

June/July 2026

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## National Academy of Sciences

The United States National Academy of Sciences has announced the election of 120 members and 25 international members in recognition of their distinguished and continuing achievements in original research. Those elected this year bring the total number of active members to 2,705 and the total number of international members to 557. (International members are members of the Academy with citizenship outside the United States.)

Among the new NAS members are five IMS members and/or Fellows:



Peter Bartlett

**Peter L. Bartlett:** *professor emeritus, Department of Electrical Engineering and Computer Sciences and Department of Statistics, University of California, Berkeley*



Andrew Gelman

**Jianqing Fan:** *Frederick L. Moore '18 Professor of Finance, professor of statistics and machine learning, and professor of operations research and financial engineering, Department of Operations Research and Financial Engineering and Department of Statistics, Princeton University*



Jianqing Fan

**Andrew Gelman:** *Higgins Professor of Statistics and professor of political science, Department of Statistics and Department of Political Science, Columbia University, New York City*

**Elizaveta (Liza) Levina:** *Vijay Nair Collegiate Professor of Statistics, Department of Statistics, University of Michigan, Ann Arbor*



Liza Levina

**Art B. Owen:** *professor of statistics and Max H. Stein Professor, Department of Statistics, Stanford University (International Member: Canadian)*



Art Owen

The US National Academy of Sciences is a private, nonprofit institution that was established in 1863. It recognizes achievement in science by election to membership, and—with the National Academy of Engineering and the National Academy of Medicine—provides science, engineering, and health policy advice to the federal government and other organizations.

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## IMS Members' News

### Royal Statistical Society Guy Medal to Peter McCullagh

The UK Royal Statistical Society has awarded Professor **Peter McCullagh** the 2026 Guy Medal in Gold for “pivotal contributions to statistical theory both broad in range and exceptional in depth.”



Peter McCullagh

Professor McCullagh, FRS, who is John D. MacArthur Distinguished Service Professor at the University of Chicago, has made wide-ranging contributions to statistical theory and methods. His book, *Tensor Methods in Statistics* (1987), is a pioneering exploitation of tensor methods applied to distributional problems arising in statistics. It contains substantial new results, in particular on the distribution of likelihood-based statistics widely used in applications. His book with John A. Nelder, *Generalized Linear Models* (first edition 1983; second edition 1989), has had a major

direct impact on statistical methods used in many fields of application.

Professor McCullagh previously received the RSS Guy Medal in Bronze in 1983, and in Silver in 2005. Among his other honors are the COPSS Presidents' Award (1990), Fellow of the UK Royal Society (1994), elected member of the American Academy of Arts & Sciences (2002), IMS Medallion Lecturer (1988), IMS Neyman Lecturer (2008), and IMS Fellow (1989).

### Javier Rojo elected Fellow of the American Mathematical Society

IMS Fellow **Javier Rojo**, Indiana University and MD Anderson Cancer Center, is among the 2026 Class of Fellows of the AMS. This honor recognizes AMS members who have made outstanding contributions to the creation, exposition, advancement, communication, and utilization of mathematics. Dr. Rojo is an elected Fellow of the ASA, RSS, and the American Association for the Advancement of Science (AAAS), and is an elected member of the International Statistical Institute (ISI). He received the ASA 2010 Don Owen award. Read more: <https://www.publichealth.indiana.edu/about/directory/Javier-Rojo-jrojo.html>

### Jiaoyang Huang among winners of 2026 Rollo Davidson Prize

The Rollo Davidson Trustees announce the award of the 2026 Rollo Davidson Prize to three recipients: **Giuseppe Cannizzaro** (University of Warwick) for great advances in our understanding of scaling-critical two-dimensional stochastic systems; **Jiaoyang Huang** (University of Pennsylvania) for deep results on edge universality for random matrices and related models; and **Titus Lupu** (Sorbonne Université) for deep contributions to the theory of Gaussian fields, Brownian motion, and isomorphism theorems.

IMS member **Jiaoyang Huang** is currently an Associate Professor in the Department of Statistics and Data Science at the University of Pennsylvania, with a secondary appointment in the Department of Mathematics. Before that, he was a postdoc at Courant Institute of Mathematical Sciences of New York University, and a Junior Fellow at the Simons Society of Fellows from 2020–22. Dr. Huang was a member of the Institute for Advanced Study (IAS) for the 2019–20 academic year. His PhD in mathematics from Harvard University was under the supervision of Professor Horng-Tzer Yau.



Jiaoyang Huang

# IMS Members' News

## Howell Tong elected to Academia Europaea

Professor **Howell Tong** has been elected a member of the Academy of Europe (Mathematics Section) in 2026. Professor Tong is a fellow of the IMS and an emeritus professor of statistics at London School of Economics, a Distinguished Visiting Professor of the Department of Statistics and Data Science at Tsinghua University, China, and the Gregory Chow Distinguished Professor at Xiamen University, China. Professor Tong has been awarded several honors, including: the Guy Medal in Silver from the Royal Statistical Society; the State Natural Science Award (Second Class) of China; and a Distinguished Research Achievement Award from the University of Hong Kong. He was elected as a Foreign Member of the Norwegian Academy of Science and Letters in the Mathematics Group.



Howell Tong

Founded in 1988, the Academia Europaea serves as the “National Academy of Sciences,” and statutory scientific advisor, for the European Union. It was co-founded by the Royal Society (UK) and national academies representing the highest academic standards in countries such as France, Germany, Italy, the Netherlands, and Sweden. It comprises four wings—Humanities and Arts, Social Sciences, Natural Sciences, and Life Sciences—covering over 20 disciplines. It is one of the most extensive and influential international scientific organizations in the world.

## Ulf Grenander Prize: nominations close May 31

Nominations are invited for the Ulf Grenander Prize in Stochastic Theory and Modeling, a distinguished award of the American Mathematical Society.

Established in 2016 and awarded every three years, the prize recognizes exceptional theoretical and applied contributions in stochastic theory and modeling, including seminal work in probabilistic modeling, statistical inference, and related computational methodologies, particularly in the analysis of complex or high-dimensional systems.

Nominations are encouraged of individuals whose work reflects the breadth, depth, and impact exemplified by Ulf Grenander's vision. Nominations (including supporting materials) should be submitted by **May 31, 2026**.

For more information, including about the previous winner Tilmann Gneiting, visit [https://www.ams.org/prizes-awards/paview.cgi?parent\\_id=39](https://www.ams.org/prizes-awards/paview.cgi?parent_id=39).

## Nominations still open for 2027 International Prize in Statistics

Nominations are open through **October 1, 2026**, for the 2027 International Prize in Statistics ([www.statprize.org/index.cfm](http://www.statprize.org/index.cfm)). The prize is awarded for a **major achievement developed through a single contribution or multiple contributions over time**. The prize, which can be awarded to **individuals, teams, or organizations**, is meant to recognize powerful ideas that have led to breakthroughs in statistics and data science and demonstrated impact on applications, methodology, theory, or practice.

Please use this link for information on the nomination process, including the nomination form: <https://www.statprize.org/nominations.cfm>. Direct your questions to [Nominations@StatPrize.org](mailto:Nominations@StatPrize.org) or to Ron Wasserstein: [ron@amstat.org](mailto:ron@amstat.org).



= access published papers online

## IMS Journals and Publications

*Annals of Statistics*: Hans-Georg Müller, Harrison Zhou

<https://imstat.org/aos>

<https://projecteuclid.org/aos>

*Annals of Applied Statistics*: Lexin Li

<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*: Jian Ding, Claudio Landim

<https://imstat.org/aap>

<https://projecteuclid.org/aoap>

*Statistical Science*: Lutz Dümbgen

<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*: Alexandra Carpentier & Arnak Dalalyan

<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*:

Yuguo Chen, Laura M. Sangalli <https://www.amstat.org/ASA/Publications/Journals.aspx>

[log into members' area at www.imstat.org](https://www.amstat.org/ASA/Publications/Journals.aspx)

*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*: Victor Rivero

<http://alea.impa.br/english/index.htm>

<http://alea.impa.br/english/index.htm>

*Annales de l'Institut Henri Poincaré (B)*:

Giambattista Giacomin, Yueyun Hu:

<https://imstat.org/aihph>

<https://projecteuclid.org/aihph>

*Bayesian Analysis*: Igor Prünster

<https://projecteuclid.org/ba>

*Bernoulli*: Kengo Kato

<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, Andrew Spieker

<https://obs.pennpress.org/>

*Probability and Mathematical Statistics*:

Krzysztof Bogdan, Krzysztof Debicki

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

*Stochastic Systems*: Rami Atar

<https://pubsonline.informs.org/journal/stsy>

# IMS Travel Awards 2026: say hello to the winners!

## New Researcher Travel Awards: 24 winners

We are pleased to announce the recipients of the IMS New Researcher Travel Awards for 2026. Each award provides funding to an IMS member who has received their PhD within the past five years, to attend any IMS-sponsored or co-sponsored meeting where they will present a paper or poster. The following 24 IMS members received the 2026 IMS New Researcher Travel Awards:



**Soham Bhattacharya**  
University of Florida



**Soham Bonnerjee**  
University of Chicago



**Isaac Gibbs**  
University of California,  
Berkeley



**Yongyi Guo**  
University of Wisconsin–  
Madison



**Lucas Kania**  
Carnegie Mellon  
University



**Daoyuan Lai**  
The University of Hong  
Kong (research at  
Columbia University)



**Mengqi Lou**  
University of Chicago  
(research at Georgia  
Institute of Technology)



**Junyoung Park**  
University of Michigan



**Kwangmoon Park**  
University of Pennsylvania



**Jingkun Qiu**  
Peking University



**Giovanni Rebaudo**  
University of Turin and  
Collegio Carlo Alberto  
(research at University of  
Texas at Austin)



**Paul Rosa**  
University of Cambridge



**Yilin Song**  
Columbia University  
Mailman School of Public  
Health (research at  
University of Washington)



**Jianbin Tan**  
Duke University



**Yuxin Tao**  
Southern University of  
Science and Technology



**Jiayi Tong**  
Johns Hopkins University



**Ian Waudby-Smith**  
University of California,  
Berkeley (research at  
Carnegie Mellon Univ.)



**Kejin Wu**  
Loyola University Chicago



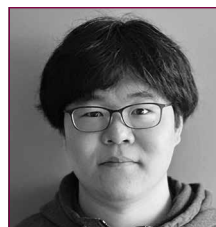
**Qiong Wu**  
University of Pittsburgh  
(research at University of  
Pennsylvania)



**Pei Zhang**  
National Cancer Institute  
(research at University of  
Maryland, College Park)



**Xinyu Zhang**  
East China Normal  
University



**Yi Zhang**  
Washington University in  
St. Louis



**Zhong Zheng**  
University of Pennsylvania



**Jin Zhu**  
University of Birmingham

## Hannan Graduate Student Travel Awards: 22 winners

The IMS is also pleased to announce these winners of the 2026 Hannan Graduate Student Travel Awards. The 22 award recipients—IMS members who are graduate students (seeking a Master's or PhD degree)—can use the funds to attend any IMS-sponsored or co-sponsored meeting, and possibly present a paper or a poster. If you see any of these people at a meeting, do say hello!



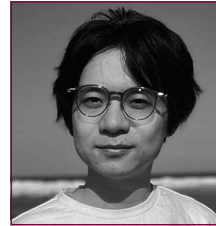
**Rajdeep Brahma**  
University of Illinois  
Urbana-Champaign



**Jinhang Chai**  
Princeton University



**Onrina Chandra**  
Rutgers, The State  
University of New Jersey



**Chengyu Cui**  
University of Michigan at  
Ann Arbor



**Mei Dong**  
University of Toronto



**Shubhangi Ghosh**  
Columbia University



**Tingxuan Han**  
Tsinghua University



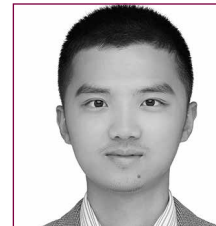
**Yan He**  
University of Toronto



**Yichen Hu**  
University of California,  
Davis



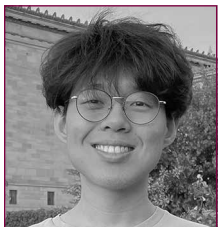
**Chengzhu Huang**  
Columbia University



**Dong Huang**  
Tsinghua University



**Valentin Kilian**  
University of Oxford



**Junu Lee**  
The University of  
Pennsylvania



**Qilong Lu**  
Peking University



**Yuying Lu**  
Columbia University



**Mahdi Nouraie**  
Macquarie University



**Seoun Park**  
Seoul National University



**Somjit Roy**  
Texas A&M University

### Are you a grad student or new researcher? Apply for a travel award for next year!

If you are a **New Researcher** (i.e. you received your PhD in the past five years), you can apply for a 2027 IMS New Researcher Travel Award, to attend any IMS-sponsored or co-sponsored meeting where you will present a paper or poster. Applications are due by February 1, 2027.

Details about the award can be found at <https://imstat.org/ims-awards/ims-new-researcher-travel-award/>

The Hannan Graduate Student Travel Award is open to **IMS student members**. Applications for next year's awards must also be submitted by February 1, 2027. For more information about the Hannan Graduate Student Travel Award, please visit the IMS awards page at <https://imstat.org/ims-awards/ims-hannan-graduate-student-travel-award/>



**Gözde Sert**  
Texas A&M University



**Edward Shao**  
University of Michigan at  
Ann Arbor



**Jiaxin Shi**  
Peking University



**Wookyeong Song**  
University of California,  
Davis

# Veridical Data Science panel

**Ruobin Gong**, Rutgers University, was one of the members of a panel at last year's JSM, which discussed the teaching of data science using the Veridical Data Science framework developed by Bin Yu and Rebecca L. Barter. Ruobin writes:

## Data Science in the Classroom: Let's Get Real

Do you feel overwhelmed by the shape-shifting challenges in data science and look for ways to effectuate change in the classroom? Rest assured that you are not alone. In a recent panel interview with the *Journal of Statistics and Data Science Education*, five educators shared their own struggles and revelations.

The participants were **Matteo Bonvini** (Rutgers University, New Brunswick), **Andrew Bray** (University of California, Berkeley), **Ruobin Gong** (Rutgers University, New Brunswick), and **Bin Yu** (University of California, Berkeley); it was moderated by **Joshua Rosenberg** (University of Tennessee, Knoxville).

The interview is an extended conversation among the panelists on teaching data science using the Veridical Data Science (VDS) framework, which builds on the panel that took place during the 2025 Joint Statistical Meeting in Nashville, TN [you may recall Ruobin wrote about this in her "Sound the Gong" column in the December 2025 issue: <https://imstat.org/2025/11/15/>].

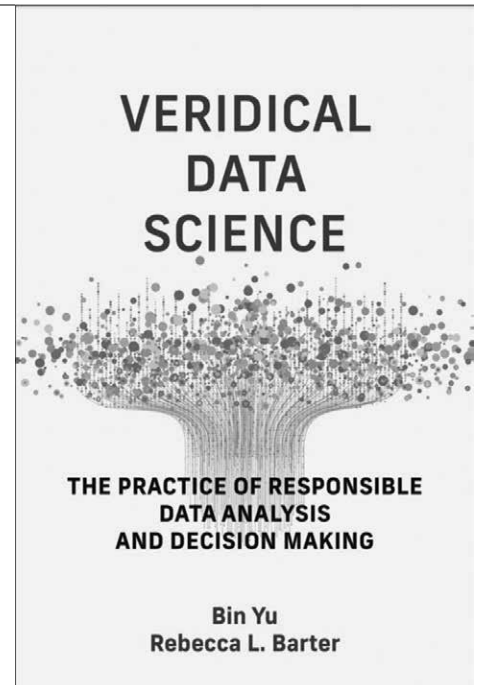
sound-the-gong-data-science-realism/).

Among the things discussed in the interview are the panelists' distinct personal paths to data science, the evolving pedagogical objectives of data science education, the unique values added by the VDS framework, as well as how it meshes with the modern reality in which LLM-based assistance becomes indispensable.

To read the whole interview, visit <https://www.tandfonline.com/doi/full/10.1080/26939169.2026.2632565>

## Topics covered in the interview:

1. The courses where we use Veridical Data Science (VDS)
2. How we came to adopt VDS in our classrooms
3. Our personal paths to Data Science
4. Goal of Data Science education
5. Comparing Data Science and Statistics
6. Challenges in teaching Data Science
7. What do we want students entering the class we teach to know
8. Teaching Data Science with VDS
9. Challenges brought by LLMs When shifting a Data Science class to one that is VDS-flavored
10. Where does VDS stand in the landscape of Data Science frameworks?
11. GAISE and Data Science
12. More on the experience of Data Science in K–12
13. On the Data Science education literature



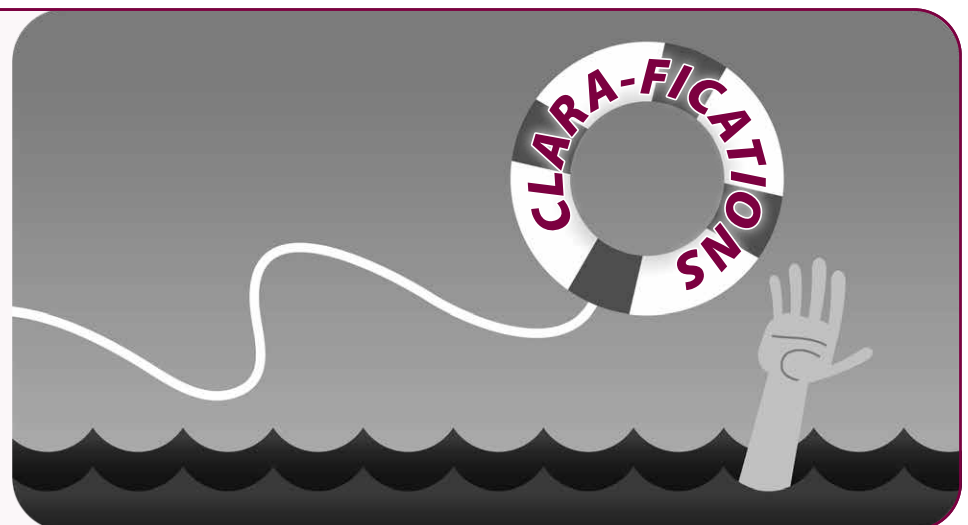
You can read an Open Access web version of *Veridical Data Science*, by Bin Yu and Rebecca L. Barter, at <https://vdsbook.com/> [CC-BY-NC-ND]. A print version of this book is published by MIT Press.

*If you need some career advice...*

*If you feel like you're drowning when your fellow students are swimming...*

## Ask for Clara-fication!

Email your question or conundrum to [bulletin@imstat.org](mailto:bulletin@imstat.org), we'll anonymize it, and publish Clara Grazian's helpful response (and not your name!).



## Hand Writing **Mistaken Mappings**

**David Hand**, Imperial College London, writes on the problem of translating substantive questions to statistical questions:

If we wanted to decide whether the total weight of passengers on a plane exceeded that allowed by the airline given the flight conditions, we could gather all of them together on a giant scale and see if they were over the permitted weight. Or, we could multiply an estimated “average passenger weight” by the number of passengers on the plane (as airlines actually do). In doing this, we have moved away from the actual physical situation we are studying, representing it in numerical terms and using mathematical and statistical tools to find an answer, which we then map back to the physical world (perhaps in the form “ask for volunteers to leave the flight”).

That vignette captures the essence of statistical (and, more generally, applied mathematical) methods. We map the real-world problem (be it the physical world, economic world, psychological world, or whatever) to a formal representation, typically in numerical terms, carry out our manipulations on the numbers, draw some numerical conclusions, and map those conclusions back to the real world. Our formal representation permits deduction and inference much more easily than would corresponding manipulations in the real world (getting all those passengers onto the giant scales).

The core notions here are *mapping* and *representation*, and it is obvious that the accuracy and validity of our conclusions relies on the veracity of these notions. Moreover, not all aspects of the real world will be relevant to our objectives. Passenger names, food preferences, or ages are irrelevant to our objective of deciding if the plane is safe to take off. In any statistical approach to a problem, we must decide what is relevant, what should be mapped to the numbers which we will analyse, *what variables we should measure*.

And we must decide how to construct a good representation. Multiplying individual passenger weights together would not be helpful. We need to add them. Addition here is representing the notion of passengers being together on the plane, at least for our question about total weight. We must decide what our model should look like and how an algorithm should be constructed so that it parallels the question and the world being studied

This is obvious, indeed so obvious that it may not need saying. Yet sometimes insufficient care is taken in the mapping, resulting in mistaken statistical conclusions. Or, insufficient care is taken to ensure that the statistical question answers the substantive question.

Simpson’s paradox provides an illustration in which the need to ensure valid mapping between the two questions is obvious. This “paradox” arises when comparing two populations, and is the phenomenon in which *every* subgroup of population A has a larger mean than the corresponding subgroup of population B so that so

that one concludes that “A is greater than B”, but where the overall mean of A is smaller than the overall mean of B. The apparent contradiction arises from the fact that the two analyses are actually answering different questions. The first asks about the average conditional difference between A and B, conditioning on the groups, while the second asks about the unconditional difference. They are different questions, so we should not be surprised when they give different answers. What we should ask ourselves is which of these two questions properly represents the substantive question?

When presented with the two possible mappings, as in the Simpson’s paradox illustration, one can make a choice about which (if either) properly represents the substantive question. But what about situations in which just one mapping is presented? Could it be that sometimes people have rushed in to use familiar or standard approaches even though they are inaccurate representations of the substantive question? The reader may be familiar with the “fallacy of the instrument” (in picturesque terms, the “hammer fallacy”: *if all you have is a hammer, everything looks like a nail*).

Some examples are familiar: misinterpreting the meaning of regression coefficients; using the  $F$ -measure to evaluate a machine learning system, when diagnostic odds ratio, partial AUC, or one the host of other measures better captures the relevant aspect of performance; misinterpreting group behaviour as individual behaviour as in the ecological fallacy; the use of  $p$ -values as measures of effect size; the misinterpretation of  $p$ -values as the probability that the null hypothesis is true; interpreting correlation as causation (despite the familiar adage!); using single-link cluster analysis, with its potential long straggling clusters, when what is really wanted are compact spherical clusters, such as those produced by  $k$ -means analysis; and so on. But others are less familiar, and may not even have been recognised, not least by the researchers conducting the study. My 2026 book *What’s the Question? Deciding What You Really Want to Know* explores this issue in depth. It gives a wide variety of examples, ranging from simple questions relating to averages to complex questions relating to sophisticated statistical tools, covering those mentioned above and others. If even averages have been misused and misunderstood, misrepresenting the substantive question, then how much greater is there opportunity for misuse and misunderstanding with advanced tools?

In the previous issue, **Marianne Huebner** wrote about the importance of initial data analysis (IDA). I certainly agree with her about its importance, and about how it can protect against mistaken conclusions. But there is a critical step which is even more “initial” than IDA. This is the step of statistical question formulation: *of mapping the substantive question to the statistical question*.

## Marianne's Measures **Pain Points in Preparing Papers**

**Marianne Huebner**, Michigan State University, has a plan to protect you from having to take these statistical painkillers for your data headaches. Devise your data collection to ensure that your statistics are transparent, reproducible, and trustworthy. She writes:

Imagine you contribute to a manuscript reporting an observational study on health outcomes. The analyses are complete, and the tables and figures look great. Now you are preparing a paper. At this stage, “pain points” may emerge. (These will be familiar to statisticians across projects and institutions.) Also, some of these issues may resurface during peer review, when analytic decisions must be clarified or revisited. They are not just frustrations that slow down the process of getting a paper submitted; they are warning signs of lack of transparency and weakened trustworthiness. Fortunately, many of these pain points are preventable through prespecified statistical analysis plans and reproducible workflows. Below are several common examples; this list is *not* comprehensive.

**Example:** You aim to report the study following the STROBE guidelines [1]. As part of this, you need to transparently describe how the final analysis sample was constructed. A flow diagram can be used to document how many participants were assessed for eligibility, how many excluded (and why), and what the final analysis sample size was. During the analysis process you may have made changes, for example, dropped some cases because it turned out they should have been excluded for one reason or another, or a variable intended for the modeling was not usable.

**Pain point:** If these exclusions were not tracked systematically in the analysis script, it can be frustrating to reconstruct the exact sequence of steps and ensure that all numbers add up to the sample size shown in the participant flow diagram; discrepancies will be evident to attentive readers.

**Example:** The Results section typically begins with a description of the analysis population and a table describing the variables included in the models—often referred to as “Table 1.”

**Pain point:** If the number of missing values for each variable was not recorded initially, revising an otherwise carefully constructed table can be tiresome.

**Example:** You may realize that the models were not fit using the full dataset described in Table 1. This can occur when some covariates have missing values or additional exclusion criteria are applied during analysis.

**Pain point:** Table 1 must be revised to reflect the population used for inference, including updated frequencies, proportions,

means, quantiles, or missingness, which is an arduous process. Mismatches between tables and analyses can undermine clarity and credibility.

**Example:** Modeling introduces further complexity. Suppose several covariates have missing values. Although the proportion missing for any single variable is small and a complete-case analysis seems justified, the combination of variables may result in a much larger proportion of missingness that needs to be addressed in the analysis. If the outcome is an event, then the event size needs to be reported also. Each model may include a different set of variables or be fit to a different subset of the data and therefore requires reporting its own sample size/event size [2].

**Pain point:** If this information has not been tracked, it must be reconstructed from scripts and output and possibly repeating analyses.

**Example:** The Discussion section requires interpreting findings and situating them within the existing literature. During this process, you may encounter prior studies that you had not considered earlier—studies that adjusted for an important variable omitted from your analyses, posed related but distinct research questions, or highlighted future research directions you had not anticipated. You suddenly feel uncertain about whether you asked all the right questions and truly “*mapped the substantive research question to the appropriate statistical question*,” as David Hand writes on the previous page.

**Pain point:** If the newly identified variable is deemed essential, or if a newly encountered research question is relevant and can be addressed with your existing data, additional analyses become necessary. This requires fitting new models and constructing new results tables in order to be able to compare to these existing studies.

At first glance, these pain points seem like inconveniences: unanticipated detours that delay writing or submission. Addressing these issues is not optional. Anticipating—and preventing—these problems is part of our professional responsibilities and ethical research practice. They reflect a commitment to:

**Transparency:** Making analytic decisions visible and understandable, rather than reconstructing them after the fact.





**Reproducibility:** Ensuring that analyses can be repeated or extended—including by your future self.

**Trustworthiness:** Demonstrating that the analytic process and reported results are credible, any limitations and potential bias are described, and claims are supported by evidence from the data [3].

Practical strategies for minimizing these pain points include developing a statistical analysis plan, conducting careful initial data analysis, systematically documenting exclusions and missingness, and maintaining reproducible workflows [4]. Such practices not only streamline manuscript preparation but also substantially reduce the burden—and risk—associated with responding to reviewer requests for clarification, reanalysis, or expanded reporting. Although some challenges in manuscript preparation or in addressing reviewer comments may be out of your control, these approaches greatly reduce the likelihood that preventable problems surface precisely when a manuscript is ready for submission.

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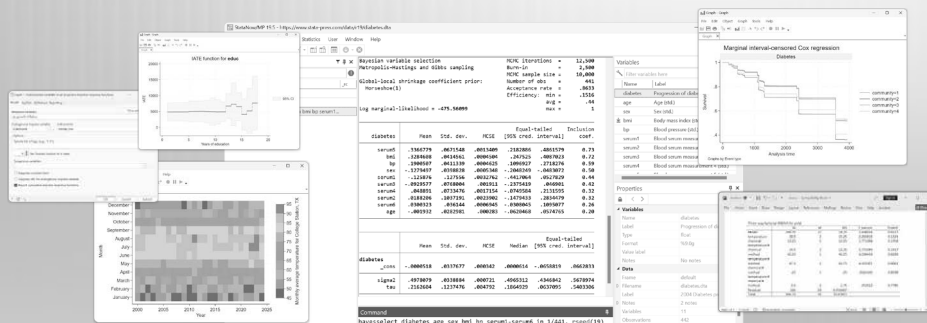
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## Lines from Layla **Basics Before Brilliance**

**Layla Parast**, University of Texas at Austin, has some advice for beginner researchers. The small things, done well *and* reliably, really do matter. She writes:

Every year, I talk to undergraduates who are interested in “doing research.” This is, in general, a very good instinct. Research is one of the best ways to actually learn what statistics is, beyond problem sets and exams. It is also one of the fastest ways to figure out what you do, and do not, enjoy.

That said, there is a persistent mismatch between what students *think* research is and what it actually is.

A common misconception is that research is just harder homework. It is not. In homework, someone knows the answer. In research, no one does. That is the entire point. Sometimes the problem is too hard, sometimes the idea fails, and sometimes the result is that there is no result. This is not a bug; it is the job.

So, if you are an undergraduate trying to get involved in research, let me offer some advice. None of this guidance is complicated, but it is apparently necessary.

First, **engage**. Go to talks. You will not understand most of what is happening. That is fine. In fact, that is expected. Look, I don’t even understand those talks. The goal is not immediate comprehension; it is exposure. But if you go, actually go. Listen. Try to follow something, literally, anything. If you ask a question, ask it because you are curious, not because you want to sound clever. (These are not the same thing, and faculty can tell the difference immediately.)

Second, **figure out what you like**. Not in some abstract, touchy-feely sense, but in a very practical one. What kinds of tasks do you enjoy? Writing code? Proving things? Cleaning messy data? Reading papers? Research is made up of many small, sometimes tedious components. If you hate all of them, this may not be your path. If you like

even one of them, that’s a starting point.

Third, and this is the one I wish I could put in bold, underline, and repeat three times: **be reliable**. If you say you will do something by Friday, do it by Friday. Not Friday evening with an apology, not Saturday morning with an explanation. Friday. From a faculty perspective, I can teach you almost anything technical. I cannot teach you to meet a deadline. Reliability is the entire currency of early research opportunities.

Closely related: **do small things well**. Early on, you are not being asked to solve open problems. You are being asked to run code, check a derivation, reproduce a figure. These tasks are not trivial. They are tests of trust. If you do them carefully and completely, you will be given more interesting things. If you do them carelessly, you will not.

Another small but important point: **communicate like a professional**. This does not mean writing formal emails with elaborate greetings. It means being organized and respectful of time. If you run into ten small issues, do not send ten emails. Keep a list. Think about them. Try to solve them. Then send one clear, structured message. Even better, bring them to a meeting. And before asking “why did this fail?”, spend a little time trying to answer that question yourself. When you do ask, say what you tried. This turns a vague question into a productive conversation.

Also: **write things down**. Like, with a pen (or pencil). On this thing that we call - paper. Let’s say it together, PAPER. You will forget what you did, why you did it, and what worked. Everyone does. The difference is whether you planned for that.

Now, a brief comment on ego. Leave it at the door. You will be wrong frequently (also, I will be wrong, frequently). That is not a reflection of your ability; it is the nature of the work. What does matter is **honesty**. If you did not finish something, say so. If you do not understand something, say so. Pretending otherwise does not make the problem go away—it just makes it harder to fix later, often for someone else, like me.

Finally, understand what the process looks like. Early research is mostly learning and failing. Often in that order, sometimes simultaneously. You try things that don’t work. This is, counterintuitively, a good sign. It usually means the question is interesting. Over time, if you stick with it, you move toward more independence: identifying ideas, proposing approaches, owning pieces of the project. But that transition only happens if the foundation is solid.

All of this boils down to something very simple. Faculty are making an investment when they take on a student, undergraduate or graduate. Students are making an investment in return. When it works well, both sides benefit.

So, if you are looking for research opportunities, you don’t need to be the smartest person in the room. You do not need to know everything in advance. You do need to show up, do what you said you would do, think a little before asking for help, and take the work seriously.

It is a surprisingly effective strategy. And, for reasons that remain unclear, a surprisingly uncommon one.

# IMS Blackwell Lecture preview: **Cun-Hui Zhang**

Cun-Hui Zhang, Distinguished Professor of Statistics at Rutgers University, is a Fellow of the Institute of Mathematical Statistics and of the American Statistical Association. His research interests include high-dimensional data, machine learning, empirical Bayes, time series, nonparametric methods, multivariate analysis, survival data and biostatistics, functional MRI, closed loop diabetes control, and network tomography.

This Blackwell Lecture will be delivered at the IMS 2026 meeting, in Salzburg, July 6–9, 2026. See the program at <https://ims2026.github.io/IMS2026/program.html>



## Empirical Bayes for Dependent Data

Empirical Bayes is founded on a simple but powerful idea: when many related statistical decision problems are observed together, pooling information across them can substantially outperform procedures that treat each problem separately. Since its introduction more than 75 years ago, this principle has had a profound impact on statistical thinking and practice. Yet most of its classical development has focused on independent observations. In contrast, modern applications, ranging from spatial epidemiology to large-scale digital platforms, increasingly generate compound decision problems with dependent data. In such settings, the value of pooling is often evident, but the key challenge is how to do so effectively without detailed knowledge of the underlying dependence structure.

A key observation, present since the inception of empirical Bayes but often overlooked, is that the fundamental theorem connecting compound decision problems to the oracle Bayes formulation does not require independence. In this setting, the oracle prior is the empirical distribution of the unknown parameters across related decision problems, representing the ideal target for information pooling. Building on this observation, we develop a marginal likelihood framework for empirical Bayes under dependence.

In this marginal likelihood approach, the effect of dependence can be quantified through the largest eigenvalue of the correlation matrix of the data. This quantity serves as a discount factor on the effective sample size, measuring how much dependence reduces the usable information available for pooling. Importantly, for the nonlinear procedures we propose, the dependence conditions required are no stronger than those needed for linear estimators. Thus, substantial empirical Bayes gains remain achievable even in broad dependent settings.

For Gaussian mean estimation, the proposed approach achieves nearly parametric rates for estimating the score function, yielding regret relative to the oracle estimator of nearly reciprocal sample-size order. Parallel to Stein's unbiased risk estimate (SURE), the method also provides an estimator of the compound risk with bias of nearly reciprocal sample-size order, enabling confidence regions for the full mean vector. Beyond point estimation, the marginal

likelihood framework automatically provides consistent estimators of the oracle prior, posterior distributions, and Bayes credible intervals. Although the general convergence rates are logarithmic for these more challenging targets, the marginal likelihood method adapts to atomic sparsity in the oracle prior, achieving substantially faster nonparametric rates when the oracle prior has relatively few support points.

The framework is also robust to model misspecification. In the Gaussian setting, the theory requires only pairwise Gaussian assumptions rather than a full joint Gaussian model, broadening applicability when Gaussianity is only approximate. Beyond Gaussian models, the marginal likelihood approach also extends naturally to dependent Poisson observations, where the largest eigenvalue of the correlation matrix again serves as the effective sample size discount factor.

Taken together, these results significantly broaden the scope of empirical Bayes, extending it from classical independent settings to modern dependent data while preserving much of its statistical efficiency. More broadly, they show that the power of information pooling remains robust under dependence, provided that dependence is properly quantified and controlled.

## The IMS Blackwell Award and Lecture

The IMS established the Blackwell Award and Lecture to reflect one of David Blackwell's many interests in probability, statistics, and/or the allied fields of game theory and information theory. The lecture is presented by a person whose contributions have been fundamental to the development of one of these areas. David Blackwell (1919–2010) was an outstanding mathematician, probabilist and statistician, an inspiring teacher in all these areas, and a much-loved person. Widely recognized for his achievements, he was the first African American inducted into the US National Academy of Sciences, and an Honorary Fellow of the UK Royal Statistical Society. He served as President of the IMS and of the Bernoulli Society, and Vice-President of the ISI and the ASA.



## IMS Medallion Lecture preview: Philip A. Ernst

Philip A. Ernst is Chair in Statistics and Royal Society Wolfson Fellow in the Department of Mathematics, Imperial College London. He earned his PhD in Statistics in 2014 from The Wharton School of the University of Pennsylvania. His research interests include exact distribution theory, mathematical finance, optimal stopping, queueing systems, statistical inference for stochastic processes, and stochastic control. Ernst's work has been funded by the U.S. Army Research Office (ARO), the U.S. Office of Naval Research (ONR), the National Science Foundation (NSF), The British Academy, and The Royal Society. He is the recipient of numerous international and national research awards, including: a 2026 IMS Medallion Award & Lecture, a 2023 Lebesgue Chair, a 2023 British Academy/Wolfson Fellowship, a 2022 Royal Society Wolfson Fellowship, a 2022 COPSS Leadership Academy (now "Emerging Leader") Award, the 2020 (inaugural) INFORMS Donald P. Gaver, Jr. Early Career Award for Excellence in Operations Research, a 2018 U.S. Army Research Office (ARO) Young Investigator Award, and the 2018 IMS Tweedie New Researcher Award. He is also a Class of 2025 IMS Fellow. Before joining Imperial College London in 2022, Ernst was Professor of Statistics at Rice University, where he was awarded seven teaching awards in his eight years of employment (including the George R. Brown Prize for Excellence in Teaching: the university's most prestigious teaching award). He presently serves as Deputy Editor of *Stochastics* and as Associate Editor for six journals, including *Journal of the American Statistical Association*, *Theory and Methods* and *Mathematics of Operations Research*. This Medallion lecture will be delivered at the 45th Conference on Stochastic Processes and their Applications at Cornell University, Ithaca, USA, June 14–20, 2026.



### Yule's "nonsense correlation": Moments, density, and tests of independence for non-stationary Gaussian processes

In 1926, G. Udny Yule considered the following problem: given two independent and identically distributed random walks of length  $n$ , what is the distribution of their empirical (Pearson) correlation coefficient  $\rho_n$ ? Yule observed empirically that this statistic  $\rho_n$  does not converge to 0, but tends to be frequently far from 0 and heavily dispersed in  $(-1, 1)$ , leading him to call it "nonsense correlation."

This led to a formulation of two concrete questions, each of which would remain open for more than 90 years:

- (i) Find (analytically) the variance of  $\rho_n$  as  $n$  tends towards infinity; and
- (ii) Find (analytically) the higher order moments and the density of  $\rho_n$  as  $n$  tends towards infinity.

A straightforward application of the classical Donsker's theorem shows that the limiting law for  $\rho_n$  is the natural empirical correlation  $\rho$  of two independent Wiener processes on  $[0, 1]$ .

In 2017, Ernst, Shepp, and Wyner closed question (i) by calculating  $\text{Var}(\rho)$  analytically as an explicit double integral, numerically equal approximately to 0.2405. This talk begins where Ernst et al. (2017) leaves off. I shall explain how Ernst, Rogers, and Zhou (2025) succeeded in closing question (ii) by calculating all moments of  $\rho$ , explicitly up to order 16, leading, for the first time, to an approximation to the limiting density of Yule's nonsense correlation.

I will then turn to an investigation of the fluctuations around the convergence of  $\rho_n$  to  $\rho$  for both standard Brownian motion and long-memory fractional Brownian motion. I will present the key elements of a surprising result of Ernst, Viens, and Yan (2025) by

which the fluctuations are of order  $1/n$  rather than  $1/\sqrt{n}$ , and by which the asymptotic distribution is in the so-called second Wiener chaos, whereas its conditional asymptotic law given the data is actually Gaussian. This subtle phenomenon illustrates a conditional central limit theorem (CLT), where the asymptotic variance is data-dependent and there is a non-zero asymptotic mean which is also data dependent. The expressions for these asymptotic first and second moments are explicit, given via bilinear functionals of the data's two paths, combined with a conditional delta method. The limit in law in the second Wiener chaos can be represented via the same trivariate bilinear functional of the data, and a further trivariate bilinear functional which depends linearly on the data and linearly on an auxiliary pair of Wiener processes independent of the data. The presence of this auxiliary pair causes the limit to be in law and not in a stronger sense; it also explains why the limit can be interpreted as a conditional CLT.

To the best of our knowledge, these results lead to the first statistical test of independence for pairs of non-stationary and non-i.i.d. Gaussian processes, leveraging a diffuse limit in law, even extending to processes with long-range dependent increments.

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# IMS Medallion Lecture preview: **Jelle Goeman**

Jelle Goeman is professor of biostatistics at Leiden University Medical Center. He obtained his PhD at Leiden University in 2006 under supervision of Hans van Houwelingen and Sara van de Geer. His research interest is in high-dimensional data, in particular in testing and multiple testing problems that arise in such data, and he has made several theoretical and methodological contributions in this area. His frequent involvement in medical research, including genomics and neuroimaging, has made sure that novel methods align well with the needs of applied researchers. His focus in these areas has been to allow researchers to postpone as many analysis decisions as possible until after seeing the data.



This Medallion Lecture will be given at the IMS Annual Meeting (in Salzburg, July 6–9, 2026).

## Principles and Flexibility in Multiple Testing

Designing a multiple testing procedure is generally a difficult task. However, when the goal of the method is to control the familywise error rate there is a general principle, the closure principle, that method designers can rely on. The closure principle says that every method controlling familywise error rate is either a special case of closed testing, or it can be uniformly improved by a closed testing procedure. This reduces the complex task of designing any multiple testing procedure to the task of designing a closed testing procedure. To design such a procedure, a researcher has to choose how to combine the evidence against any subcollection of the hypotheses of interest into a single  $p$ -value, and solve a discrete numerical optimization problem.

In this presentation we show how the closure principle can be generalized from just familywise error rate control to any error rate of interest. We show that any multiple testing procedure controlling any error rate can be written as a special case of a generalization of the closed testing procedure that uses  $e$ -values instead of  $p$ -values. To design a multiple testing procedure, a method designer therefore only needs to choose how to combine the evidence against each subcollection of the hypotheses of interest in an  $e$ -value, and solve a discrete numerical optimization problem.

The  $e$ -Closure principle is a very powerful tool for method design. It allows for relatively easy design of procedures for novel and exotic error rates. For example, if hypotheses come sequentially, a practitioner may accept one expected error per  $K$  consecutive hypotheses. Designing a valid multiple testing procedure for such an error rate is relatively easy with  $e$ -Closure.

Moreover, when we rebuild existing multiple testing procedures using  $e$ -Closure we often obtain strictly more powerful variants of these existing methods. This was known for familywise error rate, where e.g. Holm's procedure can be obtained by rebuilding the Bonferroni procedure using closed testing. We demonstrate that such improvements are also possible with False Discovery Rate controlling methods, as we illustrate with the Benjamini–Yekutieli (BH) procedure and the  $e$ -BH method of Wang and Ramdas. The resulting improvements are typically more substantial than those obtained by Holm over Bonferroni.

Additionally, the  $e$ -Closure principle adds a novel aspect of flexibility to multiple testing. Classical multiple testing methods, such as Benjamini–Hochberg, return a single set of rejected hypotheses for which the error rate is controlled. Methods designed using  $e$ -Closure, in contrast, generally return a collection of such sets. Error

control is simultaneous over all sets in the collection, implying that the researcher may use a data-driven choice of a rejected set or report several of them, and still control the error rate. This flexibility is very helpful in high-dimensional data contexts such as neuroimaging. In neuroimaging, null hypotheses correspond to voxels (3D pixels) in the brain. Rejected sets are therefore subsets of the brain. If such a subset consists of several unconnected clusters, false discovery control over the entire subset is not so interesting, but  $e$ -Closure can offer false discovery rate control for each cluster individually and simultaneously.

Finally, since  $e$ -Closure is a single principle that can be used for all error rates, it allows cross-error rate conclusions. In fact, the control offered by  $e$ -Closure is simultaneous over all error rates. This means that researchers may switch error rates after seeing the data, moving, e.g. from familywise error rate control to false discovery rate control if the amount of signal in the data is less than expected. This data-adaptive flexibility even extends, in some cases, to a post hoc choice of the  $\alpha$ -level at which the error rate is controlled.

# IMS Medallion Lecture preview: Lester Mackey

Lester Mackey is a Senior Principal Researcher at Microsoft Research, where he develops machine learning methods, models, and theory for large-scale learning tasks driven by applications from weather and climate forecasting, healthcare, and the social good. Lester co-organized the second place team in the Netflix Prize competition; won the Prize4Life ALS disease progression prediction challenge; won prizes for temperature and precipitation forecasting in the yearlong real-time Subseasonal Climate Forecast Rodeo; and received best paper awards from the ACM Conference on Programming Language Design and Implementation, the Conference on Neural Information Processing Systems, and the International Conference on Machine Learning. He is a 2023 MacArthur Fellow, a Fellow of the IMS and ASA, an elected member of the COPSS Leadership Academy, and the recipient of the 2023 Ethel Newbold Prize and the 2025 COPSS Presidents' Award. This lecture will be delivered at JSM 2026 in Boston, August 1–6, 2026.



## Better-than-i.i.d. Sampling

How do you succinctly summarize a probability distribution? The gold standard is to sample  $n$  representative points either independently from the target or from a convergent Markov chain. However, these standard sampling strategies are not especially concise: since  $n$  independent points yield an order  $1/\sqrt{n}$  approximation, ten thousand points are required for 1% relative error and 1 million points for 0.1% error. Such bloated sample representations preclude applications with critically expensive downstream costs like computational cardiology, where a 1000-CPU-hour tissue or organ simulation is required for each sample point.

This lecture will introduce three tools for summarizing a probability distribution more effectively than independent sampling or standard Markov chain Monte Carlo (MCMC).

### 1. Kernel thinning

Given an initial  $n$ -point summary (for example, from independent sampling or MCMC), kernel thinning finds a subset of only  $\sqrt{n}$  points with  $O(\sqrt{\log(n)/n})$  integration error. In contrast, an independent sample of size  $\sqrt{n}$  would suffer substantially larger  $\Omega(n^{-1/4})$  integration error. This improved rate of approximation is reminiscent of quasi-Monte Carlo but applies to general target distributions.

### 2. Stein kernel thinning

Often, one only has access to a biased sample of points targeting the wrong distribution. Such biases are a common occurrence in MCMC-based inference due to tempering (where one targets a less peaked and more dispersed distribution to achieve faster mixing), burn-in (where the initial state of a Markov chain biases the distribution of chain iterates), or approximate MCMC (where one runs a cheaper approximate Markov chain to avoid the prohibitive costs of an exact MCMC algorithm). In these settings, our aim is to transform the potentially large and biased input sample into a compact and faithful representation of the target. Stein kernel thinning achieves this by optimizing a kernel Stein discrepancy, a quality measure based on Stein's method that allows one to directly

measure and hence correct for errors against the target distribution.

### 3. Compress++

Natively, kernel thinning runs in  $n^2$  time which is tolerable for moderate-sized problems but prohibitive for large sample size  $n$ . Our final tool, Compress++, resolves this issue by converting any unbiased quadratic-time thinning algorithm into a near-linear-time algorithm with error inflated by no more than a factor of 4. The same simple meta-procedure also accelerates super-quadratic thinning algorithms by square-rooting their runtime.

These tools are especially well-suited for tasks that incur substantial downstream costs per summary point and have been used to compress uncertainty in digital twins of human hearts, to develop fast, high-quality attention approximations in transformers, to accelerate stochastic gradient training through reordering, and to powerfully test for distributional differences in near-linear time.

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# IMS Medallion Lecture preview: **Bodhisattva Sen**

Bodhi Sen is Professor and Chair of Statistics at Columbia University, New York. He completed his PhD in Statistics from the University of Michigan, Ann Arbor, in 2008. Prior to that, he was a student at the Indian Statistical Institute, Kolkata, where he received his Bachelors (2002) and Masters (2004) in Statistics. His core statistical research centers around nonparametrics—function estimation (with special emphasis on shape constrained estimation), theory of optimal transport and its applications to statistics, empirical Bayes procedures, kernel methods, likelihood and bootstrap based inference, etc. His honors include the NSF CAREER award (2012) and the Young Statistical Scientist Award (YSSA) in the Theory and Methods category from the International Indian Statistical Association (IISA). He is an IMS Fellow. This Medallion Lecture will be given at the IMS Annual Meeting (in Salzburg, July 6–9, 2026).



## Wasserstein-Cramér-Rao Theory of Unbiased Estimation

Statistics has a long romance with geometry. As a parameter varies, a model traces a path through probability distributions, and classical theory measures that path using the Fisher–Rao (Rao, 1945) geometry, closely tied to the Hellinger distance (Amari and Nagaoka, 2000). The Fisher information is the metric that this local Hellinger geometry induces on parameter space, while differentiability in quadratic mean (van der Vaart, 1998) expresses the smoothness of the resulting path of distributions. From this viewpoint, the key step in the standard proof of the Cramér–Rao inequality—what a statistician might regard simply as differentiation under the integral sign—can be understood as a consequence of the absolute continuity of the model in that geometry, a theme that will reappear throughout the talk.

The classical theory of unbiased estimation is organized around variance, which measures the instability of an estimator across independent resamples from the same distribution. That is a natural benchmark, but it is not the only one. For an estimator  $T(X_1, \dots, X_n)$ , we propose a different measure of instability, which we call the *sensitivity* of  $T$ :  $\mathbb{S}(T) = E[\sum_{i=1}^n \|\nabla_{x_i} T(X_1, \dots, X_n)\|^2]$ . This quantity measures the total expected effect on the estimator  $T$  of infinitesimal perturbations of the sample points. In problems with moving support, boundary effects, or small data perturbations, this kind of stability can matter just

as much as variance.

Once sensitivity becomes the quantity of interest, Wasserstein geometry enters naturally. In this lecture I revisit three classical achievements—the Cramér–Rao lower bound, exact efficiency in exponential families, and asymptotic efficiency of maximum likelihood—and ask: what becomes of this picture when Fisher–Rao/Hellinger geometry is replaced by *Wasserstein geometry*?

A parallel theory emerges. In much the same way that variance is tied to Fisher–Rao/Hellinger geometry, sensitivity is tied to Wasserstein geometry. There is a Wasserstein–Cramér–Rao lower bound, which gives a universal lower bound on the sensitivity of unbiased estimators in terms of a Wasserstein information matrix (Li and Zhao, 2023). The bound applies to models that are absolutely continuous in Wasserstein space, or, equivalently, whose local evolution is described by the continuity equation (Ambrosio, Gigli, and Savaré, 2008). An exact-efficiency theory follows from the equality case of Cauchy–Schwarz, giving rise to transport families—the Wasserstein analogue of exponential families. And there is an asymptotically sensitivity-efficient estimation strategy: the Wasserstein projection estimator, obtained by projecting the empirical measure onto the model in Wasserstein distance, just as maximum likelihood may be viewed as a kind of KL projection.

One simple example where the theory

becomes especially vivid is for the family  $\text{Uniform}[0, \theta]$ ,  $\theta > 0$ . This model lies outside the usual classical Cramér–Rao framework because its support changes with  $\theta$ , so the standard score-based regularity condition fails. In Wasserstein geometry, however, the family is absolutely continuous, and one can derive a meaningful lower bound on the sensitivity of any unbiased estimator of  $\theta$ . The example exposes a sharp tension between variance and sensitivity. The maximum likelihood estimator, namely the sample maximum, has excellent variance but is highly sensitive to infinitesimal perturbations: a single nudge to the largest observation moves the estimate by the same amount. By contrast, the Wasserstein projection estimator has an explicit form as a weighted average of order statistics and is asymptotically sensitivity-efficient.

More broadly, the lecture is an invitation to rethink efficiency geometrically. Variance is a powerful notion of instability, but it is not always the one most relevant to modern inferential problems. When stability under small perturbations is itself part of what we want from an estimator, Wasserstein geometry offers a natural alternative framework.

This is joint work with Nicolás García Trillos (University of Wisconsin–Madison) and Adam Jaffe (Columbia University), based on our paper “Wasserstein–Cramér–Rao Theory of Unbiased Estimation” (García Trillos, Jaffe and Sen, 2025).

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## IMS Medallion Lecture preview: **Ian McKeague**



Ian McKeague is Professor Emeritus of Biostatistics at Columbia University in the City of New York, and Distinguished Visiting Professor at the City University of Hong Kong. He has served as a co-editor of the *Journal of the American Statistical Association*, and will soon start a term as a co-editor of *Statistica Sinica*. He is a Fellow of the IMS and the ASA. His research focuses on inference for stochastic processes, post-selection inference, and functional data analysis, with diverse applications in biomedical settings. In particular, he has developed inferential methods for selecting high-dimensional predictors and causal mediators of survival outcomes, for the analysis of growth trajectories, and for the analysis of wearable device data. His work has also included studies of Bayesian/Markov chain Monte Carlo methods with applications in ocean circulation inverse problems, signature verification, and statistical problems inspired by relativity and quantum physics. This lecture will be given at the 2026 IMS Annual Meeting.

### What we can know from complex functional data

The first part of the talk will consist of an informal discussion of the nature of novelty in statistics. Recent headlines ask: *Does A.I. think? Can A.I. become conscious?* Fortunately, so far at least, consciousness is necessary for a statistician. The famous remark of John Tukey that “the best thing about being a statistician is that you get to play in everyone’s backyard” essentially made the same point, and that being a statistician gives the freedom to pursue an interest in almost any field, given you have a slight corner on something. This point has a parallel in the thinking of the British writer Geoff Dyer. For instance, in discussing his memoir *The Missing of the Somme* at a recent event at Columbia, Dyer remarked that his initial idea for the book was “a great insight of such originality that nobody had had it before ... what I realized about the First World War is that it took place in the past.” I will argue for what I call the Tukey–Dyer method: the inspired choice of “a slight corner on something” (in Dyer’s words) as the starting point for creative work, even when you are not an expert. I will discuss the surprising role that this method can play in searching for novel ideas in statistics, and how it has occasionally led to some projects I have been involved with.

The second part of the talk will discuss some specific examples of the Tukey–Dyer method, and, in particular, how a paper concerning inference for non-smooth functional data having sample paths of bounded variation [1] was inspired in this way. This paper originated in the need to understand complex wearable device data

collected in a Columbia-based study of an experimental therapy for mitochondrial disease, a group of disorders that affect the body’s ability to produce energy. The resulting clinical paper [2] provided a bias-adjusted outcome measure of acceleration across a range of subjects’ activities and has played a role in assessing the efficacy of a nucleoside therapy (recently approved by the FDA) for thymidine kinase 2 deficiency, an ultra-rare autosomal recessive mitochondrial disease. In addition, I will briefly touch on the potential, in terms of what we can know in a statistical sense, of having access to complex functional data collected along causal paths in a possibly non-smooth metric spacetime. This relaxes the smooth Lorentzian framework of Einstein’s field equations to allow rougher settings, and is related to similar problems for standard metric space-valued random objects. In this connection, I will also discuss how a statistical approach might be useful in addressing the question (recently raised in the physics literature) of whether the discreteness of spacetime has an observable signature.

### References

- [1] Chang, H-W, and McKeague, IW (2022). Empirical Likelihood-based Inference for Functional Means with Application to Wearable Device Data. *Journal of the Royal Statistical Society, Series B*, 84(5), pp.1947–1968
- [2] McKeague, IW, et al. (2025). Assessing a Mitochondrial Disease Treatment via a Novel Statistical Technique for Accelerometer Data. *Annals of Clinical and Translational Neurology*, 12: 2505–2513



## Student Puzzle 61

Deadline: August 15, 2026

**Student Puzzle editor Anirban DasGupta sets these puzzles, returning to a familiar pattern. He says, “We state here three problems of a diverse nature for you. We will consider responses that solve just one of the three problems, but please consider sending solutions to more than one problem. We will be thrilled if you do!” Here are the three problems:**

**Puzzle 61.1** Consider i.i.d. observations  $X_1, X_2, \dots$  from a distribution on the real line having a density. Call  $X_i$  a record value if  $X_i > X_j$  for all  $j < i$ ; we assume  $X_1$  to be a record value. For  $n \geq 1$ , let  $N_n$  denote the number of record values observed among  $\{X_1, \dots, X_n\}$ .

- Find the mean and variance of  $N_n$  for  $n = 10$ .
- Calculate approximately the value of  $P(N_n > 8)$  for  $n = 100$ .

**Puzzle 61.2** Let  $\mathbf{Z}$  have a  $p$ -dimensional multivariate standard normal distribution. Denote the  $p$ -dimensional unit Euclidean ball by  $\mathcal{B}$ . Prove or disprove that  $\lim_{p \rightarrow \infty} E[\sup_{\mathbf{c} \in \mathcal{B}} \mathbf{c}' \mathbf{Z}] / \sqrt{p}$  exists. Can you say what is the value of this limit, if a limit exists?

**Puzzle 61.3** Suppose  $X_1, X_2, \dots, X_n$  are i.i.d. observations from  $N(\theta, \theta)$ ,  $\theta > 0$ . Prove that for any convex loss function, the sample mean  $\bar{X}$  and the sample variance  $s^2$  are inadmissible estimators of  $\theta$ .

*Student members of IMS are invited to submit solutions to [bulletin@imstat.org](mailto: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.*

## Caucus for Women in Statistics and Data Science

Here’s the latest news from the Caucus for Women in Statistics and Data Science (<https://cwstat.org>):

### Fifth Annual International Day for Women in Statistics and Data Science Conference

We are pleased to share some updates about the 5th Annual IDWSDS Conference, taking place online on October 6th, 2026. Abstract submission is open. Please remember the following key dates:

- June 30: deadline for all program submissions
- August 15: registration opens for all speakers and attendees

IDWSDS features three types of program submissions:

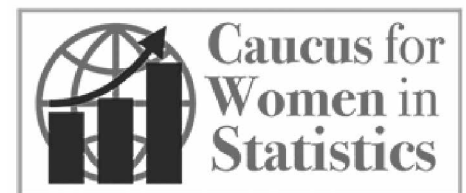
**Plenary Talks** (*new for 2026!*) are 30-minute solo presentations (including Q&A) on a technical topic of interest to the conference community. If your proposal is not accepted for a plenary talk, you may choose to be considered for a 15-minute talk.

**Invited Sessions** are 60 minutes with exactly four confirmed speakers (15 minutes each), organized around a cohesive theme or topic. All speakers must be confirmed before submission.

**Contributed Talks** are 15-minute individual presentations. They may be grouped into themed sessions or added to invited sessions by the program committee. Read the full submission details and submit your proposal at <https://www.idwsds.org/join-the-program/>.

**Sponsorship Opportunities:** Be part of CWS’s mission to empower women in statistics and data science. By becoming a sponsor, your brand will gain visibility across multiple platforms, including our conference website, social media posts, and YouTube videos. See <https://www.idwsds.org/sponsorship/>.

Any questions about the conference, please reach out to [info@idwsds.org](mailto:info@idwsds.org).



*Supporting an Inclusive Statistics and Data Science Community*

### Upcoming CWS Events:

- June 5 at 1pm ET: June Social Hour
- June 8 at 4pm ET: Webinar on AI use in grant proposals
- June 23 at 8pm ET: GISTER and CWS webinar
- July 14 at 1pm ET: Webinar on the new ASA Data Science Certificate
- August 2–7: CWS events at JSM Boston
- September planning includes a webinar on preparation to be a PhD student; a research webinar organized by our country representative committee; and a webinar by Dr. Leann Long on “Career Trajectory and Applying for Big Grants”.

Follow us on social media and contact us at [cws@cwstat.org](mailto:cws@cwstat.org) for more information.

# OBITUARY: William S. Cleveland

## 1943–2026

WILLIAM S. CLEVELAND, the Shanti S. Gupta Distinguished Professor of Statistics and Courtesy Professor of Computer Science at Purdue University, passed away on March 27, 2026, at the age of 83. A pioneering statistician and visionary scholar, Bill transformed the way generations of researchers think about data, graphics, and scientific inquiry. His work helped establish data visualization as a rigorous intellectual discipline, and his broader vision of statistics as a field grounded in learning from data helped shape what we now call data science.

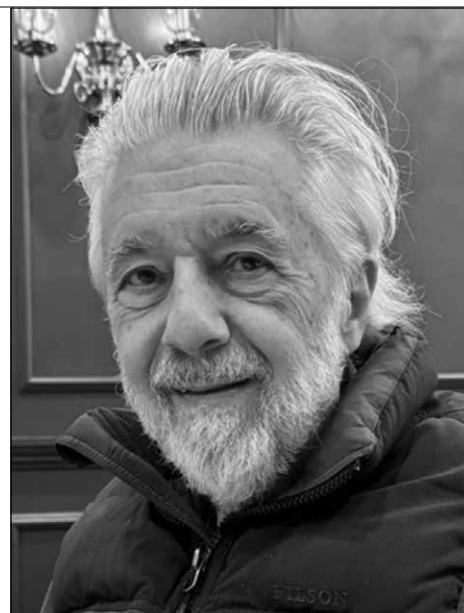
Born in Sussex, New Jersey, on January 24, 1943, Bill studied mathematics at Princeton University and earned his PhD in statistics from Yale University in 1969 under Leonard J. Savage. He began his career at Bell Laboratories, where he became a Distinguished Member of Technical Staff and served for 12 years as head of the Statistics Research Department. At Bell Labs, Bill worked alongside some of the most influential thinkers in modern statistics and computing, contributed to the development of the S programming language, and advanced a culture of hands-on data analysis that would leave a lasting mark on the field. He joined Purdue in 2004 and was later named Shanti S. Gupta Distinguished Professor of Statistics.

Bill's research contributions were foundational. He was internationally known for his work in local regression, nonparametric smoothing, graphical perception, and statistical computing. His books *The Elements of Graphing Data* and *Visualizing Data* became classics, teaching scientists not merely how to draw graphs, but how to think clearly and honestly with

data. His scholarship combined mathematical care, computational innovation, and extraordinary practical insight. Bill was also extraordinary for the breadth of his vision. In a 2001 publication, he gave one of the earliest and most influential articulations of “data science” as an expansion of statistics, integrating computing, subject-matter knowledge, and analytic thinking. What many now regard as a new field, Bill recognized and framed with exceptional clarity decades ago. His ideas anticipated the transformation of statistics in the twenty-first century and continue to shape how universities, industries, and scientists approach data-driven inquiry.

At Purdue, Bill brought distinction, intellectual breadth, and generosity of spirit to the Department of Statistics and the wider University. He was a scholar of uncommon originality, but also a valued colleague and mentor whose insight and encouragement influenced many faculty, students, and collaborators. His work connected statistics with computer science, machine learning, visual perception, environmental science, and other domains, reflecting his conviction that the most important statistical ideas emerge through engagement with real scientific problems.

Bill received many honors in recognition of his profound impact on the discipline, including election as a Fellow of the IMS [elected in 1999, “For path-breaking work in data visualization and smoothing that has affected how people think about and approach their data”] and of the American Statistical Association (ASA). He received the ASA Lifetime Achievement Award in Graphics and Computing, the Parzen Prize for Statistical Innovation, and an honorary



William S. “Bill” Cleveland

doctorate from Hasselt University; he was an IMS Medallion Lecturer in 1983.

Yet those who knew him will remember not only the brilliance of his accomplishments, but also his clarity of thought, generosity, vision, and humanity. Purdue's Department of Statistics has lost an extraordinary colleague, and the statistical sciences have lost one of their great modern architects. His legacy will endure in the methods he created, the field he helped define, and the many people whose thinking he changed for the better.

.....  
*Written by Xiao Wang,  
 Department Head, and J.O. Berger  
 & M.E. Bock Professor of Statistics,  
 Department of Statistics,  
 Purdue University*

# OBITUARY: Stephen Portnoy

## 1948–2026

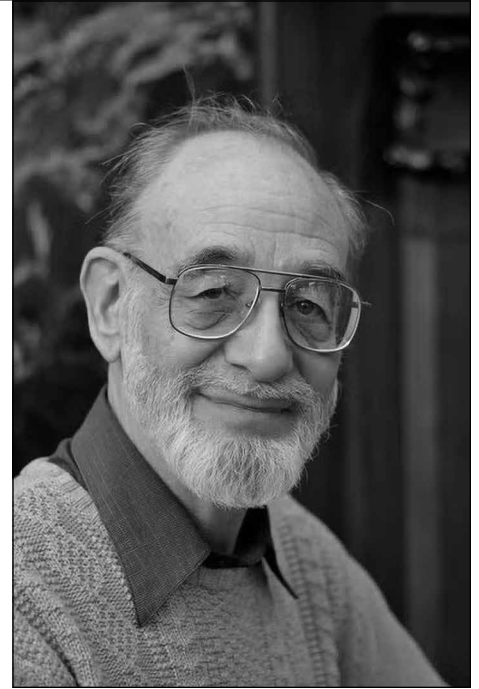
On December 28, 2025 our distinguished friend and colleague Stephen Portnoy passed away at the age of 83. Stephen was a founding member of the Department of Statistics at the University of Illinois at Urbana-Champaign and an influential contributor to the international research community of mathematical statistics throughout his long career. He was a Fellow of the IMS and the ASA and recipient of the prestigious International Franqui Professorship at the Université Libre de Bruxelles in 2005.

Stephen Portnoy was born in Kankakee, Illinois, in 1942, attended high school in Menlo Park, California, earned an undergraduate degree in mathematics at MIT, and a PhD in Statistics at Stanford in 1969 under Charles Stein. Until 1974 he was an Assistant Professor at Harvard University. He joined the math department at UIUC in 1974 and following the formation of the Statistics Department became Professor of Statistics until his retirement in 2002. After moving to Oregon in 2016, he became Adjunct Professor of Statistics at Portland State University. Steve remained active in research even after his retirement. He co-edited the flagship journal of the ASA, the *Journal of the American Statistical Association (Theory & Methods)*, from 2005–08. His most recent publication appeared in 2022 on canonical quantile regression.

Following the lead of Stein, Steve's early work focused on decision theory and admissibility. However, his 1977 paper on “robustness in dependent situations” marked a shift toward the emerging field of robust statistics and provided a new rationale for redescending M-estimators. In the 1980s he began a series of fundamental

papers on “large- $p$ ” asymptotics that anticipated the contemporary profusion of work on high-dimensional statistics. These papers established conditions under which regression estimators with  $p$  parameters and  $n$  observations would be consistent and asymptotically Gaussian when  $p^2/n$  was large. Toward the end of the 1980s Steve became interested in quantile regression and together with Roger Koenker, Jana Jurečková, Xuming He, and others, began to explore various new directions. Formal theory for linear combinations of regression quantiles led to new proposals for adaptive estimation of regression parameters and some dramatic improvements in computational methods. Expanding on the work of Jurečková and Gutenbrunner that connected the dual variables of quantile regression optimization problem to Hájek rank score statistics, new proposals for robust tests for linear model parameters were suggested. Penalty methods for nonparametric estimation of conditional quantile functions employing total variation penalties were also introduced. His 1997 paper with Koenker published in *Statistical Science*, known as “the Gaussian hare and the Laplacian tortoise,” made a convincing case for the efficient computation of quantile regression with large-scale data.

Steve's 2003 paper on “censored regression quantiles” introduced a new approach to the analysis of survival data. Exploiting the idea that the univariate Kaplan–Meier estimator could be interpreted as redistributing censored probability mass to the right, he devised a recursive algorithm for extending this idea to the regression setting. This work has been highly influential and has spawned an extensive literature.



Stephen Portnoy

Throughout his career Steve was also engaged in collaborative research on applied topics ranging from evolutionary biology to biblical studies. He was primary advisor for 13 PhD students, including Xuming He, and secondary advisor for another 10. He was instrumental in the formation of the statistics department at UIUC and was always an engaged and constructive member of the faculty. He was an inspirational figure for both of us and for his many friends and colleagues internationally and will be greatly missed.

Written by Roger Koenker and Xuming He,  
University of Illinois at Urbana-Champaign

A conversation with Stephen Portnoy conducted by Xuming He and Xiaofeng Shao appeared in *Statistical Science* in 2022, which you can read at <https://doi.org/10.1214/21-ST5845>

# From Participation to Impact: Advancing Statistical Capacity in Africa

Yehenew Kifle (University of Maryland, Baltimore County) is the conference chair for the **Ninth African International Conference on Statistics (2026 AIC)** to be held at Strathmore University in Kenya from June 29 to July 3, 2026. He writes with some background on the AIC series: The African International Conference on Statistics (AIC) has

become a powerful continent-wide platform to advance statistical science, build human capital, and strengthen academic institutions in Africa. Since its small-scale launch in 2014, AIC has evolved into a sustained engine for capacity building, collaboration, and long-term academic development.

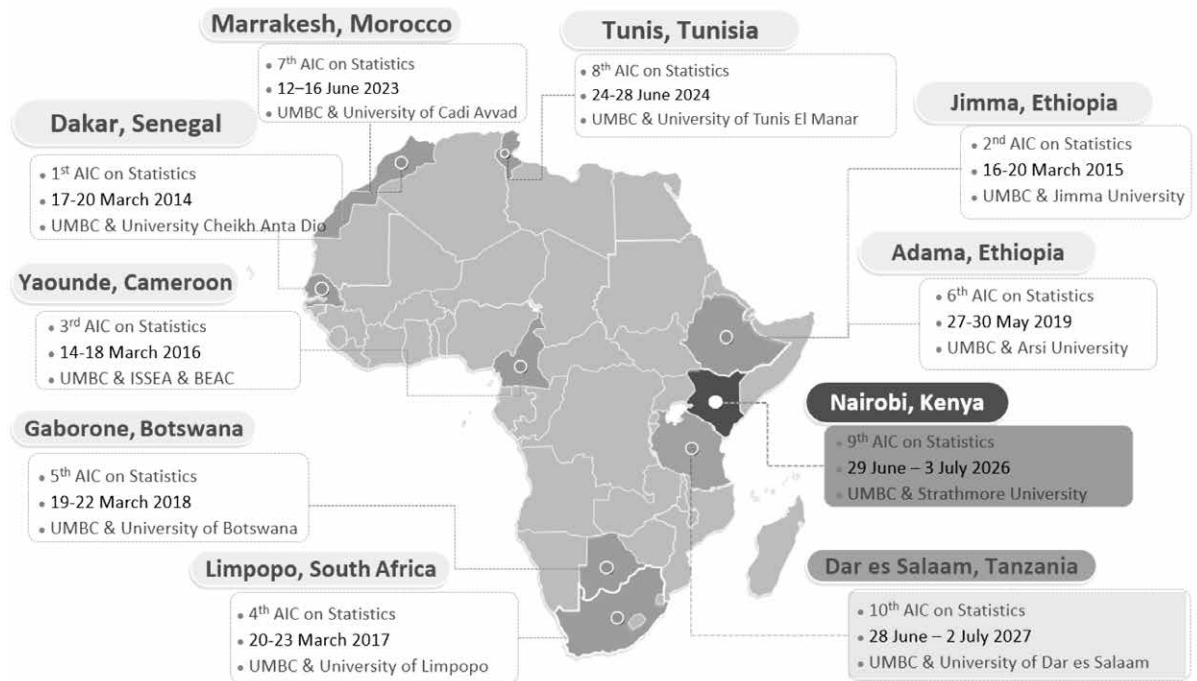
AIC's strength lies in its design. Its rotating, Africa-centered model, spanning countries such as Senegal, Ethiopia, Cameroon, South Africa, Botswana, Morocco, and Tunisia, ensures that access to global statistical engagement is not confined to a single location. Instead, it brings opportunity directly to local African institutions, enabling universities across the continent to host, lead, and benefit. This structure reduces geographic barriers while fostering ownership and institutional visibility.

At the core of AIC is a strong emphasis on training and building the

skills of the next generation of African statisticians. Each conference integrates pre-conference workshops designed for graduate students and early-career faculty, providing hands-on exposure to modern statistical methods and data science tools. AIC also promotes inclusive academic development, including initiatives aimed at empowering women in statistics through leadership and professional development workshops. These efforts expand access, strengthen networks, and contribute to a more inclusive statistical community. These opportunities are particularly impactful in settings where access to advanced training is limited. This commitment is further strengthened in the upcoming **AIC-2026, which will feature a specialized workshop on "Artificial Intelligence for Advanced Statistical Analysis"**. Supported by the American Statistical Association (ASA) and the IMS, the workshop is specifically

designed for African statisticians, particularly PhD students and early-career faculty. This initiative reflects AIC's forward-looking vision of equipping African researchers with the tools needed to engage in contemporary statistical topics.

AIC's contributions extend beyond training into long-term academic investment. Each conference supports host African institutions through the donation of advanced statistics textbooks, strengthening graduate-level teaching and research infrastructure. This ensures that the benefits of AIC persist well beyond the conference itself. Moreover, the most compelling measure of AIC's success is its contribution to academic pathways and leadership development. Through mentorship and sustained collaboration, many participants have secured fully funded PhD opportunities at leading institutions around the world. Importantly, several of these scholars



Locations of the African International Conference on Statistics (AIC) from its inaugural conference in Senegal in 2014, to this year's AIC in Kenya and next year's AIC in Tanzania, highlighting its rotating model

return to African universities as faculty and researchers, contributing to local capacity and creating a multiplier effect across the continent. AIC is thus helping to build a self-sustaining pipeline of highly trained statisticians.

Equally significant is AIC’s role as a global connector. Through partnerships with organizations such as ASA and IMS, the conference has facilitated joint research, co-supervision of graduate students, and long-term institutional collaboration. A notable strength is the active involvement of African statisticians in the diaspora, who take leadership roles in organizing invited sessions, and contributing to the scientific program.

At the same time, AIC continues to expand its focus on increasing invited and keynote speakers based within Africa, ensuring that emerging statisticians can engage

with and be inspired by strong role models.

Funding from ASA and IMS is primarily directed toward strengthening conference infrastructure, supporting local accommodation for participants from Africa, and running conference workshops. This support is especially focused on participants from the host country and the broader region, where the impact on access and capacity building is greatest. While AIC’s long-standing tradition is that invited speakers cover their own international travel expenses, the conference provides local accommodation for a select number of international invited speakers, ensuring both broad participation and high-quality scientific engagement. This partnership has enabled AIC to significantly strengthen participation across the continent, as evidenced by the strong and growing registration for AIC-2026. The conference continues

to attract participants from East, West, North, and Southern Africa, demonstrating an expanding continental footprint and increasing engagement [see the map below left].

Beyond individual development, AIC has contributed to institutional transformation. Collaborations initiated through the conference have led to joint PhD programs, faculty exchanges, and sustained partnerships between African and international universities. These outcomes underscore a central point: AIC is not merely a conference, it is a platform for building durable academic ecosystems.

Looking ahead, the 2026 AIC at Strathmore University in Kenya represents a significant milestone. With strong participation from across the continent, targeted training initiatives, and continued international collaboration, AIC is well positioned to deepen its impact in graduate education, research, and regional integration.

AIC offers a compelling model for how scientific initiatives can drive meaningful change. Its achievements are tangible: training early-career statisticians, strengthening institutions through resources and partnerships, building global research networks, promoting inclusivity, and developing a growing pipeline of African statistical leaders. Overall, the story of AIC is not one of limitation, but of progress, investment, and transformation. It reflects what is possible when a conference is designed not just to convene, but to build. While AIC has made strong progress, there is still more to be done. We invite all statisticians, especially those with strong connections to Africa, to join future AIC conferences and contribute to building a lasting and transformative impact.

For additional information, please contact the Conference Chair, **Yehenew Kifle**, Department of Mathematics and Statistics, University of Maryland, Baltimore County, USA: [yehenew@umbc.edu](mailto:yehenew@umbc.edu)

Registered African participants for the 9th AIC, as of April 2026



# Recent papers: IMS-supported/affiliated journals

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

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

### Volume 62, Number 1, February 2026

Lace expansion and mean-field behavior for the random connection model . . . . .	M. HEYDENREICH, R. V. D. HOFSTAD, G. LAST AND K. MATZKE; 1–67
Gaussian deconvolution and the lace expansion for spread-out models . . . . .	Y. LIU AND G. SLADE; 68–85
Universal 'winner-takes-it-all' phenomenon in scale-free random graphs . . . . .	R. VAN DER HOFSTAD; 86–109
Mixing of the symmetric beta-binomial splitting process on arbitrary graphs . . . . .	R. PYMAR AND N. RIVERA; 110–145
Sharp convergence to equilibrium for the SSEP with reservoirs . . . . .	P. GONÇALVES, M. JARA, R. MARINHO AND O. MENEZES; 146–165
Sausage volume of the random string and survival in a medium of Poisson traps . . . . .	S. ATHREYA, M. JOSEPH AND C. MUELLER; 166–194
A Gaussian convexity for logarithmic moment generating functions with applications in spin glasses . . . . .	W.-K. CHEN; 195–206
Edge universality of sparse random matrices . . . . .	J. HUANG AND H.-T. YAU; 207–244
What is a $p$ -adic Dyson Brownian motion? . . . . .	R. VAN PESKI; 245–262
Biorthogonal measures, polymer partition functions, and random matrices . . . . .	M. CAFASSO AND T. CLAEYS; 263–295
Gaussian beta ensembles: The perfect freezing transition and its characterization in terms of Beurling–Landau densities . . . . .	Y. AMEUR, F. MARCECA AND J. L. ROMERO; 296–327
About the asymptotic behaviour of the martingale associated with the Vertex Reinforced Jump Process on trees and $\mathbb{Z}^d$ . . . . .	V. RAPENNE; 328–362
Convergences of looptrees coded by excursions . . . . .	R. KHANFIR; 363–408
Height and contour processes of Crump–Mode–Jagers forests (III): The binary, homogeneous universality class . . . . .	E. SCHERTZER AND F. SIMATOS; 409–433
Quenched invariance principle for biased random walks in random conductances in the sub-ballistic regime . . . . .	A. FRIBERGH, T. LIONS AND C. SCALI; 434–486
Non-atomicity of the extremal decomposition of the free state for finite-spin models on Cayley trees . . . . .	L. COQUILLE, C. KÜLSKE AND A. LE NY; 487–504
Localized bounds on log-derivatives of the heat kernel on incomplete Riemannian manifolds . . . . .	R. W. NEEL AND L. SACCHELLI; 505–522
Local times of deterministic paths and self-similar processes with stationary increments as normalized numbers of interval crossings . . . . .	W. M. BEDNORZ, P. DAS AND R. M. ŁOCHOWSKI; 523–547
On the robustness of spatial quantiles . . . . .	D. KONEN AND D. PAINDAVEINE; 548–581
Wasserstein posterior contraction rates in non-dominated Bayesian nonparametric models . . . . .	F. CAMERLENGHI, E. DOLERA, S. FAVARO AND E. MAININI; 582–606
Strong existence and uniqueness of solutions of SDEs with time dependent Kato class coefficients . . . . .	S. YANG AND T. ZHANG; 607–637
Independent projections of diffusions: Gradient flows for variational inference and optimal mean field approximations . . . . .	D. LACKER; 638–666
Poisson equations with locally-Lipschitz coefficients and uniform in time averaging for stochastic differential equations via strong exponential stability . . . . .	D. CRISAN, P. DOBSON, B. D. GODDARD, M. OTTOBRE AND I. SOUTTAR; 667–721
Differentiability of the shape function for directed polymers in continuous space . . . . .	Y. BAKHTIN AND D. DOW; 722–746
Finitely dependent random colorings of bounded degree graphs . . . . .	Á. TIMÁR; 747–750

## Observational Studies

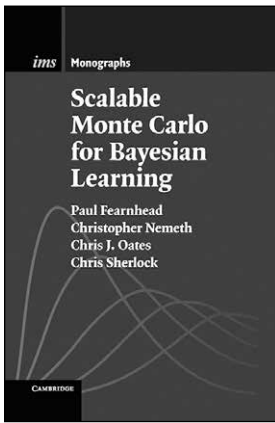
*Observational Studies*, an IMS affiliated journal, is an open-access, peer-reviewed journal that publishes manuscripts on all aspects of observational studies, including study protocols, methodologies, descriptions of data sets, software and analyses of observational studies. The Co-Editors-in-Chief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

### Volume 11, Number 1, 2025

On Identification of Optimal Dynamic Treatment Regimes with Proxies of Hidden Confounders . . . . .	JEFFREY ZHANG, ERIC TCHETGEN TCHETGEN; 1–15
Causal Mediation Analysis for Effect Heterogeneity . . . . .	JIAQING ZHANG, LINDA VALERI; 17–41
Matching with Multiple Criteria and Its Application to Health Disparities Research . . . . .	CHANG CHEN, ZHIYU QIAN, BO ZHANG; 43–65
Outcome-Assisted Multiple Imputation of Missing Treatments . . . . .	JOSEPH FELDMAN, JEROME P. REITER; 67–90
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Monotonicity Test: An R Package for Efficient Nonparametric Monotonicity Testing . . . . .	DYLAN HUYNH, LAYLA PARAST; 123–141

*The Institute of Mathematical Statistics presents*

# *IMS MONOGRAPHS*



## ***Scalable Monte Carlo for Bayesian Learning***

Paul Fearnhead, Christopher Nemeth, Chris J. Oates, Chris Sherlock

A graduate-level introduction to advanced topics in Markov chain Monte Carlo (MCMC), as applied broadly in the Bayesian computational context. The topics covered have emerged as recently as the last decade and include stochastic gradient MCMC, non-reversible MCMC, continuous time MCMC, and new techniques for convergence assessment.

A particular focus is on cutting-edge methods that are scalable with respect to either the amount of data, or the data dimension, motivated by the emerging high-priority application areas in machine learning and AI. Examples are woven throughout the text to demonstrate how scalable Bayesian learning methods can be implemented.

This text could form the basis for a course and is sure to be an invaluable resource for researchers in the field.

Paul Fearnhead is Professor of Statistics at Lancaster University, with research interests in Bayesian and Computational Statistics. Christopher Nemeth is Professor of Statistics at Lancaster University, working at the interface of Statistics and Machine Learning, with a focus on probabilistic modelling and the development of new computational tools for statistical inference. Chris J. Oates leads a team working in the areas of Computational Statistics and Probabilistic Machine Learning at Newcastle University. Chris Sherlock is Professor of Statistics at Lancaster University; he has worked in data assimilation, numerical modelling and software engineering, and now in computationally intensive Bayesian statistics.

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# [www.imstat.org/cup](http://www.imstat.org/cup)

Cambridge University Press, with the Institute of Mathematical Statistics, established the *IMS Monographs* and *IMS Textbooks* series of high-quality books. The series editors are Yingying Fan (Coordinating Editor, 2024–27), Ramon van Handel (Probability), Rahul Mazumder (Algorithms) and Po-Ling Loh (Statistics).

# IMS meetings around the world

## Joint Statistical Meetings

### 2026 Joint Statistical Meetings



August 1–6, 2026, Boston, USA

[w https://www2.amstat.org/meetings/jsm/2026/](https://www2.amstat.org/meetings/jsm/2026/)

The theme for JSM 2026 is “Communities in Action: Advancing Society.” The program committee has finalized the invited program, choosing 181 of the top proposals out of more than 350 submitted. Registration & housing reservations opened May 1, 2026. Events will be held at the following locations:

Thomas Michael Menino Convention and Exhibition Center

for technical, poster, and plenary sessions; EXPO; Career Service;

professional development courses; roundtables; and business/committee meetings; and the Westin Boston Seaport District for business/committee meetings. Reserve your hotel now. For a map, rates, and reservations, please connect to the JSM Housing Bureau: <https://connectionstravel.app/JSM26Boston/start>



### JSM dates for 2026–2030

<b>JSM 2026</b>	<b>IMS Annual Meeting</b>	<b>JSM 2028</b>	<b>IMS Annual Meeting</b>	<b>JSM 2030</b>
<b>August 1–6, 2026</b>	<b>@ JSM 2027</b>	<b>August 6–10, 2028</b>	<b>@ JSM 2029</b>	<b>August 4–8, 2030</b>
<b>Boston, USA</b>	<b>August 8–12, 2027</b>	<b>Philadelphia, USA</b>	<b>August 5–9, 2029</b>	<b>Milwaukee,</b>
<b>[see above]</b>	<b>Chicago, USA</b>		<b>Seattle, USA</b>	<b>Wisconsin, USA</b>

### PAKDD 2026 Workshop on AI and Data Science for Digital Finance

9 June, 2026. Hong Kong, China

[w https://sites.google.com/view/ai4dfpakdd/](https://sites.google.com/view/ai4dfpakdd/)

This workshop will be an in-person event at PAKDD 2026 (the 30th Pacific–Asia Conference on Knowledge Discovery and Data Mining, <https://www.pakdd2026.org/>). The theme is *AI and Data Science for Digital Finance: Transforming Markets, Assets, and Inclusion*. The workshop aims to bring together researchers, practitioners, industry experts, and policymakers interested in the development and application of AI and data science in digital finance.

Keynote speakers: Yilei Shao, East China Normal University; Simon Trimborn, University of Amsterdam; Rita Yi Man Li, Hong Kong Shue Yan University.

Abstract submission deadline: April 15, 2026. See website for details.

### 2026 IMS Annual Meeting

July 6–9, 2026, Salzburg, Austria

[w https://imstat.org/2026AnnualMeeting/](https://imstat.org/2026AnnualMeeting/)

The 2026 IMS Annual Meeting will be held in Salzburg, July 6–9, at Salzburg Congress ([salzburgcongress.at/en](http://salzburgcongress.at/en)). The conference will cover a broad range of topics from statistics and probability, as well as the IMS Wald lectures by **Tilmann Gneiting**, the Blackwell lecture by **Cun-Hui Zhang**, and three Medallion award lectures, by **Ian McKeague**, **Bodhisattva Sen**, and **Jelle Goeman**. There’s also the IMS Presidential Address by **Kavita Ramanan** and the Lawrence D. Brown PhD Student Award lectures (**Jin-Hong Du**, **Yu Gui**, **Subhodh Kotekal**, **Reese Pathak**), in addition to plenary, invited, and contributed presentations. Conference participants will also be treated to a classical chamber concert.

**Registration is open.** Regular rates apply before June 15: <https://imstat.org/shop/2026-ims-annual-meeting>. If you’re bringing children to Salzburg, IMS can help with childcare costs to support your participation: <https://imstat.org/meetings/ims-child-care-initiative/> ... and don’t forget to **book your hotel early!**

*Immediately after this meeting, the 10th BFF (Bayesian, Fiducial, and Frequentist Statistics) Conference will take place, July 10–11, 2026: <https://bffconference.github.io/bff-salzburg-2026/index.html> [see page 30].*

## At a glance:

forthcoming  
IMS Annual  
Meeting and  
JSM dates

## 2026

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

JSM: Boston, USA, 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

## 2029

IMS Annual Meeting @ JSM: Seattle, USA, August 4–9, 2029

## Statistics and Trustworthy AI for Cross (X)-Domain Acceleration (STAI-X)

NEW

July 31 – August 1, 2026

Harvard University, Cambridge, MA [right before JSM]

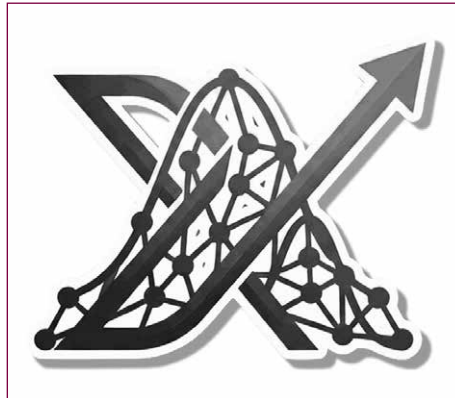
[w](https://statsupai.org/STAI-X2026/index.html) <https://statsupai.org/STAI-X2026/index.html>

In partnership with several leading statistical organizations and journals, the StatsUpAI Interest Group of the American Statistical Association is delighted to announce the first STAI-X: Statistics and Trustworthy AI for Cross (X)-Domain Acceleration (STAI-X) conference to be held at Harvard University on July 31–August 1, 2026. The STAI-X conference is co-hosted with the Department of Statistics and the Department of Biostatistics at Harvard University, and will take place just before the 2026 Joint Statistical Meetings (JSM), which will be in Boston this year.

STAI-X aims to advance the integration of statistics and AI to accelerate trustworthy cross-domain discovery, innovation, spanning theory, methods, and applications, aiming for broad impact. STAI-X provides an opportunity to showcase cutting-edge research at the intersection of statistics and AI, facilitate connections and collaborations across research domains in AI, as well as hosting invited talks, platform talks selected from submitted papers, and offering short courses.

**Partner organizations:** The STAI-X conference is organized in partnership with several leading organizations, including the National Academies Committee on Applied and Theoretical Statistics (NASEM-CATS), Committee of Presidents of Statistical Societies (COPSS), American Statistical Association (ASA), Institute of Mathematical Statistics (IMS), East-Northern American Region (ENAR) and West-Northern American Region (WNAR) of International Biometrics Society, Statistical Society and Canada (SSC), and International Chinese Statistical Association (ICSA). We would like to invite paper and poster submissions on all topics at the interface of AI and statistics, as well as domain applications. Areas of interest include Foundations and Methods at the Interface of Statistics and AI, AI Agents and Benchmarks for Data-Driven Discovery, and AI x Statistics x Science and Society.

**Integrated Conference-Journal Peer Review Model:** In partnership with leading statistical and domain science journals, STAI-X introduces a novel peer review model designed to accelerate research dissemination by combining the speed and topical relevance of machine learning conferences with the rigor and editorial standards of journals.



### Short Courses

STAI-X 2026 will host six short courses on July 31, 2026 at Harvard University. Courses are taught by leading researchers and cover foundational and applied topics across statistics, machine learning, and AI — from agentic AI workflows and scaling theory to large language models, reinforcement learning, clinical trials, and diffusion models. Three morning courses (SC1–SC3, 8:00am–12:00pm) and three afternoon courses (SC4–SC6, 1:00pm–5:00pm) will

run in parallel. Participants may register for one morning and one afternoon course.

Please see <https://statsupai.org/STAI-X2026/short-courses.html>

- SC1 | *Agentic AI: From Zero to Infinity* | Tian Zheng (Columbia)
- SC2 | *Theory of Scaling in Modern Deep Learning* | Soufiane Hayou (JHU), Nikhil Ghosh (Flatiron)
- SC3 | *An Overview of LLMs for Statisticians* | Linjun Zhang (Rutgers)
- SC4 | *Reinforcement Learning: Foundations and Applications* | Chengchun Shi (LSE)
- SC5 | *The Role of AI in Accelerating Clinical Trials and Drug Development* | Alexia Iasonos (MSKCC), John O'Quigley (UCL)
- SC6 | *Theory for Diffusion Models: Continuous and Discrete* | Sitan Chen (Harvard)

### Key Dates and Deadlines:

Early Bird Registration: June 1, 2026

Regular Registration: June 25, 2026

**Information:** If you have any questions, please contact us at [staix.contact@gmail.com](mailto:staix.contact@gmail.com).

**STAI-X organizing committee co-chairs:** Edgar Dobriban, University of Pennsylvania; Xihong Lin, Harvard University; Wenqi Wang, The University of Texas MD Anderson Cancer Center; Linjun Zhang, Rutgers University

SAVE THE DATE for ICSDS2026:

**2026 International Conference on  
Statistics and Data Science  
December 15–18, 2026, Split, Croatia**

w <https://sites.google.com/view/ims-icsds2026/>

The 2026 IMS–ICSDS will be held December 15–18, 2026, in Split, Croatia. More information soon!

**15th High-Dimensional Data Analysis (HDDA) conference**

**August 12–14, 2026**

**Istanbul Medipol Medical University, Turkey**

w <https://hdda2026.medipol.edu.tr/>

High-Dimensional Data Analysis (HDDA) emerged in response to modern scientific and technological advances that generate data with a very large number of variables relative to sample size. Breakthroughs in genomics, bioinformatics, finance, image processing, and machine learning highlighted limitations of classical methods and motivated new theory, models, and computation for high-dimensional settings, including sparsity-based methods, regularization, dimension reduction, and modern regression and inference theory.

**2026 IMS Asia Pacific-Rim Meeting (IMS–APRM)**

**June 13–16, 2026**

**Hong Kong, China**

w <https://ims-aprm2026.sta.cuhk.edu.hk/>

The seventh meeting of the Institute of Mathematical Statistics Asia Pacific-Rim Meeting (IMS–APRM) will take place in Hong Kong from June 13 to June 16, 2026, and will be hosted by The Chinese University of Hong Kong (CUHK).

Participants can look forward to a diverse program featuring keynote speeches, panel discussions, and workshops led by prominent experts in the field of statistics. The conference will cover a wide range of topics, including theoretical advancements, innovative methodologies, and practical applications in various domains. Attendees will have the opportunity to engage in meaningful discussions, exchange ideas, and explore potential collaborations.

Plenary speakers: **Andrea Montanari**, Stanford University, and **Hans-Georg Müller**, University of California, Davis. A further list of 21 distinguished lecturers, as well as 72 invited sessions, can be found on the conference website above.

Registration is open.

The vibrant city of Hong Kong, known for its rich cultural heritage and modern infrastructure, will provide an inspiring backdrop for the event, offering numerous opportunities for networking and professional growth.



**IMS New Researchers Conference:**

**NRC–North America**

*APPLY TO ATTEND by April 15*

**July 29–August 1, 2026** [*right before JSM*]

**UMass Amherst Campus, Amherst, MA**

w <https://sites.google.com/uw.edu/nrc2026umass/>

NRC–US gathers around 50 early-career researchers in the fields of statistics, probability, optimization, biostatistics, and data science. The program has panels and plenaries by leading scholars, poster and oral presentations by participants, and structured mentoring. *APPLY TO ATTEND by April 15: see website for link!*

**SPA 2026: 45th Conference on  
Stochastic Processes and their Applications  
June 14–20, 2026. Ithaca, NY, USA**

w <https://events.ces.scl.cornell.edu/event/spa2026/summary>

Early registration ends April 30 for the 2026 conference on Stochastic Processes and their Applications (SPA 2026) in June at Cornell. The keynote speakers are: 2026 BS/IMS Schramm lecturer **Roland Bauerschmidt**; 2026 IMS Medallion lecturers **Philip Ernst** & **Marcel Nutz**, as well as Lévy lecturer **Nathanaël Berestycki** and Doob lecturer **Timo Seppäläinen**.

Contributed session proposals are welcome: please submit by April 15 via <https://events.ces.scl.cornell.edu/event/spa2026/> program. See the website for housing and travel information.

**APPLY TO ATTEND THE FIRST IMS Asian New Researchers Conference:**

**NRC–Asia Pacific Rim**

**June 17–18, 2026** [*right after the IMS-APRM 2026, see above*], **Hong Kong, China**

w <https://sites.google.com/uw.edu/inrc-asia/home>

NRC–Asia Pacific Rim will be held in conjunction with the HKU 2026 Summer Workshop on Statistics and Data Analytics. Day 1 will consist of talks by senior speakers invited for the HKU 2026 Summer Workshop on Statistics and Data Analytics. (This workshop aims to bring together leading researchers in statistics and data science from around the world and offers an open platform for participants to share insights in a collaborative environment.) Day 2 will provide participants with the opportunity to present their research through brief expository talks and posters, and to meet other early-career researchers. There will be panels and presentations by senior researchers on topics including publishing, grant applications, collaboration, and mentoring. *APPLY TO ATTEND BEFORE APRIL 15: see website for application link!*

**2026 WNAR/IMS Annual Meeting****June 14–17, 2026. Pullman, Washington, USA****w** <https://wnar.org/wnar2026>

Washington State University in Pullman offers a beautiful summer setting for a conference, combining the energy of a vibrant campus with the charm of the surrounding Palouse region. Warm, sunny days highlight the rolling hills of wheat fields that create one of the most picturesque landscapes in the Pacific Northwest.

There will be short courses, a plenary lecture, invited and contributed sessions, young investigator events, and a Student Paper Award with oral sessions. Email [programchair@wnar.org](mailto:programchair@wnar.org) or [wnar@wnar.org](mailto:wnar@wnar.org) with questions.

**International Workshop in Sequential Methodologies****June 1–4, 2026****American Univ., Washington DC, USA****w** <https://www.american.edu/cas/iwsm2026/>

**Registration and abstract submission are open.** This biennial conference will bring together researchers and practitioners to explore advances in sequential statistics, related areas of statistics and applied probability, and their many applications. The technical program includes approximately 140 presentations covering theoretical, methodological, and applied areas of sequential inference, change-point detection, sequential estimation, ranking and selection, machine learning and artificial intelligence, clinical trials and adaptive design, statistical process control, optimal stopping, stochastic approximation, applied probability, mathematical finance, and related areas.

The program features these plenary lectures:

- *Recent Advances in Statistical Process Control for Dynamic Disease Screening and Spatio-Temporal Disease Surveillance*, by Peihua Qiu (University of Florida)
- *From Theory to Decision: A Journey with Sequential Methods in Clinical Trials*, by Dong-Yun Kim (NIH)
- *Nearly Optimal Sequential Multi-hypothesis Tests for General Stochastic Models with Dependent and Non-identically Distributed Observations*, by Alexander Tartakovsky (AGT StatConsult)
- *Shortest Fixed-Width Confidence Intervals for a Bounded Parameter: The Push Algorithm* by Jay Bartroff (University of Texas)

The regularly updated site has registration, abstract submission, and lodging links, as well as other information. **Early registration** ends on April 1, 2026. Any questions? Please contact the organizers (see website).

**9th African International Conference on Statistics (AIC 2026)****June 29–July 3, 2026. Strathmore University, Nairobi, Kenya****w** <https://aic2026.strathmore.edu/>

The 9th AIC, jointly hosted by Strathmore University (SU), Kenya, and the University of Maryland, Baltimore County (UMBC), USA, will be held under the theme: “Leveraging big data, artificial intelligence, and emerging analytical tools in mathematical sciences for development in Africa.”

Abstract submission by April 15; register by May 15.

**International Symposium on Nonparametric Statistics (ISNPS 2026)****June 22–26, 2026, Thessaloniki, Greece****w** <https://easyconferences.eu/isnps2026/>

The International Symposium on Nonparametric Statistics (ISNPS 2026) will be held in Thessaloniki, Greece, June 22–26, 2026. This global forum will bring together researchers from around the world to exchange ideas, foster collaboration, and advance the fields of nonparametric statistics, data science and machine learning.

Building on the success of previous meetings, the 2026 symposium will feature plenary lectures, special invited sessions, contributed talks, and a dedicated student poster session. A student paper competition will be held within the poster session, with travel support awarded to the winners. Professor **Jianqing Fan** (Princeton University) will deliver the **Peter Hall Lecture**.

**The 4th Joint Conference on Statistics and Data Science (JCSDS 2026)****July 11–13, 2026. Guiyang, Guizhou, China****w** <https://jcsds2026.scimeeting.cn/en/web/index/31392>

Jointly organized by the Chinese Association for Applied Statistics, Probability and Statistics Society of China, Association for Industrial Statistics Teaching, Business Statistics Society of China, the China Medical Association’s Biostatistics Division and IMS–China. Since its inaugural meeting in 2023, JCSDS has become one of the world’s largest gatherings in statistics and data science. The previous three meetings attracted 1800–2100 participants from 20+ countries. JCSDS typically has 6 keynote addresses, 100 invited sessions, and more than 50 contributed and poster sessions. **The 4th JCSDS will be staged together with the IMS–China biannual meeting**, with special sessions dedicated to the late Peter Hall, to mark his 10-year passing from us. In addition to the usual scholarly talks, it will have forums for Developing Statistics and Data Science in the era of AI, industry exhibitions, and extensive networking opportunities.

Important dates: Early-bird registration deadline May 16, 2026. Contributed talk & poster submission April 30, 2026. Accommodation booking deadline July 3, 2026.

We look forward to welcoming you to the beautiful “Forest City” of Guiyang in July 2026 for another unforgettable JCSDS!

# More IMS meetings

## 18th World Meeting of the International Society for Bayesian Analysis

June 28–July 3, 2026

Nagoya, Japan

[w https://isba2026.github.io](https://isba2026.github.io)

ISBA2026 will be the 18th conference in the series of biennial ISBA World Meetings. It will bring together the international community of researchers and practitioners who develop and use Bayesian statistical methods to share recent findings, exchange ideas, and discuss new challenges.

ISBA World Meetings attract both established and early-career researchers and for place special emphasis on promoting the work of early-career researchers, resulting in a conference that brings together the world's best Bayesian researchers, building and strengthening ties between them, and fostering new collaborative relationships. We expect between 600 and 700 researchers will attend the conference, which will feature several plenary speakers, invited and contributed talks, and multiple poster sessions.

## 2027 ENAR/IMS Spring Meeting

March 14–17, 2027, Boston, USA

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

Next year's ENAR/IMS Spring Meeting will be held at Boston Marriott Copley Place, in Boston, USA. Please note these deadlines:

June 5, 2026: Invited Session & Education Program Proposals

October 1, 2026: Distinguished Student Paper Award Submissions

October 15, 2026: Abstract Submissions

## One World Approximate Bayesian Inference (OWABI) Seminar (Ongoing, online)

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

After five seasons of the One World Approximate Bayesian Computation (ABC) Seminar (<https://warwick.ac.uk/fac/sci/statistics/news/upcoming-seminars/abcworldseminar/owabc/>), launched in April 2020 to gather members and disseminate results and innovation during those weeks and months under lockdown, we have now decided to launch a “new” seminar series, the One World Approximate Bayesian Inference (OWABI), to better reflect the broader interest and scope of this series, which goes beyond ABC. In particular, simulation-based inference and ML related techniques will have a particular role. Feel free to contact any of the organisers if you want to suggest yourself or someone else for a talk.

All webinars are held on Zoom/Teams, with a link shared on the email sent via the mailing list. So if you are interested in the OWABI seminar and would like to hear from us, monthly, about the announced speaker, title and abstract and, most importantly, be able to join the talk, please register at [https://listserv.csv.warwick.ac.uk/mailman/listinfo/abc\\_world\\_seminar](https://listserv.csv.warwick.ac.uk/mailman/listinfo/abc_world_seminar).

A “One World ABI” playlist on the ISBA YouTube channel, with all past OWABC and current OWABI talks is available at [https://www.youtube.com/playlist?list=PLUaj\\_wLsosMTjqTN8kmm6nNo7YtLV6-1Z](https://www.youtube.com/playlist?list=PLUaj_wLsosMTjqTN8kmm6nNo7YtLV6-1Z)

This webinar is part of the larger One World seminar initiative [*see right*].

## Bernoulli–IMS 12th World Congress in Probability & Statistics

July 24–28, 2028

Singapore

[w TBC](#)

The 2028 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 in due course.

Please keep the date!

## Asia-Pacific Seminar in Probability and Statistics

Ongoing and online

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

The Asia-Pacific Seminar in Probability and Statistics (APSPS) is a monthly online seminar, broadcast on a mid-month Wednesday via Zoom. The seminar series was created as a permanent forum for good research in the field.

Topics include: probabilistic models for natural phenomena, stochastic processes and statistical inference, statistical problems in high-dimensional spaces, asymptotic methods, statistical theory of diversity.

The organizers—see the list of Board members on the website, chaired by Ajay Jasra (Chinese University of Hong-Kong, Shenzhen)—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 would like to receive email announcements about the next speakers, send an email to any of the APSPS Board members, who are listed on the website above.

## One World Probability Seminar (OWPS):

Ongoing and online

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

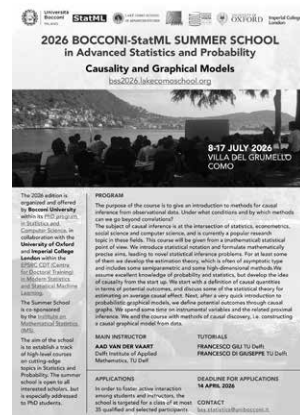
Thursdays, 14:00 UTC/GMT. Please subscribe to the mailing list for updates:

<https://www.owprobability.org/ mailing-list>

## 2026 Bocconi–StatML Summer School in Advanced Statistics and Probability: Causality and Graphical Models July 8–17, 2026. Como, Italy

[w https://bss2026.lakecomoschool.org/](https://bss2026.lakecomoschool.org/)

The Bocconi-StatML Summer School in Advanced Statistics and Probability continues the tradition of the summer schools in Statistics and Probability that Università Bocconi had been organizing since the early '90s, and held in Torgnon, Val d'Aosta, until 2008. Since 2021, the school is jointly organized by Bocconi with the University of Oxford and Imperial College, London, and is held in alternating years in the UK and in Como, Italy. The aim of the Bocconi-StatML Summer School in Advanced Statistics and Probability is to establish a track of high level courses on advanced and cutting-edge topics in Statistics and Probability. The Summer School offers lectures delivered by internationally leading scholars on the specific designated topic, and supervised tutorials.



## NISS Writing Workshop for Junior Researchers July 17 & July 24, 2026: Zoom Online

**August 2, 2026: In person at JSM Boston (optional)**

[w https://www.niss.org/events/niss-writing-workshop-jr-researchers-day-1](https://www.niss.org/events/niss-writing-workshop-jr-researchers-day-1)

Registration is open for this very popular workshop for junior researchers. The goal is to provide instruction for junior researchers writing journal articles and grant proposals. Participants will be required to provide a recent sample of their writing [uploaded as part of the registration process, see below], which will be reviewed by a senior mentor. The sample could be a current draft of an article to be submitted for publication or an early version of a grant proposal. Senior mentors will be former journal editors and program officers, who will critique the submitted material and provide individual feedback. Participants will be expected to initiate a revision in response with additional feedback from their mentors.

**Deadline for the Writing Workshop application submission is June 30**, with notification of acceptance soon thereafter. In response to ongoing discussions about the use of AI in academic writing and publishing, the workshop will introduce journal and agency-specific policies and regulations regarding the use of AI in publishing, grant applications and reviews.

The workshop is designed for researchers with a PhD awarded or anticipated during 2018–2025 in statistics, biostatistics or related field. Attendance at the Writing Workshop will be limited and applicants within 6 years' post-PhD and members of the participating societies will receive preference.

You can register via the website above, but please note that you will need to submit a copy of your full writing sample during this online registration. This submission must be much more than simply an abstract.

You only need to submit once, as your one-time submission automatically creates a submission for both Fridays and the August 2 session at JSM. **Please plan to attend both Fridays (July 17 & 24)** to be considered for course completion. You get an automatic entry into the August 2 Short Course at JSM, but are not required to attend for course completion (we realize not everyone goes to JSM).



Image by councilicle from Pixabay

## Other meetings and events

### Australian Probability Conference 2026

NEW

June 22–25, 2026

Brisbane, Australia

[w](https://australian-probability-conferences.github.io/apc2026/) <https://australian-probability-conferences.github.io/apc2026/>

We are pleased to invite you to participate in the Australian Probability Conference 2026. The conference will bring together researchers in probability, stochastic processes, mathematical statistics, and their applications. Participation is open to both Australian and overseas researchers, and we warmly welcome colleagues from around the world to join us at the University of Queensland. We particularly encourage participation from PhD students and early career researchers.

### 10th BFF (Bayesian, Fiducial, and Frequentist Statistics) Conference July 10–11, 2026 [immediately after the IMS Annual Meeting]

Salzburg, Austria

[w](https://bffconference.github.io/bff-salzburg-2026/index.html) <https://bffconference.github.io/bff-salzburg-2026/index.html>

The BFF Conference brings together researchers working in Bayesian, Fiducial, and Frequentist statistics. The 10th edition will take place in beautiful Salzburg, *directly after the IMS Annual Meeting in Salzburg*, so you can easily combine both meetings. Keynote lectures by Richard Samworth and Peter Grünwald, as well as several invited talks on BFF approaches. All in one room, no parallel sessions. **Poster submission deadline: May 30, 2026**

### CIBB 2026: 21st International Conference on Computational Intelligence Methods for Bioinformatics and Biostatistics September 2–4, 2026. Rome, Italy

NEW

[w](https://cibb2026.teralab.ai) <https://cibb2026.teralab.ai>

The 21st International Conference on Computational Intelligence Methods for Bioinformatics and Biostatistics (CIBB 2026) will take place in Rome, Italy, on September 2–4, 2026. CIBB is an established international conference series that brings together researchers from statistics, computer science, and life sciences to explore advanced computational and data-driven approaches for biomedical research.

Topics include machine learning, artificial intelligence, biostatistics, bioinformatics, medical informatics, and large-scale analysis of biological and clinical data. The conference focuses on cutting-edge methods for understanding complex biological systems, improving disease modeling, and enabling data-driven healthcare and precision medicine. Special attention is given to emerging paradigms such as high-performance computing, scalable algorithms, and quantum-inspired approaches for life sciences.



## ADVERTISE A CONFERENCE

### ATTENTION MEETING ORGANIZERS



#### MEETINGS ANNOUNCEMENTS

will be placed on the website and in the IMS Bulletin. Please submit announcements at [www.imstat.org/submit-meeting.html](http://www.imstat.org/submit-meeting.html). *There is no charge for this service.*



#### ANNOUNCE EARLY

As soon as the meeting name, dates, location, and website are set, submit this information at [www.imstat.org/submit-meeting.html](http://www.imstat.org/submit-meeting.html). We will place it immediately in the website ([imstat.org/meetings-calendar/](http://imstat.org/meetings-calendar/)) and Bulletin ([www.imstat.org/bulletin](http://www.imstat.org/bulletin)) calendars to help people put it on their radar. The sooner the better: we can place this information months to years in advance.



**THE SOONER  
THE BETTER!**  
*Get on their  
radar!*



#### Submit announcements at least 6 months before the meeting.

Consider your submission deadlines when placing advertisements. You want to ensure people have a chance to see the ad in time to make your deadlines.

#### ANNOUNCEMENTS SHOULD INCLUDE:

- ✓ Meeting name, dates and location
- ✓ Meeting website
- ✓ Important deadlines (abstract submission, registration)
- ✓ Titles of plenary sessions and speakers
- ✓ Other items to entice attendees (locations, speakers, etc.)
- ✓ If you have a suitable print quality image of the location, include it. Must be at least 300dpi tiff, jpeg, etc.

#### ★ *Grab Attention.* DRIVE ATTENDEES TO YOUR WEBSITE!

The goal of the ad is grab readers' attention; they should be directed to the website to get more information and register.



*No need to include all the information from your website, just enough to encourage people to attend.*



**SUBMIT YOUR ANNOUNCEMENT TODAY!**  
[www.imstat.org/submit-meeting.html](http://www.imstat.org/submit-meeting.html)

**Data Science & AI Summit****NEW****October 1–2, 2026****London, United Kingdom****w** <https://datascience.thepeopleevents.com/>

Data Science Week attracts a diverse audience of leaders and professionals from industries including financial services, healthcare, IT, manufacturing, retail, government, education, and more. Attendees range from C-level executives, data scientists, engineers, and AI specialists to professionals in innovation, cybersecurity, marketing, operations, and legal. The event showcases cutting-edge technology solutions—spanning AI tools, cloud platforms, generative AI, analytics, automation, and consulting services. Join us for the 4th edition of Data Science Week 2026—a global series of conferences taking place in London centered around a unique theme tailored to regional innovation and global relevance.

**Bayesian Biostatistics Conference Bayes 2026****NEW****October 21–23, 2026****Leiden, The Netherlands****w** <https://www.bayes-pharma.org/>

This meeting is an annual gathering of biostatisticians interested in using Bayesian methods in life science and public health settings. A particular focus of the meeting is biopharmaceutical development, with associated discussion of methods acceptable in regulatory science. The meeting begins with a free half-day short course, then 8 plenary speakers (30 mins) and a large number of contributed talks (20 mins). The 2026 meeting features invited speakers from both FDA & EMA, and a panel discussion focused on the various Bayesian guidance documents currently emerging from these agencies.

## Employment Opportunities

**Italy: Milano/Milan****Bocconi University**

Assistant Professor

<https://jobs.imstat.org/job/83083797/>**Sweden: Lund****Lund University, Department of Statistics**

Tenure-track Assistant Professor in Statistics with a focus on Data Science

<https://jobs.imstat.org/job/83233983/>**United States: Los Angeles, CA****University of California Los Angeles**

Assistant Adjunct Professor 2026-27

<https://jobs.imstat.org/job/83601169/>**United States: Los Angeles, CA****University of California Los Angeles**

Lecturer 2026-27

<https://jobs.imstat.org/job/83215652/>**United States: Baltimore, MD****University of Maryland, Baltimore County**

Post Doc Fellows in Applied Mathematics

<https://jobs.imstat.org/job/83539147/>




## ADVERTISE A JOB

*Is your department or company hiring?*

For maximum reach, place your ad on the IMS jobs board at **<https://jobs.imstat.org>** and we will also list here in the *Bulletin* the basics (location, institution, job title/function and a link to the full ad), at no extra charge. As long as your job is active on the web it will be included here.

Packages start at just **\$420** for a 60-day online job posting.



# 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>


  **One World ABI (Approximate Bayesian Inference, formerly ABC, Approximate Bayesian Computation) Seminar** w <https://warwick.ac.uk/fac/sci/statistics/news/upcoming-seminars/abcworldseminar>

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

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

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

## June 2026

 June 1–4: Washington DC, USA. **9th International Workshop in Sequential Methodologies** (now an IMS co-sponsored meeting)  
w <https://www.american.edu/cas/iwsm2026/>

June 8–11: Agios Nikolaos, Crete, Greece (and online) **SMTDA 2026 (9th Stochastic Modeling Techniques and Data Analysis conference) and Demographics 2026 Workshop** w [www.smta.net](http://www.smta.net)


 June 9: Hong Kong, China. **PAKDD 2026 Workshop on AI and Data Science for Digital Finance**  
w <https://sites.google.com/view/ai4dfpakdd/>

June 11–13: Jiangsu Normal University, Xuzhou, China. **International Conference on Frontiers in Probability and Statistics: Celebrating the distinguished contributions of N. Balakrishnan on his 70th Birthday** w <http://statreliab.jsnu.edu.cn/>

June 12–15: Agios Nikolaos, Crete, Greece (and online). **CHAOS 2026 (the 19th Chaotic Modeling & Simulation conference)**  
w <http://cmsim.org/>

 June 13–16: CUHK, Hong Kong, China. **IMS–APRM2026: 7th IMS Asia Pacific-Rim Meeting** [immediately followed by **IMS NRC–Asia**, June 17–18, see below]  
w <https://ims-aprm2026.sta.cuhk.edu.hk/>

 June 14–17: Pullman, WA, USA. **2026 WNAR/IMS Annual Meeting** w <https://wnar.org/wnar2026>

 June 14–20: Ithaca, NY, USA. **SPA2026: 45th Conference on Stochastic Processes and their Applications**  
w <https://events.ces.scl.cornell.edu/event/spa2026/summary>

June 15–19: Rome, Italy. **21st International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems (IPMU2026)** w <https://www.sbai.uniroma1.it/conferenze/ipmu2026/index.php>

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

June 16–18: Halifax, NS, Canada. **The 2026 Classification Society Annual Meeting** w <https://www.theclassificationssociety.org/annual-meeting/>

 June 17–18: Hong Kong, China. **IMS New Researchers Conference – Asia** [right after the IMS-APRM 2026, see above]  
w <https://sites.google.com/uw.edu/inrc-asia/home>

**Meeting organizers: to get a  
FREE LISTING**

**in this calendar, please submit the  
details (as early as possible) at  
[https://www.imstat.org/  
ims-meeting-form/](https://www.imstat.org/ims-meeting-form/)**

**Or you can email details to Elyse  
Gustafson at [ims@imstat.org](mailto:ims@imstat.org)  
We'll list them in the Bulletin, and on  
the IMS website too, at  
[imstat.org/meetings-calendar/](https://imstat.org/meetings-calendar/)**

**NEW** June 22–25: Brisbane, Australia. **Australian Probability Conference 2026** **w** <https://australian-probability-conferences.github.io/apc2026/>

**ims** June 22–26: Thessaloniki, Greece. **ISNPS2026: International Symposium on Nonparametric Statistics** **w** <https://easyconferences.eu/isnps2026/>

June 28–July 1: Montreal, Canada. **46th International Symposium on Forecasting** **w** <https://isf.forecasters.org/>

**ims** June 28–July 3: Nagoya, Japan. **ISBA2026: 18th ISBA World Meeting** **w** <https://isba2026.github.io>

**ims** June 29–July 3: Nairobi, Kenya. **9th African International Conference on Statistics (AIC 2026)** **w** <https://aic2026.strathmore.edu/>

## July 2026

July 1–3: Barcelona, Spain. **Entropy 2026: Exploring Complexity and Information in Science** **w** <https://sciforum.net/event/entropy2026>

**ims** July 6–9: Salzburg, Austria [*pictured below*]. **2026 IMS Annual Meeting** **w** <https://imstat.org/2026AnnualMeeting/>



**ims** July 8–17: Lake Como, Italy. **Bocconi–StatML Summer School in Statistics and Probability (2026 Edition: Causality and Graphical Models)** **w** <https://bss2026.lakecomoschool.org/>

**ims** July 11–13: Guiyang, Guizhou China. **The 4th Joint Conference on Statistics and Data Science (JCSDS 2026)** **w** <https://jcsds2026.scimeeting.cn/en/web/index/31392>

July 12–17: Brisbane, Australia. **ICOTS 2026: 12th International Conference on Teaching Statistics** **w** <https://icots12.oa-event.com/>

**NEW** **ims** July 17 & 24: Online; August 2: at JSM Boston. **NISS Writing Workshop for Junior Researchers** **w** <https://www.niss.org/events/niss-writing-workshop-jr-researchers-day-1>

July 20–24: Istanbul, Turkey. **International Conference on Robust Statistics 2026 (ICORS2026)** **w** <https://icors2026.ankara.edu.tr/>

July 23–30: Philadelphia, USA. **International Congress of Mathematicians 2026** **w** <https://www.icm2026.org/>

**ims** July 29–August 1: Amherst, MA, USA. **IMS New Researchers Conference** [right before JSM 2026 in Boston] **w** <https://sites.google.com/uw.edu/nrc2026umass/>

## August 2026

**ims** August 1–6: Boston, MA, USA. **JSM 2026** **w** <https://ww2.amstat.org/meetings/jsm/2026/>

**ims** August 12–14: Istanbul, Turkey. **15th High-Dimensional Data Analysis (HDDA) conference** **w** <https://hdda2026.medipol.edu.tr/>

August 24–28: Lugano, Switzerland. **2026 European Meeting of Statisticians** **w** <https://www.bernoullisociety.org/organization/erc/ems>

## September 2026

**NEW** September 2–4: Rome, Italy. **CIBB 2026: 21st International Conference on Computational Intelligence Methods for Bioinformatics and Biostatistics** **w** <https://cibb2026.teralab.ai>

September 7–10: Bournemouth, United Kingdom. **RSS International Conference 2026** **w** <https://rss.org.uk/training-events/conference2026/>

## October 2026

**NEW** October 1–2: London, United Kingdom. **Data Science & AI Summit** **w** <https://datascience.thepeopleevents.com/>

**NEW** October 21–23: Leiden, The Netherlands. **Bayesian Biostatistics Conference Bayes 2026** **w** <https://www.bayes-pharma.org/>

## November 2026

November 1–3: New York City, USA. **SLDS 2026: Inference and Intelligence** **w** <https://asa-slids.github.io/slids2026/index.html>

## December 2026

**ims** December 15–18: Split, Croatia. **2026 IMS International Conference on Statistics and Data Science (ICSDS)** **w** <https://sites.google.com/view/ims-icsds2026/>

# International Calendar *continued*

*SAVE THE DATE for ICSDS2026:*

## 2026 International Conference on Statistics and Data Science

**December 15–18, 2026**

**Split, Croatia**

**w** <https://sites.google.com/view/ims-icsds2026/>

The 2026 IMS–ICSDS will be held in Split, Croatia. More information soon!

The lovely destination of Split, in Croatia, is a stunning coastal city developed around the remarkably well-preserved 1,700-year-old Diocletian's Palace. Founded by the ancient Greeks, Split was a prominent city in the Roman Empire, the Byzantine Empire, the Republic of Venice, and the Austrian Empire. Today it is one of the most popular travel destinations in the Republic of Croatia. ICSDS participants will have the opportunity to walk by the crystal-clear Adriatic waters, take short ferry rides to the stunning islands of Hvar and Brač, and soak up the vibrant atmosphere of a lively waterfront promenade lined with charming cafes and restaurants.



## March 2027

**ims** March 14–17: Boston, USA. 2027 ENAR/IMS Spring Meeting **w** <https://www.enar.org/meetings/>

## July 2027

July 5–9: Montreal, Canada. Extreme Value Analysis conference 2027 **w** <https://hecsciencesdecision.github.io/eva2027/>

July 11–15: Lusaka, Zambia. 66th ISI World Statistics Congress **w** <https://www.isi-next.org/conferences/isi-wsc2027/>

**ims** July 12–15 [**NOTE CONFIRMED DATES**]: Durham, UK. Informs Applied Probability Society Conference 2027 **w** <http://informs-aps.webspace.durham.ac.uk>

## August 2027

**ims** 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

**ims** July 24–28: Singapore. Bernoulli–IMS 12th World Congress in Probability and Statistics (incl. 2028 IMS Annual Meeting). **w** TBC

## August 2028

**ims** 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

**ims** 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)

## August 2030

**ims** August 4–8: Milwaukee, Wisconsin, USA. JSM 2030 **w** [www.amstat.org/meetings/joint-statistical-meetings](http://www.amstat.org/meetings/joint-statistical-meetings)

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

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

We'll list them here in the Bulletin, and on the IMS website too, at [imstat.org/meetings-calendar/](http://imstat.org/meetings-calendar/)

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2: March	<b>February 1</b>	February 15	March 1
3: April/May	<b>March 15</b>	April 1	April 15
4: June/July	<b>May 1</b>	May 15	June 1
5: August	<b>June 15*</b>	July 1	July 15
6: September	<b>August 15</b>	September 1	September 15
7: Oct/Nov	<b>September 15</b>	October 1	October 15
8: December	<b>November 1</b>	November 15	December 1

\* Note early deadline for August issue

the  
**next**  
issue is  
**August**  
**2026**

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**August 15**

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*IMS: Organized September 12, 1935*

1798 (print)  
1798 (online)  
**Ann. Probab. May 2026**  
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