Volume 52 • Issue 6

The members' magazine of the Institute of Mathematical Statistics

IMS Bulletin

September 2023

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Read it online: imstat.org/news

2024 World Congress: Bochum

Planning is well underway for the 11th World Congress in Probability and Statistics, organized by the Bernoulli Society (BS) and IMS, August 12–16, 2024, on the campus of Ruhr-Universität Bochum (RUB) in Germany. The scientific program will have 16 plenary talks, more than 40 invited paper sessions, and a large number of contributed paper sessions, as well as poster sessions. **A call for papers will be issued very soon!**

The plenary speakers have been announced. The Wald lectures will be given by **Peter Bühlmann**, ETH Zurich, and the Le Cam lecturer is **Peter Bickel**, University of California, Berkeley. Four IMS Medallion lectures will be given by **Moulinath Banerjee**, University of Michigan, Ann Arbor; **Marc Hallin**, Université Libre de Bruxelles; **Remco van der Hofstad**, TU Eindhoven; and **Chunming Zhang**, University of Wisconsin–Madison. There will be two IMS–BS Schramm lectures, from **Patricia Gonçalves**, Instituto Superior Técnico, Lisbon, and **Nina Holden**, Courant Institute, New York University. The IMS–BS Doob lecture will be given by **Pablo Ferrari**, University of Buenos Aires. The BS lectures are as follows: **Emmanuel Candès**, Stanford (Bernoulli lecture); **Victor Chernozhukov**, MIT (Cox lecture); **Rafal Latala**, University of Warsaw (Kolmogorov lecture); **Xihong Lin**, Harvard (Laplace lecture); **Mihaela van der Schaar**, Univ. Cambridge (Tukey lecture); and **Rongfeng Sun**, National University of Singapore (Lévy lecture).

The RUB campus is easily accessed by frequent subway trains from Bochum city center, which is itself very well connected by public transport to other cities in Europe. All delegates at the World Congress will receive a ticket that allows them unlimited and free use of local public transport in the Ruhr Area, including from Düsseldorf airport, the closest international airport. This ticket is valid on regional trains (not the high-speed ICE), subways, trams and buses, from 11–17 August, 2024.

Herold Dehling, chair of the Local Organizing Committee, says, "The World Congress will be the most important meeting in the area of Probability Theory and Mathematical Statistics in 2024. In close cooperation with the Scientific Programme Committee, chaired by Aurore Delaigle (Melbourne) and Kavita Ramanan (Brown), the local organizers are working hard to make this a unique forum for the exchange of the latest ideas among researchers working on the frontiers of current knowledge in Probability and Statistics. The Ruhr-University campus offers an excellent environment for such meetings. Don't miss this opportunity to present your most recent research, and to learn what your colleagues have been doing!"

Registration will open soon. We warmly invite your participation!

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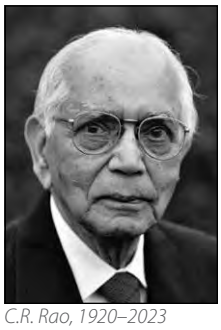
Executive Committee

IMS Members' News

C.R. Rao passes away at 102



C.R. Rao, 1920–2023

Professor **C.R. Rao**, Penn State Eberly Professor Emeritus of Statistics and statistics legend, passed away in Buffalo, New York, on August 22, 2023. His family members Teja, Vincent, Vera and Malini were with him. He was 19 days away from his 103rd birthday. Among a very large number of honors was the award of the 2023 International Prize in Statistics; Guy Nason, who chaired the Prize's Foundation, described Rao's work as "monumental," adding that it "revolutionized statistical thinking [and] continues to exert enormous influence." An obituary will follow in due course.

IMS members receiving American Statistical Association (ASA) awards at JSM

The ASA announced the following awards to IMS members at the Joint Statistical Meetings in Toronto. **David R. Cox Foundations of Statistics Award**: **Nancy Reid**, Univ. Toronto. **Gertrude M. Cox Scholarship in Statistics Award, Honorable Mentions**: **Alyssa Columbus**, Johns Hopkins; **Taylor J. Krajewski**, Univ. of North Carolina, Chapel Hill. **ASA Fellows**: **Matias D. Cattaneo**, Princeton; **Daniel S. Cooley**, Colorado State; **Xinping Cui**, UC Riverside; **Adrian Dobra**, Univ. of Washington; **Margaret Gamalo**, Pfizer; **Tailen Hsing,** Univ. of Michigan; **Sunduz Keles**, Univ. of Wisconsin–Madison; **Robert Todd Krafty**, Emory Univ.; **Shujie Ma**, UC Riverside; **Himel Mallick**, Merck Research Laboratories; **Tyler Harris McCormick**, Univ. of Washington; **Yajun Mei**, Georgia Inst. Tech.; **Jing Ning**, MD Anderson Cancer Center; **Layla Parast**, Univ. of Texas at Austin; **Marianna Pensky**, Univ. of Central Florida; **Deo Kumar Srivastave**, St. Jude Children's Research Hospital; **Lu Wang**, Univ. of Michigan; **Lingzhou Xue**, Penn State; **Corwin M. Zigler**, Univ. of Texas at Austin. **Founders Award**: **Karen Kafadar**, Univ. of Virginia; **Vijayan N. Nair**, Univ. of Michigan. **Mentoring Award**: **Narayanaswamy Balakrishnan**, McMaster University. **Outstanding Statistical Application Award**: two of the seven authors of the winning paper, **Michael Bertolacci** and **Noel Cressie**, both from the Univ. of Wollongong, Australia. **Karl E. Peace Award**: **Bhramar Mukherjee**, Univ. of Michigan. **Bob Riffenburgh Award**: **Michael C. Wu**, Fred Hutchinson Cancer Center. **Monroe G. Sirken Award**: **Andrew Gelman**, Columbia. **SPAIG Award**, five of the 10 authors of the winning paper: **Joseph G. Ibrahim**, Univ. North Carolina, Chapel Hill; **Joseph F. Heyse**, Merck & Co.; **Ming-Hui Chen**, Univ. of Connecticut; **Donglin Zeng**, Univ. North Carolina, Chapel Hill; **Guoqing Diao**, George Washington Univ. **Waller Distinguished Teaching Career Award**: **William I. Notz**, Ohio State Univ. **Samuel S. Wilks Memorial Award**: **Jeremy M. Taylor**, Univ. of Michigan. **Deming Lecturer**: **Malay Ghosh**, Univ. of Florida. **Gottfried E. Noether Distinguished Scholar Award**: **Tony Cai**, Univ. of Pennsylvania. **Gottfried E. Noether Early-Career Scholar Awards**: **Chao Gao**, The Univ. of Chicago; **Weijie Su**, Univ. of Pennsylvania. Congratulations to all the ASA award winners!

Adrian Raftery to give Myles Hollander lecture

Adrian Raftery, the Boeing International Professor of Statistics and Sociology and an adjunct professor of Atmospheric Sciences at the University of Washington, is the 2023 Myles Hollander Distinguished Lecturer. His talk is on October 25, 2023, at Florida State University and online. See stat.fsu.edu/HollanderLecture.

COPSS Awards 2023

Committee of Presidents of Statistical Societies honors statisticians

Maya Sternberg, COPSS secretary/treasurer writes: The Committee of Presidents of Statistical Societies (COPSS) presented the 2023 awards at JSM in Toronto on August 9. The awards are jointly sponsored by COPSS founding partner members: IMS, the American Statistical Association, the Eastern and Western regions of the International Biometric Society (ENAR and WNAR) and the Statistical Society of Canada. Award criteria and nominating procedures are at https://community.amstat.org/copss/awards

The winner of the **2023 COPSS Distinguished Achievement Award and Lectureship** was **Bin Yu** (University of California, Berkeley). This award recognizes meritorious achievement and scholarship that has a significant impact to the field of statistical science. The award citation recognized Dr. Yu for *"fundamental contributions to information theory, statistical and machine learning methodology; interdisciplinary research in fields such as genomics, neuroscience, remote sensing and document summarization; and for outstanding dedication to professional service, leadership, and mentoring of students and young scholars."*

The winner of the **2023 Presidents' Award** was **Ryan Tibshirani** (UC Berkeley). This award is presented annually to a young member of one of the COPSS participating societies in recognition of outstanding contributions to the profession. The award citation recognized Dr. Tibshirani for *"contributions to nonparametric estimation, high dimensional inference and distribution-free inference; for the development of new methodology; for contributions at the interface of statistics and optimization; and for the development of methods for epidemic tracking and forecasting."* [Read Ryan Tibshirani's interview on page 10.]

The winner of the **2023 George W. Snedecor award** is **Michael Kosorok** (University of North Carolina, Chapel Hill). This award is presented in odd-numbered years to recognize an individual who has been instrumental in the development of statistical theory in biometry with a noteworthy publication in biometry within three years of the date of the award. The award citation recognized Dr. Kosorok for *"foundational, creative, and original contributions to mathematical statistics; for methodological developments in empirical processes and machine learning; for advancement of precision health; and for mentoring of students, postdocs, and junior faculty."*

The winner of the **2023 F.N. David award and Lectureship** is **Karen Bandeen-Roche**, Johns Hopkins Bloomberg School of Public Health. This award is presented biennially (odd years) to recognize an individual as a role model to others by their contributions to the profession through excellence in research, leadership of multidisciplinary collaborative groups, statistics education, or service to the professional societies. The award citation recognized Dr. Bandeen-Roche for *"outstanding leadership and service in the biostatistics and statistics community, for her leadership in statistical education, and for her achievements in biostatistical research, particularly in the field of aging research and frailty."*

There were eight winners of the **Emerging Leader Award**, formerly known as the COPSS Leadership Academy Award. These awards recognize early-career statistical scientists who show evidence of and potential for leadership to shape and strengthen the future of the field of statistics. The 2023 winners were: **Yates Coley, Lorin Crawford, Peng Ding, Edgar Dobriban, Jingyi Jessica Li, Avi Feller, Veronika Rockova,** and **Gongjun Xu**.

More about the winners can be found in the April/May *IMS Bulletin,* which you can download from https://imstat.org/wp-content/uploads/2023/02/Bulletin52_3.pdf. See the online version for photos of the winners: https://imstat.org/archive-vol-52-2023/#Issue06

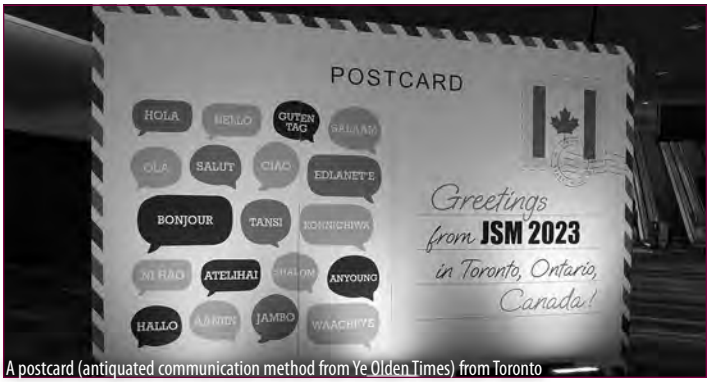
JSM2023 in pictures


Blackwell lecturer Ya'acov Ritov [left] with Peter Bickel


Wald lecturer Bin Yu [r] with Peter Bühlmann


Wing H. Wong [l] received the Wahba Medal from Xiaotong Shen


Annals of Statistics co-editors Enno Mammen and Lan Wang chat with Vladimir Koltchinskii before the AOS Invited Paper session



A postcard (antiquated communication method from Ye Olden Times) from Toronto


Team IMS at the booth in the Expo Hall


The new IMS Fellows who were able to attend the awards presentation at JSM: pictured left to right are Lester Mackey, Stefano Favaro, Dale L. Zimmerman, Heather Battey, Rina Foygel Barber, Boaz Nadler, Ali Shojaie, Elizabeth H. Slate, Yang Feng, Fengzhu Sun, and Kai Zhang


Medallion lecturer Aurore Delaigle [l] with Annie Qu


Medallion lecturer Yingying Fan [r] with Richard Samworth


Medallion lecturer Runze Li [l] with Jianqing Fan


Medallion lecturer Ingrid Van Keilegom [l] with Lan Wang


New Researchers Group session: chair Murat Erdogdu with speakers Zhimei Ren, Abhishek Chakrabortty, Edward Kennedy,

Aaditya Ramdas received the Peter Hall Prize


Peter Bühlmann hands the gavel to new president Michael Kosorok

The 2022 Carver Medal was presented to Xuming He

The view from the IMS booth in a busy Expo Hall. There were over 6,000 attendees at the JSM!


The Brown Award winners chatting before their session [left–right]: Yuetian Luo, Tudor Manole, Yaqi Duan

Presidential Address 2023: Peter Bühlmann

IMS: What does it stand for? What could it stand for?

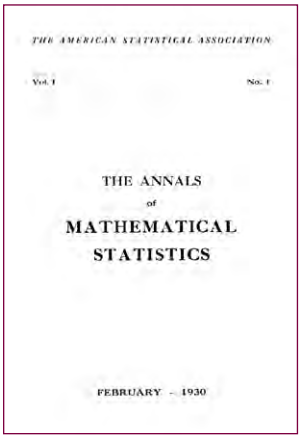
Peter Bühlmann gave the Presidential Address at the 2023 Joint Statistical Meetings in Toronto. The following text is based on his slides, which you can view at https://people.math.ethz.ch/~peterbu/speeches/Presaddr_Buhlmann.pdf

This is a picture of IMS: … and what follows is my own view and perspective (a.k.a. "picture") of IMS.

What does IMS stand for? It stands for Institute of Mathematical Statistics. Perhaps this is an unusual name nowadays, but unusual can be good, distinguishing from the mainstream. Notice that it's an "Institute" (as opposed to an association or society). Also, it's "Mathematical Statistics": there's no explicit mention of probability, or of data science. More on these points later…

Let's look at a bit of history, to see if we find some explanation. This draws from Stephen Stigler's 1996 *Statistical Science* paper, "The History of Statistics in 1933," and from the Wiley StatsRef article, "Institute of Mathematical Statistics (IMS)," written by Elyse Gustafson and Edsel Peña in 2019.

IMS was founded five years after the beginning of *The Annals of Mathematical Statistics* in 1930. The journal looked like this [*below left*].


THE AMERICAN STATISTICAL ASSOCIATION

Vol. I No. 1

THE ANNALS
of
MATHEMATICAL
STATISTICS

FEBRUARY — 1930

Notice the American Statistical Association's name across the top? The first article was written by Willford King, Secretary-Treasurer of the ASA (and later ASA President in 1935), entitled "Mathematical Statistics"—it's two pages long, I recommend it! In it, he emphasized the importance of mathematical statistics as a promising new development: both for the "mathematically inclined members" and also for the less mathematical statisticians who would "recognize that the more advanced phases of mathematics are rendering extremely valuable service in furthering the progress of statistical technique, thus aiding in the solution of problems of the greatest moment" (King, 1930).

However, things didn't work out so well, and there were some issues around the division between these two "groups" (those devoted to advanced mathematics and those who were not). Growing disagreement then led to Harry C. Carver, the first editor of the *Annals,* taking it over in January 1934, *at his own expense* and maintaining it without institutional base. As Carver could not do this for too long, he came up with the idea of an association of mathematical statisticians. This triggered the official founding of the IMS. Thus, the Institute of Mathematical Statistics was founded on September 12, 1935, at Ann Arbor, Michigan, with Henry L. Rietz (University of Iowa) as its first President, Walter A. Shewhart as Vice-President, Allen T. Craig as Secretary-Treasurer, and Harry Carver as the main initiator and editor of its journal.


Henry L. Rietz

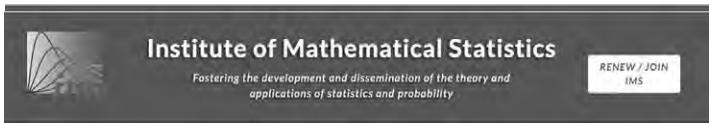

Harry C. Carver

The founders chose the word "Institute." Merriam Webster defines "institute" as "an organization for the **promotion** of a cause (motive)" and "association" as "an organization of persons having a common interest." So, "institute" is not such a bad name!

At its inception, then, I would say that the new *Institute* of Mathematical Statistics stood for the *promotion* of—quoting again from the first article of the *Annals of Mathematical Statistics*—"…the more advanced phases of mathematics [which are] furthering the progress of statistical technique, thus aiding in the solution of the greatest moment" (King, 1930).

IMS: What does it stand for today?

Today, in 2023, you'll find this on the IMS website banner: "Fostering the development and dissemination of the theory and applications of statistics and probability."



If we want to find out about someone, we could read their CV. What might the CV of the IMS look like?

Curriculum Vitae

Institute of Mathematical Statistics

Personal Data: 4,670 members, from very many countries

Education: Many thousands of graduate and postgraduate degrees

Recognition: see below

Positions: simultaneously all over the world!

References (upon request): ASA, IBS, SSC, ISI, RSS, etc. (because others should say "What IMS stands for"!)

I'll focus for now on "Recognition". In short, I would say:

Relative to IMS's size, with 4,670 members (2022), we do a lot!

Let me elaborate on this. First, look at our **publications**—*Annals of Statistics, Annals of Probability, Annals of Applied Statistics, Annals of Applied Probability, Statistical Science, IMS Monographs and Textbooks, IMS Bulletin*—and our co-sponsored publications—*ACM/IMS Journal of Data Science, Electronic Communications in Probability, Electronic Journal of Probability, Electronic Journal of Statistics, Journal of Computational and Graphical Statistics, Probability Surveys, Statistics Surveys*… IMS is highly recognized for its publications, which are among the best in the field!

What about our **meetings and conferences**? We hold them all over the world: we have a truly global reach! For example, the annual standalone meeting we hold every four years has most recently been in London, Vilnius, Sydney, Gothenburg, Rio de Janeiro, Banff; the Asia Pacific-Rim Meeting has been in Melbourne, Singapore, Hong Kong, Taipei, Tokyo, Seoul; the World Congress (with the Bernoulli Society) was held in Toronto, Istanbul, Singapore, Barcelona, Guanajuato, Vienna, Chapel Hill, Uppsala, Tashkent… and there have been many, many other meetings.

Let's look at our **awards and honors**, again, we have many. There are the Awards & Named Lectures—honoring the contributions of Abraham Wald, David Blackwell, Lucien Le Cam, Jerzy Neyman, Henry Rietz, Grace Wahba, and, jointly with Bernoulli Society, Oded Schramm and Joseph Doob—and the Medallion lectures. We elect IMS Fellows. We award the Harry C. Carver Medal; the Peter Gavin Hall IMS Early Career Prize; the Tweedie New Researcher Award; and the IMS Lawrence D. Brown PhD Student Award. Our travel awards are for New Researchers and Graduate Students (Hannan Travel Award). Together, this makes a portfolio of awards from early*- to mid- and senior-career. Again, relative to IMS's size of 4,670 members, we have very many awards!

*As you can see in the previous paragraph, *early* is asterisked. **Early-career researchers** are of the utmost importance! We created the IMS New Researchers Group, who are an *independent* sub-unit with a similar governance structure to IMS (the NRG president is Pragya Sur; they have just held the annual New Researchers Conference, in Toronto immediately before JSM, which was very successful.) It is IMS's core responsibility to support the careers and research of the next generation, for at least two reasons: because we owe it to the next generation, and because only the next generation will keep up with new developments at sufficient speed.

There has been **expansion in various directions** over the years. For applied and interdisciplinary statistics, we have the *Annals of Applied Statistics* (started in 2007) which is by now a top journal; and, together with ACM, we have the brand-new *ACM/IMS Journal of Data Science* (inaugural issue available now) to strengthen the interaction with data science and machine learning. The **International Congress of Statistics and Data Science, ICSDS**, had its first highly successful meeting last December in Florence, and the next will be in Lisbon in December 2023. We have a new program, **Industry Friends of IMS**, founded in 2023 to stimulate intellectual exchange between industry and academia. [*See Peter's article on page 14.*]

And importantly, we have very many members who devote a huge amount of their time and passion to IMS endeavors. IMS can do all these things only with their volunteers. I think this is truly amazing! Thank you!

Where does IMS stand within the community? How do we compare? Let's look at some membership data. Among national statistical societies, selecting two examples, the ASA has about 19,000 members; the Royal Statistical Society (RSS) about 10,000 members. In international statistical societies: the International Statistical Institute (ISI) ≈ 4,000 elected fellows; the International Biometric Society (IBS) ≈ 6,000 members (organized in 37 regions, and four networks); the International Society for Bayesian Analysis (ISBA) ≈ 900 members; the Bernoulli Society ≈ 760 members… and IMS, remember, has 4,670 members.

Where do we stand in "data science"? Looking at some Computer and Data Science ("regular") societies: ACM (Association for Computing Machinery) has about 110,000 members from more than 190 countries; IEEE (Institute of Electrical and Electronics Engineers), which covers a lot of data science nowadays, has about 427,000 members from more than 190 countries, in 344 sections in ten geographic regions worldwide; INFORMS (Operations Research & Analytics) has ≈ 13,000 members from all continents. Machine learning societies have a somewhat different model, as they are built around major conferences as a society to run the conference. The International Machine Learning Society, for example, runs the annual ICML conference; the Neural Information Processing Systems Foundation runs the annual NeurIPS conference; the Association for Uncertainty in Artificial Intelligence runs the annual UAI conference.

So, IMS and other statistical societies are smaller and more homogeneous than the big CS/EE/data science "competitors"—yet are much broader in scope than just running an ML conference. I see this as a fantastic opportunity for IMS—and all other statistics societies!

IMS: What *could* it stand for?

We can always improve and develop great new projects, obviously. What could we do?

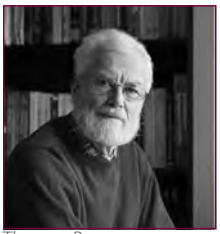
Continued from **page 7**

Let me just focus on this: **What is the role of the "M" ("Mathematical") in IMS?** Mathematical Statistics was a "fashionable" new wave: about 100 years ago, it brought rigor and success to statistical analysis, and later, to data science and machine learning. What could the "M" stand for in the future?

Firstly, it could stand for foundational work in statistics and data science: by this, I mean general statistical and data science principles, new frameworks and paradigms (computational, methodological), mathematical theory and insights, and so on. There are a lot of exciting and new problems. Let's find inspiration from interdisciplinary science, data science, machine learning, AI, industry problems. Among concrete interdisciplinary examples, it could be neuroscience, astrophysics, personalized medicine, climate science; and at the intersection with machine learning, I mention bias and fairness, data privacy, data integration and fusion, scalability and performance, interpretability and "explainability" (a.k.a. causality), adaptive and reinforcement learning, optimal transport in machine learning… And then there's the nearly non-science-fiction future of quantum computing, a billion human genomes sequenced, human brain simulations and modeling 100 billion neurons… Let's go out and actively participate in shaping the foundations of new data science problem domains; and importantly, also critically debate new developments. This is again a great opportunity!

Secondly, in modern probability—admittedly not my area of expertise—probability is nowadays a central field in mathematics. For example, the Fields Medal has been awarded to "pure" probabilists in 2006, 2014, and 2022. Could exposure to data science provide new developments in probability and mathematics? We definitely want to have probability on board in IMS!

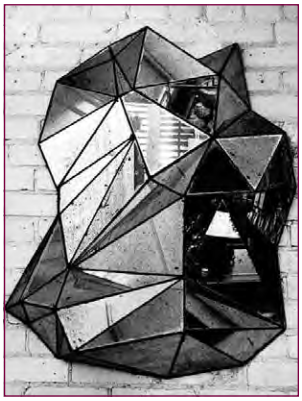
Third, statistics remains connected to mathematics. I want to illustrate this point with two surprising stories where statisticians have recently proved major conjectures in mathematics. In 2014, the proof of the Gaussian Correlation Conjecture (now the Gaussian Correlation inequality): "As he was brushing his teeth on the morning of July 17, 2014, Thomas Royen, a little-known retired German statistician, suddenly lit upon the proof of a famous conjecture at the intersection of geometry, probability theory and statistics that had eluded top experts for decades." (*Quanta Magazine*, 2017). Thomas Royen worked at Hoechst, a pharma company in Germany (1979–85) and then at the University of Applied Sciences in Bingen (1985–2010). And in 2020, the second time, the proof of the Kannan–Lovász–Simonovits (KLS) conjecture, as described in *Quanta Magazine* in 2021: "Statistics Postdoc Tames Decades-Old Geometry Problem. To the surprise of experts in the field, a postdoctoral statistician has solved one of the most important problems in high-dimensional convex geometry." This was Yuansi Chen, a former PhD student of Bin Yu, currently at Duke University.


Thomas Royen


Yuansi Chen

Why were Thomas Royen and Yuansi Chen interested in doing pure mathematics? Did they see a connection to their statistical work? It does open new paths! For example, the KLS conjecture has fundamental consequences for MCMC and stochastic optimization in statistical modeling and data science.

We may have different ways to interpret the "M" and thus we may also say the **"M" stands for "Multi-faceted"**—like this mirror. Multi-faceted in terms of areas, fields, approaches, methods, algorithms, mathematical theories, applications—and in terms of people with diverse backgrounds and strengths.


from https://www.commutedesign.com/large-scale/multi-faceted-mirror

What could IMS stand for? IMS is growing more multi-faceted. We must take a broad view to develop this further. Theory is not better than applications; applications are not more relevant or impactful than theory; and so on.

There are different facets of people, specifically of IMS members, in terms of gender, personal background, scientific culture, scientific expertise, age group, geographical location and origin, etc.

What are the assets and challenges for a Multi-faceted IMS? As a first asset, we are exceptionally well positioned to build further on our global reach. The IMS membership surveys in 2013 and 2021 showed a significant growth in members from Asia—and according to the 2022 membership directory, the regional presence of members is: Africa 3%, Asia 23%, Europe 22%, North America 48%, Oceania 2%, South America 2%.

Table: Geographic distribution of respondents comparing the 2013 and 2021 membership survey

Continent	2013 (%)	2021 (%)
Africa	1.7	3.3
Asia	12.5	21.4
Europe	20.0	16.5
North America	61.1	55.2
Oceania	3.4	2.1
South America	1.3	1.4

And, as I mentioned before, we have conferences

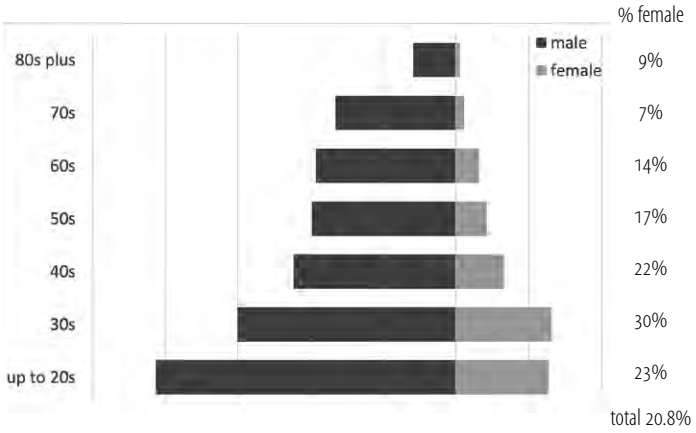
all over the world. Multi-faceted should truly be global in 2023 and beyond. Can we give to and receive from all six continents? I very much hope so!

Another significant asset is our long tradition and great expertise in mathematical foundations. You may recall Bin Yu's IMS Presidential Address in 2014, *"Let Us Own** Data Science"* (**"Own" here does not exclude other owners of data science.) This has been a great message for almost 10 years, but we must realize that owning data science is a too big endeavor for the statistics community alone. Thus, I'd rather say,

"Let Us Shape the Foundations of Data Science"***
*(*** "Shape" here does not exclude others!).*

We are in an excellent position to do this—but we need to add this facet to our thinking and to the IMS core portfolio of activities, such as the aforementioned ICSDS meetings, the *ACM/IMS Journal of Data Science*, and so on.

Here's one challenge: demographics. From the IMS membership survey 2021, we see:



The proportion of women is indicated in paler gray, the different age brackets (30s means 30–39 years old) are on the left and the corresponding percentages on the right. It is clear that in 2023 and beyond, we must have more women in IMS. Does a multi-faceted culture help to achieve this goal? I very much think so!

Will you participate in making the IMS more multi-faceted? Come with us on the journey to shape IMS's future.

IMS:
truly International,
truly Multi-faceted,
truly Statistics-and-Probability!

I count on your participation!

Behind the curtain of IMS: Some words of thanks

In closing, I would like to share my appreciation of a few people.

Firstly, our Executive Director **Elyse Gustafson**, who is incredibly experienced, efficient, encouraging, kind and supportive—and she likes working with everybody! Pictured here with **Regina Liu** and **Annie Qu**, who initiated the International Congress of Statistics and Data Science (ICSDS).


Regina Liu, Elyse Gustafson and Annie Qu at ICSDS2022

The *IMS Bulletin* editor **Tati Howell** is extremely skilled in communication on all levels, helpful, supportive, and very kind.

Edsel Peña, who is very knowledgeable about IMS, always available, reliable, exacting about the details, and very kind! Edsel is finishing his six-year (double) term as IMS Executive Secretary. Thank you for your long commitment and dedication to IMS.


The "very constructive" 2022–23 Executive Committee

Former President **Chris Burdzy**, who is very knowledgeable and highly responsible about IMS, thinks logically, is meticulous about the details and gives constructive and honest advice. Thank you for all your time and dedication for IMS as President-Elect, President and Past President!

Michael Kosorok (President-Elect), **Annie Qu** (Program Secretary), **Jiashun Jin** (Treasurer) as additional members of a very constructive Executive Committee.

Our team members over very many years: **Patrick Kelly** (IMS Production Editor), **Laila Lunderman** (Webmaster), **Geri and Krissi Mattson** (of Mattson Publishing Services), **Larissa Puryear** (Dues and Subscriptions, LP Society Services)

…and, last but not least: ***you, the 4,670 members!*** Including a huge number of reviewers, associate and co-editors, committee members for many tasks (meetings, awards, outreach, DEI, ...)

As IMS President I could see the true reality behind the curtain: that IMS crucially depends on the work from all these very many volunteers. I am deeply impressed and grateful for all the excellent work you do for IMS. Thank you!

COPSS Presidents' Award: Ryan Tibshirani

Ryan Tibshirani wins the prestigious 2023 COPSS Presidents' Award

Ryan Tibshirani is a professor in the Department of Statistics at the University of California, Berkeley. His research interests lie broadly in statistics, machine learning (ML), and optimization and more specifically in high-dimensional statistics, nonparametric estimation, distribution-free inference, convex optimization, and numerical methods with applied interests on tracking and forecasting epidemics. Ryan completed both his BS in Mathematics and a PhD in Statistics at Stanford University.

The Presidents' Award citation recognized Dr. Tibshirani *"For contributions to nonparametric estimation, high dimensional inference and distribution-free inference; for the development of new methodology; for contributions at the interface of statistics and optimization; and for the development of methods for epidemic tracking and forecasting."*

Read on for Ryan's interview with Amita Manatunga, COPSS Chair, and Maya Sternberg, COPSS Secretary/Treasurer.

Photo: Eric Sampson/ASA

Ryan Tibshirani (right) with Michael Kosorok at the COPSS Awards session at JSM in Toronto

What was your first reaction to winning the prestigious COPSS President's Award?

Big surprise! Needless to say I am very humbled, and very grateful to my nominators.

What made you choose work in the field of statistics?

I found my way to statistics due to a mix of being inspired by my dad ([Rob Tibshirani] who is also a professor of statistics) and being drawn to the field due to my own interests and inclinations. I studied math and computer science as an undergraduate, and became interested in statistics through summer internships in biology labs, connected to my dad's applied collaborations. There I learned the basics of data analysis "on my feet". Initially, my interests in statistics were entirely applied. Eventually, I became aware of how broad the field of statistics is, and that being a statistician would allow me to pursue applied, methodological, computational, or theoretical questions—any of this is "fair game". Of course, it didn't hurt that my impressions of statisticians based on those I knew (my dad, Trevor Hastie, Jerry Friedman, and a few others) was that they are an open, curious, and fun crowd. It was then a pretty easy choice to go to graduate school in statistics.

Which part of your job do you like the most?

There is a lot to like. As much as professors might like to grumble on occasion (who doesn't?), being a professor is a pretty amazing job. One of the most important aspects to me is intellectual freedom: having the complete freedom to pursue what you want. The way I look at the motivation behind doing research is multi-dimensional: one axis measures importance, another measures beauty. Sometimes I pursue things because I find them important, and other times because I find them beautiful or interesting. Of course, this is not to say that everything I work on succeeds in being important and/or beautiful. These are just landmarks. The point is that I get the freedom to choose my own approach.

Here are a few other things that I like about being a professor.

Advising students—this can often be a special relationship, and watching your student develop and grow can be really rewarding.

Teaching—for me, this has actually been one of the best ways to deepen my own understanding and appreciation of various topics and subfields.

Lastly, I have been incredibly fortunate with my collaborators so far. Many of my collaborators have become close personal friends, people that I would like to continue working and hanging out with for the rest of my life.

How lucky I am to have this job!

Continues on **page 11**

What advice would you give to young people who are entering the profession as PhD students and assistant professors at this time?

That is a tough one. There is a lot that comes to mind, but I will just share one idea. I have seen too many people in academia become distressed and unhappy, for long periods, including people that I saw at one point as persistently positive. A younger version of myself would say: "that won't happen to me", and would just carry on as usual, and try not to think too much about it. But my advice is now this: think carefully about your "value function". That is, what are you using to measure the value of your work and your output (broadly interpreted), and derive a sense of fulfillment and happiness? This can be highly individual, but I believe it is worth thinking about it explicitly, and it is never too early to start (you can start as a student).

Here are two things that are meaningful to me, and that have been helpful for me to identify and keep track of: "local impact" and "mutual respect". The first refers to the impact I have on my students, collaborators, and so on—the people I interact with regularly. I look for evidence that I am contributing positively to these "local" relationships. This makes me happy, and is more under my control than (say) where my paper gets published or whether it gets cited a lot. The second refers to the following. I start by identifying the people that I really respect. For some subset, I will be lucky enough to be able to develop a relationship with them (say, work with them). Over time, I look for signs that I may have earned their respect. Such signs can be really special.

Who are your most significant mentors? How did/do they impact your career?

At Stanford (where I was a PhD student): my dad, Trevor Hastie, Jonathan Taylor, and Emmanuel Candès. At Carnegie Mellon (where I spent the first 11 years of my faculty career): Larry Wasserman, Roni Rosenfeld, and Chris Genovese.

I can say a lot about each one and their impact. For Trevor, Jon, Emmanuel, Roni, and Chris, these thoughts will have to be saved for private conversations between us.

For my dad and Larry, I will just share a few words. My dad's "scientific common sense" is second to none. I've always said to myself that if I found myself working on an applied problem of critical importance and I could bring one stats collaborator to the table with me, it would be my dad. Larry might be the closest person we have in statistics to a "universalist". The breadth of topics that he understands (not superficially, but deeply) truly amazes me. I have learned so much from each of them, well beyond statistics. They have both accomplished so much, and yet are still so kind and generous to everyone around them. Also, they still know how to have fun, and remain young at heart.

Why were you drawn to statistical machine learning?

I think there are a few reasons. First, I am genuinely interested in computer science and optimization, outside of statistics, so it was natural for me to be drawn to machine learning. Second, ML is a fun, young field full of excitement, and this excitement can be contagious. Third, being at Carnegie Mellon had a big influence on me in this regard: though I was hired by the Department of Statistics, the people in the Machine Learning Department were welcoming from day one, and eventually I became jointly appointed in Statistics and Machine Learning. I am actually unsure of whether this would have happened anywhere else—at Carnegie Mellon, Statistics and ML are very close and collaborative. At the start of my career, I was interested in ML, but didn't have much experience or credibility as an ML researcher. Still, the ML people welcomed me and helped nurture my interests. It was wonderful and quite formative for me.

What are your hobbies and interests beyond statistics?

Spending time with my family (I have two amazing little kids and a wonderful wife), whether it be at home or on family trips. In terms of current activities, I am mostly biking, swimming, and playing the occasional sport (I played various sports growing up and still like to dabble). I love music, and wish I had more time for it. I wish I had more time for reading books too. Maybe in the future I will make more time for music and books.

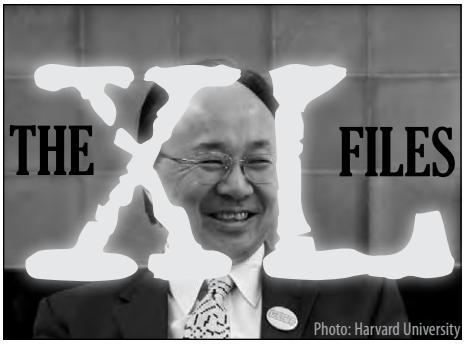
Nominations for next year: The 2024 COPSS Awards

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

- **Presidents' Award**
- **COPSS Distinguished Achievement Award and Lectureship**
- **Elizabeth L. Scott Award and Lectureship**
- **COPSS Emerging Leader Awards**

The deadline for nominations is December 15. Read more about each award, and how to nominate, at https://community.amstat.org/copss/awards/nominations

XL-Files: Tenure by GPT-*n*—Make it or Fake it



Xiao-Li Meng chats some more about ChatGPT, following his piece in the April/May 2023 issue: https://imstat.org/2023/03/31/xl-files-chatgpt-first-contact/

Since my first encounter with *it* in March, ChatGPT, along with its many emerging siblings and cousins (some out of wedlock), has rapidly evolved into a "promptbot," by which I'm not referring only to the way chatbots have given rise to the concept of "prompt engineering". More broadly, they have prompted a whole spectrum of actions, from the outright banning and panning of their uses to intensely exploring and exploiting their potential. History has shown that humanity has rarely (ever?) resisted the allure of our technological achievements. Banning technology is about as effective as telling a teenager not to watch an R-rated movie. The only way to suppress a technology that has already piqued the public interest is to introduce a better one: rather than fearing it, steering it in the right direction, first studying its boons and dooms.

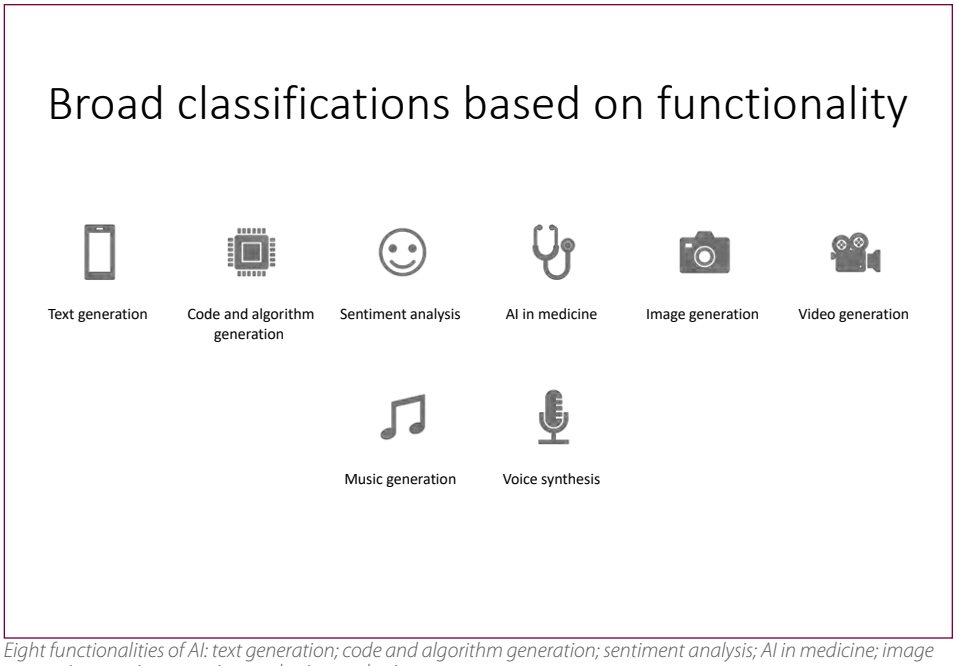
I therefore was delighted when my fearless and tireless colleague, Lucas Janson, initiated a summer reading group on studying the impact of generative AI on the field and practice of statistics. Of course, a summer is too short to study *everything*, and hence after some venting and voting, we settled on the following weekly schedule:

7 & 14 June	*Overview: Model principles of generative AI*
21 June	*Overview: What's out there?*
28 June	*Overview: Prompt engineering*
5 July	*Assistive tool: Writing code*
12 July	*Assistive tool: Writing text*
19 July	*Assistive tool: Making visualizations*
26 July	*Speculative tool: Searching academic literature*
2 August	*Assistive tool: Cautions/pitfalls*
9 August	*(No meeting: JSM)*
16 August	*Research topics: Model interpretation*
23 August	*Research topics: Calibrating uncertainty*

Except for the first two sessions, which were led by a faculty member and two students, each topic was covered by a team of two students, or by a student–faculty pair. I joined the one on "What's out there?", partly because of my access to the diverse editorial board of *Harvard Data Science Review* (*HDSR*), which is in the midst of organizing a special issue on "Future Shock: Grappling With the Generative AI Revolution." (This is the first open call from *HDSR*, so please don't miss the opportunity to submit: https://hdsr.mitpress.mit.edu/). Thanks to the superb human intelligence provided by PhD student Ritwik Bhaduri, we ended up with nearly 50 dense slides, covering eight functionalities, as summarized in the opening slide below.

We began with text and code generation because they are essential tools for those diligently working toward their academic degrees or tenure, as well as for those of us who have not found a lifestyle more satisfying than generating texts with strategically embedded Greek letters. The versatility of generative AI shines through its wide range of functions and adaptability within each function. For instance, with just text generation, GPT-4 can create, capsulize, condense, compare, contrast, and critique content. And as technological advancements continue, we can anticipate even more capabilities, especially with a plethora of plugins regularly emerging.

We highlighted the sentiment analysis to show how generative AI can be employed to produce research data before generating text or code. We cited a study on how GPT-4 can classify the sentiment



Eight functionalities of AI: text generation; code and algorithm generation; sentiment analysis; AI in medicine; image generation; music generation; and voice synthesis

of news headlines—positive, negative, or neutral—to predict stock market trends for the following day. Predictions are inherently risky. However, it's a safe bet that for sentiment analysis, generative AI will surpass and replace many human "classifiers". Envisioning GPT-*n* as a superlative "wisdom of the crowd" would not be a hallucination, especially as *n* grows. After all, GPT-*n* is trained on a vast amount of data that surpasses what any group of humans can handle (without the help of generative AI). If our collective sentiments sway the stock market, it's more logical to trust a massive synthesizer like ChatGPT over individual human judgment. This isn't to claim that AI surpasses human intelligence. It's merely a nod to two facets of human intelligence: the collective wisdom of humanity and the unique intellect of individuals. ChatGPT essentially grants individuals unprecedented access to a digitized form—however incomplete or biased—of our collective knowledge, available nearly anytime and anywhere.

There's a well-known Chinese saying, "三个臭皮匠,顶个诸葛亮". While a pun-preserving translation is virtually impossible, GPT-4 offers a poetic rendition: "In unity of three craftsmen's thought, a sage's wisdom is forth brought." I'm fond of the term "unity," as it encapsulates generative AI's cohesive wisdom synergy, contrasting human attempts at consensus. How often do we see a group of experts—say 30 (much less 30 million)—come to a unanimous decision quickly, or at all? This synthesized intelligence, while efficient, may at times lack the depth of diverse human perspectives. But the value of swift consensus can't be understated, especially when human biases, self-interests, or egos obstruct decision-making. Even in an ideal world driven solely by the greater good, promptly gathering and synergizing insights from a large group of experts remains a dream (or nightmare).

The time-saving advantage of using ChatGPT is undeniable, especially for those intrigued by countless challenges in data science. While churning out more articles shouldn't be the sole aim of (academic) research, very few institutions would grant tenure based on a small number of high-quality publications. It's thus a reasonable prediction that the volume of academic articles will surge alongside the progression of GPT-*n*.

Is the overall quality of research articles also on an upward trajectory? That's a vastly more challenging hypothesis to test, especially since assessing quality necessitates its own set of comprehensive research. One would hope that as quantity increases, quality doesn't proportionately decrease. But that might remain merely a hope.

Consider the need to search for and summarize literature in preparing research articles, a task for which ChatGPT is known to hallucinate at times. To see how much progress GPT-4 has made over GPT-3.5, I prompted both with the same request: "Provide some representative articles by Xiao-Li Meng" (on Aug 20, 2023). GPT 3.5 came back with a list of five. The first four were accurate, but the last one,

"Gelfand, A. E., & Meng, X.-L. (1990). Model choice in generalised linear models via noninformative priors. *Biometrika*, **77**(2), 249–261"

…is a complete fabrication. I never had the opportunity to co-author with Alan Gelfand. The article title doesn't exist (nor would it be adopted by any reputable statistician). Furthermore, the page range provided in 1990's *Biometrika* straddles two completely unrelated articles.

Nevertheless, compared to a similar test I conducted in March, GPT-3.5 has shown notable progress. Back then, all four articles it provided were fictional. Worse still, the four titles appeared plausible or even credible, which is perilous since apparent authenticity demands discernment to identify false references. Although verifying a reference's legitimacy is typically straightforward (for those who at least glance at what they cite), when ChatGPT is employed to explore unfamiliar territories, the risk to research quality magnifies. Fictitious information, if unchecked, can become fodder for future AI training, perpetuating inaccuracies, and ultimately, like repeated lies, creating an illusion of truth.

While GPT-3.5's performance in August outshone its earlier version, the optimism was short-lived. GPT-4 responded to the same prompt with six articles, mis-attributing four of them. Two of these errors amusingly reassigned my co-authors, with a Harvard classmate (Andrew Gelman) replaced with a Chicago colleague (Wing Wong), and a Chicago advisee (David van Dyk) with my Harvard adviser (Donald Rubin). Another amusing misrepresentation,

"Multiple Imputation in Practice: Comparison of Software Packages for Regression Models With Missing Values. Meng, X.-L., Rubin, D. B. (1992). *The American Statistician*, **45**(3), 186–202"

…is a genuine title from *The American Statistician* but was published two decades later by Horton and Lipsitz (2012, Vol 55, 244–254). Although my PhD advisor Don Rubin and I are known to be "multiple imputers" (thankfully Don didn't venture into "serial imputation"), the term "software" appeared once in Don's extensive list of article titles, and not at all in my publications. This fact should significantly diminish the likelihood that either of us would publish an article on "comparison of software packages." However, when an AI learns patterns primarily through exhaustive training, its ability to discern what shouldn't be there—such as the

XL-Files *continued*

absence of certain topics in our publications—depends on its training on what is missing, a *negation learning* that seems to be beyond GPT-4's current capabilities.

In general, GPT-4 is widely recognized as a leap forward from GPT-3.5. In this context, however, the term "forward" would be apt only if I were tempted to pad my list of publications through "multiple imputations." Of course, such a notion should not even cross anyone's mind. However, my playful experiment is not without a serious message. As tools like ChatGPT become more pervasive, the risk of erroneous outcomes, whether unintentional or malicious, is likely to accelerate, notwithstanding technological advancements. While this isn't cause for panic, it should compel us to approach information with heightened scrutiny, filtering it through our critical thinking and discernment. If a significant number of human beings make this a habit, our collective wisdom as a species might just grow. Such progress would truly be a testament to the potential of humanity—after all, the primary goal of AI is not to supplant, but to amplify human intelligence on both collective and individual scales.

Lastly, lest anyone assumes I've been infected by ChatGPT's penchant for hallucinations, let me share the ChatGPT-3.5 poem I promised in my April/May XL-Files. It serves as a reminder that our profession could benefit from a dose of GPT's imaginative flair, especially the kind that nudges us out of our usual boundaries:

"All data has [*sic*] stories, some mistold
Messy facts, some can unfold
All models simplify, some more sound
Fallible assumptions, some more profound
Methods serve, some versatile
Interpretations, some contrived, some worthwhile"

Introducing Industry Friends of IMS: IFoIMS

Past-President Peter Bühlmann is pleased to introduce some new Friends:

Statistics and Data Science are of crucial importance in very many areas of society, with people working in academia, industry or government. To strengthen scientific exchange across fields, IMS has created a new membership category named ***Industry Friends of IMS (IFoIMS).***

An IFoIMS member is strongly encouraged to participate in the intellectual and scientific content of IMS activities. These could include organizing invited sessions or panel discussions at IMS meetings, for example at the International Conference on Statistics and Data Science (ICSDS) or the New Researchers Conference (NRC). We aim to have IFoIMS from the widest possible spectrum of different industry sectors: the only requirement is that an IFoIMS must conduct research or development related to data science, statistics, probability, or stochastic modeling.

I am truly excited to have IFoIMS as an additional facet of IMS to enrich the exchange of cutting-edge new research and development in an industrial context. There are plenty of challenging new problems in data science, often related to massive datasets. Strengthening collaborative efforts between academia and industry will be highly beneficial for scientists working at the intersection of theory and practice in data science. IFoIMS is an additional component that makes IMS more multi-faceted [*see Peter's Presidential Address article in this issue*], and thus brings people together with different expertise and from various working environments.

You can read more about IFoIMS at https://imstat.org/industry-friends-of-ims-ifoims/

Current Industry Friends of IMS, who were involved in the initial creation of IFoIMS, are:

- Citadel Securities (https://www.citadelsecurities.com/)
- Eli Lilly and Company (https://www.lilly.com/)

Obviously, we aim to have many more!

If you have ideas or suggestions, or if you know of other good matches for an IFoIMS with a suitable contact person in the company, please write to me, as the contact person of the IMS working group to develop IFoIMS, via e-mail to buhlmann@stat.math.ethz.ch.

Other news items

Changes in the 2023–24 IMS Executive Committee

Each year at the Annual Meeting the presidency of the IMS hands over. This year's IMS President is **Michael Kosorok**, who took over from **Peter Bühlmann**. **Tony Cai** is the new President-Elect. **Chris Burdzy** has left the Executive, having finished his presidential term. Also leaving the committee this year is **Edsel Peña**, who served two three-year terms as Executive Secretary. He is replaced by **Peter Hoff**. The remaining two members of the committee are **Jiashun Jin**, Treasurer, and **Annie Qu**, Program Secretary.

Tony Cai

Peter Hoff

ICSDS 2022 plenary talks on IMS YouTube channel

Did you know that IMS has a growing collection of plenary speaker videos on our YouTube channel? You can watch them at https://www.youtube.com/@InstMathStat

Four plenary talks from the 2022 ICSDS (International Conference on Statistics and Data Science) are the latest to be added.

These are "Scaling up Bayesian Modeling and Computation for real-world biomedical and public health applications" by **Sylvia Richardson**; "Protocols for observational studies: methods and open problems" by **Dylan Small**; "Deformed polynuclear growth in (1+1) dimensions" by **Alexei Borodin**; and "Conformal prediction in 2022" by **Emmanuel Candès**.

New blog post on YoungStatS website

YoungStatS

Access the YoungStatS website at: https://youngstats.github.io/

You can read the latest YoungStatS blog post, on Bayesian nonparametrics, at: https://youngstats.github.io/post/2023/08/17/testing-multiple-differences-via-symmetric-hierarchical-dirichlet-processes/.

Its author, IMS member Dr. **Beatrice Franzolini** (Bocconi University, Italy) is currently chair-elect of the junior ISBA (j-ISBA, International Society for Bayesian Analysis) section.

Look out for another YoungStatS article in an upcoming *Bulletin!*

Obituary: Richard Gundy

1934–2023

Richard (Dick) Gundy

Distinguished Emeritus Professor Richard Floyd Gundy passed away peacefully on February 20th, 2023. He was 89 years old.

Dick graduated from Illinois College. He went on to earn a PhD in Experimental Psychology at Indiana University, followed by a post-doctoral fellowship at the University of Chicago. Fascinated with the statistics he learned in the Psychology program, he decided to turn to mathematics and earned a PhD in Statistics from the University of Chicago, with Patrick Billingsley as advisor. His combined applied and theoretical training made him particularly attractive to the Rutgers Statistics Department. He joined the faculty there in 1965, and for the next 52 years he taught a variety of math and statistics courses, both at the undergraduate and graduate level. He was instrumental in the development of the Statistics department's graduate program.

Dick was a Fellow of both the IMS and the American Mathematical Society. He served as Associate Editor of *Applied and Computational Harmonic Analysis*, of *Potential Analysis* (Kluwer Academic Press), and of *Publicacions Matemàtiques* (Universitat Autònoma de Barcelona). He is most recognized for his contributions in the field of probability theory, particularly the theory of martingales. He authored and co-authored many important papers in his field. The Burkholder–Davis–Gundy Inequality, an important result in martingale theory, is co-named after him.

Dick was a distinguished lecturer and exchange professor at the Hebrew University of Jerusalem; Institut Mittag-Leffler, Sweden; Université de Provence, Marseille; Université de Paris, Orsay; University of Cambridge; University of Grenoble; and other research universities. He had a gift for languages, starting with Spanish. He was self-taught in French and Hebrew and led classroom lectures in these languages. He also taught himself Russian and served at one point as a technical Russian translator.

Dick enjoyed staying active and fit. He was an avid squash player and runner who competed in marathons and other road races in the US and abroad. He also loved magic, particularly tricks involving coins and cards, occasionally incorporating these into basic probability lectures. Dick is survived by his wife Doris; children Peter (who recently passed away), Maria, Anastasia, Gregory and Timothy; grandchildren Carmen and Christian; and brother, Jim.

Written by Harold Sackrowitz, Rutgers University, with contributions from Dick's colleagues and family

Obituary: Donald Guthrie

1932–2022

Donald Guthrie passed away peacefully on November 18, 2022, with family by his side. He was 89.

Don was born to Donald and Clair Guthrie in Eureka, CA, on July 8, 1933. Don graduated high school at 16 and subsequently graduated from Stanford University. He went on to complete an MA in mathematical statistics from Columbia University and returned to Stanford to earn his PhD in statistics. Over the many decades of his career, Don taught and researched at several institutions, most notably Oregon State University and the University of California at Los Angeles.

Throughout his career, Don was an innovator in the use of modern computing in statistics. His research and publications primarily examined child psychiatry and statistical computing. His love of baseball crept into his work, as well, including the editing of a special section related to statistics in sports in the *Journal of the American Statistical Association*. While research was important, his energy centered on mentorship. At OSU, he served as the major adviser for six of the first eight PhD students to graduate from the department. In addition to a passion for baseball, Don became an avid runner, participating in numerous marathons.

He and the love of his life, Janet, were married in 1954, and they traveled the world after their children were grown, returning each time with an abundance of stories. They enjoyed symphonies and operas, and as they transitioned into retirement, Don and Janet moved to Bainbridge Island, Washington, to be closer to their family.

Don is survived by his wife Janet; sister Jean; children Don (Candace) and Sarah (Jon); grandchildren C.J. (Ryan), Donald "Jack" (Stephanie), and McCage (Jennifer); and great-grandchildren Corin and Rhys.

Written by Don's family, this obituary is slightly condensed from the version in the April 2023 issue of Amstat News

Obituary: Donald A. Pierce

1939–2022

Donald (Don) Pierce

Don Pierce had a habit of continuing email threads with his collaborators years after a previous message without missing a beat in the conversation. Such instant-restart conversations reflected a profound intellectual concentration, a dogged pursuit of deeper understanding, and the special importance he placed on his collaborative relationships. These conversations continued in a cogent, coherent, and intellectually fierce manner even up to the weeks before his death at age 82. Don died in July 2022 after a random and brutal beating at a bus stop.

Early in his career at Oregon State University, Don was influenced by a series of lectures by the summer visitor David Cox, and from these developed a keen interest in the mathematics of likelihood theory, with particular concern for mathematical theory that was truly relevant to application. His focus on the translation of theoretical implications to data analysis led to important applications-oriented work and made complicated mathematical results accessible to a wide audience.

Don's 1975 discussion contribution to Efron's *Annals of Statistics* paper, "Defining the Curvature of a Statistical Problem (with Applications to Second Order Efficiency)" was the first instance of a lasting interest, which he shared with Ib Skovgaard for many years, in the interplay between geometry and inference. His related attention to higher-order asymptotics led to pioneering contributions in likelihood-based "deviance" residuals and advanced inferential techniques that could be incorporated into standard methodology and software, most notably in collaboration with Ruggero Bellio and Dawn Peters. One prestigious achievement was his discussion paper with Peters, presented at a Royal Statistical Society meeting in January 1992, "Practical use of higher-order asymptotics for multiparameter exponential families." His proposal of methods for higher-order asymptotics in the Cox model with Bellio, among the last methodological articles he published, represents a culmination of his thinking about these problems, forty years after the initial Cox influence.

Don was also widely recognized for his methodological work on radiation health epidemiology and his analyses of mortality and cancer incidence in Japanese atomic bomb survivors. During his years of work at the Radiation Effects Research Foundation (RERF) in Hiroshima, he played a key role in developing a general class of nonlinear excess relative risk and excess rate models, and methods for fitting these using Poisson and binomial likelihood and partial likelihood techniques. These models have come to dominate analyses of radiation dose effects and are used in other fields as well. He also led a pioneering effort to develop practical methods to adjust for measurement error in the survivor dose estimates, which are now routinely used in analyses of the A-bomb survivor data. Don developed a general nonparametric approach for covariate uncertainty adjustment based on Laplace approximations and made many other contributions to radiation dose-response modeling. Some important collaborators in these areas were Michael Vaeth, Dan Stram, and particularly Dale Preston. Because of his expertise, Don played central roles in the National Academy of Sciences review of low-dose radiation exposure on health effects (BEIR VII) and in the International Commission for Radiation Protection report on extrapolating radiation risk effect estimates to low doses.

Don received a PhD in Statistics from Oklahoma State University in 1966, then joined the faculty in the Statistics Department at Oregon State University where he remained until 1996, but with several absences to visit RERF. After retirement from Oregon State, he worked full time at RERF until 2005. Between 2005 and 2015, Don served as a consultant and mentor in biostatistics and public health at Oregon Health and Science University. He was an elected fellow of the IMS and ASA, an elected member of the ISI, an Editor of the *Oxford University Press Statistical Science Series*, and an Associate Editor of *Biometrika* and *Journal of the American Statistical Association*.

To students, Don was thought of as smart, hard, intimidating, and deserving of respect. At both Oregon State and Oregon Health and Science University, he was recognized for his successful commitment to mentoring junior faculty. His collaborators think of him as a "real" researcher, motivated by an intense desire to learn and to learn usefully. As a person, Don was, paradoxically, both intense and gentle. His baritone voice and mental engagement projected an air of authority, but at the same time, he was a sincerely kind person, as was evident in his genuine smile.

Written by Dan Schafer, Oregon State University, with contributions from Ruggero Bellio, Dawn Peters, Dale Preston, and Ib Skovgaard

ACM/IMS
Journal of Data Science

jds.acm.org

jds.acm.org

Editors

Call for Papers

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

Bridging Research Communities

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

Recent papers: two IMS journals

Annals of Probability: https://projecteuclid.org/aop

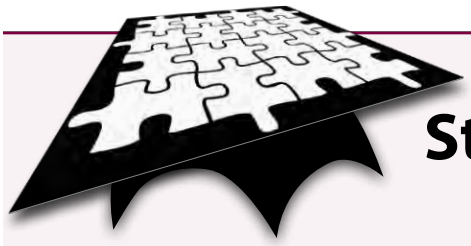
The *Annals of Probability* publishes research papers in modern probability theory, its relations to other areas of mathematics, and its applications in the physical and biological sciences. Emphasis is on importance, interest, and originality—novelty and correctness are not sufficient for publication. Co-editors are Alice Guionnet and Christophe Garban. Access papers: **https://projecteuclid.org/aop**

Volume 51, number 4, July 2023

Annals of Applied Probability: https://projecteuclid.org/aoap

The *Annals of Applied Probability* aims to publish research of the highest quality reflecting the varied facets of contemporary Applied Probability. Primary emphasis is placed on importance and originality. Co-editors are Kavita Ramanan and Qi-Man Shao.

Volume 33, number 4, August 2023



Student Puzzle Corner 46

We're repeating the previous puzzles: there's still time to get your solution to Student Puzzle Editor Anirban DasGupta!

Puzzle 46.1. Consider the usual linear model $Y_i = \beta_0 + \beta_1 x_{i,1} + \ldots + \beta_p x_{i,p} + \epsilon_i$, $i = 1, 2, \ldots, n$, $1 \le p < \infty$. We assume that $\epsilon_i \overset{\text{iid}}{\sim} f(z)$, where $f(z) = c(\alpha)\, e^{-|z|^\alpha}$, $-\infty < z < \infty$, $0 < \alpha < \infty$, and $c(\alpha)$ is the normalizing constant. Provide infinitely many explicit consistent estimators of the vector of regression coefficients, estimators that are consistent under all error densities f stated above.

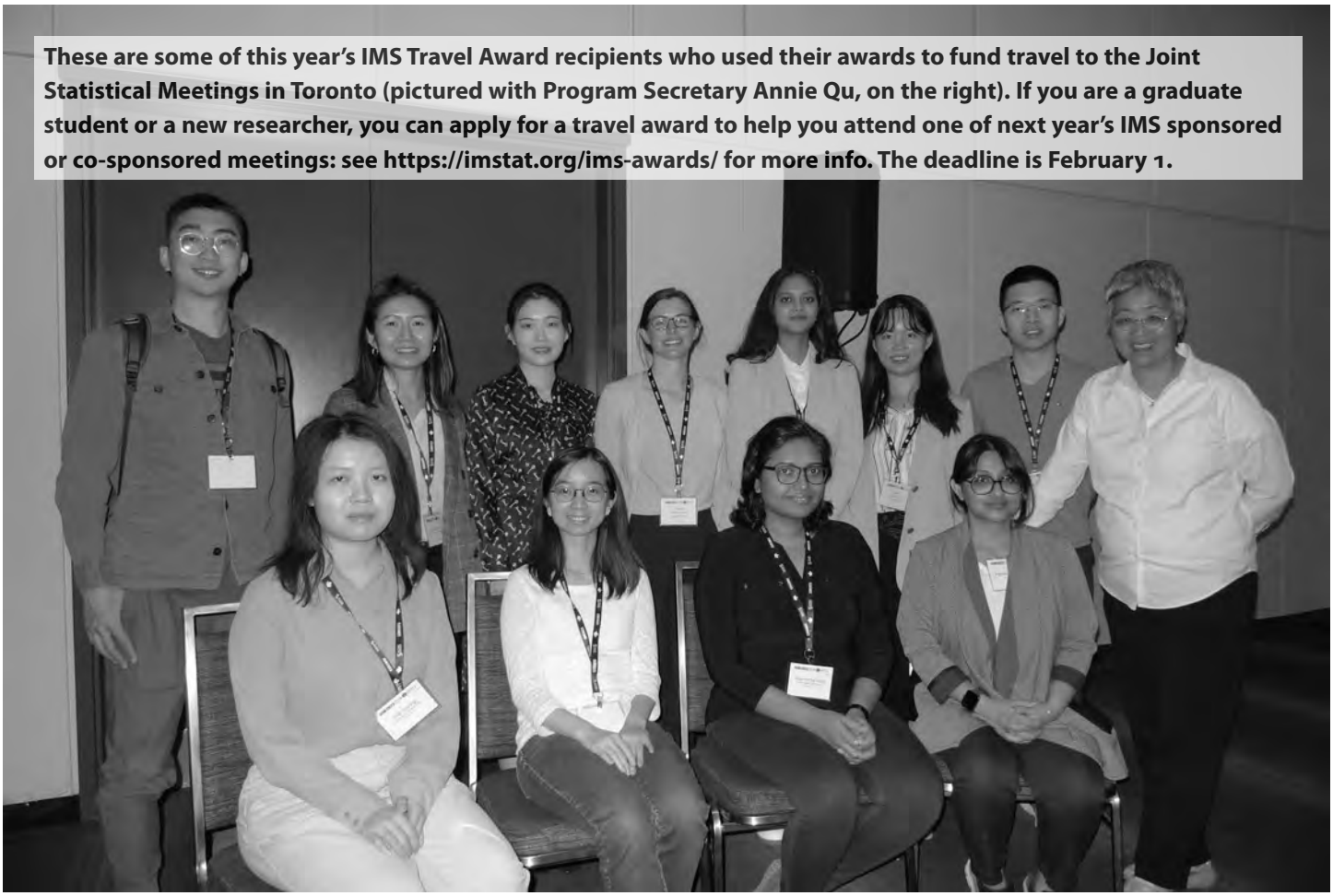
Puzzle 46.2. Suppose X, Y, Z are i.i.d. Poisson with mean $\lambda > 0$. Let $f(\lambda) = P_\lambda(X, Y, Z$ are the degrees of a nonempty graph on 3 vertices). Find $\sup_{\lambda > 0} f(\lambda)$.

Deadline: September 15, 2023

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

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

IMS Travel Awards: apply for next year



These are some of this year's IMS Travel Award recipients who used their awards to fund travel to the Joint Statistical Meetings in Toronto (pictured with Program Secretary Annie Qu, on the right). If you are a graduate student or a new researcher, you can apply for a travel award to help you attend one of next year's IMS sponsored or co-sponsored meetings: see https://imstat.org/ims-awards/ for more info. The deadline is February 1.

Clara-fications #2

Columnist **Clara Grazian** continues our advice column for early-career researchers:

Question: ***When is the right time, as an academic, to have a baby?***

Clara says: This question was posed to me during a panel session organised for International Women in Mathematics Day 2023 (12th May). The panellist who spoke before me responded with, "When you become eligible for long leave." I felt incredibly frustrated. Throughout my early years in academia, during both my PhD and Postdoc, I encountered this notion repeatedly: "You can only have a baby once you secure a permanent job," "Starting a family should wait until you become a faculty member," "Consider having a family only after earning tenure." Strangely, these suggestions almost always came from my female colleagues. (There was a lone exception when a male professor close to retirement remarked that women in their thirties should prioritise having a baby over pursuing a PhD—but that is another story!)

My frustration stemmed from my own desire to start a family in my twenties, while I already felt professionally established. Admittedly, I was pursuing a PhD, but I had an underlying conviction that I would secure a job one way or another, which turned out to be accurate. These recommendations conflicted with my aspirations.

My perspective has evolved since then. The crux of the matter lies precisely here: *only you can determine if you are prepared to have children*. Perhaps you feel secure in your relationship or ready to embark on parenthood independently, with or without a partner. Maybe you prefer a more stable financial situation (let's be honest: PhD stipends are terrible nearly everywhere!). Alternatively, you might prioritise obtaining a permanent position, with benefits like redundancy packages, extended leaves, and maternity or paternity benefits.

Every individual is unique, and no one can decide if you are ready or not, if the timing is right for you or not, except yourself. Consequently, I am recapturing my initial frustration with that response, realising that while it might not be an excellent piece of advice for a wide audience, it could have held personal significance for that colleague, who possibly deemed it vital to secure a permanent job before starting a family.

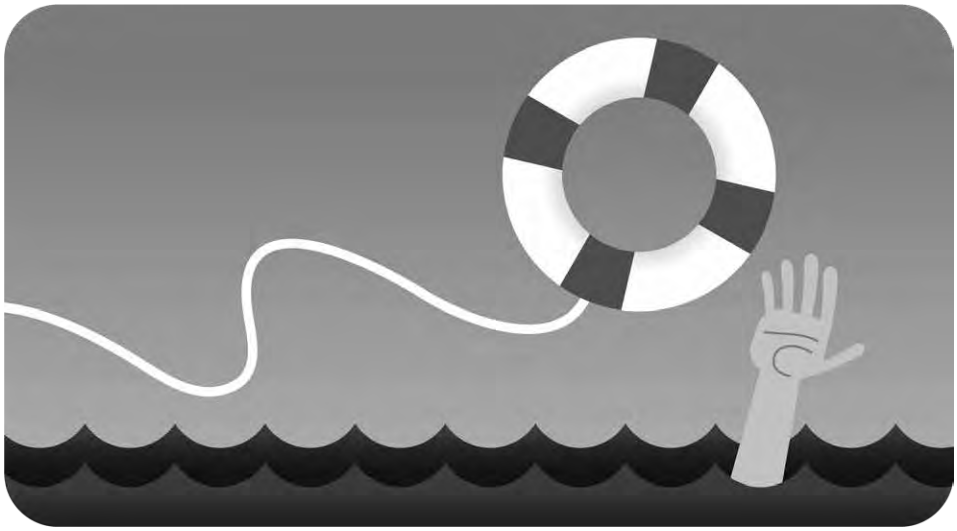
What I can share from experience is this: I've witnessed it all. Individuals (both men and women) having babies during their PhDs, and it worked out fine. People becoming single parents and thriving, with or without a partner. Individuals having babies after attaining permanent positions, and it was all right. People welcoming babies and not having their contracts renewed afterward, yet managing well. The essence lies in distinguishing between professional and personal aspirations. If you desire parenthood and plan your life to give space to this desire, you'll manage, one way or another. It's more about feeling settled than the actual state of being settled, as the definition of "being settled" varies from person to person.

One last consideration: over a 40-year career, situations may arise that affect your job productivity (illness, divorce, loss, caregiving responsibilities). Taking maternity or paternity leave when your child is young is merely one of these reasons—a blissful one, at that!

Early-career researchers are invited to send their **questions about the life of a researcher or ask for career advice**, and Clara will try to find an answer…

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

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



IMS meetings around the world

Joint Statistical Meetings

2024 Joint Statistical Meetings
August 3–8, 2024
Portland, Oregon, USA
w https://ww2.amstat.org/meetings/jsm/2024/

Submit a Continuing Education Course Proposal

Professional Development (PD) is a fundamental component of the professional life of statisticians, increasing the value of their contributions to society. As a priority among our members, the ASA will offer continuing education courses at JSM 2024 in Portland, Oregon, and we encourage your contribution. Submit a continuing education course proposal that touches on one of these areas:

- An in-depth presentation of a specific area of statistical theory, methodology, or application. The material covered may focus on cutting-edge methods or other more established topics.
- A broad overview of an established area of statistical theory or methodology suitable either as a refresher or an introduction to the field.
- A description of a statistical method and its application using one or more software tools, as long as there is significant content material described in the proposal.

Submit your proposal by **September 30**, via https://ww2.amstat.org/meetings/jsm/2024/submissions.cfm
Other key dates are:

Computer Technology Workshop Proposal Submission: July 13, 2023 – January 15, 2024
Topic-Contributed Session Proposal Submission: November 15 – December 7, 2023
Contributed Abstract Submission: December 1, 2023 – February 1, 2024
Registration & Housing reservations open May 1, 2024.

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

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

IMS Asia Pacific Rim Meeting (IMS–APRM) 2024 UPDATED
NEW DATES: January 4–7, 2024. Melbourne, Australia
w https://ims-aprm2024.com/

IMS-APRM will provide an excellent forum for scientific communications and collaborations for researchers in Asia and the Pacific Rim, and promote communications and collaborations between the researchers in this area and those from other parts of the world. The program covers a wide range of topics in statistics and probability, presenting recent developments and the state of the art in a variety of modern research topics and in applications.

The conference organizers are **accepting contributed abstracts** via the website (deadline for submission is October 31, 2023).

Registration is now open, with an early-bird rate until September 30: https://ims-aprm2024.com/registration/

At a glance:

forthcoming IMS Annual Meeting and JSM dates

2024

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

JSM: Portland, OR, **August 3–8, 2024**

2025

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

2026

IMS Annual Meeting: TBC

JSM: Boston, MA, **August 1–6, 2026**

2027

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

More IMS meetings

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

August 12–16, 2024

Ruhr-University Bochum, Germany

w https://www.bernoulli-ims-worldcongress2024.org/

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

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

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

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

December 18–21, 2023

Lisbon, Portugal

w https://sites.google.com/view/icsds2023/

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

The ICSDS will provide **10 Student Travel Awards, $800 USD each, to PhD students who participate in the invited or contributed program**. Applicants for the awards must be members of IMS, and joining at the time of application is allowed. Note that IMS membership is FREE for all students. The **deadline for applications for travel awards is NOW SEPTEMBER 10, 2023**.

The period for early-bird registration is also **extended to September 25th**. Please register via the 2023 ICSDS site https://sites.google.com/view/icsds2023/registration

We look forward to seeing you at the ICSDS in Lisbon in December.

Regina Liu and Annie Qu, Program Co-chairs, 2023 IMS ICSDS

International Symposium on Nonparametric Statistics (ISNPS 2024) NEW

June 25–29, 2024

Braga, Portugal

w https://w3.math.uminho.pt/ISNPS2024/

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

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

More IMS meetings

Myles Hollander Distinguished Lecture NEW
by Adrian Raftery
October 25, 2023
Florida State University and online
w https://stat.fsu.edu/HollanderLecture

Adrian Raftery, the Boeing International Professor of Statistics and Sociology and an adjunct professor of Atmospheric Sciences at the University of Washington, is the 2023 Myles Hollander Distinguished Lecturer. Professor Raftery's will present his lecture on *"Downscaled Probabilistic Climate Change Projections, with Application to Hot Days,"* on October 25, 2023 at 11:00am on the campus of Florida State University.


Adrian Raftery

The live talk will also be accessible via Zoom.

For more information and to register for the virtual talk, visit stat.fsu.edu/HollanderLecture.

Asia-Pacific Seminar in Probability and Statistics
Ongoing and online
w https://sites.google.com/view/apsps/home

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

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

UPDATED
2024 ENAR/IMS Spring Meeting
March 10–13, 2024
Baltimore, MD, USA
w https://www.enar.org/meetings/spring2024/

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

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

Submission deadlines. Between September 5 and October 6, 2023, Distinguished Student Paper Award submissions (up to 20 awards are made each year; see https://www.enar.org/meetings/StudentPaperAwards/index.cfm for more information). Between September 5–October 17, 2023: contributed session proposals due.

UPDATED
WNAR2024
held in conjunction with the 2024 Graybill Conference
June 9–12, 2024
Fort Collins, Colorado, USA
w https://wnar.org/Meetings

The 2024 meeting of the Western North American Region of The International Biometric Society will be held joint with the 2024 Graybill Conference. There will be short courses, a Presidential Invited Address, invited and contributed sessions, young investigator events, and a Student Paper Award with oral sessions. The local organizer is Wen Rick Zhou, Colorado State University. Email wnar@wnar.org with any questions.

WNAR/IBS Outstanding Impact Award and Lectureship: Submit nominations for the 2024 award by November 1, 2023.

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

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

One World Probability Seminar (OWPS): Ongoing and online
w https://www.owprobability.org/one-world-probability-seminar/

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

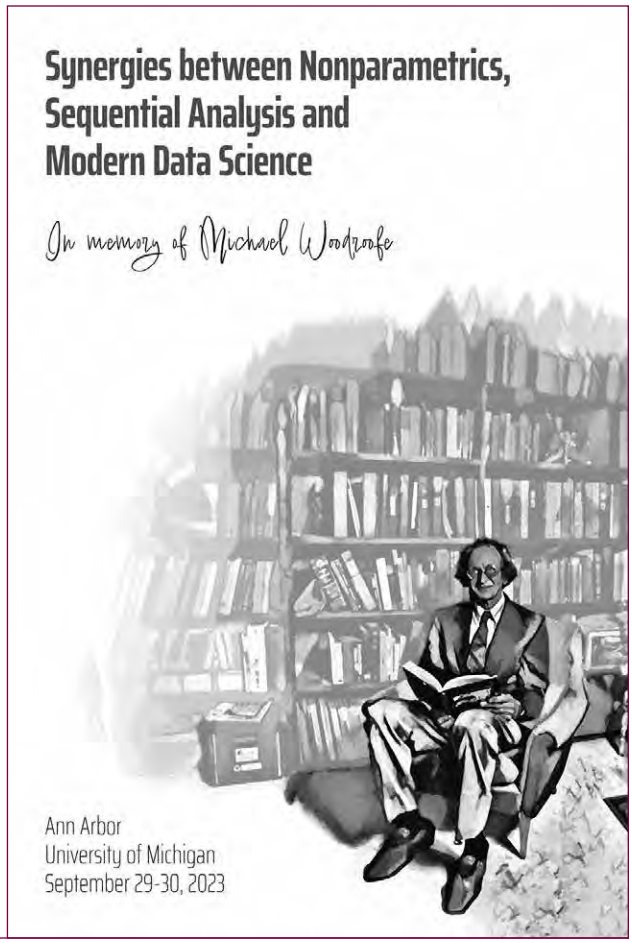
Synergies between Nonparametrics, Sequential Analysis, and Modern Data Science
September 29–30, 2023. University of Michigan, Ann Arbor, USA.
w https://sites.lsa.umich.edu/woodroofememorial/

The Department of Statistics at the University of Michigan (UM) will host a conference titled Synergies between Nonparametrics, Sequential Analysis, and Modern Data Science on the UM campus from September 29 to 30, 2023. The conference will feature distinguished speakers in non-parallel sessions, covering a range of topics including:


Michael Woodroofe (1940–2022)

- Sequential Analysis in Clinical Trials
- Shape Constraints and Applications
- Limit Theorems for Dependent Data
- Modern Data Science and Reinforcement Learning
- Semi-, Nonparametrics and Selection Biases
- Astrostatistics in the 21st Century

It aims to celebrate the remarkable contributions of Michael Woodroofe to Statistics and Probability and provide a platform for exchanging ideas. Registration for the conference is now open. Junior researchers and graduate students who present posters may receive priority in securing financial support from the anticipated NSF funding for this event. To register and see the most up-to-date information, please visit https://sites.lsa.umich.edu/woodroofememorial/



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

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

IMS representative on Program Committee: Frederi Viens.

More details to follow. Please mark your calendars!

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

The fifth international workshop on Statistical Analyses of Multi-Outcome Data, also known as SAM 2024, will take place in Salzburg, Austria, on July 9–10, 2024. Salzburg, renowned as Mozart's birthplace and the picturesque setting for the film *The Sound of Music*, is a spectacularly scenic city and an ideal destination for a summer visit. We hope you will be able to join us!

Our workshop covers a broad range of topics, such as complex longitudinal and survival data analysis, high-dimensional data analysis, precision medicine, and artificial intelligence/machine learning methods, among others. The workshop will have two plenary sessions (speakers TBA), 24 invited sessions, and a poster session. A banquet will be held on the evening of July 9.


Scenic Salzburg hosts SAM 2024

Other meetings and events around the world

NISS events

Webinar: Academic Perspectives on ChatGPT
September 14, 2023, 1:30pm–3pm ET
Online
https://www.niss.org/events/academic-perspectives-chatgpt
In recent years, the rise of advanced language models, such as ChatGPT, has presented both opportunities and challenges in the realm of education. One growing concern is the misuse of these powerful tools by students who rely on them to complete their assignments instead of engaging in independent learning and critical thinking. To address this pressing issue, our NISS Academic Affiliates are organizing a webinar dedicated to exploring opportunities and constraints. Join us for this insightful webinar as we bring together esteemed academics, educators, and researchers to examine the phenomenon of students using ChatGPT and similar language models used for student learning. Through thought-provoking presentations and interactive discussions, we aim to delve into the underlying factors contributing to this and identify effective measures to determine its impact.

Third Penn Conference on Big Data in Biomedical and Population Health Sciences
September 18–19, 2023
University of Pennsylvania, USA
https://www.niss.org/events/3rd-penn-conference-big-data-biomedical-and-population-health-sciences
Topic: "Realizing the potential of machine learning and artificial intelligence (AI) in population health and biomedicine." The Third Penn Conference on Big Data in Biomedical and Population Health Services will be held on September 18-19, 2023 at the Perelman School of Medicine's Biomedical Research. Registration is open.

Undergraduate Student Guide for Grad School:
PhD & MS Programs in Stats, Biostats & Data Science Degrees
Every Friday in October 2023 (Oct. 6, 13, 20, and 27)
Zoom Webinars
https://www.niss.org/events/undergraduate-student-guide-grad-school-phd-ms-programs-stats-biostats-data-science-degrees
Exploring Grad School Paths: Discover the diverse array of opportunities that advanced degrees in Statistics, Biostatistics, and Data Science can offer. Learn about the unique career trajectories, research areas, and real-world applications that await you in these exciting fields.

NISS | National Institute of Statistical Sciences

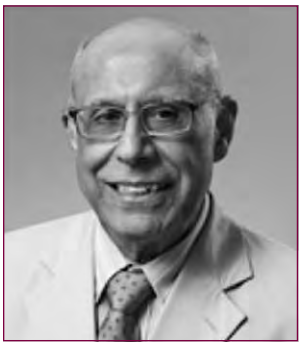
COPSS–NISS Leadership Webinars
Tuesday, September 19, 2023, 12-1pm ET / 9-10am PT
Topic: Leadership in National Scientific Societies
Panelists: Lance Waller (Emory), (TBD), Moderator: Natalie Dean (Emory)
Register (free) at https://www.niss.org/events/copss-niss-leadership-webinar-1
Future dates: Tuesday, October 17, 2023 - 12 pm - 1 pm ET, Tuesday, November 28, 2023 - 12 pm - 1 pm ET
For series information please see https://www.niss.org/copss-niss-leadership-webinar-series
The COPSS-NISS Leadership Webinar Series is co-organized by the Committee of the Presidents of Statistical Societies (COPSS) Emerging Leaders in Statistics and the National Institute of Statistical Sciences (NISS). The purpose of the webinar series is to promote leadership skills for members of the statistical societies at any stage in their careers. The series features conversations with leaders throughout the discipline, including leaders from major academic and government institutions, and companies. Invited speakers share their leadership stories and answer questions about their experiences. Each webinar is moderated by a member of the COPSS Emerging Leaders in Statistics program.

Bayesian Young Statisticians Meeting (BAYSM 2023)
November 13–17, 2023. Online
w https://events.stat.uconn.edu/BAYSM2023/
The Bayesian Young Statisticians Meeting is the official conference of j-ISBA, the junior section of the International Society for Bayesian Analysis (ISBA).

BAYSM 2023 will be held November 13–17, 2023, entirely online. All early-career Bayesian statisticians are encouraged to submit an abstract by September 11, 2023 via the website above.

The plenary speakers are: **Catherine Forbes**, Monash University; **David Rossell**, Universitat Pompeu Fabra; **Alexandra Schmidt**, McGill University; **Marc Suchard**, University of California Los Angeles; and **Giacomo Zanella**, Bocconi University.

New Frontiers in Reliability and Risk Analysis: A Tribute to Nozer D. Singpurwalla
October 13–14, 2023
George Washington University, Washington DC, USA
https://statistics.columbian.gwu.edu/nds2023
This two-day meeting will commemorate the life and work of Nozer Singpurwalla by bringing together experts from the fields he helped to shape.



The symposium will feature four plenary sessions highlighting prominent speakers who each knew Nozer personally and reflect his diverse research interests. The plenary speakers are **Jim Berger** of Duke University, **Sallie Keller** of the U.S. Census Bureau, **Way Kuo** of City University of Hong Kong, and **Jayaram Sethuraman** of Florida State University. Past (2017) American Statistical Association President **Barry Nussbaum** – who is also one of Singpurwalla's former doctoral students – will give the keynote address during the symposium banquet.

IMSI programs and events

The Institute for Mathematical and Statistical Innovation (iMSI) at the University of Chicago has five long programs coming up:

Algebraic Statistics and Our Changing World
September 18–December 15, 2023
https://www.imsi.institute/activities/algebraic-statistics-and-our-changing-world/

Data-Driven Materials Informatics
March 4–May 24, 2024
https://www.imsi.institute/activities/data-driven-materials-informatics/

The Architecture of Green Energy
June 17–August 23, 2024
https://www.imsi.institute/activities/the-architecture-of-green-energy/

Statistical Methods and Mathematical Analysis for Quantum Information Science
September 16–December 13, 2024
https://www.imsi.institute/activities/statistical-methods-and-mathematical-analysis-for-quantum-information-science/

Uncertainty Quantification and AI for Complex Systems
March 3–May 23, 2025
https://www.imsi.institute/activities/uncertainty-quantification-and-ai-for-complex-systems/

A full list of the events (workshops and conferences) organized by iMSI is on the website at https://www.imsi.institute/events/

Royal Statistical Society Discussion Meeting: 'Probabilistic and statistical aspects of machine learning'
September 6, 2023
Harrogate, UK
https://rss.org.uk/training-events/events/key-events/discussion-papers/
Join us on September 6th in Harrogate, Yorkshire, at 5pm (BST) to hear the presentation of two discussion papers on 'Probabilistic and statistical aspects of machine learning' due to be published in *Journal of the Royal Statistical Society, Series B*. This Discussion meeting is taking place at the RSS annual conference in Harrogate and will be chaired by RSS President, Andy Garrett. It is free, open to everyone and there's no need to register for the conference, just for the meeting itself.

Full details of the meeting, papers and authors including their preprints can be found here: https://rss.org.uk/training-events/events/key-events/discussion-papers/. We encourage comments on the paper following the presentation by the authors. This can then be written up in 400 words for publication in the journal. Contact j.shorten@rss.org.uk for full details and to reserve a speaking slot of up to 5 minutes. Alternatively, you can decide on the day to make a comment. Any contributions sent by 5th September will be read at the meeting if there's time. All contributions should be received by 30 September - submit in editable format to https://mc.manuscriptcentral.com/jrssb for publication in the journal along with the paper.

We very much hope to see you there.

Employment Opportunities

Germany: Garching b. Munich

Technical University of Munich, Institute for Advanced Study

Tenure Track Assistant Professorship in Statistical Modelling and Uncertainty Quantification for Spatio-Temporal Data

https://jobs.imstat.org/job//70304530

Singapore

Nanyang Technological University

Full Professor (with Tenure) in Mathematics Education

https://jobs.imstat.org/job//69998009

Taiwan: Taipei City

Institute of Statistical Science, Academia Sinica, Taiwan

Tenure-Track Faculty Positions

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

United Kingdom: Glasgow

University of Glasgow

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

https://jobs.imstat.org/job//70507001

United Kingdom: Glasgow

University of Glasgow

Multiple Lecturer/ Senior Lecturer/ Reader Positions in Statistics & Data Analytics (Research & Teaching Track)

https://jobs.imstat.org/job//70506862

United States: Berkeley, CA

University of California, Berkeley – Department of Statistics

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

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

United States: Los Angeles, CA

University of Southern California, Marshall School of Business

Professor of Data Sciences and Operations (Open Rank) - Statistics

https://jobs.imstat.org/job//70057823

United States: San Diego, CA

Art of Problem Solving

Math Curriculum Developer

https://jobs.imstat.org/job//70230969

United States: San Diego, CA

San Diego State University

Assistant Professor: Data Science/Statistics Education

https://jobs.imstat.org/job//70466398

United States: Chicago, IL

University of Chicago Booth School of Business

Assistant/Associate Professor of Econometrics and Statistics

https://jobs.imstat.org/job//70416640

United States: Ann Arbor, MI

University of Michigan

Tenure-Track Assistant Professor & Open Rank

https://jobs.imstat.org/job//70230934

United States: Albuquerque, NM

The University of New Mexico, Department of Mathematics and Statistics

Assistant Professor of Statistics

https://jobs.imstat.org/job//66117983

United States: Ithaca, NY

Cornell University - ORIE

Professor of Practice/Senior Lecturer/Lecturer

https://jobs.imstat.org/job//70084977

United States: Waco, TX

Baylor University, Statistics

Assistant Professor, Clinical track

https://jobs.imstat.org/job//70502460

United States: Waco, TX

Baylor University, Statistics

Assistant Professor, Tenure-Track

https://jobs.imstat.org/job//70502436

United States: Seattle, WA

Fred Hutchinson Cancer Center

Assistant or Associate Professor, Infectious Disease Biostatistics

https://jobs.imstat.org/job//70135889

International Calendar of Statistical Events

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

Online and Ongoing series

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

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

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

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

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

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

September 2023

September 7: London, UK. **7th IMA Conference on Mathematics in Defence and Security** **w** https://ima.org.uk/20850/7th-ima-defence/

UPDATED ONLINE September 11–15: Online (previously advertised in Ljubljana, Slovenia). **23rd European Young Statisticians Meeting (EYSM) 2023** **w** https://sites.google.com/view/eysm2023

September 24–26: Koper / Capodistria, Slovenia. **Applied Statistics 2023** **w** https://as.mf.uni-lj.si/

ims September 29–30: Ann Arbor, MI, USA. **Synergies between Nonparametrics, Sequential Analysis, and Modern Data Science** **w** https://sites.lsa.umich.edu/woodroofememorial/

October 2023

HYBRID October 3: London, UK, and online. **RSS Discussion Meeting: 'Parameterizing and Simulating from Causal Models' by Robin Evans and Vanessa Didelez** **w** https://rss.org.uk/training-events/events/key-events/discussion-papers/

NEW October 13–14: Washington DC, USA. **New Frontiers in Reliability and Risk Analysis: A Tribute to Nozer D. Singpurwalla** **w** https://statistics.columbian.gwu.edu/nds2023

ims October 25: Tallahassee, FL, USA. **2023 Myles Hollander Distinguished Lecture, by Adrian Raftery** **w** https://stat.fsu.edu/HollanderLecture

November 2023

November 9–10: Northfield, MN, USA. **NISS Ingram Olkin Forum (IOF) workshop: Statistical Challenges in the Analysis of Police Use of Force** **w** https://www.niss.org/events/iof-workshop-statistical-challenges-analysis-police-use-force

December 2023

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

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

January 2024

ims January 4–7: Melbourne, Australia. **IMS Asia Pacific Rim Meeting (IMS-APRM2024)** **w** http://ims-aprm2024.com/

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

February 2024

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

Continues on **page 30**

International Calendar *continued*

March 2024

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

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

May 2024

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

June 2024

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

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

July 2024

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

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

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

August 2024

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

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

August 2025

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

August 2026

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

August 2027

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

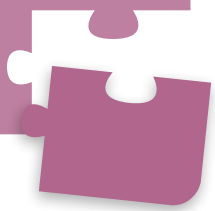
August 2028

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

August 2029

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

Are we missing something? If you know of any statistics or probability meetings which aren't listed here, please let us know.
You can email the details to Elyse Gustafson at ims@imstat.org, or you can submit the details yourself at https://www.imstat.org/ims-meeting-form/
We'll list them here in the Bulletin, and on the IMS website too, at imstat.org/meetings-calendar/



Membership and Subscription Information: 2023

Journals

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

Individual Memberships

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

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IMS Bulletin

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

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4: June/July	**May 1**	May 15	June 1
5: August	**July 1**	July 15	August 1
6: September	**August 15**	September 1	September 15
7: Oct/Nov	**September 15**	October 1	October 15
8: December	**November 1**	November 15	December 1

the **next** issue is

October/ November 2023

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DEADLINES for submissions

September 15, then **November 1**

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Volume 52 · Issue 6

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

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Articles

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