

# Bernoulli News

Newsletter of the Bernoulli Society for Mathematical Statistics and Probability

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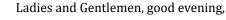
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### EADEM MUTATA RESURGO

Bernoulli Society Presidential Address On the Occasion of the Society's Golden Jubilee



It so happens that I became the President of the Bernoulli Society, as our Society was approaching its 50 years. As a matter of fact, I wasn't even born when the Society was founded. So, one could say it's bit quirky that I'm the one that stands here today, speaking to you about the Society's half-century. Still, even retrospectively, one can appreciate that in the mid 70's, the Bernoulli Society was an idea whose time had come. Three ingredients converged at the right time.

First, a clear scientific rationale: the need to give more organised expression to statistics in the physical sciences on the one hand, and to stochastic processes on the other. Then, the need to have a truly international entity that could unite scientists that were otherwise divided by the geopolitics of the cold war. And finally, there were the visionaries who were there at the right time and saw how to crystallise it all into the Bernoulli Society: Jerzy Neyman, David Kendall, Jim Durbin, and Jef Teugels, among others of course.

And the labor leading to the Society's birth took time and effort. Our Past President, Jef Teugels, has eloquently documented the developments that culminated in the Society's creation. Soon after its founding, the Bernoulli Society sought to expand its geographical scope beyond its European Roots. It was our Past President Klaus Krickerberg who looked both east and west, resulting in the LARC and the EAPRC committees.



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### Editor BOJANA MILOŠEVIĆ

Faculty of Mathematics UNIVERISTY OF BELGRADE BELGRADE, SERBIA

#### **Contact**

bojana.milosevic@matf.bg.ac.rs

† Bernoulli News is the official newsletter of the Bernoulli Society, publishing news, calendars of events, and opinion pieces of interest to Bernoulli Society members, as well as to the Mathematical Statistics and Probability community at large. The views and opinions expressed in editorials and opinion pieces do not necessarily reflect the official views of the Bernoulli Society, unless explicitly stated, and their publication in Bernoulli News in no way implies their endorsement by the Bernoulli Society. Consequently, the Bernoulli Society does not bear any responsibility for the views expressed in such pieces.

n p. 1 **Deadline for the next issue: 31 March, 2025**Send contributions to: bojana.milosevic@matf.bg.ac.rs

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# Bernoulli Society Presidential Address (continued from front cover)

Historically, it is clear that the Bernoulli Society has had a profound effect on the unity of our field, certainly in geopolitical terms. Just think about the First Bernoulli World Congress in Tashkent in 1986: 1000 participants from 40 different countries from both east and west. But it has also been fostering the unity of its constituent disciplines, both probability and statistics. I think the two disciplines cohabit both intimately and harmoniously in our Society, and this is not accidental. David Williams famously quipped that probability and statistics were married and then they got divorced. I like to think that within our Society they are reconciled. And not accidentally so: it is deliberately nurtured. If you think about it, the Bernoulli Journal is possibly the only venue where both disciplines can feature equally.

Finally, the meetings organised by the Bernoulli Society have had major impact, both globally and regionally. The World Congresses are of course the premier example, indeed jointly with IMS starting with the 2nd World Congress in Uppsala. But there are also the regional meetings: the European Meeting of Statisticians (EMS) and the Latin American Congresses (CLAPEM) having a transformational effect on their corresponding regions. All these meetings seem so evident and central today, but there was a time when their future seemed tentative, and in some ways one of the great success stories of the Bernoulli Society, and arguably one of its key reasons for existence, was to secure this future.



In many ways, some of them good, others less so, the

Society has not changed dramatically over the course of its history. But one thing does seem strikingly different, and this has to do with gender balance. Of course, this reflects a more general positive trend: we are slowly starting to make use of all the bright minds, not just the male ones – but it is still important that this be reflected all the way up to the leadership of our scientific bodies. There is still a long way to go, but the future looks brighter.

And speaking of the future, looking ahead, we may be confronted with a bit of déjà vu, where divisions of the past –considered for a long time as ancient history-start re-emerging. Hopefully it won't get to that, but in any case, the Society should remember its founding principles, and play the same unifying role.

I also see a challenge in terms of the role and impact of Societies, more generally. The way research is conducted, evaluated, disseminated, and accessed has given rise to a more individualistic perspective, especially in later scientific generations. It becomes harder to advocate for the importance of tending the collective. This can make us more susceptible to external influences which comes with opportunities but also risks. It can sometimes be very beneficial: a fresh perspective or a shake-up is occasionally necessary and can reinvigorate the community. But there are also massive players who have the funds and outlets to set the narrative, but whose objectives are not necessarily aligned with ours.

Namely, and I quote: the objectives of the Bernoulli Society are the advancement of the sciences of probability (including stochastic processes) and mathematical statistics and of their applications to all those aspects of human endeavour which are directed towards the increase of natural knowledge and the welfare of mankind.

Ladies and gentlemen, I believe that our Society gives us an identity. It makes us part of a tradition stretching back to some of the some of the foundational actors in our discipline. They are no longer with us, but others like them carried the torch, and yet more will, in a circle of scientific generations. **Eadem Mutata Resurgo, reads our motto. Changed but the same, I rise again.** 

I, for one, am proud to be a part of this tradition.

Victor M. Panaretos President of the Bernoulli Society Delivered on August 13, 2024, at the Bernoulli-IMS World Congress in Bochum

### A Word from the President

In the months leading to 2024, there was a fair amount of discussion amongst our officers and members about how to best commemorate the Society's 50 years. In the end, the consensus was to opt for something modest but thoughtful, rather than a separate big event. This manifested in a few different ways.

First and foremost, there was a special celebratory event that took place in Bochum, during our 11th World Congress. The event kicked off with a commemorative video, including testimonials from Presidents and Scientific Secretaries. You can watch this video here:

https://www.bernoullisociety.org/videos/ Bernoulli50video.html

This was followed by a Presidential Address,

https://www.bernoullisociety.org/videos/ Bernoulli50PresidentialAddress.html

and a speech by Past President Wilfrid S. Kendall, who provided a critical overview of the Society's "second 25 years",

https://www.bernoullisociety.org/videos/ WSK-second25years.html

The event then concluded with our regular General Assembly and a "birthday party" reception. By all accounts, the event was a great success. Indeed, with nearly 200 participants, it was probably one of the best attended Bernoulli Society GAs. I wish to thank the World Congress organisers and staff for helping us put together this celebration.

A second project to mark our Golden Jubilee involved recording interviews with the Society's Presidents, Scientific Secretaries, van Zwet Medal winners over the years. We reached out to all living members of this group, and I'm very pleased to say that we got a very good turnout. As a result, we have now curated a collection of several interviews that record a valuable collection of insights and perspectives on the Society. You can access all these through the webpage:

https://bernoullisociety.org/bernoulli50

I wish to warmly thank S.-X. Chen, R.D. Gill, P. Jagers, W.S. Kendall, E. Mammen, Th. Mikosch, V. Pérez-Abreu, N. Reid, J.L. Teugels, M.E. Vares, and E. Waymire for taking part in this laborious project. I think the result was well worth the effort, and records important parts of our history. I would also like to acknowledge the A/V experts at EPFL, who helped me edit the videos.

Finally, our members were able to collect various memorabilia at the Bernoulli Society's booth at the

World Congress: most importantly, a commemorative polo shirt featuring the "Bernoulli 50" logo. I'm happy to report that this was very popular, and many World Congress participants could be seen proudly sporting them during the Congress. If you missed the opportunity to get one, you will have your chance at the SPA 2025 in Wroclaw, where a Bernoulli booth will also be present.

Moving forward, I would like to warmly congratulate our recent award winners: Rianne de Heide (Twente), Lihua Lei (Stanford), and Snigdha Panigrahi (Michigan), recipients of the 2025 New Researcher Award; Gisueppe Canizzaro (Warwick), who has been awarded the Doeblin Prize; and Herold Dehling (Bochum) who has been awarded the Willem van Zwet Medal. I would like to extend a personal thank you to Herold, who has indeed provided valuable services to our Society, most prominently (but certainly not exclusively) by his outstanding work as LOC Chair of the recent World Congress. You can read more in this BNews issue.

I would also like to take this opportunity to thank Gang Li (UCLA) and Grace Y. Yi (Western Ontario) for their dedicated service as EJS editors, and welcome the incoming editors, Alexandra Carpentier (Pottsdam) and Arnak Dalalyan (Paris) – I am grateful to them for taking on this important role as of January 1st 2025.

Let me conclude with two important announcements:

- As was announced at our recent GA, the next Bernoulli-IMS World Congress will take place in Singapore in 2028. Adrian Roellin (NUS) will serve as Chair of the LOC and he has my gratitude for taking on this important and major task. I'm also thankful to all colleagues at the National University of Singapore for putting forward such a compelling proposal. Please stay tuned for updates!
- In a break with tradition, our next General Assembly –including the transfer of the Bernoulli bookwill take place at the SPA 2025 meeting in Wroclaw, Poland (July 14-18, 2025) rather than the ISI World Statistics Congress (5-9, October). This is due to the ISI WSC being exceptionally moved to fall instead of its usual timing in the summer, thus not being well-aligned with our own administrative calendar.

Victor M. Panaretos President of the Bernoulli Society Lausanne, Switzerland

# **News from the Bernoulli Society**

# The European Meeting of Statisticians – Call for proposals

The Bernoulli Society has launched a call for proposals for hosting the European Meeting of Statisticians (EMS) in 2027 and 2029. The European Meetings of Statisticians are central events for statistics and probability in Europe and worldwide. The meetings should be the natural forum where all European statisticians and probabilists meet to exchange ideas and learn about the latest scientific developments. The EMS is typically held in June or July at a time of year

that helps maximize attendance, although timing may vary depending on the local circumstances of the chosen venue. The venue should be a location accessible to a large proportion of Bernoulli membership and European researchers. Anyone interested in hosting either EMS 2027 or EMS 2029 should contact secretariat@bernoullisociety.org who can provide detailed information for guidance on what is required.

# Call for Special Issue of Extremes: Bridging Heavy Tails and Artificial Intelligence

The journal *Extremes* invites contributions to a special issue on Artificial Intelligence (AI) and Extreme Value Theory (EVT) with the aim of bridging the gap between the two fields and addressing the growing challenges posed by extreme events. Topics of interest include interfaces between regularly-varying tails and machine learning, neural architectures for model-

ing heavy-tailed phenomena, explainability of machine learning models for extremes, generative models for extreme events, and online learning methods for extreme events. Manuscripts must be submitted by March 30th, 2025. For guidelines and submissions, visit the Springer Submission Portal.

## **Awards and Prizes**

### The Winner of the 2025 Willem van Zwet Medal



The third awardee of the Willem van Zwet Medal is Herold Dehling (Ruhr-Universität Bochum). He was awarded for the excellence of his services to the Society, his leadership in the editorial work and strengthening of the Society's publications, and his special effort and commitment in the organization of flagship events of the Bernoulli Society.

Knowing that there are so many other colleagues who devote their time and energy to the wellbeing of the Bernoulli Society, I am extremely honoured and humbled to receive the 2025 Willem van Zwet Medal. It has been a great privilege for me to serve the Bernoulli Society. I especially remember with pleasure the 2006 European Meeting of Statisticians, and the 2013 German-Polish Joint Conference in Probability and Statistics. Both times, I had the honor to be SPC chair. A very special highlight was, of course, the 2024 Bernoulli-IMS 11th World Congress in Probability and Statistics, when I chaired the LOC. I also felt privileged to serve as EIC of SPA, and as BS Publications Secretary. I hope that also in the future, I will have opportunities to contribute to the success of our Society. Receiving the Willem van Zwet Medal is certainly a great motivation.

Herold Dehling, Bochum

Congratulations Herold!!!

### **Bernoulli Society New Researcher Award 2024-2025**

The New Researcher Award recognizes the work of outstanding young researchers who are members of the Bernoulli Society. This year the award was for innovative contributions to the field of Probability. The award committee chose the following new researchers for the award: Lingfu Zhang (University of California, Berkeley;); Leonardo Tolomeo (University of Edinburgh); Jiaoyang Huang (University of Pennsylvania). Each of the above awardees delivered an invited talk during the 11th Bernoulli-IMS World Congress held in Bochum, Germany, August 12-16.

The winners of the New Researcher Award 2025 in Mathematical Statistics are: **Rianne de Heide** (University of Twente); **Lihua Lei** (Stanford Graduate School of Business); **Snigdha Panigrahi** (University of Michigan).

The awardees will deliver a talk at the special invited session during the ISI World Statistics Congress Conference to be held in The Hague, Netherlands, from October 5-9, 2025. The committee also selected **Ashwin Pananjady** (Georgia Institute of Technology), for an honourable mention.

#### 2024 Awardees:



Lingfu Zhang obtained his bachelor's degree from MIT in 2017 and his PhD in mathematics from Princeton University in 2022. He then spent two years as a Miller Fellow at UC Berkeley before joining Caltech as an assistant professor in the sum-

mer of 2024. His research focuses on probability theory, exploring various problems connected to mathematical physics, computer science, combinatorics, and statistics. Topics he has worked on include Anderson localization, mixing and cutoff of Markov chains, local sampling algorithms, and, more recently, the Kardar–Parisi–Zhang (KPZ) universality class and its connections to random matrix theory.



**Leonardo Tolomeo** received his PhD at the university of Edinburgh in 2019. He then worked as a postdoc at the university of Bonn from 2019 to 2022, and was hired as an assistant professor at the University of Edinburgh in 2022.



Jiaoyang Huang Jiaoyang Huang is an Assistant Professor in the Department of Statistics and Data Science at the University of Pennsylvania. His research focuses on random matrix theory, a mathematical theory with widespread use in modern fields of science and engineering. His work further develops random

matrix theory to address questions concerning the universality behavior of sparse random graphs and interacting particle systems, which have profound implications in graph theory, network theory, and mathematical physics. His interests also include statistical learning theory, where he develops new tools to understand the training dynamics of deep neural networks. Huang's work has been supported by the National Science Foundation. Additionally, he is the recipient of the Bernoulli Society New Researcher Award in 2024, Sloan research fellowship in 2024, a finalist of the Blavatnik Regional Awards in 2022, and a Simons Junior Fellow from 2020 to 2022.

#### 2025 Awardees:



Photo taken by Patrick Siemons

Rianne de Heide is an Assistant Professor in mathematical statistics at the University of Twente. Her research contributes to the foundations of the new theory of hypothesis testing with evalues, Bayesian learning and bandit algorithms. Central in her work is both bringing a solid mathematical foundation to the topics she works on in different fields, as well as making the theory accessible for less mathematical au-

diences. Rianne contributes to academia becoming a workplace where everyone feels valued and can be themselves by raising awareness for the obstacles underrepresented groups face, and by improving policy. She recently initiated the Kindness and Excellence in Academia initiative in the Netherlands.



Lihua Lei is an assistant professor at Stanford Graduate School of Business, an Assistant Professor of Statistics (by courtesy), and a Faculty Fellow at Institute for Economic Policy Research (SIEPR). He got his PhD in statistics at

UC Berkeley, advised by Peter Bickel and Michael Jordan, and spent three years at Stanford Statistics working with Emmanuel Candès as a postdoc. His research areas include causal inference, econometrics, experimental design, conformal inference, multiple testing, network clustering, and stochastic optimization. A large portion of his research focuses on empowering statistical reasoning with machine learning and augmenting machine learning with statistical reasoning.



**Snigdha Panigrahi** is an Assistant Professor of Statistics at the University of Michigan and also holds a courtesy appointment at the Department of Biostatistics. She has been an elected member of the International Statistical Institute since 2021. Recently, her work was

recognized with the CAREER Award for early-career faculty by the National Science Foundation. Snigdha's research, supported by both the National Science Foundation and the National Institutes of Health, focuses on developing new randomized techniques for replicable learning from complex data. Although many statistical learning methods are available for exploring different models and selecting the one with the best predictive performance, there are far fewer options for performing inference in the fitted, data-dependent model. The randomized techniques in Snigdha's research integrate with existing methods for supervised and unsupervised learning, enabling efficient inference in the resulting data-dependent models and thereby improving the replicability of findings from these models.

**Ashwin Pananjady** Ashwin Pananjady is a tenure-track assistant professor at Georgia Tech appointed jointly between the H. Milton Stewart School of Industrial and Systems Engineering



and the School of Electrical and Computer Engineering, where he holds a Gerald D. McInvale Early Career Professorship. His research interests span highdimensional statistics and probability, mathematical optimization and signal processing, and their applications to data science, machine learning and reinforcement learning. Pananjady received his Ph.D. in Electrical Engineering and Computer Science from UC Berkeley where he graduated with the David Sakrison Memorial Prize, and his B.Tech. degree in Electrical Engineering from IIT Madras where he graduated with the Governor's Gold Medal. He is a recipient of an Amazon Research Award, Adobe Data Science Research Award, Best Paper Prize (runner-up) for Young Researchers in Continuous Optimization from the Mathematical Optimization Society, Lawrence Brown Award from the Institute of Mathematical Statistics, and Simons-Berkeley Research Fellowship in high-dimensional probability, geometry and computation. His teaching has been recognized by both Georgia Tech and Berkeley.

### The Winner of 2024 Wolfgang Doeblin Prize

Giuseppe Cannizzaro (University of Warwick and EP-SRC Fellow, UK) has been awarded the 2024 Wolfgang Doeblin Prize. This prestigious recognition highlights his exceptional contributions to the field of stochastic partial differential equations and his outstanding achievements in the application of these equations to non-equilibrium statistical physics. Professor Giuseppe Cannizzaro will present a lecture at the 44th Con-

ference on Stochastic Processes and their Applications, which will take place in Wrocław on July 14–18, 2025. More details about this award can be found at /www.bernoullisociety.org/prizes?id=158. Have a look at the interview with Giuseppe on page.

Congratulations Giuseppe!

# **Second Rousseeuw Prize awarded for False Discovery Rate**

The King Baudouin Foundation has announced the winners of the second Rousseeuw Prize for Statistics. This biennial prize, worth 1 million USD, aims to reward excellence in statistical research that has a significant impact. The selected topic is The False Discovery Rate (FDR) and Methods to Control It. The prize amount will go to Yoav Benjamini (70%), Daniel Yekutieli (15%) and Ruth Heller (15%) from Tel Aviv University. An image with their photos is attached. The jury also recognizes the important contribution of Yosef Hochberg, who sadly is no longer alive.

The international jury appointed by the King Baudouin Foundation selected the winners from the nom-

inations received after a widely advertised call earlier this year. The jury consisted of its chair, David Hand (Imperial College), Lutgarde Buydens (Radboud University Nijmegen), Probal Chaudhuri (Indian Statistical Institute), Roger Koenker (University of Illinois), Steve Marron (University of North Carolina), Cynthia Rudin (Duke University), Louise Ryan (University of Technology Sydney), David Steinberg (Tel Aviv University), Maria-Pia Victoria-Feser (University of Geneva), and Huixia Judy Wang (George Washington University). More details can be found at www.rousseeuwprize.org.

Congratulations to all winners!

## **Call for Nominations: 2025 Ethel Newbold Prize**

The Bernoulli Society's Newbold Prize Committee invites nominations for the 2025 Ethel Newbold Prize. Established in 2014, this biennial prize honours the sig-

nificant contributions of women to the field of statistics. The award, generously supported by Wiley, recognises excellence in statistics without regard to the gender of

the recipient.

The Ethel Newbold Prize will be awarded to an outstanding early or mid-career scientist whose work demonstrates excellence in mathematical statistics or in research that links developments in a substantive field to new advances in statistics. The award consists of the prize amount of 2,500€ together with an award certificate. The recipient will also be invited to present a talk at the next Bernoulli-IMS World Congress, a Bernoulli-sponsored major conference, or the ISI World Statistics Congress.

The prize will only be awarded if the set of nominations includes candidates of both genders. Nominations should include a letter outlining the nominee's achievements and contributions and a recent curriculum vitae of the nominee.

In order to nominate someone, please send your nomination and any inquiries to Adrian Röllin at adrian.roellin@nus.edu.sg. The deadline for submissions is 30 November 2024. The winner will be announced in early 2025.

# **New Executive Members in the Bernoulli Society**

### The new representatives of Young Researcher Committee



**Short bio:** Chiara Amorino is an Assistant Professor at Universitat Pompeu Fabra (UPF) in Barcelona. She earned her PhD in Mathematics in 2020 from Université Paris-Saclay, where her thesis focused on statistical inference for stochastic differential equations with jumps. Before joining UPF, she was a postdoctoral researcher at the University of Luxembourg. Chiara's research spans a broad range of topics in applied probability and statistics. Her primary focus lies in statistical methods for interacting particle systems and local differential privacy. Additionally, she has explored topics such as Stein's method, Malliavin calculus, Hawkes processes, and fractional Brownian motion. She has served as a referee for several leading journals, including Annals of Statistics, Bernoulli, Stochastic Processes and Applications, Journal of Econometrics, and Journal of Machine Learning. Beyond her academic contributions, Chiara has actively presented her research and organized numerous conferences. She is currently a co-organizer of the Statistics Seminar at Universitat Pompeu Fabra.



**Short bio:** Yan Shuo Tan is an assistant professor at the Department of Statistics and Data Science at the National University of Singapore. He obtained his PhD in Mathematics in 2018 from the University of Michigan, and was previously a Neyman Visiting Assistant Professor at the Department of Statistics at the University of California, Berkeley as well as a Research Fellow at the Simons Institute. His research is on statistical machine learning, focusing on the theory, methodology and applications of modeling with tree-based models and randomized ensembles. He is also interested more generally in interpretable machine learning.

**Vision of the Job:** am honored to be a member of the Bernoulli Young Researchers Committee. I hope to use this opportunity to encourage more meaningful interaction among researchers from different countries, and foster a warm and welcoming environment for young researchers in statistics and probability, regardless of their background.

# A Conversation with Giuseppe Cannizzaro

Moderated by Editor

Giuseppe Cannizzaro did his Undergraduate and Master studies in Mathematics at the Università degli Studi di Padova, graduating with honours in 2013. He then moved to Technische Universität Berlin, where he completed his PhD under the direction of Prof. Peter K. Friz. In 2016, he joined the group of Prof. Martin Hairer at the University of Warwick first and Imperial College London then. He went back to the University of Warwick as Harrison early Career Assistant Professor in 2018, supported by an EPSRC Postdoctoral Fellowship. After becoming Assistant Professor, he won the prestigious UKRI Future Leaders Fellowship in 2022. Currently, he is a Reader (Associate Professor) within the same university.

**B.M.** The Wolfgang Doeblin Prize is one of the most prestigious awards for young researchers. How did you feel when you received the letter informing you that you were this year's winner?

**G.C.** I was extremely happy and surprised! I had never thought of prizes before. Clearly, I knew they exist, but I did not envision myself winning one. There are several amazing young researchers working in probability, so it is a huge honour to have even been considered for the Doeblin.

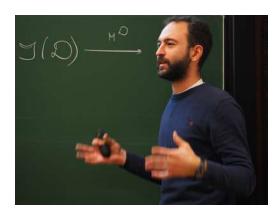
**B.M.** What do you think, how much this award will be important for your future career?

**G.C.** Honestly, I have no idea! It is an unexpected and very welcome recognition for the results I obtained so far, and, from a personal point of view, I consider it as stimulus to do even more in the future. I hope the Doeblin prize will help to make myself and my research known also to those who do not work in the same field as mine and that it will contribute to trigger new collaborations as well as stimulate the interest of prospective students to it.

**B.M.** How do you see the importance of probability evolving in the research landscape in the coming years?

**G.C.** I believe that the field of probability has grown significantly in recent years. This is due to the fact that It is an extremely fascinating subject with a number of deep theoretical questions and has many intriguing connections with a variety of fields, from other areas of Mathematics to (theoretical) Physics, Computer Science and Statistics. Furthermore, Probability plays a significant

role in modelling and its versatility makes it very wellsuited to applications to real world problems. Therefore, I think its importance can only grow in the future.



**B.M.**Finally, what advice would you give to PhD students entering the field today?

G.C. Listen to everyone, from senior academics to colleagues and younger students, even from disciplines and research areas which are not necessarily close to yours, and actively engage with them, explaining your research questions and understanding theirs. It is difficult to predict where inspiration will come from, and it takes time to identify the research direction which better suits one's interests and abilities. Also, don't be discouraged by failure. Research is not a straight path and, in most cases, is made of bumps and turns. As such, it requires time and a mind open to consider strategies and directions which can even be far from what one might have imagined.

### A summary of the centennial sessions 1922–1924

Adam Jakubowski Nicolaus Copernicus University adjakubo@mat.umk.pl

Communicated by the Editor

Adam Jakubowski is a Professor at the Department of Probability Theory and Stochastic Analysis of the Faculty of Mathematics and Computer Science at the Nicolaus Copernicus University in Toruń. His research interests revolve around limit theorems of probability theory, the theory of stochastic processes in infinite dimensional spaces and the stochastic theory of extreme values. Prof. Jakubowski studied at the Nicolaus Copernicus University in 1973-1978 and was elected the Best student of the University in 1976. He held many positions both at the NCU and in the national arena. He was the Dean of the Faculty of Mathematics and Computer Science for two terms (1999-2005), a long-standing member of the NCU Senate (1993-2012), an elected member of the Council of Science by the Ministry of Higher Education and Science (2008-2010), a member of the Central Commission for Degrees and Titles (2013-2016) and a Deputy Chairman of the Committee on Mathematics of the Polish Academy of Sciences (2011-2014). He has extensive contacts abroad. He was a fellow of the Alexander von Humboldt Foundation (Göttingen (1987-88), Bielefeld (1993)). He is an honorary member ("Elected Fellow") of the Institute of Mathematical Statistics (2009) and the International Statistical Institute (2019). He was a member of the World Steering Committee for the International Year of Statistics 2013. In the Bernoulli Society he was, among others, a member of the European Regional Committee (2002-2006), a member of the World Council (2008-2012), the Chairman of the Committee on the Special Year 2013 (2011-2013), and finally the President (2021-2023).

In the article entitled "A Conversation in the Polish Space", written by Chris Burdzy and myself, and published in Bernoulli News Vol. 28 (2) November 2021, I suggested celebrating the centennial of the Probability Theory as we know it now. Let me recall here an excerpt from this article.

Our random walk in the space of historical events has brought us to the early 1920s. That was an exciting period for probability theory. In 1922 the direct part of what is nowadays called the Lindeberg-Feller Central Limit Theorem was published. Lindeberg's result was obtained by a new method that is still of interest. In 1924 Khintchine's Law of the Iterated Logarithm appeared in (...) Fundamenta Mathematicae. These are just two of many examples of fundamental developments in that golden age of probability theory. (...) I am going to encourage organizing conference sessions placing the above cornerstone results in a historical context.

It seems this idea was quite successful. Below you may find a list of events, organized sessions and invited speakers.

### 2022

During IMS Annual Meeting, held 27–30 June 2022 in

London (UK) Session IP23 "Centennial of the Lindeberg Central Limit Theorem" was organized. The speakers were:

- René Schilling (Technische Universität Dresden, Germany)
  - "The Central Limit Theorem: Lindeberg and After". A review of the genesis of the Lindeberg theorem and the contributions of P. Lévy and W. Feller.
- Alfredas Račkauskas (Vilnius University, Lithuania)
  - "Asymptotic Normality in Banach Spaces via Lindeberg Method". Lindeberg's proof of the central limit theorem was extended to certain Banach spaces, depending on geometric aspects (smoothness).
- Adam Jakubowski (Nicolaus Copernicus University, Poland)
  - "The Lindeberg CLT and the Principle of Conditioning". The Lindeberg CLT gives the martingale CLT using a heuristic device called the Principle of Conditioning.
  - Originally, I invited Magda Peligrad to deliver a review talk on the CLT for stationary (dependent) sequences, but she could not come (as it was still the COVID-19 time). My presentation was an *ad hoc* attempt to complete the schedule.

In **2023** two events with historical sessions were organized.

During **34th European Meeting of Statisticians**, held 3–7 July 2023 in Warsaw, Poland, Session IS16 "Centennials of important events in the Probability Theory" was devoted to the (nowadays obvious) relation: stochastic process  $\longleftrightarrow$  distribution on path space.

- Aleksander Weron (Wrocław University of Science and Technology, Poland)
  "Contributions of Hugo Steinhaus to Probability Theory". Symmetric Bernoulli scheme was obtained as an image of the Lebesgue measure on [0, 1].
- Rene Schilling (Technische Universität Dresden, Germany)
  "Celebrating 100 Years of Wiener Space". Some historical aspects surrounding Wiener's paper on "Differential Space" were discussed.
- Adam Jakubowski (Nicolaus Copernicus University, Poland)
  "Convergence in law of stochastic processes". A commonly accepted identification "convergence in law" = "weak convergence of probability measures" was questioned.

During **64th ISI World Statistics Congress**, held 14 – 20 July 2023 in Ottawa, Canada, **the Bernoulli Society Presidential Lecture** was delivered by

- Reinhard Siegmund-Schultze (University of Agder, Kristiansand, Norway)
  - "Between two paradigms of probability theory: a discussion between Richard von Mises and Andrey Kolmogorov in 1932". Details of unknown correspondence between the two famous scientists were presented.
  - This was the only *strictly* historical talk in the series of sessions under consideration. While flavors in relations between the two giants can be exciting, the best source of knowledge describing the road to Kolmogorov's "Grundbegriffe der Wahrscheinlichkeitsrechnung" seems to be the article
  - G. Shafer and V. Vovk, The Sources of Kolmogorov's *Grundbegriffe*, *Statistical Science*, **21 (2006)** 70–98.

#### 2024

During Bernoulli-IMS 11th World Congress in Probability and Statistics, held 12–16 August 2024 in Bochum, Germany, Session IPS43 "Khintchin's LIL Centennial Session" took place. The talks were given by

- Christoph Aistleitner (Graz University of Technology, Austria)
  - "The law of the iterated logarithm in analysis and number theory". A survey of results analogous to the LIL but admitting dependence.
- István Berkes (Renyi Mathematical Institute, Budapest, Hungary)
  - "Khinchin 1924: decimal digits, irrational rotations and the law of the iterated logarithm". A review of contemporary problems with roots similar to the LiL.

The sessions in London, Warsaw and Bochum had quite good attendance, if we take into account that they were organized in parallel streams. This shows that even among purely research publics there is some demand for events of such type. What insights could be valuable for future upcoming occurrences of a similar nature? First of all, it is not easy to organize such a pseudo-historical session. Experienced scholars know a lot, but they are old and tired, not always ready to travel, while young people seem to have a little esteem for the past. Next, a talk given by a professional historian is seldom interesting for active researchers, as most of the facts are known and properly described in the literature. In my opinion, a contemporary "trip to the past" should either

- look at old results from some new perspective, or
- recall the potential of old, often forgotten methods and bring them to new life.

The session in Bochum on the LIL was a perfect example of the former approach. The latter suggestion can be illustrated with the Lindeberg method, considered during the session in London on the CLT. Let us look, for example, at article "A Short and Elementary Proof of the Central Limit Theorem by Individual Swapping" by Calvin Wooyoung Chin, published in The American Monthly, 129:4, 374-380, a journal with a broad audience. The essential part of this article - the details of the Lindeberg method - is taken from the paper by Peter Eichelsbacher & Matthias Löwe "90 Jahre Lindeberg-Methode", Math. Semesterberichte (2014) 61: 7-34 (in German). Chin, however, does not cite e.g. the classic book on convergence of probability measures by Patrick Billingsley (1968), where the CLT was obtained exactly by the Lindeberg method. Eichelsbacher and Löwe do! This phenomenon is well known: there is a tendency for new generations to forget their unfashionable heritage. We have therefore to maintain an accurate perspective on history!

many

# Past Conferences, Meetings and Workshops

# Organized, Sponsored and Co-Sponsored by for Mathematical Statistics and Probability Bernoulli-IMS 11th World Congress in Probability and Statistics, Ger-

The Bernoulli-IMS 11th World Congress in Probability and Statistics was held from 12 to 16 August 2024 on the campus of Ruhr University Bochum, Germany. Organized jointly by the Bernoulli Society for Mathematical Statistics and Probability, and by the Institute of Mathematical Statistics, the congress stood in the tradition of the previous World Congresses, held in Tashkent (1986), Uppsala (1990), Chapel Hill (1994), Vienna (1996), Guanajuato (2000), Barcelona (2004), Singapore (2008), Istanbul (2012), Toronto (2016) and Seoul (2021, virtual). The 2024 World Congress was attended by 933 participants from around the world, making it the best attended world congress since the 1986 Tashkent World Congress. The participants came from 50 different countries, about 25% from Germany, many from neighboring European countries, but also 20% from the US and Canada, sizeable numbers from Asia, Australia and New Zealand, with also some representation from Central and South America, as well as from Africa. The international scientific programme committee was chaired by Aurore Delaigle (University of Melbourne) and Kavita Ramanan (Brown University). Further members of the SPC were Sudipto Banerjee (University of California, Los Angeles), Riddhipratim Basu (Tata Institute of Fundamental Research, Bangalore), Krzysztof Bogdan (Wrocław University of Science and Technology), Holger Dette (Ruhr University Bochum), Hugo Duminil-Copin (University of Geneva), Alice Guionnet (ENS Lyons), Ruth Heller (Tel Aviv University), Nina Holden (New York University), Regina Liu (Rutgers University), Ramsés H. Mena (Universidad Nacional Autónoma de México), Andrea Montanari (Stanford University), Johanna Neslehova (McGill University), Sofia Olhede (EPFL), Roberto Oliveira (IMPA, Rio de Janeiro), Mariana Olvera-Cravioto (University of North Carolina, Chapel Hill), Valentin Patilea (ENSAI, Bruz), Sarah Penington (University of Bath), Annie Qu (University of Calfornia at Irvine), Gareth Roberts (University of Warwick), Janice Scealy (Australian National University), Stijn Vansteeland (Ghent University), Valeria Vitelli (University of Oslo), Hendrik Weber (University of Münster), Song Xi Chen (Peking University), and Thaleia Zaripophoulou (University of Texas at Austin). Members of the local organizing committee were Axel Bücher, Herold Dehling (Chair), Holger Dette, Peter Eichelsbacher, Roland Fried, Christof Külske, Christoph Thäle, Anita Winter, and Jeannette Woerner. The local organizing committee was assisted by a professional

conference organizer, as well as by a team of more than 30 volunteers (staff members, Ph.D. students, and postdocs) from Ruhr University Bochum and the neighboring universities of Dortmund and Duisburg-Essen.



Program co-chairs Aurore Delaigle and Kavita Ramanan, with Local Organizing Chair Herold Dehling. Photo copyright © RUB, Marquard.

During the opening ceremony on Monday morning, led by LOC co-chair Peter Eichelsbacher, the conference participants were welcomed by Günter Meschke (Vicerector of Research, Ruhr University Bochum), Gerd Laures (Dean of the Faculty of Mathematics, Ruhr University Bochum), Claudia Kirch (Spokesperson for the Stochastics Section of the German Mathematical Society), Victor Panaretos (BS President), Michael Kosorok (IMS President) and by SPC Chairs Aurore Delaigle and Kavita Ramanan. LOC chair Herold Dehling read greetings sent by Klaus Krickeberg, former president of the Bernoulli Society and chair of the Scientific Programme Committee of the First World Congress in Probability and Statistics held in 1986 in Tashkent. The 11th Bernoulli-IMS World Congress had an impressive scientific programme. Highlights were the following 15 plenary lectures:

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

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

Special to the 2024 World Congress was the Ising Lecture, organized by the Department of Mathematics of Ruhr University Bochum in memory of Ernst Ising (1900–1998), who spent most of his childhood and youth in Bochum. Born in Cologne, Ising moved in 1904 with his parents to Bochum, where he graduated from high school in 1918. It was in his 1924 Ph.D. thesis, written under the supervision of Wilhelm Lenz at the University of Hamburg, that Ernst Ising analyzed the model for ferromagnetism that nowadays bears his name. In his opening words as chair of the Ising Lecture, Herold Dehling commemorated the fate of the Ising family and other Jewish families in Bochum during the Nazi period.

Most talks were given in one of the parallel sessions, arranged during 10 time slots with 17 sessions each. 149 invited talks were given in 49 invited paper sessions, devoted to a wide range of topics of strong current research interest in probability, statistics, and the interface. The topics and the organizers of the invited paper sessions had been selected by the scientific programme committee. A call for proposals resulted in 55 organized contributed paper sessions with a total of

214 talks. In addition, 242 individual contributed talks were presented, as well as 108 posters, making a total of 728 scientific presentations. The 11th Bernoulli-IMS World Congress in Probability and Statistics featured a vibrant social program, with over 200 participants pre-registering on Sunday afternoon at a Bochum church café, enjoying coffee, tea, and homemade cake. The opening ceremony included an organ performance by Christof Külske in the Audimax, while Monday's IMS Presidential Address and Awards Ceremony was followed by a Welcome Reception with music by Benedikt Jahnel. The Bernoulli Society's 50th anniversary celebration took place during Tuesday's General Assembly, with a reception in the Audimax foyer. The conference dinner on Wednesday evening at Ruhr University Bochum's Mensa was attended by over 800 participants, fostering lively social interaction. Smaller excursions included visits to the picturesque Hattingen old town and the UNESCO-listed Zeche Zollverein.



Generous support from the German Science Foundation (DFG), Ruhr University Bochum, and other sponsors allowed for modest conference fees (300–350 EUR, reduced 200 EUR) that included public transport and social events. Daycare services were also offered at an affordable cost (50 EUR/day), enabling parents to attend.

Participants unanimously agreed that the 11th Bernoulli-IMS World Congress in Probability and Statistics was a great success. Many factors contributed to this. The excellent quality of the scientific programme offered a chance to get an impression of latest developments at the forefront of research on a wide spectrum of topics in probability and statistics. The superb local facilities on the campus of Ruhr University Bochum fostered exchange among the participants. The participants brought a contagious enthusiasm for their latest research, and enjoyed the chance to share their ideas. Not to forget the hard and dedicated work of the local organizing committee, the scientific programme committee, and the many helping hands on campus. The participants could also feel the good spirit among all who were involved in the organization, and the joy that they shared in their work.

> Herold Dehling On behalf of the Local Organizing Committee Bochum

# Pre-Meeting for Young Researchers of the BS-IMS World Congress 2024, Germany



The Pre-Meeting for Young Researchers of the BS-IMS World Congress 2024 took place from August 10-11 at Campus Essen of the University of Duisburg-Essen. The meeting hosted over 90 PhD students and postdocs with backgrounds in statistics, probability and data science. The program featured a scientific day with lectures of Emmanuel Candès, Remco van der Hofstad and Susan Murphy, and a career day with several panels and workshops on diversity, career planning and the publishing process. More than 30 young researchers also presented their work in two poster sessions. During the whole event, the participants were extremely engaged in the discussions and happily used the opportunity to connect among each other and with

the world-renowned speakers. Among other things, they particularly appreciated the quality of the lectures and the possibility to learn from personal experiences in academia of the panel members. The meeting was generously supported by the Bernoulli Society and the IMS, with additional funding from the DMV-Fachgruppe Stochastik and the Faculty of Mathematics at University of Duisburg-Essen. This funding supported 8 scholarships for young researchers from low-income countries and the accommodation of more than 50 participants.

The organizers (Mona Azadkia, Thomas Berrett, Axel Buecher, Andressa Cerqueira, Imma Curato, Sebastian Engelke, Zhenhua Lin, Anita Winter)

# Ole E. Barndorff-Nielsen memorial conference, Denmark

From 29-31 May 2024 around 80 researchers gathered at the Department of Mathematics at Aarhus University in Denmark to celebrate the life and extraordinary scientific achievements of Ole E. Barndorff-Nielsen (1935-2022). We refer to the following obituaries summarising Ole's remarkable contributions to mathematical statistics, probability, financial econometrics and turbulence: www.math.au.dk/en/currently/news/news-item/artikel/eulogy-ole-eiler-barndorff-nielsen-1935-2022 and https://academic.oup.com/jrsssa/article/185/4/2289/7069415

The conference was opened by personal remarks by Ole's wife Bente Barndorff-Nielsen, and Victor Panaretos shared a video message stressing Ole's important contribution to Mathematical Statistics and to the Bernoulli Society in particular, where Ole served as the chair of the European Regional Committee, the Presi-

dent of the society as well as the founding Chief Editor of the Bernoulli Journal.

During the conference, four overview keynote lectures were given summarising Ole's remarkable contributions to various areas of statistics: Michael Sørensen (University of Copenhagen) spoke about "Ole E. Barndorff-Nielsen: Work on statistical inference, sand, wind and hyperbolic distributions", followed by Heather Battey (Imperial College London) highlighting Ole's famous p\* formula in her talk entitled "Ole E. Barndorff-Nielsen's approximate conditional inference". Ole's groundbreaking contributions to financial econometrics were highlighted in Neil Shephard's (Harvard University) talk on "Ole E. Barndorff-Nielsen's contributions to Financial Econometrics" and Almut Veraart (Imperial College London) spoke about "Ole E. Barndorff-Nielsen's contributions to Ambit Stochastics," which covers Ole's work on developing a probabilistic framework for spatio-temporal phenomena in turbulence research and beyond. In addition to the keynote talks, there were 26 invited talks by many of Ole's former collaborators and friends. There was also a poster session showcasing some exciting new research directions by early career researchers.

In addition to Ole's vast scientific contributions, the conference participants and speakers shared personal anecdotes about their interactions with Ole and expressed their appreciation for Ole's tireless and caring support for young researchers throughout his life. Ole's life and work has a lasting impact on many of us and Ole's legacy will live on in many of the exciting research directions he created and the generations of re-

searchers he supported.

We gratefully acknowledge financial support for the conference by research grants of Mark Podolskij, Rodrigo Labouriau and Michael Sørensen and in-kind support by the Bernoulli Society.

Mikkel Bennedsen (Aarhus University), Fred Espen Benth (University of Oslo), Rodrigo Labouriau (Aarhus University), Mark Podolskij (University of Luxembourg), Orimar Sauri (Aalborg University), Steen Thorbjørnsen (Aarhus University), Almut Veraart (Imperial College London).

Almut Veraart On behalf of the Organizing Committee London



### XXVII Brazilian School of Probability, Salvador, Brazil



The XXVII Brazilian School of Probability took place on August 5–9 in Salvador, Brazil. The program featured courses by Frank den Hollander and Alessandra Cipriani, along with numerous talks by renowned researchers. Funding from several sources supported around one hundred participants, including PhD stu-

dents, postdocs, and probability researchers from around the world. Photos and information are available at https://ebp.ufba.br

Alessia Caponera
e-Briefs, Issue 62
Italy

### Statistical Modeling with Apllications 2024, Serbia



Statistical Modeling with Applications 2024 - Stat-Mod 2024 took place on September 24-25 in Belgrade in, in a hybrid format, marking the fifth edition since its establishment. This international conference brings together prominent scientists working in various fields of statistics and its applications, including finance, insurance, machine learning, and many others.

The conference featured 11 thematically focused sessions, with a total of 43 presentations, 22 of which were delivered in person. Participants came from Belgium, Luxembourg, Spain, Greece, Germany, Serbia, Romania, France, Algeria, Cyprus, Austria, Italy, the Czech

Republic, and the United Kingdom. In addition to the presentations, social activities included a traditional Serbian dinner, which offered participants the chance to enjoy authentic local cuisine and experience the warmth of Serbian hospitality, as well as an organized excursion that provided an opportunity to explore local cultural or historical landmarks, enriching the overall conference experience. More details ate available at www.statmod2024.sciencesconf.org

Vlad Stefan Barbu & Bojana Milošević On behalf of the Organizing Committee Belgrade

# Other Events Stochastics Bridges Continents: German-Japanese Autumn School 2024 at Ulm University

From September 23 to 27, Ulm University hosted the international autumn school "Time Series, Random Fields, and Beyond." This prestigious event brought together 45 mathematicians from five European countries, the USA, and Japan to discuss cutting-edge research in time-space stochastics. Organized in collaboration with Japan's Tohoku University, the University of Tokyo, and the Institute of Statistical Mathematics, the school emphasized international collaboration and exchange.

The School provided a unique platform for young mathematicians to network and learn from leading experts in the field. Renowned speakers delivered 12 lectures and 11 invited talks, complemented by 15 poster

presentations of young researchers covering topics like time series, random fields, econometrics, spatial statistics, and stochastic geometry.

Japanese contributions showcased research on the geometry of random fields, Markov chains and data analysis using spatial graphs, time-space econometrics with Fourier methods, as well as backward stochastic differential equations, to name just a few.

German participants highlighted recent contributions to (geometric) point processes and hyperuniformity, ergodic stochastic processes in number theory, etc. with applications e.g. in machine learning optimization and material science. They emphasized the

value of exchanging ideas with peers from diverse fields and countries, such as Austria, France, Italy, Japan, Luxembourg, and the USA.



Group photo of the German-Japanese Autumn School in Ulm (Photo: Andrea Weber-Tuckermann, Ulm University).

The conference fostered both scientific collaboration and cultural exchange. A guided tour of the old city of Ulm and a traditional dinner at a historic Ulm brewery provided a taste of German culture for international guests.

The scientific committee included Satoshi Kuriki (ISM Tokyo), Alexander Lindner (Ulm University), Yasumasa Matsuda (Tohoku University, Sendai), Teppei Ogihara (University of Tokyo), Evgeny Spodarev (Ulm University), and Robert Stelzer (Ulm University).

The event was part of a long-standing partnership between Ulm University's Faculty of Mathematics and Economics and three leading Japanese institutions, building on previous conferences in Tokyo (2018), Ulm (2019), and Sendai (2022). The next event in this series is planned to take place 2026 at the University of Tokyo. The collaboration with Japan strengthens ties between Europe and the Far East, benefiting the next generation of researchers in stochastics.

Further details online: www.uni-ulm.de/mawi/mawi-stochastik/allgemeines/aktuelles/fall-school-time-series-random-fields-and-beyond-2024/

Evgeny Spodarev On behalf of the organizers Ulm

# 22nd Workshop on Stochastic Geometry, Stereology and Image Analysis, Germany



The 22nd Workshop on Stochastic Geometry, Stereology and Image Analysis took place in Bad Herrenalb, located in the northern part of the Black Forest near to Karlsruhe, in June 2-7, 2024. The international workshop was organized by Daniel Hug, Günter Last, Dominik Pabst and Steffen Winter from the Karlsruhe Institute of Technology. The 7 keynote lectures, 27 talks and 18 posters presented at the workshop offered a great panorama and diverse perspectives on the current state and future directions of research in the field. Topics covered by the workshop included (but were

not restricted to) percolation, analysis and models of random graphs and complexes, Boolean and Johnson–Mehl models, image analysis and neuronal networks, stochastic modeling of porous structures, statistics of point processes, normal approximation for Gibbs processes and Poisson functionals, hyperuniformity, and analysis of random tessellation models. More detailed information can be found at www.sgsia24.math.kit.edu.

Daniel Hug On behalf of the organizers Karlsruhe

# **Calendar of Events**

This calendar lists all meetings that have been announced in this and previous issues of *Bernoulli News* together with forthcoming meetings organized under the auspices of the Bernoulli Society or one of its Regional Committees (marked by ).

A more comprehensive calendar of events is available on the BS Website www.bernoulli-society.org/index.php/meetings.

### **July 2025**

■ July 14-18 (2025), 44th Conference on Stochastic Processes and their Applications 2025; Wrocław, Poland.

■ OJuly 21–25 (2025), 24th European Young Statisticians Meeting 2025; Turin, Italy.

### October 2025

■ October 5-9 (2025), *65th ISI World Statistics Congress* , The Hague, The Netherlands

### March 2026

■ March 2-6 (2026), XVII CLAPEM, Montevideo, Uruguay

### **Quote of the Issue:**

"Eadem Mutata Resurgo, reads our motto. Changed but the same, I rise again."

Victor M. Panaretos

Vol. 178: December 2024

Vol. 60: April 2024

## **Recent Issues of Official Publications**

Bernoulli Vol. 31, No. 1: February 2025

Editors-in-Chief: D. Paindaveine

http://projecteuclid.org/current/euclid.bj

"An efficient averaged stochastic Gauss-Newton algorithm for estimating parameters [...]," P. Cénac, A. Godichon-Baggioni, B. Portier, 1–29.

"Poisson approximation of Poisson-driven point processes and extreme values in stochastic geometry," M. Otto, 30-54.

"An edge CLT for the log determinant of Wigner ensembles," I.M. Johnstone, Y. Klochkov, A. Onatski, D. Pavlyshyn, 55–80.

"On the expected number of critical points of locally isotropic Gaussian random fields," H. Xu, H. Yang, Q. Zeng, 81–105.

"Distribution-free tests of multivariate independence [...]", H. Shi, M. Drton, M. Hallin, F. Han, 106–129.

"Self-normalized Cramér type moderate deviations for martingales and applications," X. Fan, Q.M. Shao, 130-161.

"Non-ergodic statistics and spectral density estimation [...]," L.V. Hoang, E. Spodarev, 162–186.

"Simultaneous off-the-grid learning of mixtures issued from a continuous dictionary," C. Butucea, J.F. Delmas, A. D., C. Hardy, 187–212.

"Stability and sample complexity of divergence regularized optimal transport," E. Bayraktar, S. Eckstein, X. Zhang, 213–239.

"Adaptive deep learning for nonlinear time series models," D. Kurisu, R. Fukami, Y. Koike, 240-270.

"Asymptotically optimal sequential multiple testing with asynchronous decisions," Y. Xing, G. Fellouris, 271–294.

"Independence preserving property of Kummer laws," A. E. Koudou, J. Wesołowski, 295–311

"Nearest neighbor empirical processes," F. Portier, 312-332.

"Parameter estimation with increased precision for elliptic and hypo-elliptic diffusions," Y. Iguchi, A. Beskos, M. Graham, 333–358.

"Poisson hulls," G. Last, I. Molchanov, 359-387,.

"Cross-validation for change-point regression: Pitfalls and solutions," P.A. Ernst, L.C.G. Rogers, Q. Zhou, 388-411.

'Yule's "nonsense correlation": Moments and density," A. Daouia, S. A. Padoan, G. Stupfler, 412–431.

Fréchet mean set estimation in the Hausdorff metric, via relaxation ," M. Blanchard, A.Q. Jaffe, 432–456.

"Inference in balanced community modulated recursive trees," A. Ben-Hamou, V. Velona, 457-483.

"Estimation of a pure-jump stable Cox-Ingersoll-Ross process," E. Bayraktar, E. Clément, 484–508.

"Sampling using adaptive regenerative processes," H. McKimm, A. Wang, M. Pollock, C. Robert, G. Roberts, 509–536.

"Maximum interpoint distance of high-dimensional random vectors," J. Heiny, C. Kleemann, 537–560.

"Synchronisation for scalar conservation laws via Dirichlet boundary," A. Djurdjevac, T. Rosati, 561–583. 
"Tractably modelling dependence in networks beyond exchangeability," W. Wu, S. Olhede, P. Wolfe, 584–608. 
"Optimal stopping of the stable process with state-dependent killing," K. van Schaik, A.R. Watson, X. Xu, 609–629.

"Tail probability of maximal displacement in critical branching Lévy process with stable branching," H. Hou, Y. Jiang, Y.X. Ren, R. Song, 630–648. "Dynamic principal component analysis from a global perspective,"L. Shao, F. Yao, 649–670.

"No eigenvalues outside the support of the limiting spectral distribution [...]," Z. Bai, J. Hu, J. W. Silverstein, H. Zhou, 1555–1585.

"Some new concentration inequalities for the Itô stochastic integral," N.T. Dung, 692-708.

"A log-linear model for non-stationary time series of counts," A. Leucht, M. H. Neumann, 709–730.

"Irregular nonparametric autoregression," H. Gruber, M. Jirak, 731–758.

"Transportation cost inequalities for stochastic reaction diffusion equations on the whole real line," Y. Li, S. Shang, T. Zhang, 759–782.

"Maximum likelihood estimation for small noise multi-scale McKean-Vlasov stochastic differential equations," J. Xu, Q. Zheng, J. Mu, 783–815.

"Strong limit theorems for empirical halfspace depth trimmed regions," A. Ilienko, I. Molchanov, R. Turin, 816–841.

## Stochastic Processes and their Applications

Editor-in-Chief: Eva Löcherbach

http://www.sciencedirect.com/science/journal/03044149

"Fisher information bounds and applications to SDEs with small noise," N.T. Dung, N.T. Hang, 104468

"A mean field game approach to equilibrium consumption under external habit formation," L. Bo, S. Wang, X. Yu, 104461.

"Empirical optimal transport under estimated costs: Distributional limits [...], S. Hundrieser, G. Mordant, C.A. Weitkamp, A. Munk, 104462.

"On concentration of the empirical measure for radial transport costs," M. Larsson, J. Park, J. Wiesel, 104466.

"On g-expectations and filtration-consistent nonlinear expectations," S.Zheng 104464.

"Non-equilibrium fluctuations for SEP(lpha) with open boundary," C. Franceschini, P. Gonçalves, M. Jara, B. Salvador, 104463.

"Convergence rate analysis in limit theorems for nonlinear functionals of the second Wiener chaos," G.-R. Liu, 104477.

"A stochastic analysis of particle systems with pairing," V. Fromion, P. Robert, J. Zaherddine, 104480.

"Stochastic wave equation with heavy-tailed noise: Uniqueness of solutions and past light-cone property," J. J. Jiménez, 104479.

"Large deviations for slow-fast processes on connected complete Riemannian manifolds," Y. Hu, R.C. Kraaij, F. Xi, 104478.

"Markovian lifting and asymptotic log-Harnack inequality for stochastic Volterra integral equations,"Y. Hamaguchi, 104482.

"Strong limit theorems for step-reinforced random walks," Z. Hu, Y. Zhang, 104484.

"Antithetic multilevel Monte Carlo method for approximations of SDEs with non-globally Lipschitz continuous coefficients," C. Pang, X. Wang, 104467.

"Fractional stable random fields on the Sierpiński gasket," F. Baudoin, C. Lacaux, 104481

'Markov chains generating random permutations and set partitions," D. Stark, 104483

'A martingale approach to Gaussian fluctuations and laws of iterated logarithm for Ewens-Pitman model," B. Bercu, S. Favaro, 104493

'A class of processes defined in the white noise space through generalized fractional operators," L. Beghin, L. Cristofaro, Y. Mishura, 104494

### Bernoulli Society Bulletin e-Briefs

Editor-in-Chief: A. Caponera

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victor.panaretos@epfl.ch nancym.reid@utoronto.ca adjakubo@mat.umk.pl c.kleijweg@cbs.nl

C.Constantinescu@liverpool.ac.uk sebastian.engelke@unige.ch mark.podolskij@uni.lu jeffyao@cuhk.edu.cn johan.segers@uclouvain.be

aldousdj@berkeley.edu susanne@math.ku.dk jean-marie.dufour@mcgill.ca

Marie-Colette.van.Lieshout@cwi.nl

rolando.rebolledo@uv.cl a.w.vandervaart@tudelft.nl

croydon@kurims.kyoto-u.ac.jp holger.dette@ruhr-uni-bochum.de

mikosch@math.ku.dk giovanni.peccati@gmail.com

eulalia@im.ufrj.br

andrew.wood@anu.edu.au

Panki Kim (South Korea) pkim@snu.ac.kr

Jingwen Song (China) jingwensong@nwpu.edu.cn Gesine Reinert (UK) gesine.reinert@keble.ox.ac.uk

Mark Podolskij (Luxembourg) mark.podolskij@uni.lu

Corina Constantinescu (UK) C.Constantinescu@liverpool.ac.uk

sonia.petrone@unibocconi.it Sonia Petrone (Italy) Ajay Jasra (China) ajayjasra@cuhk.edu.cn

iarmend@dm.uba.ar Inés Armendáriz (Argentina)

Davy Paindaveine (Belgium) davy.paindaveine@ulb.be Eva.Locherbach@univ-paris1.fr Eva Löcherbach (France) Bojana Milošević (Serbia) bojana.milosevic@matf.bg.ac.rs

Alessia Caponera (Italy) acaponera@luiss.it

Adrien Figiel (Poland)

Corina Constantinescu (UK)

Kamila Siuda (Poland)

Chiara Amorino (Spain) Andressa Cerqueira (Brazil) Yan Shuo Tan(Singapore)

C.Constantinescu@liverpool.ac.uk sekretariat@bernoullisociety.org

chiara.amorino@upf.edu acerqueira@ufscar.br yanshuo@nus.edu.sg

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- PhD students developing countries: €12.
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