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INTERNATIONAL SOCIETY FOR BAYESIAN ANALYSIS

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MESSAGE FROM THE PRESIDENT

Amy Herring president@bayesian.org

Welcome to the first ISBA Bulletin of 2023 – I hope the new year is off to a good start (and in fact, many ancient cultures in the Northern Hemisphere celebrated the new year around the time of the vernal equinox). ISBA members have been busy in the past months, with exciting work forthcoming in *Bayesian Analysis* and many interesting webinars and professional meetings in the pipeline. Attending in-person meetings with colleagues has greatly enriched the past calendar year in ways I previously took for granted!



Some of my favorite ISBA experiences are the small, focused meetings – such as the BNP in Cambridge, where I learned so much from the presentations and conversations in small groups of colleagues, with my research taking a fruitful turn as a result. A few weeks ago, I attended the BayesComp meeting in Levi, Finland, which provided several in depth short courses leading to three days of outstanding scientific presentations, coupled with the magic of snow and lights north of the Arctic Circle. I express my sincere thanks to Lassi Roininen, Matt Moores, and the many others who planned and saw through a very successful meeting. Special thanks also to Yunyi Shen of MIT for this fabulous shot of the aurora, visible after a great group hike, led by Tamara Broderick, to the summit one evening. I'd love to know what ISBA experiences you find most valuable – feel free to share at president@bayesian.org.

While my colleague Sudipto Banerjee thanked the many ISBA volunteers and outgoing officers who contributed to a great 2022 in our December issue, I would like to express my sincere thanks for his own leadership as ISBA President, bringing the organization back *en masse* in person for the world meeting, and generally being a bright spot in the day of anyone fortunate to see him.

> IN THIS ISSUE FROM THE EDITOR AWARDS FROM THE PROGRAM COUNCIL UPDATES FROM BA JUNIOR ISBA NEWS FROM THE WORLD

I also welcome Aad van der Vaart to the Executive Committee as President-Elect – I remember being in awe of a lecture series on semiparametric statistics he gave when I was a doctoral student, and I am honored to collaborate with him on the ISBA executive. Yanxun Xu has already been hard at work as ISBA treasurer, and as the last of our banking and investment accounts are transferred to her keeping, our outgoing treasurer Marian Farah will finally get to take a well-earned (many, many times over!) break from ISBA duties.

Planning for the 2024 World Meeting in Venice is well underway, and our program council Chair, Sinead Williamson, and Past Chair, Mattias Katzfuß, have been joined by Chair-Elect Sergios Agapiou. Sergios organized the successful 2022 BNP Networking Meeting in Cyprus, which was for many of us their first post-COVID in person meeting, and for some graduate students their inaugural scientific conference. I am excited for the ideas, energy, and organizational skills he is bringing to the group. It was amazing to see a group of junior researchers from the 2022 BNP Networking Meeting in Cyprus reconnect a few months later at the 2022 BAYSM in Montreal, further expanding their professional networks at the ISBA meeting. At our recent admitted PhD students visit day, when asked for advice about how to succeed in graduate school, I had Cyprus and the outstanding recent BNP in Chile in mind as I encouraged students, wherever they may decide to study, to start early in presenting their scientific work and building the network of colleagues with whom they will share ideas and brainstorm future directions. Indeed, the upcoming BNP Networking meeting in Melbourne will be a tremendous opportunity, especially for junior researchers, and I hope many are able to attend!

The World Meeting will be held 1–7 July 2024 on the San Giobbe Campus of Ca' Foscari of Venice. Because of the nature of tourism in Venice, attendees will be expected to book their own accommodation on the islands (book early!), though a limited number of spaces will be available in the student residential complex, with top priority to students. Look for a call for proposals for short courses and invited sessions soon from the Scientific Committee. In addition, the j-ISBA section is busy planning BaYSM, to be held 29–30 June 2024, also in Venice. Watch for additional details and websites going live in the coming months. For both meetings, we are actively seeking industry partnerships and sponsorships in order to keep costs down so that as many members as possible can benefit from the scientific programs and community building opportunities. If you would like to inquire about sponsorship opportunities, are able to help with sponsor recruitment, or have suggestions, Sinead and I would love to hear from you! Keep an eye on the ISBA events page for updates on these meetings as well as meetings in the pipeline, such as the forthcoming 2023 EnviBayes Workshop on Complex Environmental Data (likely late September in Colorado).

Many of ISBA's awards are now open for nominations, including the Savage Awards, Mitchell Prize, and DeGroot Prize. Congratulations to our Savage Award finalists, who are featured later in this issue, and many thanks to the ISBA members who donated their time to reading all the dissertations submitted to the competition. Plan to attend the ISBA-sponsored Savage Award sessions at the 2023 JSM in Toronto, featuring presentations by our finalists. While the JSM is quite large, these sessions provide a "small meeting" atmosphere for a few hours in which we're able to appreciate the work of some of our outstanding junior members. ISBA is also seeking suggestions for our Nominating Committee (due to me by April 15), which will put together a slate for President-Elect and four open positions on the ISBA Board.

When I reflect on the past year for ISBA, I am amazed at the intellectual energy our members have put into making our environment one that supports and enhances academic and professional growth. j-ISBA continues to be a source of great ideas and initiatives to make the early professional years rewarding and productive for our newest members. The j-ISBA leadership and membership in particular have done an outstanding job not only in planning their own section awards and meetings, but also by actively engaging with other ISBA committees and sections to enhance ISBA's activities on a broader level.

Overall, 2023 promises to be a great year for ISBA, and I hope to see many of you at upcoming meetings or on the webinars that help keep the conversation going around the world between meetings. In the meantime, feel free to share your thoughts and ideas with me any time!

FROM THE EDITOR

Gregor Kastner

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The first issue in 2023 is complete, thanks to timely deliveries of both our long-standing associate editors Francesco Denti and Anton Westveld, as well as the new ISBA president, Amy Herring, our new program chair, Sinead Williamson, *Bayesian Analysis* editor-in-chief, Mark Steel, and Cecilia Balocchi/Fan Bu from j-ISBA. And on top, Xiaojing Wang shares news about our variety of awards. So please sit back and enjoy the latest from the world of Bayesian statistics (and beyond)!

AWARDS

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The ISBA Prize Committee and sub-committees have continued with their important task within ISBA. We had a wonderful reunion first time after COVID pandemic in person for our World Meeting in Montreal last June, where a joint ceremony for all ISBA Awards in the editions 2019, 2020, and 2021 took place. This August, the ISBA Awards Ceremony will take place at the ASA SBSS reception in the Joint Statistical Meeting, which will be held in Toronto, Canada August 5–10, 2023. In this issue, we celebrate the Savage Finalists as well as the 2023 Calls for the Savage Award, the DeGroot Prize, and the Mitchell Prize.

Savage 2022 Award Finalists

In the Category of Applied Methodology, the four finalists (in alphabetical order of their last name) were: Zhao Tang Luo for the thesis "Bayesian spanning tree models for complex spatial data" (Supervisors: Huiyan Sang and Bani Mallick); Maria Masotti for the thesis "Bayesian Functional Spatial Partitioning Methods for Prostate Cancer Lesion Detection" (Supervisors: Joseph S. Koopmeiners and Lin Zhang); Paul Parker for the thesis "Bayesian unit-level modeling of non-Gaussian survey data under informative sampling with application to small area" (Supervisor: Scott H. Holan); and Emily Wang for the thesis "Bayesian State-Space Models with Variable Selection for Neural Count Data" (Supervisor: Marina Vanucci).

In the Category of Theory and Methods, the four finalists (in alphabetical order of their last name) were: Edwin Fong for the thesis "The predictive view of Bayesian inference" (Supervisor: Chris Holmes); Matteo Giordano for the thesis "Asymptotic theory for Bayesian nonparametric inference in statistical models arising from partial differential equations" (Supervisor: Richard Nikl); Sai-fuddin Syed for the thesis "Non-Reversible Parallel Tempering on Optimized Paths" (Supervisor: Alexandre Bouchard-Côté); Yixin Wang for the thesis "Multiple Causal Inference with Bayesian Factor Models" (Supervisor: David M. Blei).

The Savage Award 2022 sub-committees comprised of David Rossell (Chair), David Nott, Yanxun Xu, Clair Gormley, Jeffrey Miller, Sylvia Kaufmann, for the category of Applied Methodology, and Pierpaolo De Blasi, Víctor Elvira, Clara Grazian, Athanasios Kottas, Lizhen Lin, Jeff Miller, Long Nguyen (Chair), Vinayak Rao, Tommaso Rigon, Botond Tibor Szabo and Yun Yang, for the category

of Theory and Methods. They were all very impressed with the high quality of submissions this year and congratulate all applicants on their fine contributions to Bayesian statistics.

The Savage finalists' presentations have been scheduled on Sunday, August 6th from 4:00–5:50PM in the Joint Statistical Meetings (JSM). You are invited to attend, and we hope to see many of you there!

2023 DeGroot Prize, Mitchell Prize, and Savage Award Call

The Prize Committee of ISBA would like to remind you that the call for submissions for the DeGroot Prize, the Mitchell Prize and the Savage Award, is still open. The deadline to submit nominations for these awards is May 31st, 2023.

The DeGroot Prize is awarded to the author (or authors) of a published book in Statistical Science. For details on the DeGroot Prize, including names of past winners and eligibility details, please visit https://bayesian.org/project/degroot-prize/. The Prize includes a check for \$1500; the winner(s) will be announced during the ISBA World Meeting in Venice, Italy in 2024.

The Mitchell Prize is given in recognition of an outstanding paper that describes how a Bayesian analysis has solved an important applied problem. The prize includes a check for \$1000 and a plaque; the winner(s) will be announced at the World Meeting in Venice, Italy in 2024. For details on the Mitchell Prize, including names of past winners, eligibility details, and submission information, please visit https://bayesian.org/project/mitchell-prize/.

The Savage Award, named in honor of Leonard J. "Jimmie" Savage, is bestowed each year to two outstanding doctoral dissertations in Bayesian econometrics and statistics, one each in Theory & Methods and Applied Methodology. Up to two awards of \$1000 will be awarded. Finalists will be notified in mid-December and invited to present their dissertation research at a special contributed session at the ISBA World Meeting in Venice, Italy in 2024. The winners will also be announced in this World Meeting. For details on the Savage Award, including names of past winners, eligibility details, and submission information, please visit https://bayesian.org/project/savage-award/.

Nominations for the Mitchell Prize, Savage Award and DeGroot Prize may be made by any ISBA or SBSS member. To join ISBA please go to https://bayesian.org/membership/joinrenew. And finally, questions regarding any of the Prizes or Awards may be sent to the ISBA Prize Committee at prize-committee@bayesian.org.

FROM THE PROGRAM COUNCIL

Sinead Williamson

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New Member of the Program Committee

We are delighted to welcome Sergios Agapiou as the new Vice-Chair of the Program Council, joining myself and Matthias Katzfuss. We are very grateful to departing program committee member Botond Szabo for his outstanding service over the past three years, juggling not one but two highly successful world meetings.

ISBA 2024 World Meeting

The ISBA 2024 World Meeting is scheduled to be held in Venice, Italy from July 1–6, 2024. The Scientific Committee is working on the program and schedule. Calls for short courses and invited sessions will be announced in the coming months; we encourage you to think about potential contributions to the program.

(Co-)Sponsorship/Endorsement Requests

If you are planning a meeting and would like to request financial sponsorship (or co-sponsorship) or non-financial endorsement from ISBA, please submit your request to the program council at program-council@bayesian.org. Detailed information on how to submit requests for either sponsorship or endorsement can be found here. In particular, all requests for (co-)sponsorship of events to occur in 2024 must be received by May 30, 2023

Upcoming ISBA-Sponsored/Endorsed Events

- BISP3 Workshop on Bayesian Inference for Stochastic Processes, May 22–24, 2023, Madrid, Spain.
- GDRR7 Seventh Symposium on Games and Decisions in Reliability and Risk, May 24–26, 2023, Madrid, Spain.
- Annual JAGS Workshop: Bayesian Modeling for Cognitive Science, July 10–14, 2023, Amsterdam, Netherlands/Online.
- Theory and Practice of Bayesian Hypothesis Testing: A Hybrid JASP Workshop, July 15–16, 2023, Amsterdam, Netherlands/Online.
- 7th EAC ISBA Conference, July 23–25, 2023, Qingdao, China/Online.
- Monash ISBA-BNP Networking Workshop, December 4–8 2023, Melbourne, Australia.

UPDATES FROM BA

Mark Steel

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I hope you all are well. I only have a short report this time, just to alert you to two new discussion papers. As you know, Bayesian Analysis regularly publishes papers with discussion. We now welcome contributed discussions of the two following manuscripts:

- "Causal Inference Under Mis-Specification: Adjustment Based on the Propensity Score" by David A. Stephens, Widemberg S. Nobre, Erica E. M. Moodie and Alexandra M. Schmidt. The manuscript can be accessed in the Advance publication section of the journal website or at https://doi.org/10.1214/22-BA1322, and
- "Data Augmentation for Bayesian Deep Learning" by Yuexi Wang, Nicholas Polson and Vadim O. Sokolov The paper can be found in the Advance publication section of the journal or at https://doi.org/10.1214/22-BA1331.

Please note that the contributions should be no more than two pages in length, using the BA LATEX style. The discussions should be submitted to the journal using the journal submission page by April 24, 2023 for the Stephens et al. paper and by September 30, 2023 for the Wang et al. paper. Please choose "contributed discussion" as manuscript type and clearly indicate which Discussion Paper your discussion refers to when submitting your contribution. Your contributions will be sent to the authors, who will get the opportunity to respond in a rejoinder. I very much hope to see many interesting and thought-provoking contributions appear in the journal.

JUNIOR ISBA

Cecilia Balocchi and Fan Bu cecilia.balocchi@ed.ac.uk and fanbu@ucla.edu

New j-ISBA officers

With the beginning of the new year and the newly elected officers joining the j-ISBA board, let us introduce our new Chair-elect, Beatrice Franzolini, and our new treasurer, Beniamino Hadj-Amar!

Beatrice is a Research Fellow at the Agency for Science, Technology and Research (A*STAR) in Singapore, working with Maria De Iorio. She is also a member of the Division of Biomedical Data Science (BiDS) of the NUS Yong Loo Lin School of Medicine, a member of the BayesLab at the Bocconi Institute for Data Science and Analytics (BIDSA), and a member of the Complex Data Modeling Research Network. She holds a PhD in Statistics from Bocconi University, obtained under the supervision of Antonio Lijoi and Igor Prünster. Her main areas of research are Bayesian nonparametrics, Bayesian methodology, and Biostatistics.

Beniamino is a Postdoctoral Fellow at Rice University (Houston, TX) in the Department of Statistics, working with Marina Vannucci. He has obtained his Ph.D. in the Oxford-Warwick Statistics Programme (OxWaSP), under the supervision of Bärbel Finkenstädt (University of Warwick, UK). His main area of research is at the interface between statistics and science, where he is particularly interested in the development of Bayesian methodologies for the automated analysis of complex dynamical time series. Throughout his academic experience, he has been working on addressing scientific problems in several fields, such as respiratory research, circadian studies and neuroscience. From a methodological perspective, his research interests include switching models, change-point models, Bayesian nonparametrics, statistical spectral analysis, graphical models, and mixture models.

A big "thank you" goes to Xenia Miscouridou and Sally Paganin for their hard work and their contributions to j-ISBA!

j-ISBA organized sessions

The first j-ISBA organized session of the year took place at BayesComp 2023, in Levi, Finland. The session "Advances in scalable Bayesian methods", chaired by Alejandra Avalos-Pacheco, featured the works of three outstanding j-ISBA members: François-Xavier Briol (University College London), Karla Monterrubio-Gómez (University of Edinburgh) and Andrea Bertazzi (Delft University of Technology). The session took place in a crowded room with an unparalleled view over white Levi. We thank all the researchers who attended the session and contributed with interesting questions, as well as the speakers for their great talks.

Finally, we are looking forward to the exciting activities planned for the j-ISBA community in the new year:



Figure 1: j-ISBA session at BayesComp2023. Speakers (from left to right): Karla Monterrubio-Gómez, Andrea Bertazzi, François-Xavier Briol. Chair: Alejandra Avalos-Pacheco.

- Another edition of the **Blackwell-Rosenbluth Award** awaits us! The award aims at recognizing outstanding junior Bayesian researchers, based on their overall contributions to the field and to the community. While the community awaits for the call to be open, consider if you might want to make a nomination! PhD students or early career researchers who obtained their PhD after January 1, 2018 will be eligible.
- While we patiently wait for BaYSM 2024 to happen in Venice, stay tuned for more virtual, inclusive events to engage the j-ISBA community!
- Following the success of last year's mentoring panel "Updating your (prior) beliefs" held at BaYSM 2022, we are planning more events focused on mentoring, inclusivity and mental well-being.

So, if you have not done so yet, remember to join the j-ISBA section, by adding USD \$5 when you renew your ISBA membership (which is only USD \$5 for students and USD \$30 for early career researchers)!

NEWS FROM THE WORLD

Francesco Denti

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Upcoming Meetings, Conferences, and Workshops

• The ISBA Computational Section is looking for expressions of interest (EoIs) to organize the next **Bayes Comp meeting in 2025**.

The deadline for sending an expression of interest is April 30, 2023. It should consist of 1–2 pages stating the names of the conference chairs, at least some names of scientific committee

members, the planned venue, and potential dates when the meeting can be held (ideally within January to May 2025). After receiving the EoIs, we will select 2–3 and ask for a full proposal, including a budget and other details. A budget and expected registration costs are optional for the EoI, but if you have a rough idea, you can include them.

EoIs should be sent to the section chair (David Rossell): david.rossell@upf.edu. Please also get in touch if you have any questions.

• MaxEnt2023, the 42nd International Workshop on Bayesian Inference and Maximum Entropy Methods in Science and Engineering will be in Garching, from July 3 to July 7, 2023.

The main topics of the workshop are the application of Bayesian inference and the maximum entropy principle to inverse problems in science, machine learning, information theory, and engineering. The workshop thus invites contributions to all aspects of probabilistic inference, including novel techniques and applications and work that sheds new light on the foundations of inference.

The early registration deadline is set for April 15, 2023. More information can be found at this page.

• The summer school **Bayesian methods in health economics** will be held on 24–28 July 2023 at the Centro Studi CISL in Florence.

This summer school aims to provide an introduction to Bayesian analysis and Markov Chain Monte Carlo (MCMC) methods using R and MCMC sampling software (such as OpenBUGS and JAGS) as applied to cost-effectiveness analysis and typical models used in health economic evaluations. In addition, more recent methods for Probabilistic Sensitivity Analysis and research prioritization, including Value of Information calculations, will be discussed. The summer school is intended for health economists, statisticians, and decision modelers interested in Bayesian modeling and will be based on a mixture of lectures and computer practicals.

Registration is now open and available through UCL Online Store. The deadline for registration is set to June 15, 2023, and there are 20 places available.

• The **second Bayesian Nonparametrics Networking workshop** will take place on 4–8 December 2023 at Monash University in Melbourne, Australia.

The format will largely follow the 1st of these new BNP Networking workshops held in Nicosia (Cyprus) in April 2022, this time with three mini-courses delivered by Jim Griffin, Athanasios Kottas, and Stephanie van der Pas, who will also deliver Keynote talks. The workshop will also feature invited talks, contributed talks, and a poster session, each featuring various topics presented by a blend of junior and established researchers.

Those who wish to be considered for a contributed talk or poster presentation should submit their abstract by April 15, 2023. This is the same due date for travel grant applications for junior researchers. For more information, please visit the workshop event page.

• The **13th Bayesian Inference for Stochastic Processes** will be held at the Real Academia de las Ciencias (Madrid) on 22–24 May 2023.

The workshop will provide an opportunity to review, discuss and explore directions of development of Bayesian Inference in Stochastic Processes. Theoretical and applied contributions are both welcome. A non-exhaustive list of topics includes Markov processes, state-space models, spatial, empirical, birth-death, and branching processes, queueing, population modeling, signal processes, stochastic differential equations, and statistical machine learning. All sessions at this workshop will be plenary, with a mix of invited and contributed talks. In addition, there will be a poster session.

Reduced fees for early registration are available until April 15, 2023. More info at this link.

• The European Seminar on Bayesian Econometrics 2023, one of the major conferences in econometrics worldwide and the primary event on Bayesian econometrics in Europe, will be hosted by the Adam Smith Business School, in September 2023 at the University of Glasgow. More details to follow. Stay updated with this link.

And don't forget:

- Don't miss the **series of monthly webinars** organized by the Bayesian nonparametric section of ISBA (**BNP-ISBA**). The next scheduled speakers are **Matteo Ruggiero**, **Filippo Ascolani**, and **Guillaume Kon Kam King** (April 5, 2023). Check this link for more details.
- The **Applied Bayesian Statistics school** is back! ABS23 will be held in Florence on June 12–16, 2023. The topic of the school will be **Bayesian causal inference**. The lecturer will be **Fan Li** (Duke University) with the support by researchers at the University of Florence. More info at this link.
- The **Joint Statistical Meetings** (JSM) is the largest gathering of statisticians and data scientists held in North America. The 2023 JSM will be held in Toronto, CA. The conference is scheduled for August 5–10, 2023. More info at this link.

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