communicate the study results. They argue that it is our "responsibility to connect the research question to the results and to the audience's interpretation of the results."

Full disclosure: this perspective makes me uncomfortable. For

over a decade, I worked at the RAND Corporation, an organization whose tagline emphasizes "Objective analysis." My gut instinct is to prefer the first title, since it states the purpose of the study in a (seemingly) objective way, rather than the researchers' conclusions about the study (which could be perceived, rightly or not, as subjective). But is my discomfort with the second title really rooted in my past work experience, or is there something deeper at play? It's important for me to emphasize—both in this column, and to my students—that there is no right or wrong title. The primary goal is to recognize that their personal experiences, perceptions, and biases shape all of their decisions, including those as seemingly simple as the title of a plot. One student mentioned that she didn't find the term "inmates" dehumanizing. I agreed with her, but I also asked whether she knew anyone who had been in jail (while making it clear she didn't have to answer). She said no, and I admitted that I don't either. Perhaps that's why we don't perceive the term as problematic. On the other hand, someone who does have a personal connection to the justice system might feel very differently.

The second goal of this exercise is to encourage students to reflect—now, throughout their studies, and later in their career—on their role as a data scientist. Is it our responsibility to use data to influence opinions, or should we simply "let the data speak for itself"? I'm not here to provide definitive answers. My goal is to encourage students to think critically as they develop into capable and responsible data scientists. To be sure, *they teach me* something every day and I am consistently impressed by their maturity, self-awareness, and creativity. Each fall semester, I do my best to guide them, hoping that when it's time, they'll spread their wings and fly on their own—confident and ready to take on the world of data science.

*Layla Parast (center) shields and guides her fledgling freshmen—until they are ready to spread their wings and fly as data scientists*



## Clara-fications #3



**Clara Grazian**, Senior Lecturer in Statistics in the School of Mathematics and Statistics at the University of Sydney, continues our advice column for (anonymous) early-career researchers.

**Question:** *I am close to finishing my PhD in Statistics in a country that is part of Europe, although I don't have a traditional background as I am a first generation immigrant and I am in my mid-30s. I enjoy research quite a lot and I have had the amazing opportunity to attend several events, and even present at some. However, I have the constant feeling that there is no future in academia for me. This is hard to grasp at times. Perhaps I'm wrong. Do you have any advice?*

**Clara responds:** I'm really sorry to hear that you feel there's no future for you in academia. However, I can assure you that this is a common feeling among PhD students (and postdocs, and even faculty members). Part of the problem is the uncertainty of the job, particularly in the early years of a career.

The impression I get from your question is: *"Is it too late for me to have an academic job? Is it okay to look for a job in your 30s?"* In my experience, academia is a welcoming environment, and universities have many inclusivity rules that people generally respect and share. This means that, when applying for an academic position, the hiring process should not discriminate against candidates for any reason, including age.

In some systems (for example, the Italian one), there may be limitations in terms of years of contracts (e.g., as postdocs) when applying for a faculty position, or years from the completion of a PhD. This can vary from country to country. However, I have never seen a limitation based on age—though this doesn't mean it doesn't exist in some parts of the world!

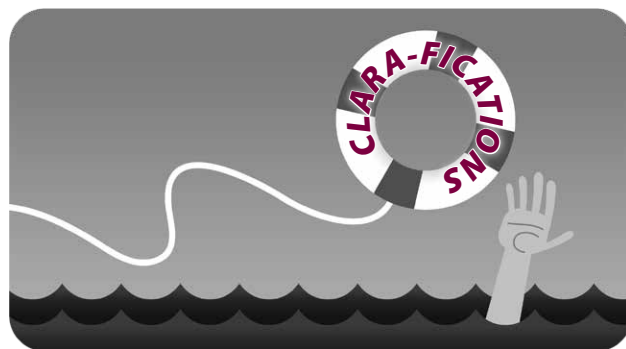
There could be countries where a range of previous experiences is valued more highly than in others. My general feeling is that some countries (such as the UK, US, and Australia) tend to be more open to varied previous experiences than some continental European countries. However, I've met academics in many countries, including France and Italy, who obtained a Faculty position in their 30s or even in their 40s, after a range of experiences.

Overall, I think academia is more flexible than it might seem. Many students believe there's A Perfect Path from university to lectureship/assistant professorship, but that's not true at all. Some decisions may slow down a career a bit, but usually, you can change paths quite easily. For example, I did a postdoc in a field quite unrelated to my PhD and subsequent research as a Lecturer. I thought it would negatively impact my career, but in the end, it became a source of experience and helped me gain a broader perspective. Similarly, I know people who spent several years in industry before

getting an academic job. Those years were not "useless" but contributed to their overall vision and research.

If you're worried about your background, please don't be. It's sad to think that our PhD students are concerned about their backgrounds. It's true that some academics come from families of academics, but many are the first in their families to earn a degree (like me!), and many come from immigrant families. What you've achieved should be a source of pride, not worry. Can I assure you that you'll always find environments where this isn't an issue? No, I can't. Unfortunately, not every environment is inclusive—but this is true for academia *and* industry. But honestly, you wouldn't want to work in those environments anyway. There are better workplaces, and academia usually has very diverse staff members—it's one of its strengths.

What I believe is this: if you have passion and love for this profession, there can be a place for you in academia. It may not be easy, but it's not easy for anyone, even those on a more "direct" path—university, PhD, Postdoc, Faculty position. The central question should be: *What do you want?* And, *are you happy in the job you're doing?* I cannot tell you that there will be a place for you in academia, but do not avoid trying if this is what you want. There are many amazing and bright researchers who, for the most varied reasons, decide to leave academia. But if it is what you want right now, then try!



Do you need some friendly advice? Are you unsure how to do something?

Does everyone around you look like they know exactly what they're doing? (*They really don't!*). Send your **question about the life of a researcher or ask for career advice**, and Clara-fications columnist Clara Grazian will respond in the next available issue.

**Don't worry, we won't publish your name.**

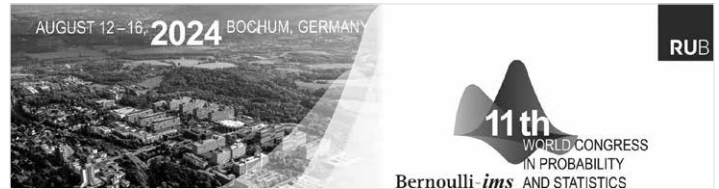
Your question might even be what someone else has been secretly wondering, but was too afraid to ask...

Send your questions for Clara to [bulletin@imstat.org](mailto:bulletin@imstat.org).

# World Congress report

**Herold Dehling, the Chair of the Local Organizing Committee for the World Congress, writes:** The Bernoulli–IMS 11th World Congress in Probability and Statistics was held from 12 to 16 August, 2024, on the campus of Ruhr University Bochum, Germany. Organized jointly by the Bernoulli Society for Mathematical Statistics and Probability, and the Institute of Mathematical Statistics, the congress stood in the tradition of the previous World Congresses, held in Tashkent (1986), Uppsala (1990), Chapel Hill (1994), Vienna (1996), Guanajuato (2000), Barcelona (2004), Singapore (2008), Istanbul (2012), Toronto (2016) and Seoul (2021, virtual). The 2024 World Congress was attended by 933 participants from around the world, making it the best attended world congress since the 1986 Tashkent World Congress. The participants came from 50 different countries: about 25% from Germany, many from nearby European countries, but also 20% from the US and Canada, sizable numbers from Asia, Australia and New Zealand, with also some representation from Central and South America, as well as from Africa.

The international scientific programme committee was chaired by Aurore Delaigle (University of Melbourne) and Kavita Ramanan (Brown University). Further members of the SPC were Sudipto Banerjee (University of California, Los Angeles), Riddhipratim Basu (Tata Institute of Fundamental Research, Bangalore), Krzysztof Bogdan (Wrocław University of Science and Technology), Holger Dette (Ruhr University Bochum), Hugo Duminil-Copin (University of Geneva), Alice Guionnet (ENS Lyons), Ruth Heller (Tel Aviv University), Nina Holden (New York University), Regina Liu (Rutgers University), Ramsés H. Mena (Universidad Nacional Autónoma de México), Andrea Montanari (Stanford University), Johanna Nešlehová (McGill University), Sofia Olhede (EPFL), Roberto Oliveira (IMPA, Rio de Janeiro), Mariana Olvera-Cravioto (University of North Carolina, Chapel Hill), Valentin Patilea



(ENSAI, Bruz), Sarah Penington (University of Bath), Annie Qu (University of California at Irvine), Gareth Roberts (University of Warwick), Janice Scealy (Australian National University), Stijn Vansteeland (Ghent University), Valeria Vitelli (University of Oslo), Hendrik Weber (University of Münster), Song Xi Chen (Peking University), and Thaleia Zaripophoulou (University of Texas at Austin).

Members of the local organizing committee were Axel Bücher, Herold Dehling (Chair), Holger Dette, Peter Eichelsbacher, Roland Fried, Christof Külske, Christoph Thäle, Anita Winter, and Jeannette Woerner. The local organizing committee was assisted by a professional conference organizer, as well as by a team of more than 30 volunteers (staff members, PhD students, and postdocs) from Ruhr University Bochum and the neighboring universities of Dortmund and Duisburg–Essen.

During the opening ceremony on Monday morning, led by LOC co-chair Peter Eichelsbacher, the conference participants were welcomed by Günter Meschke (Vice-rector of Research, Ruhr University Bochum), Gerd Laures (Dean of the Faculty of Mathematics, Ruhr University Bochum), Claudia Kirch (spokesperson for the Probability and Statistics Group of the German Mathematical Society [see page 9 for more about this group]), Victor Panaretos (BS President), Michael Kosorok (IMS President) and by SPC Chairs Aurore Delaigle and Kavita Ramanan. The LOC chair Herold Dehling read greetings sent by Klaus Krickeberg, former president of the Bernoulli Society and chair of the Scientific Programme Committee of the First World Congress in Probability and Statistics held in 1986 in Tashkent.

The 11th Bernoulli–IMS World Congress had an impressive scientific programme. Highlights were the plenary lectures:

- **Mihaela van der Schaar** (Cambridge University), Tukey Lecture: *The (Causal) Discovery Ladder: Unravelling Governing Equations and Beyond using Machine Learning*
- **Pablo A. Ferrari** (University of Buenos Aires), Doob Lecture: *Soliton Decomposition of the Box-Ball System and the Pitman Transformation*
- **Marc Hallin** (Université Libre de Bruxelles), Medallion Lecture: *Ancillarity, Maximal Ancillarity, and Semiparametric Efficiency*
- **Emmanuel Candès** (Stanford University), Bernoulli Lecture: *Frontiers in conformal and model-free inference*



Program co-chairs Aurore Delaigle and Kavita Ramanan, with Local Organizing Chair Herold Dehling

- **Xihong Lin** (Harvard T.H. Chan School of Public Health), Laplace Lecture: *Empower an End-to-End Scalable and Interpretable Data Science Ecosystem by Integrating Statistics, AI, and Domain Sciences*
- **Peter Bühlmann** (ETH Zürich), Wald Lecture: *Causality-Inspired Statistical Machine Learning*
- **Rafal Latała** (University of Warsaw), Kolmogorov Lecture: *Upper and Lower Bounds for Moments and Tails of Real and Vector-Valued Random Chaoses*
- **Chunming Zhang** (University of Wisconsin–Madison), Medallion Lecture: *Learning Network-Structured Dependence from Multidimensional Temporal Point Processes*
- **Rongfeng Sun** (National University of Singapore), Lévy Lecture: *The Critical 2D Stochastic Heat Flow: Disordered System Meets Singular SPDE*
- **Nina Holden** (New York University), 2024 Schramm Lecture: *Scaling Limits of Random Planar Maps*
- **Moulinath Banerjee** (University of Michigan), Medallion Lecture: *Estimation and Inference for the Average Treatment Effect in a Score-Explained Heterogeneous Treatment Effect Model*
- **Frank den Hollander** (Leiden University), Ising Lecture: *Evolution of Discordance [see below for more about the Ising Lecture]*
- **Victor Chernozhukov** (MIT), Cox Lecture: *Long Story Short: Omitted Variables Bias in Causal Machine Learning*
- **Remco van der Hofstad** (Eindhoven University of Technology), Medallion Lecture: *Critical Percolation on Scale-Free Random Graphs*
- **Patricia Gonçalves** (IST Lisbon), 2023 Schramm Lecture: *Hydrodynamics, Fluctuations, and Universality of Exclusion Processes*

Special to the 2024 World Congress was the Ising Lecture, organized by the Ruhr University Mathematics Department in memory of Ernst Ising (1900–1998), who spent most of his childhood and youth in Bochum. Born in Cologne, Ising moved in 1904 with his parents to Bochum, where he graduated from high school in 1918. In his 1924 PhD thesis, written under the supervision of Wilhelm Lenz at the University of



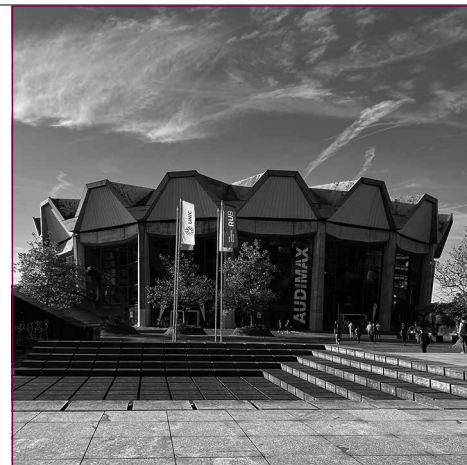
Ernst Ising

Hamburg, Ernst Ising analyzed the model for ferromagnetism that nowadays bears his name. Speaking as chair of the Ising Lecture, Herold Dehling commemorated the fate of the Ising family and other Jewish families in Bochum during the Nazi period.

Most talks were given in one of the parallel sessions, arranged during 10 time slots with 17 sessions each. 149 invited talks were given in 49 invited paper sessions, devoted to a wide range of topics of strong current research interest in probability, statistics, and the interface between them. The topics and the organizers of the invited paper sessions had been selected by the scientific programme committee. A call for proposals resulted in 55 organized contributed paper sessions with a total of 214 talks. In addition, 242 individual contributed talks were presented, as well as 108 posters, making a total of 728 scientific presentations.

The campus of Ruhr University Bochum provided superb facilities for the World Congress. Plenary talks were delivered in the Audimax [pictured above], Germany's largest lecture hall, having a seating capacity of 1700. Coffee breaks, the welcome reception, the poster session, and book exhibits took place in the foyer of the Audimax. Parallel sessions were held in two nearby buildings which offered enough rooms for 17 parallel sessions at any time. Lunch was served in the Mensa of Ruhr University, in a building adjacent to the Audimax.

There was a broad social program during the world congress, to which many people contributed in various ways. More than 200 participants took the chance to avoid long queues by pre-registering on the Sunday afternoon in the cafe of a downtown Bochum church, which also gave a chance for a first social gathering with coffee, tea, and home-baked cake. During the opening ceremony on the Monday morning, Christof Külske played the organ in the Audimax. Monday evening saw the IMS Presidential Address and Awards Ceremony, followed by the Welcome Reception, with piano music by Benedikt Jähnel, TU Braunschweig [pictured right]. On the Tuesday evening, the Bernoulli Society, as part of its annual General Assembly, celebrated its 50th anniversary, followed by a reception in the foyer of the Audimax. On Wednesday evening, the conference dinner [pictured on the next page] took place in the Mensa building of Ruhr



## World Congress report continued



*The conference dinner, attended by more than 800 participants, had a lively atmosphere*

University Bochum. In addition, several smaller excursions were organized, such as to the picturesque old town of Hattingen, and to the Zeche Zollverein, a UNESCO World Heritage Site that once was home to the world's largest coal mine.

The Bernoulli–IMS 11th World Congress was financially supported by grants from the German Science Foundation DFG, by Ruhr University Bochum, by the Stochastics Section of the German Mathematical Society, as well as by the Bernoulli Society, and the Institute of Mathematical Statistics. The generous support from these organizations made it possible to keep the conference

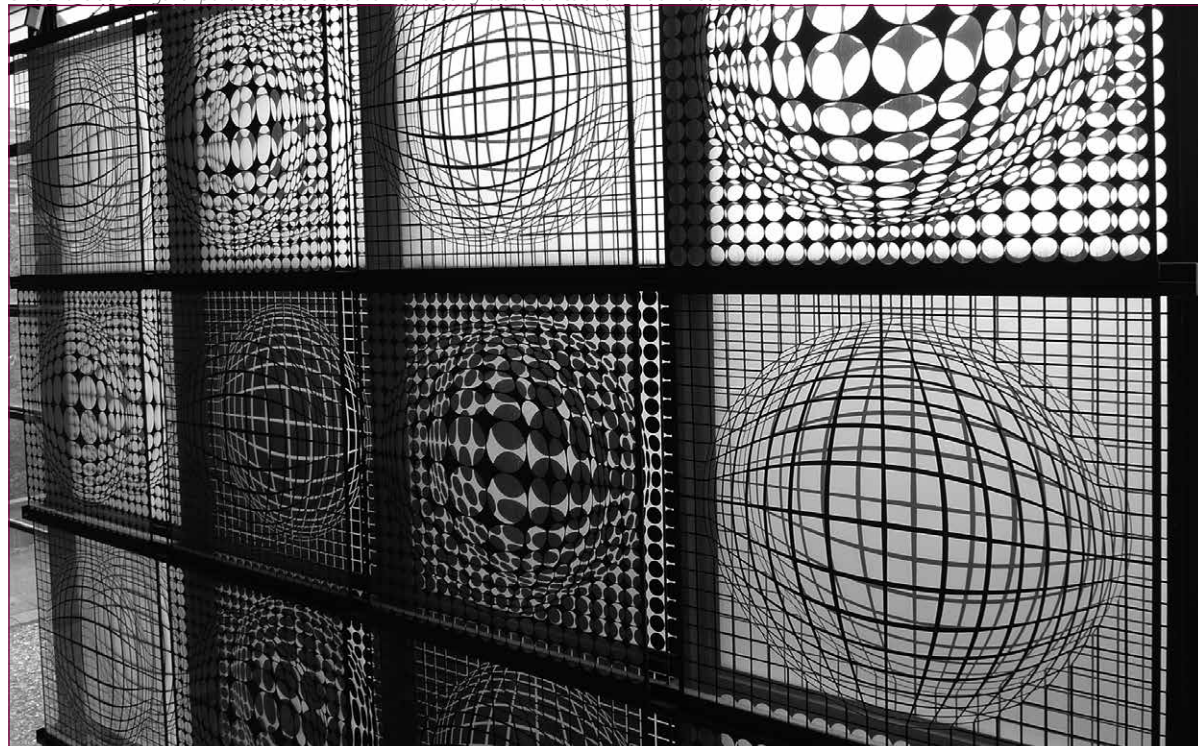
fees at a modest level (300 EUR for members of BS or IMS, 350 EUR regular fee, 200 EUR reduced fee). The conference fee included unlimited use of local public transport, and also access to the social gatherings, including Wednesday night's conference dinner. As a result, the conference dinner was attended by more than 800 conference participants, creating a very lively atmosphere for social interaction.

Thanks to the generous support from various sponsors, daycare could be provided at modest cost for the participants (50 EUR per day), allowing parents to bring their children to the congress.

Participants unanimously agreed that the 11th Bernoulli–IMS World Congress in Probability and Statistics was a great success. Many factors contributed to this. The excellent quality of the scientific programme offered a chance to get an impression of latest developments at the

forefront of research on a wide spectrum of topics in probability and statistics. The superb local facilities on the campus of Ruhr University Bochum fostered exchange among the participants. The participants brought a contagious enthusiasm for their latest research, and enjoyed the chance to share their ideas. Not to forget the hard and dedicated work of the local organizing committee, the scientific programme committee, and the many helping hands on campus. The participants could also feel the good spirit among all who were involved in the organization, and the joy that they shared in their work.

*One of the buildings for parallel sessions at the World Congress features this window decoration*





# Probability and Statistics Group of German Mathematical Society

Claudia Kirch, professor of Mathematical Stochastics at Otto-von-Guericke University Magdeburg, Germany, is the 2023–25 chair of the steering committee for Fachgruppe Stochastik, the Probability and Statistics Group of the German Mathematical Society. After Claudia spoke at the opening ceremony of the World Congress [see page 6], we invited her to explain a little more about the group and its activities. She writes:

In Germany, probability theory and mathematical statistics are commonly referred to as the field of stochastics, originating from the Greek word for ‘to aim at a mark, to guess’—which explains the German name of the group: *Fachgruppe Stochastik*. After WWII, the German stochastics community was still small enough to meet at the prestigious Oberwolfach Research Institute for Mathematics in the German Black Forest. These annual meetings provided a platform for evolving the slowly growing community of researchers in the field of stochastics. At the beginning of the 1990s, the community had clearly outgrown the location in Oberwolfach, in particular given the goal of providing a platform not only for established researchers but also for junior scientists. Because most researchers of the group at the time belonged to mathematics departments, the new organization was to be a subject group of the German Mathematical Society. In 1993, the group was officially founded at the Philipps University in Marburg, one of the oldest universities in Germany. Today, more than 30 years later, the group counts more than 500 members, has an official status as a non-profit association in Germany, and maintains strong ties to the German Mathematical Society despite the legal independence of the two associations. Additionally, the group aims at having an active collaboration and exchange with

other related scientific societies, for example, it is an active member of the Deutsche Arbeitsgemeinschaft Statistik (DAGStat), a consortium of statistical scientific societies and professional associations in Germany.

The group organizes a biennial conference, the German Probability and Statistics Days (GPSD) that takes place at a different German university each time. The conference not only brings together the German stochastics community, providing a platform for senior and junior researchers alike, it also enjoys an increasing international popularity. The last conference, in March 2023, took place in Essen with 547 participants from more than 20 countries, five plenary talks, 13 keynote talks in 13 sections and more than 350 contributed talks plus a well-attended poster session. The next conference will take place in Dresden, March 11–14, 2025. It will feature five plenary talks (Nina Gantert, Takashi Kumagai, Jonas Peters, Mathieu Rosenbaum, and Judith Rousseau) in addition to 14 keynote talks in 14 different sections covering the full spectrum of probability, statistics and their applications

in physics, biology, finance and insurance. See <https://www.gpsd-2025.de/>

Promoting young scientists and providing a platform for their scientific exchange and networking activities was and still is a major concern for the group: At the GPSD conference, the Probability and Statistics Group awards the prestigious prize for the best dissertation in Germany in the field of probability and statistics within the last two years. To date, 20 scientists have received the award, well more than half of whom now hold a professorship. Starting with next year’s award, there will be two prizes: one for the best dissertation in probability and one for the best dissertation in statistical theory.

On a broader scale, the group also supports annual meetings of PhD students organized by the students themselves, each year at a different German university. Those meetings have taking place since 2005, providing great networking opportunities for the next generation of probabilists and statisticians in Germany. Indeed, advisors are often surprised to discover just how many acquaintances their students talk to when they all meet again at the next GPSD conference. Furthermore, it is possible for young scientists to apply for some support from the group in organizing smaller scientific events such as a specialized workshop.

The group also runs the moderated mailing list ST-NET dedicated to serving the stochastics community with roughly 500 postings mainly on job openings and conferences each year and more than 2000 subscribers. Should you wish to send a posting or subscribe to the list, please contact the webpage: <http://www.fg-stochastik.de/moderation.html>.

At the webpage, you also find information on how to become a member of the group, if you have been tempted to do so by now!

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*Takis (and George) Tackle*

## Generative AI in Academia: Research and Ethics

**Takis Konstantopoulos**, University of Liverpool, is joined again by **George Kesidis**, Pennsylvania State University, for their second column in a series on the impact of AI on academia. They write:

In our article in the April/May 2024 issue, we touched upon how generative AI impacts on higher education in arguably absurd ways. But what about research? AI is a tool that can be of use to the scientific researcher. Large Language Models (LLMs) like ChatGPT can quickly distill information available online and respond with good grammar and syntax, produce images, and produce code which performs specific functions. Even computer-assisted theorem proving (dating back to the 1950s) can be attempted by AI, but certainty or rigor is not guaranteed. But at present can AI create interesting theorems? Even if, in the future, it could, is it clear that such an ability may replace the modern (human) scholar, as many believe?

It's important to understand the limits and potential failings of any tool as it evolves, despite the hype, and AI is no exception. Indeed, it has been demonstrated how an AI may confidently produce incorrect responses [1], or “hallucinations” for LLMs [2], and demonstrably not “understand” certain words it produces. AI, by its nature, immediately poses serious ethical issues and invites fraud. It is difficult to consider the role of AI without considering these issues. For example, generative AIs have recently been used to “co-author”

papers and to peer review them. In this article, we focus on such ethical issues, but to do so we first need to discuss the (degradation of) ethical standards of research in the years prior to the emergence of ChatGPT.

### Some aspects of modern research ethics.

Problems such as data fabrication [3] and falsification [4, 5] are far from new. “Publish or perish” and research by “least publishable units” have been practiced for some time. The threat of such corruption is presently acknowledged [6, 7, 8]. To ostensibly address this, universities and research organizations now require mandatory research ethics training\*, research corruption is endemic today nevertheless [9].

Just as the industrialization (or “democratization”) of higher education has led to the dramatic increases in student throughput, the industrialization of scientific research has dramatically increased the rate of production\*\* of research articles [10]. With such mechanization, fueled by intense research funding, comes bureaucracy and bean counting, where those workers who produce more beans, as measured by metrics, receive greater reward. Not long ago, research metrics were nascent and the range of salaries among academics was narrow compared to the present. Metrics do translate into real money even though many believe they're just supposed to measure scholarly quality.

Boosting metrics (e.g., *H*-index) has become a *raison d'être* serving not only

those who seek higher salaries but also academic administrators who do not wish to “waste” time to try to understand an iota of the employees' research. Consequently, the peer review process is being compromised (as alleged in [11, 12]); authorship is being boosted through paper mills [13, 14]; co-authorship and co-citation cartels are being formed [15, 16]. *Quid pro quos* may also play-out in promotion within scholarly organizations and in grant proposal panels. *H*-index may be reported for priority work-visa applications in the US.

### Enter generative AI

Like other technologies, generative AI can support legitimate research and development when guided by human expertise and creativity. However, AI also facilitates cheating. With generative AI, dubious research articles can be easily produced and sold through paper mills. Even before AI, some highly decorated and very well paid researchers maintained a publication rate of a few dozens of papers per year; with AI, this rate could easily double or triple. Given that universities no longer judge the content of the paper but merely quote a number (metric) associated with it, AI-assisted or generated articles may quickly become highly profitable.

Recent reports indicate that ChatGPT-3 has been listed as a co-author on some research articles [17] and even served as a peer reviewer [18]—something we've experienced personally. This highlights how

\* Considering the research-ethics training some of these organizations require, one is reminded of the notion of Schelerian separation: preaching ethics while not practicing them, or at least not seriously enforcing them; one is also reminded of chapter 38 of the *Tao Te Ching*: “The lowest virtue holds on to virtue.”

\*\* At present, the four main AI research conferences (annually, in total): receive over 40,000 submissions (some of these are re-submissions from one conference to the next); accept 9,000 papers; and produce many tens of thousands of reviews.

Continued from page 10

AI is being used to partly or fully replace both authors and referees. The shift in universities, as noted earlier, to metrics-based assessments only worsens the impact of AI-assisted fraud.

Some may argue that ChatGPT and similar tools—whether for text, images, videos, web searches, computations, or graphics—are as deserving of authorship as some human co-authors today. This raises a critical question: has the standard of research co-authorship become so diluted that such tools now meet the criteria? Imagine a generative AI achieving an  $H$ -index of 100, becoming a fellow of a learned society, securing millions in government funding as a principal investigator, and being awarded a chaired professorship at a major university. Would such absurdity prompt genuine reforms in research practices and evaluation? Unfortunately, we fear it would not. Long before the AI era, Adler, Ewing, and Taylor [19] warned us that research evaluation cannot be reduced to simple metrics. Now, we face new challenges that could inflict unprecedented damage.

Some academics, particularly those inclined towards modern-style administration, argue that using metrics and AI in research evaluation is a step towards fairness, advocating for the complete elimination of traditional informed judgment. However, this shift to bean counting can be seen as driven by laziness and a disdain for genuine critical thinking. AI creates an ideal environment for those who have gained power without true scholarly effort. While alarmists claim AI will surpass humans, this is presently unfounded; however, its impact on research, and research ethics, is already evident. Without intervention, not from university administrators, but from active and honest scholars, we risk academia entering a darker phase than the one Peter Fleming described [20].

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# Updates on the 2024 ICSDS meeting

The **2024 IMS International Conference on Statistics and Data Science (ICSDS)** takes place December 19–22, 2024, in Nice on the south coast of France. Program co-chairs Regina Liu and Annie Qu report on the latest developments:

## Applications for The ICSDS Junior Researcher Travel Fund

To ensure inclusivity and accessibility of ICSDS to junior researchers all over the world, IMS is pleased to announce a new **travel support fund for junior faculty and post-docs who do not have other forms of institutional support**. This fund is generously sponsored by the Industry Friends of IMS (IFoIMS). Please see <https://www.ims-icsds2024.org/home> for the link to submit your applications, no later than October 30.

## Congratulations to 2024 ICSDS Student Travel Award recipients

The number of applications for Student Travel Awards this year has increased to higher than 110, covering many areas of statistics and data science. The award committee regrettably had to decline many quality applications due to the limited number of awards available, even though the ICSDS was able to increase the number of awards to 17, up from 12 last year, with the generous support from the Industry Friends of IMS (IFoIMS).

The award recipients are to present their papers in the ICSDS special Student Travel Award sessions, and will receive award certificates with US\$800 each during the awards ceremony on December 19.

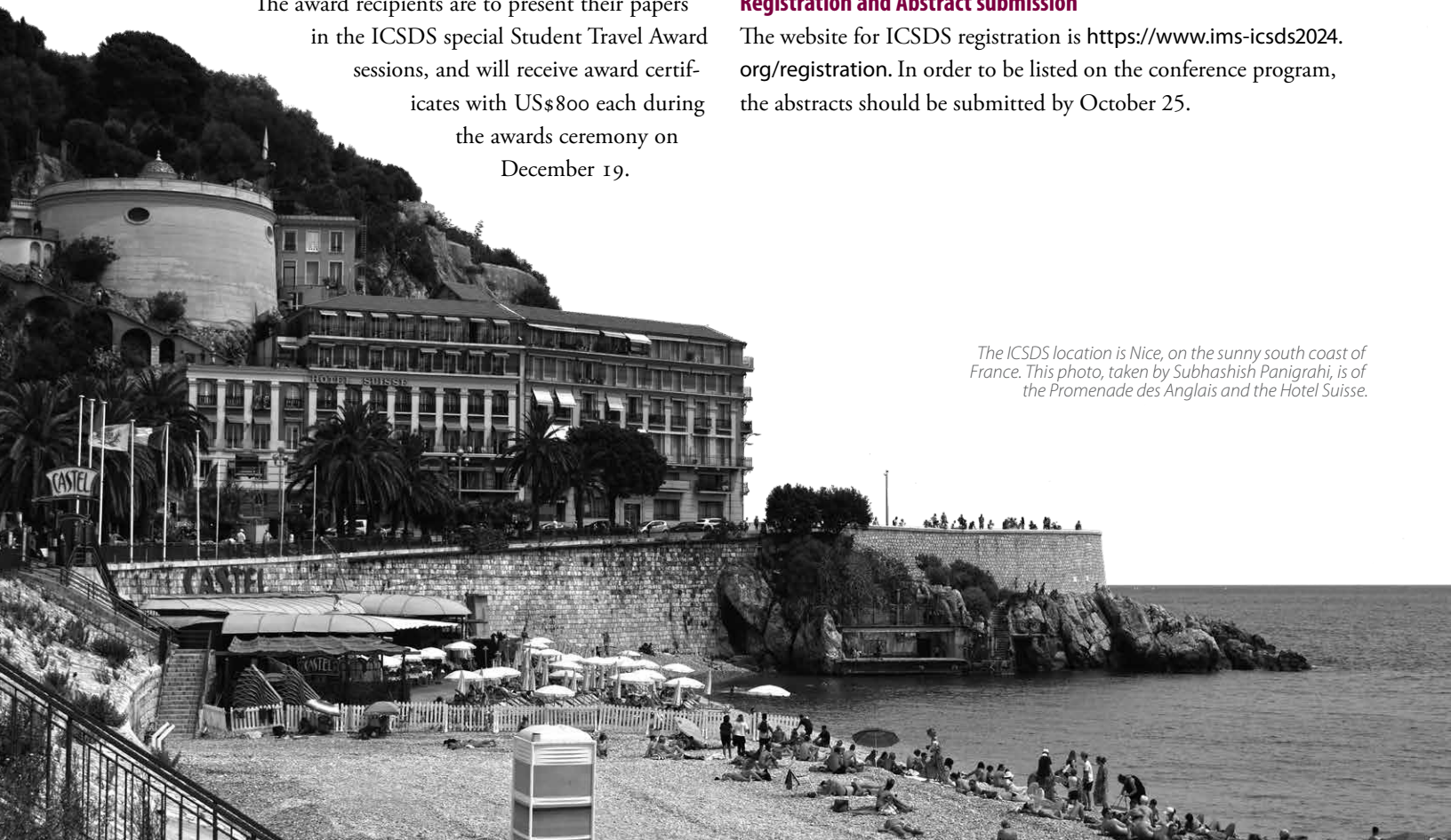
The IMS 2024 ICSDS Student Travel Award awardees, in alphabetical order, are:

**John Cherian**, Stanford University (USA);  
**Antonio Di Noia**, ETH Zurich & USI Lugano (Switzerland);  
**Stanislas du Ché**, Dauphine Paris University (France);  
**Lasse Fischer**, University of Bremen (Germany);  
**Carlos García Meixide**, National Research Council of Spain (Spain);  
**Will Hartog**, Stanford University (USA);  
**Ibrahim Kaddouri**, Laboratoire de mathématiques d'Orsay (France);  
**Kyusoon Kim**, Seoul National University (S. Korea);  
**Margherita Lazzaretto**, University of Copenhagen (Denmark);  
**Samhita Pal**, North Carolina State University (USA);  
**Rinka Sagawa**, Waseda University (Japan);  
**Gözde Sert**, Texas A&M University (USA);  
**Daniele Tancini**, University of Perugia (Italy);  
**Supriya Tiwari**, School of Business Hyderabad (India);  
**Zach (Zhenyu) Wang**, Rutgers University (USA);  
**Shihao Wu**, University of Michigan (USA); and  
**Guohua Xue**, The University of Warwick (UK).

## Registration and Abstract submission

The website for ICSDS registration is <https://www.ims-icsds2024.org/registration>. In order to be listed on the conference program, the abstracts should be submitted by October 25.

*The ICSDS location is Nice, on the sunny south coast of France. This photo, taken by Subhashish Panigrahi, is of the Promenade des Anglais and the Hotel Suisse.*





# Student Puzzle Corner 53

Anirban DasGupta says, "We are staying with our contest model introduced 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, 53I and 53II, but it will be great if you attempt both."

**Puzzle 53.1** Suppose  $X$  has a Poisson distribution with mean one. Prove that the distribution of  $X$  is determined by its moments, i.e., if  $Y$  is any real valued random variable such that  $E(Y^n) = E(X^n)$  for all  $n = 1, 2, \dots$ , then  $Y$  has a Poisson distribution with mean one.

**Puzzle 53.2** And now the contest problem. For each question, just say True or False, without the need to provide a proof. But answers with some explanations are especially welcome. Here are the items.

- (a) If  $X$  is a non-negative random variable, and has a finite MGF everywhere, then  $E(X^X) < \infty$ .
- (b) For estimating the variance of a normal distribution with an unknown mean, the MLE of the variance is inadmissible under squared error loss function.
- (c) Suppose  $X_1, X_2, \dots$  are i.i.d. Poisson with mean one. Let  $S_n = \sum_{i=1}^n X_i, n \geq 1$ . Let  $N$  be the first  $n$  for which  $S_n > 1$ . Then  $E(S_N - 2) \leq 1$ .
- (d) Suppose  $X$  is uniformly distributed in the  $p$ -dimensional disk  $\{x : \|x\|^2 = \rho^2\}$ . Treat  $\rho$  as an unknown positive parameter. Then the bias of the MLE of  $\rho$  converges to zero when  $p \rightarrow \infty$ .
- (e) Consider a  $2 \times 2$  random matrix in which all four entries are i.i.d. standard normal. Then the probability that the determinant of this matrix exceeds 1 is an irrational number.

*Student members of IMS are invited to submit solutions to bulletin@imstat.org (subject "Student Puzzle Corner"). If correct, we'll publish your name (and photo, if there's space), and the answer, in the next issue.*

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

## Solution to Puzzle 52

Congratulations to **Marco Dalla Pria**, PhD student in Modeling and Data Science at the University of Turin, Italy (pictured here), for his extremely well done solutions. Puzzle editor Anirban DasGupta explains:



*Marco Dalla Pria sent a complete set of correct answers to Puzzle 52*

**Puzzle 52.1** For  $n \geq 2$ , let  $\sigma$  denote a permutation of  $\{1, 2, \dots, n\}$ . Call a pair  $(i, j)$  a reversal pair of  $\sigma$  if  $i < j, \sigma(i) > \sigma(j)$ . Denote by  $I(\sigma)$  the set of all reversal pairs of  $\sigma$ , and by  $T(\sigma)$  the cardinality of  $I(\sigma)$ . Find the expected value of  $T(\sigma)$  if  $\sigma$  is chosen uniformly at random from the set of  $n!$  permutations of  $\{1, 2, \dots, n\}$ .

By a standard indicator variable argument,  $E(T(\sigma)) = \frac{n(n-1)}{4}$

### Puzzle 52.2

(a) If  $X \sim N_d(\mu, I)$ , then the only function  $h(X)$  such that  $E_\mu(h(X)) = h(\mu)$  for all  $\mu$  is  $h(X) = X$ . Obviously FALSE.

(b) There exist real, valued, nonconstant random variables  $X, Y$  such that  $X, Y$  are independent, and  $\frac{X}{Y}$  and  $XY$  have the same distribution. TRUE. One can take  $Y$  to be such that  $Y$  and  $\frac{1}{Y}$  have the same distribution, e.g., a standard Cauchy.

(c) Suppose  $G$  is a graph on  $n$  vertices and  $m$  edges. A coloring of  $G$  is an assignment of colors to the vertices of  $G$  in such a way that no two vertices that share an edge receive the same color. Fix an integer  $x$  and denote by  $P_G(x)$  the number of ways to color  $G$  by using exactly  $x$  colors. View  $P_G(x)$  as a polynomial in a real variable  $x$  (you can). Then the sum of all the roots of  $P_G(x)$ , counting possible complex roots, does not depend on  $n$ .

Since chromatic polynomials are monic, the sum of its roots (by Vieta's theorem) is the negative of the coefficient of  $x^{n-1}$ . It is easily seen that there are graphs for which this coefficient depends on  $n$ . So, FALSE.

(d) If  $X$  is a real valued random variable with (finite) variance  $\sigma^2$  and a median  $\xi$  (any median), then  $|E(X) - \xi| \leq \sigma$ . TRUE; use the fact that  $E(|X - c|)$  is minimized at any median and then use the Cauchy-Schwarz inequality.

(e) Suppose  $(X_1, X_2, \dots, X_{100})$  is distributed uniformly on the boundary of the unit ball in 100 dimensions. Then the joint distribution of the first 10 coordinates,  $(X_1, X_2, \dots, X_{10})$  can be approximated by a suitable 10-dimensional normal distribution with a diagonal covariance matrix TRUE; this is a consequence of a well known theorem due to Poincaré.

# European Statistics Awards for Nowcasting: register by Oct. 30

Eurostat is pleased to announce the third round of the European Statistics Awards for Nowcasting (<https://statistics-awards.eu/>), with a focus on **international trade in goods**.

The competitions began in September 2024 with registration open until 30 October 2024.

The focus of the competitions is in forecasting three key indicators: Extra-EU Imports, Extra-EU Exports, and Intra-EU Exports. Policymakers and other stakeholders frequently stress the importance of faster access to European statistics, which are essential for governments, businesses, and research organizations in monitoring international trade trends, evaluating trade policies, and analysing the economic impact of global trade.

Do you know how to code in Python or R? Register by 30 October 2024 and try your chances on your own or with a team of peers.

In this competition, teams will be evaluated based on the following criteria:

- accuracy of their nowcasts (**Accuracy award**);
- potential for their methods to be reused and scaled up to produce European statistics (**Reusability award**);
- use of an innovative approach (**Innovativity award**).

You can win up to €10,000 for the time series. The top prize breakdown includes €3,000 for Accuracy, €2,000 for Innovativity, and €5,000 for Reusability. There will also be second and third place prizes for the Accuracy Award, amounting to €2,000 and €1,000, respectively. You and your team could potentially win up to €30,000 if you achieve first place in all three categories across all three time series.

Please find more information about the timeline and awards on the Eurostat website: <https://ec.europa.eu/eurostat/en/web/products-eurostat-news/w/edn-20240920-1>.

For more information, please visit the European Statistics Awards website or contact the European Statistics Awards secretariat directly: [info@statistics-awards.eu](mailto:info@statistics-awards.eu).

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# OBITUARY: Shoutir Kishore Chatterjee (“SKC”)

## 1935–2024

The Statistics community lost a luminary with the sad demise of Professor Shoutir Kishore Chatterjee on June 18, 2024, at the age of 89. He leaves behind his son and daughter and two grandchildren, as well as numerous students, friends and admirers. A doyen among Indian statisticians, Professor Chatterjee was associated with the Department of Statistics at Calcutta University (CU) for more than four decades and steered it over a quarter century. He made significant contributions to promote quality and advance excellence in both teaching and research in statistics departments at CU and other Indian universities. He has left an indelible mark in the annals of statistics in India through numerous mentorship efforts and academic engagements. His research contributions in wide areas of statistical inference methods along with their applications and uncanny devotion to foundations have inspired many.

A scholar par excellence, a profound thinker, and a scrupulous researcher, Professor Chatterjee made seminal contributions to Stein-type sequential procedures in the multivariate set-up with nuisance-parameter-free performance. Subsequently, in his early research career, he delved in multivariate non-parametric inference methods, some carried out jointly with the late Professor Pranab Kumar Sen.

His curiosity and ensuing research seamlessly moved into other territories, for example, multivariate non-parametric tests against restricted alternatives; multivariate tolerance sets via density estimation; the estimation of variance components; change detection and semi-sequential tests; variable selection in discrimination problems; and multiple scores in non-parametric testing. Professor Chatterjee took a keen interest in, and contributed to, areas such as general

asymmetric factorial experiments in estimation of the optimum point on a response surface.

His lectures inspired successive generations of students to carry on doing research in a number of areas Professor Chatterjee touched upon. He guided and supervised the research work of several scholars towards their PhD degrees —most of whom have earned wide international recognition —in diverse aspects of statistical science including design and analysis of experiments, linear models, non-parametric and sequential inference, and foundation of statistical inference. Professor Chatterjee also energetically extended academic support to others including his colleagues. He was invaluable as a resource of ideas to all who needed some help to move along.

Professor Chatterjee did not shirk administrative responsibility to promote the cause of statistics and its applications in various academic and other professional domains, for example, serving on university-wide committees and groups set up for such purposes. He guided activities of the Calcutta Statistical Association over a long period, serving as its President and as the Editor of the *Calcutta Statistical Association Bulletin*, a premier journal of excellence, and organizing the Triennial Calcutta Symposia on Probability and Statistics organized by the Association jointly with the Department of Statistics at CU.

Professor Chatterjee visited a number of universities in India and delivered short courses on advanced topics. He was also instrumental in developing a modern curriculum in statistics for both undergraduate and postgraduate levels.

An embodiment of rectitude, Professor Chatterjee would appreciate accomplishments of others while remaining silent

about his own exemplary achievements. Firm in his convictions, he was always soft-spoken and would gracefully accommodate others’ views. He possessed profound knowledge in philosophy of religion and joined discussions on the subject regularly. Many of his colleagues, students and friends would seek his advice on complex problems in life —professional as well as personal.

Professor Chatterjee authored two books: *Statistical Thought: A Perspective and History* (2003, Oxford Univ. Press) and *Human Development and its Quantification: A Holistic Approach* (2009, Ramakrishna Mission Vivekananda University; a preprint version appeared in Chatterjee, 2008, *Sankhyā*, Ser. B, 70, pp. 157–228).

Professor Chatterjee received many awards and accolades over the years. He presided over the Statistics Section of the Indian Science Congress in 1987, was awarded the UC Distinguished Teacher Award, was selected as a National Lecturer in Statistics by the University Grants Commission during 1986–87, was selected an Emeritus Scientist by the Council of Scientific and Industrial Research of India during 1997–2000. For more details, one may read “A Conversation with Shoutir Kishore Chatterjee” in *Statistical Science* (2007).

It is next to impossible to enumerate Professor Chatterjee’s lengthy list of virtues. His impact on statistical research and education in India and abroad will be felt in the years to come. Shoutir Kishore Chatterjee will be sadly missed. He shared his wisdom freely. As direct beneficiaries, we all mourn his loss, and we miss him.

.....  
*Dr. Shyamaprasad Mukherjee,  
 Retired Centenary Professor of Statistics,  
 University of Calcutta, India*

# Report: 2024 WNAR/IMS/Graybill Meeting



Fort Collins, Colorado, was the setting for the WNAR/IMS/Graybill conference in June 2024



U.S. Census Bureau Director Robert Santos speaking to participants of the WNAR Diversity Workshop

## WNAR Correspondent Professor Jessica Minnier writes:

The 2024 Annual Meeting of the WNAR/IMS was a joint conference with the Graybill Conference hosted by Colorado State University in Fort Collins from June 9–12. **Robert Santos**, Director of the U.S. Census Bureau, gave the WNAR Plenary and Presidential Address, “Serving Through Leadership: My approach to heading a Federal Statistical Agency,” and **Scott Evans**, Professor at George Washington University, gave the Graybill Keynote, “The order of operations is important: it is time to correct the clinical trial arithmetic.”

The meeting began with three short courses: “*N*-of-1 Trials for Personalized Healthcare” by Christopher Schmid (Brown University); “Small Sample, Sequential, Multiple Assignment, Randomized Trial (snSMART) Designs and Methods for Chronic, Rare Disease Drug Development” by **Kelley Kidwell** (University of Michigan); and “Bayesian Borrowing Techniques for Rare Disease Clinical Research” by **Joseph Koopmeiners** and **Steffen Ventz** (University of Minnesota).

There were 68 invited sessions, eight contributed sessions, and 11 student paper sessions, plus three diversity workshops. With 435 participants, this was one of the largest WNAR/IMS annual meetings to date.

WNAR thanks the Program Chairs **Prince Allotey** and **Catherine Lee**, the IMS Chair **Jie Peng**, Local Organizer **Wen Zhou**, and the Graybill Program Chair **Jingling Ye**, for all their efforts.

WNAR Diversity Workshop participants



The 2024 **WNAR Diversity Workshop** was the first satellite workshop held in conjunction with WNAR, and it emphasized the importance of mentorship and belonging in the health and science fields as well as introduced various data-centered career pathways. For many of the 16

participants, it was the first time they had attended a scientific conference, and we received many positive comments about how the workshop was organized and facilitated. Most of the students (eight undergrad and seven grad) were studying in Colorado, and we had many mentors (of the 14 total) who were affiliated with Colorado universities who joined us for our matched-mentorship program. The workshop featured panels on mentorship, training opportunities, career pathways, and graduate school experiences with over 20 panelists. The workshop also included a “Disparities in Epilepsy” talk by Dr. **Sonal Bhatia** and a “Fireside Chat with **Rob Santos**”, where the director shared his inspiring life story and advice. Attendees also had the chance to participate in the Diversity Workshop networking session, WNAR Mixer, and WNAR Student Pizza Social. The 2024 WNAR Diversity Workshop was made possible by many volunteers, including the WNAR Justice, Equity, Diversity, and Inclusion (JEDI) Committee and Leadership

Six current and past presidents of WNAR





committee. Special thanks go to Elizabeth Juarez-Colunga, Megan Othus, Jan Dasgupta, Natalie Gasca, Prince Allotey, Audrey Hendricks, and Lala Kaizer for their coordination efforts. We are excited to continue this program at the next WNAR conference.

**Student Paper Competition:** Congratulations to the 42 student participants. Winners of the Student Paper Award were Leah Andrews (University of Washington) “Semiparametric Methods for Evaluating COVID-19 Vaccine Regimens in Test-Negative Designs”, and Navneet Hakhu (UC Irvine) “Censoring-Robust Estimation in Time-to-Event Clinical Trials with Adaptive Randomization”, and Robin Liu (UC Santa Barbara) “Natural Covariate-adjusted Gaussian Graphical Regression.” The winner of the Student Presentation Award was Evan Sidrow (University of British Columbia), “Stochastic Optimization for Efficient Inference in Ecological Hidden Markov Models.” We give special thanks to the chair of the student paper competition, Kayleigh Keller (Colorado State University), and the 19 judges.

Congratulations to Kyle Conniff who is the first awardee of the **Indigenous Student Travel Award!** Kyle is a PhD candidate of Statistics at UC Irvine, and he is a member of the Menominee Indian Tribe of Wisconsin.

WNAR Student Winners with President Megan Othus (left) and Student Award Committee Chair Kayleigh Keller (right)



WNAR Student Award participants



Dr. Robert Tibshirani of Stanford University was awarded the 2024 **WNAR/IBS Outstanding Impact Award and Lectureship** given his highly impactful research contributions to the fields of biometrics and science at large. Dr. Tibshirani gave the WNAR Outstanding Impact Award Lecture at JSM: “Cooperative learning and cooperative components analysis.”

Many thanks to our **sponsors:** SAS, BeiGene, Regeneron, Springer, CRC Press, and CURE Epilepsy.

The ACM/IMS *Journal of Data Science (JDS)* is a joint journal of the Association of Computing Machinery (ACM) and the Institute of Mathematical Statistics (IMS), publishing high-impact research from all areas of data science, across foundations, applications and systems. The scope of the journal is multi-disciplinary and broad, spanning statistics, machine learning, computer systems, and the societal implications of data science. JDS accepts original papers as well as novel surveys that summarize and organize critical subject areas. See <https://jds.acm.org/cfp.html>

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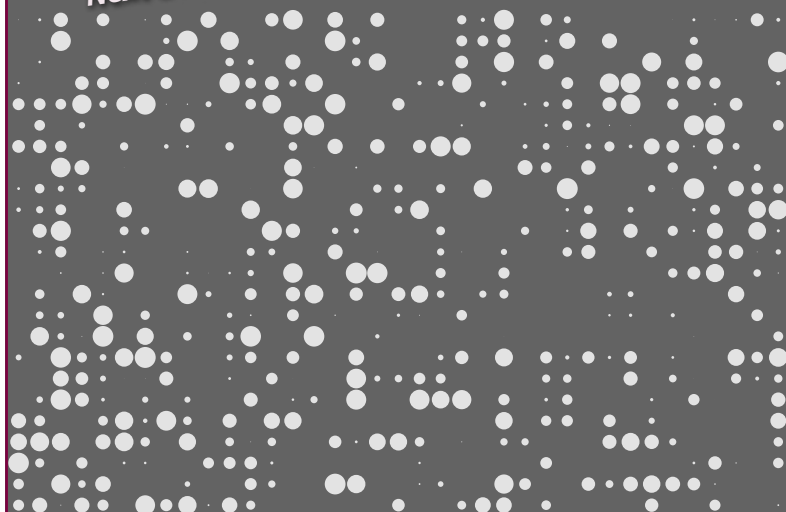
**Bridging Research Communities**

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

**Call for Papers**

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

Next deadline **January 15**



## Recent papers

### *Annals of Statistics*: Vol. 52, No. 4, August 2024

The *Annals of Statistics* aims to publish research papers of the highest quality reflecting the many facets of contemporary statistics.

Primary emphasis is placed on importance and originality. The Co-Editors are Enno Mammen and Lan Wang. Access papers at <https://projecteuclid.org/journals/annals-of-statistics/>

|  |   |
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| Asymptotic normality and optimality in nonsmooth stochastic approximation . . . . .                                  | DAMEK DAVIS, DMITRIY DRUSVYATSKIY AND LIWEI JIANG 1485                                      |
| Bootstrap-assisted inference for generalized Grenander-type estimators . . . . .                                     | MATIAS D. CATTANEO, MICHAEL JANSSON AND KENICHI NAGASAWA 1509                               |
| One-step estimation of differentiable Hilbert-valued parameters . . . . .  | ALEX LUEDTKE AND INCHEOUL CHUNG 1534  |
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| Online change-point detection for matrix-valued time series with latent two-way factor structure . . . . .           | YONG HE, XINBING KONG, LORENZO TRAPANI AND LONG YU 1646                                     |
| Majority vote for distributed differentially private sign selection . . . . .  | WEIDONG LIU, JIYUAN TU, XIAOJUN MAO AND XI CHEN 1671  |
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| Learning Gaussian mixtures using the Wasserstein–Fisher–Rao gradient flow . . . . .                                  | YULING YAN, KAIZHENG WANG AND PHILIPPE RIGOLLET 1774  |
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| On posterior consistency of data assimilation with Gaussian process priors: The 2D-Navier–Stokes equations . . . . . | RICHARD NICKL, EDRISS S. TITI 1825  |
| How do noise tails impact on deep ReLU networks? . . . . .   | JIANQING FAN, YIHONG GU, WEN-XIN ZHOU 1845  |

### *Annals of Applied Statistics*: Vol. 18, No. 3, September 2024

Statistical research spans an enormous range from direct subject-matter collaborations to pure mathematical theory. The *Annals of Applied Statistics* is aimed at papers in the applied half of this range. Our goal is to provide a timely and unified forum for all areas of applied statistics. The Editor-in-Chief is Ji Zhu. Access papers at <https://projecteuclid.org/journals/annals-of-applied-statistics/>

|  |  |
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| Multiscale Poisson process approaches for detecting and estimating differences from high-throughput sequencing assays . . . . .                      | HEEJUNG SHIM, ZHENGRONG XING, ESTER PANTALEO, FRANCESCA LUCA, ROGER PIQUE-REGI AND MATTHEW STEPHENS 1773   |
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| A bootstrap model comparison test for identifying genes with context-specific patterns of genetic regulation . . . . .                               | MYKHAYLO M. MALAKHOV, BEN DAI, XIAOTONG T. SHEN AND WEI PAN 1840   |
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| Joint mixed membership modeling of multivariate longitudinal and survival data for learning the individualized disease progression . . . . .         | YUYANG HE, XINYUAN SONG AND KAI KANG 1924  |

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Learning and forecasting of age-specific period mortality via B-spline processes with locally-adaptive dynamic coefficients. . . . . FEDERICO PAVONE, SIRIO LEGRAMANTI AND DANIELE DURANTE 1965

Latent conjunctive Bayesian network: Unify attribute hierarchy and Bayesian network for cognitive diagnosis . . . . . SEUNGHYUN LEE AND YUQI GU 1988

Quantile regression decomposition analysis of disparity research using complex survey data: Application to disparities in BMI and telomere length

between U.S. minority and white population groups. . . . . HYOKYOUNG G. HONG, BARRY I. GRAUBARD, JOSEPH L. GASTWIRTH AND MI-OK KIM 2012

Bayesian hidden Markov models for latent variable labeling assignments in conflict research:

Application to the role ceasefires play in conflict dynamics . . . . . JONATHAN P. WILLIAMS, GUDMUND H. HERMANSEN, HÅVARD STRAND, GOVINDA CLAYTON AND HÅVARD MOKLEIV NYGÅRD 2034

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# IMS meetings around the world

## Joint Statistical Meetings

### 2025 Joint Statistical Meetings



**August 2–7, 2025, Nashville, USA**

[w https://ww2.amstat.org/meetings/jsm/2025/](https://ww2.amstat.org/meetings/jsm/2025/)

*Including the 2025 IMS Annual Meeting.* The 2025 JSM will be held at the Music City Center, 201 Rep. John Lewis Way South.

**Topic-Contributed Session Proposal submissions:** November 14 – December 9, 2024. See <https://ww2.amstat.org/meetings/jsm/2025/submissions.cfm>

**Contributed Abstract submission:** December 2, 2024 – February

3, 2025. Presentations may be given on any topic of statistical interest; however, authors are encouraged to submit papers on the theme set by 2025 ASA President Ji-Hyun Lee, “Statistics, Data Science, and AI Enriching Society.” Additionally, abstracts with a primary focus on statistical applications are encouraged. Registration & Housing reservations open May 1, 2025.



### JSM dates for 2026–2030

**JSM 2026**

**August 1–6, 2026**

**Boston, USA**

**IMS Annual Meeting**

**@ JSM 2027**

**August 7–12, 2027**

**Chicago, USA**

**JSM 2028**

**August 5–10, 2028**

**Philadelphia, USA**

**IMS Annual Meeting**

**@ JSM 2029**

**August 4–9, 2029**

**Seattle, USA**

**JSM 2030**

**August 2028 [dates**

**and location TBC]**

### ICMS25: the 4th International Conference on Mathematics and Statistics

**February 20–22, 2025**

**Sharjah, United Arab Emirates**

[w https://www.aus.edu/conferences/the-fourth-international-conference-on-mathematics-and-statistics](https://www.aus.edu/conferences/the-fourth-international-conference-on-mathematics-and-statistics)

The fourth International Conference on Mathematics and Statistics (ICMS25) at American University of Sharjah aims to provide a platform for those engaged in the realm of pure and applied mathematics, mathematical education and statistics. This conference serves as a venue for the exchange of the latest research insights and for networking among scholars and practitioners.

ICMS25 will include keynote addresses from distinguished mathematicians, specialized sessions and contributions of papers, with selected publications in internationally refereed journals.

The technical program will feature three keynote lectures delivered by esteemed scholars and special sessions focusing on areas such as algebra, coding theory, data mining, machine learning, differential equations, mathematical biology and topology. Additionally, there will be contributed paper sessions with oral and poster presentations.

Abstract submission is open: deadline October 31, 2024. See website for abstract template.

### 2026 IMS Asia Pacific Rim Meeting (IMS-APRM)

**June 13–16, 2026**

**Hong Kong, ROC**

**w TBC**

The IMS Asia Pacific Rim (IMS-APRM) conferences provide an excellent forum for scientific communications and collaborations for researchers in Asia and the Pacific Rim, and promote communications and collaborations between researchers in this area and those from other parts of the world.

The 2026 Local Organizers are Xinyuan Song and Junhui Wang.

More details coming; please mark your calendars.



## At a glance:

*forthcoming  
IMS Annual  
Meeting and  
JSM dates*

## 2025

**IMS Annual Meeting @ JSM:** Nashville, TN, USA, **August 2–7, 2025**

## 2026

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

**JSM:** Boston, MA, **August 1–6, 2026**

## 2027

**IMS Annual Meeting @ JSM:** Chicago, USA **August 7–12, 2027**

## 2028

**IMS Annual Meeting/ 12th World Congress:** Singapore, **July 24–28, 2028**

**JSM:** Philadelphia, USA, **August 5–10, 2028**

# More IMS meetings

## 44th Conference on Stochastic Processes and their Applications 2025



July 14–18, 2025, Wrocław, Poland

[w https://spa.pwr.edu.pl/](https://spa.pwr.edu.pl/)

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. Invited speakers: Benoit Collins (Kyoto University); Giuseppe Cannizzaro (University of Warwick), **Doebelin Lecture**; Alessandra Faggionato (La Sapienza), **Doob Lecture**; Thomas Hutchcroft (California Institute of Technology); Tomasz Komorowski (Polish Academy of Sciences and UMCS); Florence Merlevède (University of Paris-Est Marne-la-Vallée), **Lévy Lecture**; Roberto Imbuzeiro Oliveira (IMPA); Ron Peled (Tel Aviv University); Sunder Sethuraman (University of Arizona), **Schramm Lecture**; Justin Salez (Paris Dauphine University); Cristina Toninelli (Paris Dauphine University and CNRS). Organizing committee members are Krzysztof Bogdan and Krzysztof Dębicki. You can pre-register at <https://spa.pwr.edu.pl/preregistration>.



## ENAR 2025 Spring Meeting

March 23–26, 2025

New Orleans, LA, USA

[w https://www.enar.org/meetings/spring2025/](https://www.enar.org/meetings/spring2025/)

The ENAR 2025 Spring Meeting will be held March 23–26, 2025 at the Sheraton New Orleans Hotel in New Orleans, Louisiana. The 2025 meeting theme is “ENAR is Interdisciplinary.”

Deadlines: Distinguished Student Paper submission open September 3–October 3, 2024. Contributed Session Proposal submission: September 3–October 17, 2024.

## 2026 IMS Annual Meeting

July 6–9, 2026

Salzburg, Austria

More details TBD. The Local Chair is Arne Bathke.

## IMS International Conference on Statistics and Data Science (ICSDS 2024)



December 16–21, 2024. Nice, France

[w https://www.ims-icsds2024.org/home](https://www.ims-icsds2024.org/home) [note new website URL]

The 2024 IMS International Conference on Statistics and Data Science (ICSDS) will take place December 16–19, 2024, in Nice, France.

To ensure inclusivity and accessibility of ICSDS to junior researchers from all over the world, IMS is pleased to offer a **travel support fund for junior faculty members and post-doctoral researchers who do not have other forms of institutional support**

for their travel and registration cost. This fund is generously sponsored by the Industry Friends of IMS (<https://imstat.org/industry-friends-of-ims-ifoims/>). Apply via <https://www.ims-icsds2024.org/travel-award>. The

deadline is **October 30**. The winners of the 2024 ICSDS Student Travel Awards are listed on page 12.

The ICSDS will feature many outstanding invited speakers from different countries and continents, covering a wide range of subjects in statistics and data science, in theory, methodology and applications, including four plenary speakers (**Rina Foygel Barber**, **Peter Bühlmann**, **Cynthia Dwork**, and **Martin Wainwright**).

Registration is open (<https://www.ims-icsds2024.org/registration>).

In order to be listed on the conference program, **abstracts** should be submitted by October 25.



The ICSDS location is Nice, on the sunny south coast of France. This photo, taken by Subhashish Panigrahi, is of the Promenade des Anglais and the Hotel Suisse.

## More IMS meetings

### Asia-Pacific Seminar in Probability and Statistics Ongoing and online

**w** <https://sites.google.com/view/apspd/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.

### Bernoulli–IMS 12th World Congress in Probability & Statistics July 24–28, 2028. Singapore

**w** TBC

The Institute of Mathematical Statistics annual meeting will be held at the 12th Bernoulli–IMS World Congress in Probability and Statistics, in Singapore. Details to follow.

### 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>

## Other meetings and events around the world

### German Probability and Statistics Days (GPSD) 2025

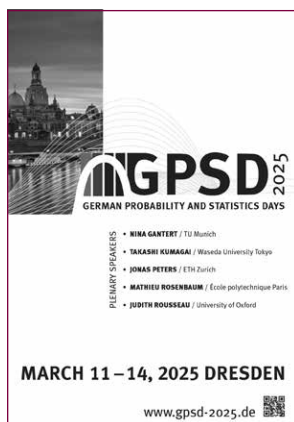
March 11–14, 2025

Dresden, Germany

**w** <https://www.gpsd-2025.de/>

The GPSD conference brings together the German and international stochastics community, providing a platform for senior and junior researchers alike, it also enjoys an increasing international popularity.

The next conference will take place at TU Dresden, from March 11–14, 2025. It will feature five plenary talks (Nina Gantert, Takashi Kumagai, Jonas Peters, Mathieu Rosenbaum, and Judith Rousseau) in addition to 14 keynote talks in 14 different sections covering the full spectrum of probability, statistics and their applications in physics, biology, finance and insurance.



### 2025 PIMS–CRM Summer School in Probability

June 2–27, 2025

Vancouver, Canada

**w** <https://secure.math.ubc.ca/Links/ssprob25/>

The Summer School will feature long courses by Tom Hutchcroft and Mathav Murugan, and mini-courses by Nathanael Berestycki, Nina Holden, Tianyi Zheng. Some participants will give short talks.

To apply for funding, please visit the Summer School website. The website also includes information for funding opportunities for students from Academic Sponsors of SLMath.

# Other meetings and events around the world

## 23rd Northeast Probability Seminar

November 21–22, 2024, New York City, United States

[w https://probability.commonscs.columbia.edu/23rd-northeast-probability-seminar/](https://probability.commonscs.columbia.edu/23rd-northeast-probability-seminar/)

The 23rd Northeast Probability Seminar will run Thursday November 21 - Friday November 22, 2024 at Columbia University. The plenary speakers are **Hubert Lacoin** (IMPA), **Hao Shen** (Madison), **Yilin Wang** (IHES), and **Christian Webb** (Helsinki) There will also be several short talks by participants, and opportunities to socialize. In order to attend this year *YOU MUST REGISTER* via the form on the website **before November 19**. This is necessary in case Columbia's campus has limited access during the seminar. When filling out that form you will be asked if you wish to apply for funding and to give a short talk. If so, please follow the instructions there. Funding is from an NSF grant and preference will be given to early career participants, in particular graduate students and postdocs who do not have other sources of funding. Likewise for short talks. More information, including a provisional schedule, can be found on the website.

## Women in Probability lunch

The Women in Probability group is glad to host another event at this year's Northeast Probability Seminar. This year, we'll host a lunch on Thursday, November 21. These events are a great opportunity for early-career researchers to interact with peers as well as more established researchers. Anyone interested in joining can contact Tai Melcher: [melcher@virginia.edu](mailto:melcher@virginia.edu).

## Bayes Comp 2025

June 16–20, 2025

Singapore

[w https://bayescomp2025.sg/](https://bayescomp2025.sg/)

The biennial Bayes Comp meetings are organized by the Bayesian Computation Section of the International Society for Bayesian Analysis (ISBA). Bayes Comp 2025 is the fourth conference in the series and is hosted by the Department of Statistics and Data Science at the National University of Singapore.

Confirmed keynote speakers are Sylvia Frühwirth-Schnatter, Pierre E. Jacob and Emtiyaz Khan.

The scientific committee welcomes **applications for satellite workshops**, to be held at NUS in the lead up to the main conference (June 16–17), as well as **invited session proposals** that will take place during the main conference (June 18–20). The deadline for proposals is midnight October 31st (Singapore time); please see the conference website for further details.

A call for contributed sessions and posters will be made in early 2025. Stay tuned for announcements about Junior Travel Support and child care.

## 22nd Winter School on Mathematical Finance

January 20–22, 2025

Soesterberg, the Netherlands

[w https://staff.fnwi.uva.nl/a.khedher/winterschool/winterschool.html](https://staff.fnwi.uva.nl/a.khedher/winterschool/winterschool.html)

Special topics: *Quantum Computing for Quantitative Finance*, and *Knightian Uncertainty*.

Two mini courses of five hours each about the special topics will be delivered by **Antoine Jacquier** (Imperial College) and **Frank Riedel** (University of Bielefeld). The special invited lectures will be given by **Zorana Grbac** (University of Paris-Diderot), **Birgit Rudloff** (Vienna University of Economics and Business), and **Sara Svaluto-Ferro** (University of Verona). Four short lectures complete the programme.

Participants who would like to present a poster will be given this opportunity. The precise format and scheduling of a poster session will be decided on later, depending on the number of such participants. Participants who want to present a poster are requested to contact the organizers.



# Employment Opportunities

## Remote (company based in Ohio, USA)

### Ohlinger Studios

New College-Level Calculus 1 Courseware Author  
<https://jobs.imstat.org/job//74977879>

## Austria: Klosterneuburg

### Institute of Science and Technology in Austria

Assistant Professor (tenure-track) and Professor (tenured) positions in Data Science  
<https://jobs.imstat.org/job//70543325>

## Canada: Vancouver, BC

### University of British Columbia

Assistant Professor Tenure Track Position in Statistics (UBC)  
<https://jobs.imstat.org/job//75277669>

## Canada: Vancouver, BC

### University of British Columbia

Faculty position in Education Leadership in the Department of Statistics (UBC)  
<https://jobs.imstat.org/job//75277672>

## Canada: Waterloo, ON

### University of Waterloo

Dean, Faculty of Mathematics  
<https://jobs.imstat.org/job//75177782>

## China: Guangzhou

### The Hong Kong University of Science and Technology (Guangzhou), Financial Technology Thrust

Open-rank faculty Positions in Fintech, Financial Engineering, AI, Machine Learning, Statistics, and Data Science  
<https://jobs.imstat.org/job//75031428>

## China: Shanghai

### New York University Shanghai

Tenured/Tenure-Track Positions in Information Technology  
<https://jobs.imstat.org/job//75326769>

## Germany: Munich

### Technical University of Munich (TUM)

Tenure Track Assistant Professor in Statistics and Data Science  
<https://jobs.imstat.org/job//75010589>

## Italy: Milan

### Bocconi University

Assistant Professor in Statistics  
<https://jobs.imstat.org/job//75129950>

## Singapore:

### Nanyang Technological University

Assistant Professor/Associate Professor in Mathematics Education  
<https://jobs.imstat.org/job//74892184>

## Switzerland: Lausanne

### Ecole polytechnique federale de Lausanne

Faculty Position in Statistics  
<https://jobs.imstat.org/job//75217996>

## Singapore

### National University of Singapore

#### Assistant, Associate and Full Professor Positions in the Department of Statistics and Data Science

The Department of Statistics and Data Science at the National University of Singapore invites applications for full-time open-rank positions in statistics, data science and related areas at tenure-track and tenured levels.

The National University of Singapore offers internationally competitive salaries, generous research funding, travel support, relocation assistance and other benefits. The Department of Statistics and Data Science has nearly 40 faculty members and provides a stimulating research environment.

Applicants must have demonstrated exceptional research potential. For the Associate and Full Professor positions, they must also have a track record of excellence in teaching and leadership. Please submit a cover letter, curriculum vitae, research and teaching statements, and at least three letters of recommendation to [mathjobs.org](https://www.mathjobs.org/jobs/list/24646): <https://www.mathjobs.org/jobs/list/24646>

We have an ongoing recruitment process and will review applications as they are received.

More information about the university and the department can be found at <https://www.nus.edu.sg> and <https://www.stat.nus.edu.sg>.



**Taiwan: Taipei City****Institute of Statistical Science, Academia Sinica, Taiwan**

Tenure-Track Faculty Positions

<https://jobs.imstat.org/job//54387703>**United Kingdom: Glasgow****University of Glasgow**

Lecturer / Senior Lecturer / Reader in Statistics and Data Analytics

<https://jobs.imstat.org/job//74951167>**United Kingdom: Glasgow****University of Glasgow**

Lecturer / Senior Lecturer / Reader Positions in Statistics and Data Analytics (Learning, Teaching and Scholarship Track)

<https://jobs.imstat.org/job//74951321>**Singapore****National University of Singapore****Department Postdoctoral Positions**

The Department of Statistics and Data Science at the National University of Singapore is one of the leading departments of its kind in Asia and globally. Comprising close to 40 full-time faculty members and around 70 research staff and PhD students, along with a strong network of industry affiliates, the department fosters a comprehensive and engaging research and educational environment in the areas of statistics and data science.

We invite applications for Departmental Postdoctoral Positions. These non-tenure track positions are aimed at early-career researchers, particularly recent or soon-to-be Ph.D. graduates, with research interests that overlap or complement those of our faculty members.

The positions offer an initial two-year appointment with the potential for a one-year extension. Successful candidates will receive a competitive annual salary of up to SGD90,000, along with generous travel support. Additionally, candidates will be provided with relocation and housing allowance. Teaching responsibilities involve two courses per year.

In order to apply, please submit a cover letter, curriculum vitae, research and teaching statements, and at least three letters of recommendation through [mathjobs.org](https://www.mathjobs.org) (<https://www.mathjobs.org/jobs/list/24647>).

More information about the university and the department can be found at <https://www.nus.edu.sg> and <https://www.stat.nus.edu.sg>.

**United Kingdom: London****London School of Economics**

Assistant Professor

<https://jobs.imstat.org/job//75475711>**United Kingdom: London****London School of Economics**

Assistant Professor in Data Science

<https://jobs.imstat.org/job//75475785>**United States: Auburn University, AL****Auburn University**

Assistant Professor- Statistics/Data Science/Topological Data Analysis

<https://jobs.imstat.org/job//75277667>**United States: Camarillo, CA****California State University Channel Islands**

Assistant Professor, Data Science

<https://jobs.imstat.org/job//75470521>**United States: Los Angeles, CA****USC Marshall School of Business: Data Sciences and Operations**

Tenure-Track Faculty Position in Statistics

<https://jobs.imstat.org/job//74939553>**United States: Los Angeles, CA****USC Marshall School of Business: Data Sciences and Operations**

Professor of Clinical Data Sciences and Operations (Open Rank)

<https://jobs.imstat.org/job//74939864>**United States: Los Angeles, CA****University of California Los Angeles**

Temporary Faculty Positions 2025–26, Mathematics

<https://jobs.imstat.org/job//75481797>**United States: Los Angeles, CA****University of California Los Angeles**

Tenure-Track / Tenured Faculty Positions, Mathematics 2025–26

<https://jobs.imstat.org/job//75481816>**United States: Riverside, CA****University of California Riverside**

Assistant Professor in Statistics

<https://jobs.imstat.org/job//75146077>

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

Assistant Professor in Statistics

<https://jobs.imstat.org/job//75147023>**United States: San Jose, CA****San Jose State University**

Open Rank Professor - Applied Data Science

<https://jobs.imstat.org/job//75299167>**United States: Fort Collins, CO****Department of Mathematics**

Assistant Professor in Combinatorics and/or Topology

<https://jobs.imstat.org/job//75021765>**United States: Fort Collins, CO****Colorado State University: Assistant Professor**<https://jobs.imstat.org/job//75234809>**United States: Fort Collins, CO****Colorado State University**

Assistant Professor, Teaching Track

<https://jobs.imstat.org/job//75459083>**United States: New Haven, CT****Yale University**

Assistant/Associate/Full Professor, Statistics and Data Science

<https://jobs.imstat.org/job//75193853>**United States: Gainesville, FL****University of Florida, Department of Statistics**

Assistant Professor in Statistics

<https://jobs.imstat.org/job//75230286>**United States: Tallahassee, FL****Florida State University**

Multiple Tenure-Track Positions Available

<https://jobs.imstat.org/job//75020680>**United States: Athens, GA****Department of Statistics**

Program Coordinator, Online MS in Applied Data Science

<https://jobs.imstat.org/job//75275171>**United States: Athens, GA****Department of Statistics: Tenure-Track Assistant Professor**<https://jobs.imstat.org/job//75274888>**United States: Ames, IA****Iowa State University**

Tenure-Track Assistant Professor in Statistics

<https://jobs.imstat.org/job//74952741>**United States: Champaign, IL****Department of Statistics, University of Illinois Urbana-Champaign**

Chair, Department of Statistics

<https://jobs.imstat.org/job//75412907>**United States: Champaign, IL****Department of Statistics, University of Illinois Urbana-Champaign**

Open Rank Faculty Position in Statistics and Data Science

<https://jobs.imstat.org/job//75470191>**United States: Chicago, IL****UChicago Data Science Institute**

Assistant Professor / Associate Professor / Professor, Data Science

<https://jobs.imstat.org/job//75106347>**United States: Chicago, IL****University of Chicago**

Part Time Lecturer MS in Applied Data Science

<https://jobs.imstat.org/job//75106777>**United States: Chicago, IL****UChicago Data Science Institute**

Data Science Preceptor

<https://jobs.imstat.org/job//75480683>**United States: Chicago, IL****UChicago Data Science Institute**

Data Science Institute Postdoctoral Scholars Program AY2025-26

<https://jobs.imstat.org/job//75481684>**United States: Normal, IL****Illinois State University**

Assistant Professor of Statistics

<https://jobs.imstat.org/job//75470282>**United States: Lexington, KY****University of Kentucky, Department of Statistics**

Assistant or Associate Professor in Statistics

<https://jobs.imstat.org/job//75394237>

**United States: Boston, MA****Boston University Math & Stat Department**

tenure-track Assistant Professor

<https://jobs.imstat.org/job//75219143>**United States: Boston, MA****Boston University Math & Stat Department**

Tenured Associate Professor or Professor

<https://jobs.imstat.org/job//75219195>**United States: Cambridge, MA****Harvard University, Department of Statistics, Faculty of Arts and Sciences**

Tenure-Track Faculty in Statistics

<https://jobs.imstat.org/job//75059531>**United States: Ann Arbor, MI****University of Michigan**

Tenure-Track Assistant Professor

<https://jobs.imstat.org/job//74592453>**United States: Ann Arbor, MI****University of Michigan, Department of Biostatistics**

Open Faculty Positions in Biostatistics

<https://jobs.imstat.org/job//75106264>**United States: East Lansing, MI****Michigan State University**

Assistant/Associate/Full Professor Tenure System

<https://jobs.imstat.org/job//75325512>**United States: East Lansing, MI****Michigan State University**

Assistant/Associate/Full Professor Tenure System

<https://jobs.imstat.org/job//75470131>**United States: Durham, NC****Duke University, The Fuqua School of Business**

Tenure-Track Faculty Position in Decision Sciences

<https://jobs.imstat.org/job//75056583>**United States: Greenville, NC****East Carolina University**

Assistant Professor, Associate Professor

<https://jobs.imstat.org/job//74879898>**United States: New York, NY****Columbia University in the City of New York, Department of Statistics  
Lecturer in Discipline Position starting Fall 2025**

The Department of Statistics invites applications for a Lecturer in Discipline position to begin July 1, 2025. This is a full-time appointment with multi-year renewal contingent on successful reviews. The position will contribute to the Departmental educational mission at the undergraduate and master's level.

Lecturers in Discipline are officers in the University who meet a programmatic need for instruction in specialized fields. The selected candidates will be expected to teach up to 3 courses per semester. A Ph.D. in Statistics or related field by the date of appointment and a commitment to high-quality teaching at both the undergraduate and MA levels in Statistics and/or Probability are required. Candidates will be expected to participate in the full gamut of statistics education including curriculum improvement, modifying and developing courses, and exploring new strategies for the teaching of statistics. We are particularly seeking candidates with expertise in applied statistics, data science, and the application of statistical methods across a variety of disciplines and sectors.

The Department currently consists of 40 faculty members, 73 PhD students, and over 300 MA students. The Department has been expanding rapidly and, like the University itself, is an extraordinarily vibrant academic community. We are especially interested in candidates who through their research, teaching and/or service will contribute to the diversity and excellence of the academic community. Women and minorities are especially encouraged to apply. For further information about the Department and our programs, please go to our webpage at: <http://www.stat.columbia.edu>

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

**Application Instructions:** All applications must be submitted through Columbia's online Academic Search and Recruiting (ASR) portal [apply.interfolio.com/154160](http://apply.interfolio.com/154160) and must include the following materials: cover letter, curriculum vitae, statement of teaching philosophy, research statement, evidence of teaching effectiveness (teaching evaluations), a sample of course syllabus and the names of three references, who will be asked to upload letters of recommendation on their behalf.

Inquiries may be made to Dood Kalicharan at [dk@stat.columbia.edu](mailto:dk@stat.columbia.edu)

Review of applications begins on **February 1, 2025** and will continue until the position is filled.

**Salary Range or Pay Grade:** \$95,000 - \$100,000

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

**United States: Las Vegas, NV****University of Nevada, Las Vegas**

Assistant Professor in Statistics, Department of Mathematical Sciences [R0140846]

<https://jobs.imstat.org/job//75311386>

**United States: Binghamton, NY****Binghamton University Department of Mathematics and Statistics**

Assistant Professor

<https://jobs.imstat.org/job//75277012>

**United States: Ithaca, NY****Cornell University - ORIE - Ithaca Campus**

Open-Rank Tenure-Track Faculty Position

<https://jobs.imstat.org/job//75372872>

**United States: New York, NY****NYU Stern School of Business**

Assistant Professor of Technology, Operations and Statistics: Statistics Group (tenure-track)

<https://jobs.imstat.org/job//75394258>

**United States: Upton, NY****Brookhaven National Laboratory**

Amalie Emmy Noether Postdoctoral Fellow in Applied Mathematics and Scientific Computing

<https://jobs.imstat.org/job//74939850>

**United States: Columbus, OH****The Ohio State University**

Associate Professor, Biostatistics, Department of Biomedical Informatics College of Medicine

<https://jobs.imstat.org/job//75130721>

**United States: Columbus, OH****The Ohio State University, Department of Statistics**

Multiple open rank tenure-track positions

<https://jobs.imstat.org/job//75207016>

**United States: Philadelphia, PA****Center for Causal Inference**

Causal Inference Postdoctoral Fellow

<https://jobs.imstat.org/job//75106621>

**United States: Philadelphia, PA****University of Pennsylvania, Wharton Department of Statistics and Data Science**

Assistant Professor (tenure-track)

<https://jobs.imstat.org/job//75393557>

**United States: Pittsburgh, PA****University of Pittsburgh, Department of Statistics**

Statistics Professor

<https://jobs.imstat.org/job//75118490>

**United States: Swarthmore, PA****Swarthmore College**

Assistant Professor in Statistics (Tenure-track)

<https://jobs.imstat.org/job//74965381>

**United States: Knoxville, TN****University of Tennessee, Department of Mathematics**

Three Mathematics of AI Tenure Track Positions at the University of Tennessee, Knoxville

<https://jobs.imstat.org/job//75309314>

**United States: Austin, TX****University of Texas at Austin, Department of Statistics and Data Sciences**

Tenured/tenure-track faculty positions in Statistics & Data Sciences

<https://jobs.imstat.org/job//75327481>

**United States: Dallas, TX****Southern Methodist University**

Open-Rank Professor of Statistics & Data Science

<https://jobs.imstat.org/job//74930230>

**United States: Dallas, TX****Southern Methodist University**

Assistant Professor of Statistics & Data Science

<https://jobs.imstat.org/job//74967225>

**United States: Dallas, TX****Southern Methodist University**

C.F. Frenley Professor of Mathematical Sciences




<https://jobs.imstat.org/job//74967227>

**United States: Seattle, WA****University of Washington, Department of Statistics**

Assistant or Associate Teaching Professor in Statistics

<https://jobs.imstat.org/job//75044684>

# International Calendar of Statistical Events



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



## Online and Ongoing series


  **Asia-Pacific Seminar in Probability and Statistics** [w https://sites.google.com/view/apsp/home](https://sites.google.com/view/apsp/home)

  **COPSS–NISS COVID-19 Data Science Webinar series** [w https://www.niss.org/COPSS–NISS-covid-19-data-science-webinar-series](https://www.niss.org/COPSS–NISS-covid-19-data-science-webinar-series)

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

  **One World Probability Seminar** [w https://www.owprobability.org/one-world-probability-seminar](https://www.owprobability.org/one-world-probability-seminar)


  **One World YoungStatS Webinar series** [w https://youngstats.github.io/categories/webinars/](https://youngstats.github.io/categories/webinars/)

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

## November 2024

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

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


 November 21–22: New York City, USA. **23rd Northeast Probability Seminar** [w https://probability.commonscs.cuny.edu/23rd-northeast-probability-seminar/](https://probability.commonscs.cuny.edu/23rd-northeast-probability-seminar/)

## December 2024

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

## January 2025

January 17–18: Gainesville, USA. **Winter Workshop: Computational Methods in Bayesian Statistics** [w https://stat.ufl.edu/winter-workshop/2025-computational-methods-in-bayesian-statistics/](https://stat.ufl.edu/winter-workshop/2025-computational-methods-in-bayesian-statistics/)

 January 20–22: Soesterberg, the Netherlands. **22nd Winter School on Mathematical Finance** [w https://staff.fnwi.uva.nl/a.khedher/winterschool/winterschool.html](https://staff.fnwi.uva.nl/a.khedher/winterschool/winterschool.html)

## February 2025

 February 20–22: Sharjah, United Arab Emirates. **ICMS25: the 4th International Conference on Mathematics and Statistics** [w https://www.aus.edu/conferences/the-fourth-international-conference-on-mathematics-and-statistics](https://www.aus.edu/conferences/the-fourth-international-conference-on-mathematics-and-statistics)


## 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/](https://www.imsi.institute/activities/uncertainty-quantification-and-ai-for-complex-systems/)

 March 11–14: Dresden, Germany. **17th German Probability and Statistics Days (GPSD)** [w https://www.gpsd-2025.de/](https://www.gpsd-2025.de/)

March 23–26: New Orleans, USA. **ENAR 2025 Spring Meeting** [w https://www.enar.org/meetings/spring2025/](https://www.enar.org/meetings/spring2025/)

## June 2025

 June 2–27: Vancouver, Canada. **2025 PIMS–CRM Summer School in Probability** [w https://secure.math.ubc.ca/Links/ssprob25/](https://secure.math.ubc.ca/Links/ssprob25/)

 June 16–20: Singapore. **Bayes Comp 2025** [w https://bayescomp2025.sg](https://bayescomp2025.sg)

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

# International Calendar *continued*

## 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/>

July 21–25: Turin, Italy. 24th European Young Statisticians Meeting **w** <https://sites.google.com/view/eysmtorino2025/home>

## August 2025

 August 2–7: Nashville, TN, USA. IMS Annual Meeting at JSM 2025 **w** [www2.amstat.org/meetings/jsm/2025/](http://www2.amstat.org/meetings/jsm/2025/)



## June 2026

June 1–4: Washington DC, USA. 9th International Workshop in Sequential Methodologies (IWSM) **w** <https://www.american.edu/cas/iwsm2026/>

 June 13–16: Hong Kong, ROC. IMS–APRM2026: IMS Asia Pacific Rim Meeting **w** TBC

June 15–19: Chicago, USA. Stochastic Networks Conference **w** <https://www.chicagobooth.edu/events/stochastic-networks-conference>

## July 2026

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


## August 2026

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

## August 2027

 August 7–12: Chicago, USA. IMS Annual Meeting at JSM 2027 **w** [www.amstat.org/meetings/joint-statistical-meetings](http://www.amstat.org/meetings/joint-statistical-meetings)

## July 2028

 July 24–28: Singapore. Bernoulli–IMS 12th World Congress in Probability and Statistics (including IMS Annual Meeting). **w** TBC

## August 2028

 August 5–10: Philadelphia, USA. JSM 2028 **w** [www.amstat.org/meetings/joint-statistical-meetings](http://www.amstat.org/meetings/joint-statistical-meetings)

## August 2029

 August 4–9: Seattle, USA. IMS Annual Meeting at JSM 2029 **w** [www.amstat.org/meetings/joint-statistical-meetings](http://www.amstat.org/meetings/joint-statistical-meetings)

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You can email the details to Elyse Gustafson at [ims@imstat.org](mailto:ims@imstat.org), or you can submit the details yourself at <https://www.imstat.org/ims-meeting-form/>

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