Allan Sly awarded Loève Prize

Award announced at the Stochastic Processes and their Applications meeting (see the report on page 15)

The 2019 Line and Michel Loève International Prize in Probability is awarded to Allan Sly of Princeton University. The prize, which carries a monetary award of $30,000, will be presented at a ceremony at the University of California, Berkeley, in early 2020.

Allan Sly received his PhD in 2009 under Elchanan Mossel at U.C. Berkeley, and was a postdoc in the Theory Group at Microsoft Research before moving to Princeton University, where he is a Professor in the Department of Mathematics. He is best known for the use of deep probabilistic methods to solve long-standing problems at the interface of probability, the theory of algorithms and statistical physics. Three areas in which he has made major advances, and illustrative papers, are:

- **The stochastic block model:** in papers such as “A proof of the block model threshold conjecture” and “Belief propagation, robust reconstruction and optimal recovery of block models” (both with Elchanan Mossel and Joe Neeman).
- **Formalizations of the one-step replica symmetry breaking heuristic:** in papers such as “Proof of the satisfiability conjecture for large $k$” and “Maximum independent sets on random regular graphs” (both with Jian Ding and Nike Sun).
- **Sharp analysis of Glauber dynamics:** in papers such as “Critical Ising on the square lattice mixes in polynomial time” and “Cutoff for the Ising model on the lattice” (both with Eyal Lubetzky).

**About the Loève Prize:**
The Prize commemorates Michel Loève, Professor at the University of California, Berkeley, from 1948 until his untimely death in 1979. The Prize was established by his widow, Line, shortly before her death in 1992. Awarded every two years, it is intended to recognize outstanding contributions by researchers in probability who are under 45 years old. A list of the 14 recipients since 1993 is at https://www.stat.berkeley.edu/~aldous/Loeve/index.html.

Allan Sly gave an IMS Medallion Lecture last year at the annual meeting in Vilnius (pictured here with Christina Goldschmidt, who presented the medallion).
IMS Members’ News

IMS Fellows recognized in British Honours list
Two IMS Fellows, Peter Donnelly and Sylvia Richardson, have been included in the The Queen's Birthday Honours List.

Peter Donnelly, Chief Executive of Genomics plc, and Professor of Statistical Science at the University of Oxford, received a knighthood (making him Professor Sir Peter Donnelly FRS), for services to the understanding of human genetics in disease.

Professor Sylvia Richardson is Director of the Medical Research Council Biostatistics Unit at the University of Cambridge. She received the Commander of the Order of the British Empire (CBE) award, for her services to medical statistics.

See www.gov.uk/government/news/the-queens-birthday-honours-list-2019

Daniela Witten receives 2019 Mortimer Spiegelman Award
The American Public Health Association (APHA) has named Daniela Witten, professor in statistics and biostatistics at the University of Washington and the Dorothy Gilford Endowed Chair in Mathematical Statistics, the winner of the 2019 Mortimer Spiegelman Award. This award honors a statistician who has made outstanding contributions to statistical methodology and its applications in public health.

Daniela Witten’s work focuses on statistical learning from complex high-dimensional data. Her methodological work is motivated by collaborations in a number of fields, including genomics, neuroscience, microbial ecology, and pathology.

Rob Tibshirani, professor of biomedical data science and statistics at Stanford University, who has collaborated with Witten, said, “Daniela is a rare researcher with the creativity to invent new statistical tools, and the scientific sense to know how and when to apply them in a way that can impact public health.”

Daniela Witten is invited to present her research at this year’s APHA conference, to be held November 2–6 in Philadelphia (https://www.apha.org/events-and-meetings/annual), where she will be presented with the award by last year’s recipient.

JSM plenary session webcasts
If you weren’t at the Joint Statistical Meetings this year, you can still watch four of the plenary sessions. These videos are at https://ww2.amstat.org/meetings/jsm/2019/webcasts/

• ASA President’s Address: Reinforcing the Impact of Statistics on Society, Karen Kafadar, University of Virginia
• ASA President’s Invited Address: Coming to Our Census: How Social Statistics Underpin Our Democracy (and Republic), Teresa A. Sullivan, University of Virginia (Emerita)
• ASA Deming Lecture: Walking with Giants: A Research Odyssey, Nicholas Fisher, University of Sydney
• COPSS Fisher Lecture: An Observational Study Used to Illustrate Methodology for Such Studies, Paul Rosenbaum, University of Pennsylvania.

You can also download slides from more than 1,500 other JSM2019 presentations via the online program: https://ww2.amstat.org/meetings/jsm/2019/onlineprogram/index.cfm.
**IMS Awards**

**Nominations open for 2020 Peter Gavin Hall Early Career Prize**

Peter Hall (1951–2016) played a significant role throughout his professional career in mentoring young colleagues at work and through professional society activities. With funds donated by his friends and family, the IMS created the Peter Gavin Hall Early Career Prize. Its purpose is to recognize early-career research accomplishments and research promise in statistics, broadly construed.

An early-career researcher is one who received their doctoral degree in one of the eight calendar years preceding the year of nomination, or in the year of nomination—so, for the 2020 prize, that means any of the years 2012–2019.

The nomination deadline is **December 1, 2019**.

The IMS gives the award committee latitude to consider nominees with extenuating circumstances that may have delayed professional achievements. Nominations may be made by any member of the IMS, and nominees do not need to be IMS members.

The award consists of a plaque, a citation, and a cash honorarium. The inaugural award will be presented at the IMS Presidential Awards ceremony held at the IMS annual meeting, part of the 10th World Congress in Probability and Statistics (WC2020), jointly organized by the Bernoulli Society and IMS, hosted by Seoul National University from August 17–21, 2020.

Electronic submission is required. See the instructions at https://www.imstat.org/ims-awards/peter-gavin-hall-ims-early-career-prize/

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### Tweedie New Researcher Award

Richard Tweedie (1947–2001) played a significant role throughout his career as a mentor. The Tweedie New Researcher Award, created in his memory, provides funds for travel to present the Tweedie New Researcher Invited Lecture at the IMS New Researchers Conference. Nominate by **December 1, 2019**: https://www.imstat.org/ims-awards/

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### Travel Awardees at JSM

Eight of this year’s IMS travel award recipients were able to come to the Presidential Address and Awards session at JSM (in total there were 10 Hannan Graduate Student awards and 11 New Researcher awards this year, funding travel to a wide range of meetings). They are pictured below with Xiao-Li Meng. More photos from JSM Denver overleaf. Read comments from some travel award recipients on page 15.

---

### IMS Co-sponsored Journals and Publications

- **Electronic Journal of Statistics**: Domenico Marinucci
  - http://imstat.org/ejs
  - http://projecteuclid.org/ejs

- **Electronic Journal of Probability**: Andreas Kyprianou
  - https://projecteuclid.org/euclid.ejp

- **Electronic Communications in Probability**: Giambattista Giacomin
  - https://projecteuclid.org/euclid.ecp

- **Journal of Computational and Graphical Statistics**: Tyler McCormick
  - http://www.amstat.org/publications/jcgs

- **Statistics Surveys**: David Banks
  - http://imstat.org/ss
  - http://projecteuclid.org/ssu

- **Probability Surveys**: Ben Hambly
  - http://imstat.org/ps
  - http://www.i-journals.org/ps/

### IMS-Supported Journals

- **ALEA: Latin American Journal of Probability and Statistics**: Roberto Imbuzeiro Oliveira
  - http://alea.impa.br/english

- **Annales de l’Institut Henri Poincaré (B)**: Gregory Miermont, Christophe Sabot
  - http://imstat.org/aihp
  - http://projecteuclid.org/aihp

- **Bayesian Analysis**: Michele Guindani
  - https://projecteuclid.org/euclid.ba

- **Bernoulli**: Mark Podolskij, Markus Reiβ
  - http://www.bernoulli-society.org/
  - http://projecteuclid.org/bj

- **Brazilian Journal of Probability and Statistics**: Enrico Colosimo
  - http://imstat.org/bjps
  - http://projecteuclid.org/bjps

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### IMS-Affiliated Journals

- **Observational Studies**: Dylan Small
  - https://obsstudies.org/

- **Probability and Mathematical Statistics**: K. Bogdan, M. Musialek, J. Rosiński, W. Szcztoka, & W.A. Woyczyński
  - http://www.math.uni.wroc.pl/~pms

- **Stochastic Systems**: Shane Henderson
  - https://pubsonline.informs.org/journal/stsy

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Some photos from one of the biggest gathering of statisticians in the world, the Joint Statistical Meetings.

Rob Tibshirani (left) introduced Wald Lecturer Trevor Hastie.

Medallion Lecturer Yee-Whye Teh.

Medallion Lecturer Liza Levina was introduced by Eric Kolaczyk.

A packed audience waiting for the first Wald lecture.

This 40-foot blue bear, by Lawrence Argent, looks into the convention center.

Some of the IMS journal editors and associate editors, at the luncheon IMS provides to say “thank you!”
Yoav Benjamini (left) gave the Rietz lecture, introduced by Tony Cai.

Marina Vanucci introduced Medallion Lecturer David Dunson.

The inaugural COPSS FN David Lecture was given by Susan Ellenberg (center, with COPSS Chair Bhramar Mukherjee and Lynne Billard, who received the FN David award in 2013).

Fisher Lecturer Paul Rosenbaum.

G. W. Snedecor Award winner Sudipto Banerjee.

COPSS Presidents’ Award winner Hadley Wickham (see interview on the next page).
COPSS Presidents’ Award: Hadley Wickham

Hadley Wickham wins the prestigious 2019 COPSS Presidents’ Award

Hadley Wickham, Chief Scientist at RStudio, is the recipient of the 2019 COPSS Presidents’ Award. This award is presented annually to a young member of one of the participating societies of COPSS in recognition of outstanding contributions to the profession of statistics. The award citation recognized Wickham “for influential work in statistical computing, visualization, graphics, and data analysis; for developing and implementing an impressively comprehensive computational infrastructure for data analysis through R software; for making statistical thinking and computing accessible to large audience; and for enhancing an appreciation for the important role of statistics among data scientists.”

Dr. Wickham gracefully agreed to be interviewed by Huixia Judy Wang, Secretary/Treasurer of COPSS:

Which part of your job do you like the most?
I love the freedom to work on problems that I think are the most important. I love the mix of thinking, programming, and educating that enables me to discover problems, propose solutions, and then get them into the hands of real people. I love working from home, and having the ability to spend focused hours on challenges that need deep attention. I love working with a talented team with diverse skills and backgrounds. Compared to my previous job in academia, I love that I don't have to write grants or attend faculty meetings!

What advice would you give to young people who are entering the profession as PhD students and Assistant Professors at this time?
Consciously work to improve your programming and marketing skills. In your career, you are likely to receive little (or no!) formal training in these areas but they are force multipliers: writing software allows many others to take advantage of your ideas, and learning how to market yourself and your work ensure that people know that you're making something that can help them. Academics sometimes see marketing as something dirty, but if people don't know that your work exists, it can't help them!

What one aspect of your research do you wish was more widely known in the scientific community?
The importance of tidying your data: regardless of how you have recorded your data, your analysis will go much more smoothly if you first “tidy” it up, making sure that each column is a variable (and hence each row is an observation). Getting your data into this form up front will save you a bunch of time if you're using the tidyverse, R in general, or pretty much any other data analysis tool.

Who are your most significant mentors? How did/do they impact your career?
Di Cook (Professor of Business Analytics at Monash University) was my PhD advisor, and I have the rare privilege of knowing that there's nowhere in the world that would have been a better fit for me. As well as giving me the freedom to work on topics that were pretty weird for statistics, Di also taught me pretty much everything I know about the art and science of data analysis. Di has done groundbreaking work in visualization, including tools for interactive graphics and graphical inference. She is a wonderful mentor and many of her students have gone on to be very influential. Di is a role model for me as she has a passion for learning, and has continued to master new skills throughout her career.

Also, JJ Allaire (CEO of RStudio). Soon after I joined RStudio, I decided that I need to really learn C++ so that I could write faster code, and JJ was a skilled and enthusiastic mentor. One of the greatest compliments I’ve ever received is JJ telling me that I’m a more-than-intermediate C++ programmer! JJ is not just an amazing programmer; he’s also a skilled technical writer, and a savvy entrepreneur. JJ has helped me substantially improve my ability to make an impact on the world through software.

Why were you drawn to statistical computing and software development?
I was drawn to computing at a young age, particularly using computers to help organize data. When I was in high school, I converted my mum’s handwritten recipes into a database (which still exists today at http://recipes.had.co.nz) and throughout my career I’ve fascinated by how to turn raw data into rich, informative displays that lead to better decisions. Trying to help people make better visualizations with less pain and more joy has lead me to push my work further and further towards the raw data.
Anything else you’d like to share about our profession?
I have found data science to be a deeply rewarding field. These days I spend most of my time developing tools for others to do data science, but I still love getting my hands dirty with real data. I really enjoy the combination of technical and human skills that are required to be an effective data scientist.

Finally, what are your hobbies/interests beyond statistics?
Outside of statistics, I love to bake, barbecue, and make cocktails. I also read a lot of science fiction and fantasy, and practice yoga.

A little (more) about Hadley Wickham
Hadley is Chief Scientist at RStudio, a member of the R Foundation, and Adjunct Professor at Stanford University, the University of Auckland, and Rice University. He builds tools (both computational and cognitive) to make data science easier, faster, and more fun. His work includes packages for data science (the tidyverse: including ggplot2, dplyr, tidyr, purrr, and readr) and principled software development (roxygen2, testthat, devtools). He is also a writer, educator, and speaker promoting the use of R for data science. Learn more on his website, http://hadley.nz.

2020 COPSS Awards: Nominations open now
Nominations are open for three awards, to be presented next year at JSM in Philadelphia.

Please visit https://community.amstat.org/copss/home for details of eligibility and nomination requirements for all these awards. Please send nominations, preferably by email in PDF format, to the committee chairs. The deadline for nominations for all three awards is December 15, 2019.

Presidents’ Award
The Presidents’ Award is presented annually to a young member of one of the participating societies of COPSS in recognition of outstanding contributions to the statistics profession. It is typically granted to an individual who either (i) has not yet reached his or her 41st birthday during the calendar year of the award or (ii) will be under age 46 throughout the award calendar year and will have received a terminal statistically-related degree no more than 12 years prior to that year (see COPSS website for more details on eligibility criteria). Nominations must be sent by December 15, 2019, preferably by email in PDF format, to:
Susan Halabi, Chair of the COPSS Presidents’ Award Committee
Professor, Department of Biostatistics and Bioinformatics
Duke University
Email: susan.halabi@duke.edu
Phone: 919-681-5430
Homepage: https://scholars.duke.edu/display/per808852

R.A. Fisher Award and Lectureship
The Fisher Award and Lectureship, awarded annually, was established in 1963 by COPSS to honor the outstanding contributions of the late Sir Ronald Aylmer Fisher, and those of a current statistician, on aspects of statistics and probability that closely relate to the scientific collection and interpretation of data. The award exists to recognize the importance of statistical methods for scientific investigations. Nominations must be sent by December 15, 2019, preferably by email in PDF format, to:
Sharon-Lise Normand, Chair of the COPSS Fisher Lecture and Award Committee
Professor, Department of Health Care Policy & Department of Biostatistics
Harvard University
Email: sharon@hcp.med.harvard.edu
Phone: 617-432-3260
Homepage: https://hcp.hms.harvard.edu/people/sharon

Elizabeth Scott Award and Lectureship
The Elizabeth L. Scott Award and Lectureship are presented biennially (even-numbered years) to an individual, male or female, who has helped foster opportunities in statistics for women. The 2020 award winner will deliver the first E.L. Scott Lecture at the JSM in Philadelphia. Nominations must be sent by December 15, 2019, preferably by email in PDF format, to:
Elizaveta Levina
Chair, COPSS Scott Lecture and Award Committee
Professor, Department of Statistics
University of Michigan
Email: elevina@umich.edu
Phone: 734-764-3235
Homepage: http://dept.stat.lsa.umich.edu/~elevina/


Treasurer’s Report 2018

Introduction
This report details membership and subscription data for the calendar year end 2018. The 2018 fiscal year-end audit report will be published separately in the Fall of 2019 after the auditors have completed the annual process.

In 2018, the total number of IMS members decreased. Subscriptions by institutions also decreased this past year. The financial status of the Institute continues to be stable and strong, and actions are in place to ensure its long-term stability.

Details of the events of the past year, membership and subscription data, sales data are given below..

Publications
The following is a list of all current IMS core, co-sponsored, supported and affiliated journals:

IMS Core Print/Electronic Publications

Co-sponsored Print/Electronic Publications

Supported Publications
ALEA: Latin American Journal of Probability and Mathematical Statistics; Annales de l’Institut Henri Poincaré (B); Bayesian Analysis; Bernoulli; Bernoulli News; Brazilian Journal of Probability and Statistics

Affiliated Publications
Observational Studies; Probability and Mathematical Statistics; Stochastic Systems

Membership Data
Total individual paid membership in the Institute as of December 31, 2018 decreased 11% from December 31, 2017. Table 1 presents the membership data back to 2014. The IMS had a peak in paid membership of 3,156 in 2008, and has been decreasing since then. This trend is similar to that of other professional societies. Nevertheless, this is clearly an area of concern, and the IMS Executive Committee continues to look for ways to address this issue.

<table>
<thead>
<tr>
<th>Membership, by Calendar Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular</td>
<td>1,616</td>
<td>1,587</td>
<td>1,565</td>
<td>1,447</td>
<td>1,369</td>
<td>-5.4%</td>
</tr>
<tr>
<td>Life/Retired Life</td>
<td>516</td>
<td>528</td>
<td>541</td>
<td>563</td>
<td>613</td>
<td>8.9%</td>
</tr>
<tr>
<td>Reduced Country/Retired/IMS China</td>
<td>364</td>
<td>376</td>
<td>337</td>
<td>370</td>
<td>331</td>
<td>-10.5%</td>
</tr>
<tr>
<td>New Graduate</td>
<td>87</td>
<td>58</td>
<td>113</td>
<td>213</td>
<td>76</td>
<td>-64.3%</td>
</tr>
<tr>
<td>Student</td>
<td>1,187</td>
<td>1,236</td>
<td>1,094</td>
<td>1,022</td>
<td>828</td>
<td>-19.0%</td>
</tr>
<tr>
<td>Total</td>
<td>3,770</td>
<td>3,785</td>
<td>3,650</td>
<td>3,615</td>
<td>3,217</td>
<td>-11.0%</td>
</tr>
<tr>
<td>Total excluding free members (students)</td>
<td>2,583</td>
<td>2,549</td>
<td>2,556</td>
<td>2,593</td>
<td>2,389</td>
<td>-7.9%</td>
</tr>
</tbody>
</table>

Geographic Distribution of Members.
The IMS membership is currently distributed as follows (see pie chart, right): 57% United States; 18% Europe; 15% Asia; 4% Canada; 3% Australia and New Zealand; <2% South America, Mexico and the Caribbean; <1% Africa.

Subscription Data
Selection of Journals by Members:
Print subscriptions by members continued to decrease in 2018, as expected, because members are opting to reduce their use of print while enjoying free electronic access to all journals. Members are charged actual cost for print copies of journals, so there is no net loss or gain to the bottom line from changes in print subscriptions by members. Table 2 (below) shows the current selection of print journals by members.

<table>
<thead>
<tr>
<th>Member subscriptions, by calendar year</th>
<th>PRINT (paid)</th>
<th>ELECTRONIC (free)</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2014</td>
<td>2015</td>
<td>2016</td>
</tr>
<tr>
<td>Annals of Applied Probability</td>
<td>100</td>
<td>80</td>
<td>68</td>
</tr>
<tr>
<td>Annals of Probability</td>
<td>108</td>
<td>97</td>
<td>75</td>
</tr>
<tr>
<td>Annals of Applied Statistics</td>
<td>171</td>
<td>141</td>
<td>107</td>
</tr>
<tr>
<td>Annals of Statistics</td>
<td>284</td>
<td>262</td>
<td>220</td>
</tr>
<tr>
<td>Statistical Science</td>
<td>534</td>
<td>464</td>
<td>386</td>
</tr>
<tr>
<td>Total</td>
<td>1,197</td>
<td>1,044</td>
<td>856</td>
</tr>
<tr>
<td>Members setting up electronic access to IMS journals</td>
<td>1,234</td>
<td>1,226</td>
<td>1,183</td>
</tr>
</tbody>
</table>

Joint Memberships
The IMS offers joint membership opportunities with: the Association for Computing

Continues on page 9
Institutional Subscription Data
Table 3 (right) presents comparative subscription data for institutions to each of our scientific journals for 2018 and previous years. Almost all journals experienced subscription decreases in 2018. Overall, institutional subscriptions decreased by 2.5%. The decrease to IMS journals, specifically, was 2.4%. We are continuing to see usage of our bundled offerings which are discounted on the whole.

Approximately 60% of the institutional subscribers to IMS journals are in USA and Canada, with the remaining subscribers distributed throughout the world.

Book Sales Data
Table 4 (right) presents sales data for IMS book series. In 2010, the IMS published its first volumes in a cooperative arrangement with Cambridge University Press to publish two series, IMS Monographs and IMS Textbooks. Sales of these volumes are going very well.

Financial and Audit Report
The fiscal year ended December 31, 2018. The external audit of the IMS will be completed shortly; the full auditor’s report will then be posted online at https://www.imstat.org/council-reports-and-minutes/.

TABLE 3: Institutional paid subscriptions, by calendar year

<table>
<thead>
<tr>
<th>PRINT</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annals of Applied Probability</td>
<td>600</td>
<td>591</td>
<td>580</td>
<td>558</td>
<td>237</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Annals of Probability</td>
<td>795</td>
<td>779</td>
<td>769</td>
<td>735</td>
<td>706</td>
<td>-3.9%</td>
</tr>
<tr>
<td>Annals of Applied Statistics</td>
<td>346</td>
<td>368</td>
<td>349</td>
<td>341</td>
<td>341</td>
<td>0.0%</td>
</tr>
<tr>
<td>Annals of Statistics</td>
<td>985</td>
<td>948</td>
<td>962</td>
<td>929</td>
<td>906</td>
<td>-2.5%</td>
</tr>
<tr>
<td>Statistical Science</td>
<td>753</td>
<td>717</td>
<td>708</td>
<td>671</td>
<td>666</td>
<td>-0.7%</td>
</tr>
<tr>
<td>IMS Bulletin</td>
<td>102</td>
<td>96</td>
<td>90</td>
<td>75</td>
<td>71</td>
<td>-5.3%</td>
</tr>
<tr>
<td>Current Index to Statistics (ceased 2016)</td>
<td>216</td>
<td>199</td>
<td>182</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Annals Inst Henri Poincaré (B)</td>
<td>297</td>
<td>305</td>
<td>304</td>
<td>300</td>
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<tr>
<td>Bernoulli</td>
<td>292</td>
<td>299</td>
<td>298</td>
<td>303</td>
<td>298</td>
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<td>Brazilian J Probab Stat</td>
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<td>135</td>
<td>135</td>
<td>134</td>
<td>132</td>
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<tr>
<td>Total</td>
<td>4,510</td>
<td>4,437</td>
<td>4,377</td>
<td>4,046</td>
<td>3,946</td>
<td>-2.5%</td>
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<tr>
<td>Total IMS journals</td>
<td>3,479</td>
<td>3,403</td>
<td>3,368</td>
<td>3,234</td>
<td>3,156</td>
<td>-2.4%</td>
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TABLE 4: Total sales of IMS Monographs and IMS Textbooks

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<tr>
<td>IMS Monographs (5 vols to end of 2018)</td>
<td>1046</td>
<td>543</td>
<td>4,115</td>
<td>4,214</td>
<td>2,414</td>
<td>14,971</td>
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<tr>
<td>IMS Textbooks (11 vols to end of 2018)</td>
<td>1093</td>
<td>1254</td>
<td>777</td>
<td>630</td>
<td>1,018</td>
<td>6,864</td>
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<tr>
<td>Total sales</td>
<td>2,139</td>
<td>1,797</td>
<td>4,892</td>
<td>4,844</td>
<td>3,432</td>
<td>21,835</td>
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</table>

Conclusion
The IMS Executive Committee has reviewed all data in this report. A long-term financial plan is already in place and the IMS continues to be strong and stable financially.

The decreases in institutional subscriptions and memberships are being felt across the market and are not unexpected. The IMS leadership began planning for these decreases over 14 years ago and has ensured that IMS resources are shored up to protect the long-term stability and growth of the society.

Zhengjun Zhang, IMS Treasurer
Nominate for IMS Awards

It’s time to think about nominating your outstanding colleagues and collaborators for these IMS awards: Hall and Tweedie awards, Carver Medal and IMS Fellowship.

Nominations are invited for the Carver Medal, created by the IMS in honor of Harry C. Carver, for exceptional service specifically to the IMS.

All nominations must be received by February 1, 2020. Please visit https://www.imstat.org/ims-awards/harry-c-carver-medal/.

A candidate for IMS Fellowship shall have demonstrated distinction in research in statistics or probability, by publication of independent work of merit. This qualification may be partly or wholly waived in the case of either a candidate of well-established leadership whose contributions to the field of statistics or probability other than original research shall be judged of equal value; or a candidate of well-established leadership in the application of statistics or probability, whose work has contributed greatly to the utility of and the appreciation of these areas. Candidates for fellowship should be members of IMS when nominated—email Elyse Gustafson erg@imstat.org to check this before you start). [See Philip Protter’s article in the Oct/Nov 2018 issue for some words of advice]. The nomination deadline is January 31, 2020. For nomination requirements, see https://www.imstat.org/honored-ims-fellows/nominations-for-ims-fellow/.

Obituary: Marc Moore (1942–2019)

Canadian statistician Marc Moore passed away on July 26, 2019, following a long illness. He was 77. A graduate of Université de Montréal, Canada, he was a professor at École Polytechnique de Montréal from 1971 to his retirement at the end of 2002. He was Chair of the Applied Mathematics Department there for six years, in addition to teaching probability and statistics to several generations of engineers. His research interests included spatial statistics, pattern reconstruction, and iceberg trajectory modeling. He authored close to 30 research papers and a probability textbook (in French); he also edited two collective works, including one in the IMS Lecture Notes–Monograph Series. He was Editor-in-Chief of The Canadian Journal of Statistics (1989–91) and President of the Statistical Society of Canada (SSC) in 1995–96. He was a member of the IMS, an elected member of the International Statistical Institute since 1987, and an honorary member of the SSC since 2003.

After retirement, he had a second career as a very talented cabinetmaker. He is survived by his wife Monique, his sons François and Benoît, and four grandchildren.

Christian Genest, McGill University, Montréal, Canada
Obituary: Joseph F. Heyse

1952–2019

Joseph F. Heyse, a respected and influential leader in biopharmaceutical statistics, passed away May 31, 2019. He was 67.

Joe Heyse joined Merck & Co., Inc., in 1976 as a statistician supporting preclinical research and immediately began to develop statistical methods that subsequently became industry standards. In 1987, Joe began supporting clinical pharmaceutical research, providing technical oversight for health economics studies to support the marketing of Merck products. In 1990, he was named the director of a newly established department of health economic statistics. Three years later, Joe assumed responsibility for the clinical biostatistics group at Merck’s Pennsylvania site—including vaccine biostatistics, which was undergoing unprecedented growth. His impact on human health in this role is best summarized by Senior Vice President of Medical Affairs Eliav Barr, who said, “Joe led the group in an era of extraordinary challenges and productivity at Merck. At that time, Merck developed vaccines against rotavirus, a leading cause of infant morbidity and mortality; human papilloma virus, which causes most cases of cervical, genital, and head/neck cancer; and varicella zoster virus, which causes chickenpox in children and often debilitating herpes zoster in adults. Each of these programs required novel, large, complicated studies to address key efficacy and safety questions. Joe’s innovative spirit, keen understanding of clinical research and the underlying disease, deep fount of statistics knowledge, and can-do attitude was instrumental in the success of these studies and the subsequent availability of these vaccines. In short, his work was instrumental to the availability of vaccines that have saved hundreds of thousands of lives and prevented untold misery.”

In 2009, Joe transitioned to the head of the early development statistics group at Merck, and most recently, he was in his fifth year as a scientific associate vice president and head of the biostatistics methodology research group, which provides statistical support to research design, analysis, and reporting relating to product development through the application of existing and innovative statistical methods.

Throughout his career, Joe published books and peer-reviewed journal papers extensively. One of his early mentors, John Tukey, noted that Joe was among the most creative statisticians he ever met.

Joe earned his MS in statistics from Villanova University in 1975 and an MBA in economics from Temple University in 1979. He was selected to participate in the Merck Research Laboratories Doctoral Program in 1984 and earned his PhD in statistics from Temple University the following year. He was a Fellow of ASA and the American Association for the Advancement of Science. Joe was the founding editor of Statistics in Biopharmaceutical Research and editor of Statistical Methods in Medical Research. Joe also served on doctoral dissertation advisory committees at Temple University and the University of Maryland Baltimore County (UMBC). “I still remember his encouraging words and strong support to junior researchers,” wrote Yvonne Huang, a professor of statistics at UMBC. She described him as “an inspiring leader to work with and a role model for us to follow.”

In his 42 years at Merck, Joe had an extraordinary impact on human health. “Joe not only directly contributed to the successful development of dozens of pharmaceutical products, but he personally and proudly developed, mentored, coached, and collaborated with hundreds of statisticians who have, in turn, become successful drug and vaccine developers and leaders in their profession,” said Lisa Lupinacci, associate vice president of late development statistics at Merck.

Amy Gillespie, Merck’s associate vice president for statistical programming, said, “Joe was indeed the catalyst for my career at Merck, [and] his encouragement and council for so many years have directly contributed to my professional and personal achievements. I will certainly miss Joe’s generosity, coaching, inspirational stories, candor, integrity, wisdom, and humor.”

Keaven Anderson, a distinguished scientist at Merck, recalled his interactions with Joe by noting, “His thinking always drew us into a future vision that we could not imagine on our own! I have so much to thank him for.”

Joe will be remembered as a humble and kind person, who was quicker to give credit than accept it and was most willing to share his time and talents to help mentor others along the way.

Joe will be dearly missed by his wife, Lil; their daughters, Angelina and Gabby; and his many friends and colleagues at Merck and in the biopharmaceutical statistics community around the world.

Raymond Bain, Merck & Co., Inc.

[Edited from a version in Amstat News]
Recent papers

Annals of Probability

The Annals of Probability publishes research papers in modern probability theory, its relations to other areas of mathematics, and its applications in the physical and biological sciences. Emphasis is on importance, interest, and originality—formal novelty and correctness are not sufficient for publication. The Annals also publishes authoritative review papers and surveys of areas in vigorous development. Access papers at https://projecteuclid.org/aop

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Genealogical constructions of population models .......................................................... ALISON M. ETHIER AND THOMAS G. KURTZ, 1827–1910
Intermittency for the stochastic heat equation with Lévy noise ........................................ CARSTEN CHONG AND PETER KEVEI, 1911–1948
Couplings and quantitative contraction rates for Langevin dynamics ............................... ANDREAS EBERLE, ARNAUD GUILLIN, AND RAFAEL ZIMMER, 1982–2010
Poly-logarithmic localization for random walks among random obstacles ...................... JIAN DING AND CHANGJU XU, 2011–2048
The scaling limit of critical Ising interfaces is $\text{CLE}_4$ .................................................. STEPHANE BENOIST AND CLÉMENT HONGLER, 2049–2086
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Large deviations and wandering exponent for random walk in a dynamic beta environment .......................................................... MÁRTON BALÁZS, FIRAS RASSOUL-AGHA, AND TIMO SEPPÄLÄINEN, 2186–2229
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Annals of Applied Probability

The Annals of Applied Probability aims to publish research of the highest quality reflecting the varied facets of contemporary Applied Probability. Primary emphasis is placed on importance and originality. Access papers at http://projecteuclid.org/euclid.aop

Volume 29, No 4, August 2019

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Large deviations for fast transport stochastic RDEs with applications to the exit problem .......................................................... SANDRA CERRAI AND NICHOLAS PASKAL, 1993–2032
Stochastic approximation with random step sizes and um models with random replacement matrices having finite mean .......................................................... UJAN GANGOPADHYAY AND KRISHANU MAULIK, 2033–2066
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ALEA: an IMS-affiliated journal

ALEA, the Latin-American Journal of Probability and Mathematical Statistics, publishes research articles in probability theory, stochastic processes, mathematical statistics, and their applications. ALEA is an electronic open-access journal of the Latin-American probability and statistical community. Access papers at http://alea.impa.br/english/

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http://alea.impa.br/english/
Meeting report: WNAR/IMS/JR

Megan Othus reports: The 2019 Annual Meeting of the WNAR/IMS was hosted by Oregon Health Science University from June 23–26, with over 280 participants. In addition to WNAR’s yearly partnership with IMS, this year we also partnered with the Japanese Region (JR) of IBS to promote international collaborations. There were 29 invited sessions (24 WNAR, three IMS and two JR), two invited panels, eight student paper sessions, and five contributed sessions. We also had 20 posters during our poster session. Professor Bin Yu (University of California, Berkeley) gave the Presidential Invited Address: “Three Principles of Data Science: Predictability, Computability, and Stability.”

Three short courses were offered: “Teaching Statistics and Data Science with R/RStudio” by Nicholas Horton (Amherst College) and Kelly McConville (Reed College), “Mediation Analysis and Software with Applications to Explore Health Disparities” by Qingzhao Yu and Bin Li (Louisiana State University Health Sciences Center), and “A Gradual introduction to Shiny” by Ted Laderas and Jessica Minnier (Oregon Health and Science University).

WNAR thanks Program Chair Meike Niederhausen and Local Organizer Byung Park Kong (both from Oregon Health & Science University) for their efforts.

2019 WNAR/IMS Student Paper Competition

Thirty-eight students participated in the student paper competition at the 2019 WNAR/IMS/JR conference. The winner in the written category was Tiffany Tang, University of California, Berkeley (“Integrated Principal Components Analysis”). There were three winners (tied) in the oral category: Natalie Gasca, University of Washington (“Using dimension-reduction methods to identify interpretable diet patterns related to body mass index (BMI) in the Multi-Ethnic Study of Atherosclerosis (MESA)”), Evan Rosenman, Stanford University (“Propensity Score Methods for Merging Observational and Experimental Datasets”), and Justin Williams, University of California, Los Angeles (“Maximum Likelihood Estimation of a Truncated Normal Distribution with Censored Data”). The students received their award at the conference banquet.[ pictured below].

We give a special thanks to the chair of the student paper competition, Jessica Minnner from Oregon Health Sciences University and the other Student Competition judges: Harold Bae (Oregon State University), Lisa Brown (Seattle Genetics), Charlotte Gard (New Mexico State University), Chad He (Fred Hutchinson Cancer Research Center), Ying Lu (Stanford University), Camille Moore (National Jewish Hospital), John Rice (University of Colorado Anschultz Medical Campus [CU Anschutz]), Laura Saba (CU Anschutz), Krithika Suresh (CU Anschutz), Fan Yang (CU Anschutz), and Wen Zhou (Colorado State University).
Meeting report: SPA 2019 in Evanston

Antonio (Tuca) Auffinger and Greg Lawler report: Northwestern University hosted the 41st Stochastic Processes and their Applications conference July 8 –12, 2019 with 277 registered participants coming from 34 different countries. The most represented were the USA, Canada, Germany, Mexico, and the UK. The conference program consisted of 13 plenary talks, 48 invited talks, and 86 contributed talks. All talks and coffee breaks took place in the same building on campus with beautiful views of Lake Michigan.

Four food trucks were one of the highlights of a fantastic outdoor Monday reception during which Chris Burdzy announced that Allan Sly was the recipient of the 2019 Loève prize [see cover story]. Allan was present to be congratulated as he was one of the 13 plenary speakers.

The Doob lecture was delivered by Jeremy Quastel while the Schramm lecture was given by Stanislav Smirnov. Massimilano Gubinelli, Jason Miller and Zhen-Qing Chen gave the Lévy, Doeblin, and Itô lectures respectively. The two IMS Medallion lecturers were Étienne Pardoux and Krzysztof Burdzy. The remaining plenary speakers were Béatrice de Tilière, James R. Lee, Dmitry Panchenko, Yinxia Ren, and Caroline Uhler.

Long lunch breaks provided opportunities for graduate students, junior and senior researchers to interact. There was also time for social events. On Wednesday afternoon, participants had the chance to explore both Evanston and Chicago. On Thursday evening, there was an unforgettable dinner at Tapas Barcelona with live music performances and sing-along led by Greg Lawler and Tom Alberts.

The weather was perfect the whole week but foremost it was five days of amazing and inspiring talks. You can see for yourself: for the first time in the history of SPAs the plenary talks were recorded and are available to watch on the conference webpage (they’re also on YouTube) at https://sites.math.northwestern.edu/SPA2019/SPA2019.html

IMS Travel Awards: Why you should apply!

The IMS funds travel awards for early-career researchers, and some of this year’s recipients have written about their experiences. Read about the Hannan Graduate Student Travel Award and IMS New Researcher Travel Award at https://www.imstat.org/ims-awards/.

Ting Ye, University of Wisconsin–Madison, attended ENAR 2019 using a Hannan Travel Award. Ting said, “I presented my work and enjoyed many great talks. It was a wonderful and eye-opening experience. I would definitely encourage others to apply for future awards.”

New Researcher Justin Strait, University of Georgia, said, “I went to O’Bayes 2019, which took place at the University of Warwick in the UK. The talks were incredibly varied and of high-quality, and left me with some interesting ideas to think about trying out within my own research. I would certainly encourage other new faculty to apply for the IMS Travel Award!”

Quan Zhou, Rice University, traveled to the WNAR/IMS/JR meeting [see report on previous page]. Quan said, “I feel so honored to be a recipient of the New Researcher Travel Award. I used the award to present one of my recent works, “Sequential Re-randomization,” at the meeting. The support from IMS means a great deal to my career and I strongly encourage other junior researchers to apply in the future.”

Bo Ning, Yale University, said, “Thanks to my IMS New Researcher Award, I was able to afford my trip to attend Aad van der Vaart’s 60th Birthday statistical conference in The Netherlands. It was an unforgettable experience. I learned about the frontiers of modern statistical research from talks given by famous statisticians. I met professors in person whom I had admired for a long time. I also attended a special event, where Aad van der Vaart received the royal award, Knight in the Order of the Lion of The Netherlands.”

Mikołaj Kasprzak, University of Luxembourg, used his New Researcher Travel Award to participate in the Stochastic Processes and Their Applications conference in Evanston [see report above]. “Apart from presenting my own work, I had an opportunity to listen to some extremely interesting and inspiring lectures delivered by top probabilists from all around the world,” he said. “I would encourage everyone to apply for future awards offered by the IMS and participate in the events organized or co-organized by the Institute.”

Yuanyuan Zhang, University of Manchester, said, “I was very privileged to receive the IMS New Researcher Travel Award, which provided me with the opportunity to present at the 2019 IMS China Meeting. Participating in the conference provided me with a great chance to network with top leading experts in my research area. In addition, it enhanced and widened my ability and knowledge in the area that I am passionate about. I would definitely encourage other researchers to apply for other IMS Travel awards.”
IMS meetings around the world
Joint Statistical Meetings: 2019–2023

IMS sponsored meeting
JSM 2020
August 1–6, 2020. Philadelphia, PA, USA.
http://www2.amstat.org/meetings/jsm/2020/
JSM (the Joint Statistical Meetings) is the largest gathering of statisticians and data scientists held in North America. It is also one of the broadest, with topics ranging from statistical applications to methodology and theory to the expanding boundaries of statistics, such as analytics and data science. JSM also offers a unique opportunity for statisticians in academia, industry, and government to exchange ideas and explore opportunities for collaboration.

IMS sponsored meetings: JSM dates for 2020–2024

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<tr>
<th>IMS Annual Meeting @ JSM 2021</th>
<th>2022 Joint Statistical Meetings @ JSM 2023</th>
<th>IMS Annual Meeting @ JSM 2024</th>
<th>JSM 2025 @ JSM 2025</th>
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<td>August 7–12, 2021, Seattle, WA</td>
<td>August 6–11, 2022, Washington DC</td>
<td>August 5–10, 2023, Toronto, ON, Canada</td>
<td>August 2–7, 2025, Nashville, TN, USA</td>
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IMS sponsored meeting
Bernoulli/IMS 10th World Congress in Probability and Statistics [see poster on following pages]
August 17–21, 2020. Seoul, South Korea
http://www.wc2020.org
Program chair: Siva Athreya; Local chair: Hee-Seok Oh. The 10th World Congress in Probability and Statistics (WC2020), jointly organized by the Bernoulli Society and IMS, will be hosted by Seoul National University. We are expecting to attract more than 900 experts from over 40 countries.

This upcoming World Congress will take a comprehensive look at the latest developments in statistics and probability as well as the current trends emerging from all associated fields. A special lecture series will document a variety of modern research topics with in-depth uses and applications of these disciplines as they relate to science, industrial innovation, and society as a whole.

As the largest city in South Korea, dynamic Seoul is a bewitching mix of ancient and modern structures, packaged in a surprisingly compact metropolis that has earned it the designation of a UNESCO City of Design. The nation's capital has a cutting-edge cityscape of glass, steel and futuristic skyscrapers, which tower over traditional wooden houses with tiled roofs and mazes of cobbled alleys in village-like districts. See poster on next pages.

IMS co-sponsored meeting
INDSTATS2019: “Innovations in Data and Statistical Sciences”
December 26–30, 2019. Mumbai, India
http://www.intindstat.org/IISA2019
The aim of INDSTATS2019 is to engage leading experts and junior members in all topics related to statistics and data sciences. The four and half days of vibrant conference activities will consist of pre-conference short courses (on Dec 26th), plenary talks by eminent speakers, invited sessions, contributed sessions, panel discussions and student paper competitions. Past IISA annual conferences in India and the US have attracted over 300 participants, across academia, industry, government, regulatory agencies and non-profit organizations. Specific topics include probability and statistics, survival analysis, personalized medicine, big data and machine learning methodology, econometrics, Bayesian statistics, clinical trial data and innovations, high-dimensional data analysis, etc.
IMS sponsored meeting

**ENAR dates, 2020–2022**
March 22–25, 2020: in Nashville, TN
March 27–30, 2022: in Houston, TX

ENAR will be in Nashville (and the following year in Baltimore, and then Houston in 2022). Featuring a *Fostering Diversity in Biostatistics* workshop, connecting underrepresented minority students interested in biostatistics with professional biostatisticians in academia, government and industry.

**IMS sponsored meetings**

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<tr>
<td>March 14–17, 2021</td>
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**IMS co-sponsored meeting**

**Design and Analysis of Experiments**

**October 17–19, 2019**
Knoxville, TN

The purpose of the Design and Analysis of Experiments (DAE) conference series, of which this is the 10th, is to provide support and encouragement to junior researchers in the field of design and analysis of experiments, and to stimulate interest in topics of practical relevance to science and industry. The meetings also attract top-notch senior researchers, and emphasize interaction between them and junior researchers.

DAE 2019 will focus on emerging areas of research in experimental design, as well as novel innovations in traditional areas. A feature of the DAE series is **pairing of senior and junior researchers** for mentoring purposes and DAE 2019 at UT will follow this tradition. There will be 10 invited sessions, each with three speakers, two poster sessions, and opportunities to lead or participate in roundtable discussions as well.

**IMS co-sponsored meeting**

**Statistics and the Life Sciences: Creating a Healthier World**

**November 15, 2019**
Boston University School of Public Health

We are globally connected like never before, in nearly all aspects of our lives. While this fact has numerous implications, from the perspective of public health it leaves us uniquely poised to potentially overcome major challenges that have to date been out of reach. These include aging traits such as cognitive decline and Alzheimer’s disease, pulmonary disease such as COPD and asthma, and cardiovascular diseases. Significant progress on any and all of these problems will be data intensive, with statistics a key element at the core. The goal of this workshop is to stage the statistical challenges and progress towards solutions in a handful of emerging and mission-critical areas of the health sciences with global impact.

Specifically, focus will be on the following three areas: digital health, machine learning in causal inference, and networks for public health. Ultimately, the idea is to bring together a gathering of representatives from statistics and related domain areas, in an agile and interactive format, and use a web-based dissemination platform to bring broad visibility to these topics.

Please register now, via the website above.

**Bayes Comp 2020**

**January 7–11, 2020**
University of Florida, Gainesville, FL

Bayes Comp is a biennial conference sponsored by the ISBA section of the same name. The conference and the section both aim to promote original research into computational methods for inference and decision making and to encourage the use of frontier computational tools among practitioners, the development of adapted software, languages, platforms, and dedicated machines, and to translate and disseminate methods developed in other disciplines among statisticians.

Bayes Comp is the current incarnation of the popular MCMSki series of conferences, and Bayes Comp 2020 is the second edition of this new conference series. The first edition was Bayes Comp 2018, which was held in Barcelona in March of 2018.
BERNOULLI - IMS
10th WORLD CONGRESS in PROBABILITY and STATISTICS

www.wc2020.org

HOSTED BY
Seoul National University

ORGANIZED BY
Bernoulli Society
Institute of Mathematical Statistics

SUPPORTED BY

AUGUST 17-21, 2020
Seoul National University
Seoul, Korea

MARCH 31, 2020
Abstract Submission Deadline

APRIL 15, 2020
Abstract Acceptance Notifications

MAY 31, 2020
Early-bird Registration Deadline
Dear Colleagues and Friends,

On behalf of the local organizing committee, it is with great delight that we welcome you to Seoul National University in Seoul, South Korea for the 10th World Congress in Probability and Statistics (WC2020), jointly organized by the Bernoulli Society and IMS, from August 17 to 21, 2020. We are expecting to attract more than 900 experts from over 40 countries.

Held every four years, the congress is a worldwide event covering all branches of statistics and probability. This includes the latest scientific breakthroughs in theoretical, methodological, applied and computational statistics and probability, as well as stochastic processes.

We believe WC2020 will bring transformation and further advancement to the scientific level and quality of the study of statistics and probability.

As the largest city in South Korea, dynamic Seoul is a bewitching mix of ancient and modern structures, packaged in a surprisingly compact metropolis that has earned it the designation of a UNESCO City of Design.

We look forward to seeing you in Seoul, Korea.

Sincerely,

Hee-Seok Oh
Chair of the Local Organizing Committee
Department of Statistics, Seoul National University

---

SEUL, KOREA

The Korean Peninsula extends about 1,000 km from the Asian continent into the Pacific Ocean with more than 3,000 islands dotting the coastline. Mountains cover almost 70 percent of the land mass, making the country one of the most mountainous regions in the world and offering abundant forest resources. Administratively, Korea consists of nine provinces with 77 small cities and 88 counties.

With a history stretching back more than two thousand years, Seoul is also a rising global star as one of the world’s most wired cities, ranked first in technology readiness. In Seoul you will experience millennia of royal palaces and historic sites among a futuristic backdrop of some of the world’s most innovative and daring architecture, such as the chicly designed Dior building or recently inaugurated Seuillo 7017.

---

MAIN SPEAKERS

Named Lectures
Kolmogorov Lecture
Persi Diaconis [Stanford University]

Bernoulli Lecture
Alison Etheridge [University of Oxford]

Levy Lecture
Massimiliano Gubinelli [University of Bonn]

Laplace Lecture
Tony Cai [University of Pennsylvania]

Tukey Lecture
Sara van de Geer [ETH Zurich]

Wald Lecture
Martin Barlow [University of British Columbia]

Blackwell Lecture
Gabor Lugosi [Pompeu Fabra University]

Doob Lecture
Nicolas Curien [Université Paris-Sud Orsay]

Schramm Lecture
Omer Angel [University of British Columbia]

IMS Medallion Lectures
Gerard Ben Arous [New York University]
Andrea Montanari [Stanford University]
Elchanan Mossel [MIT]
Laurent Saloff-Coste [Cornell University]
Daniela Witten [University of Washington]

Public Lecture
To be named

IMS Presidential Address
Susan Murphy [Harvard University]
Other meetings and events around the world

6th Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA2020)
June 2–5, 2020. Barcelona, Spain

www.smtda.net

The 6th Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA2020, 2-5 June 2020, Barcelona, Spain, www.smtda.net) will be hosted in the UNESCO Heritage site “Casa Convalescència”, Universitat Autònoma de Barcelona, Spain.

You are invited to participate in the conference and workshop and to propose an Invited Session (3–6 talks). You can also introduce Young Scientists and PhD Students to participate and give a talk or to present a poster.

The main objective of the Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA) is to welcome papers, both theoretical and practical, presenting new techniques and methodologies in the broad area of stochastic modeling and data analysis. An objective is to use the methods proposed for solving real life problems by analysing the relevant data. Also, the use of recent advances in different fields will be promoted, such as new optimization and statistical methods, data warehouse, data mining and knowledge systems, computing-aided decision supports, neural computing and artificial intelligence.

Particular attention will be given to interesting applications in engineering, productions and services (maintenance, reliability, planning and control, quality control, finance, insurance, management and administration, inventory and logistics, marketing, environment, human resources, biotechnology, medicine, ...).

For Abstract submission and special session proposals please visit the conference website at www.smtda.net or send an email to Secretariat@smtda.net.

The Data Analysis Book from ASMDA2017 Conference in London is ready in two volumes, published by ISTE-Wiley. An excellent introductory chapter by Gilbert Saporta is included. Download the books from the Wiley website: https://www.wiley.com/en-us/Data+Analysis+and+Applications+1%3A+New+and+Classical+Approaches-p-9781119597681. The SMTDA2018 Books at ISTE-Wiley are in the last stages while we collect the updated forms of the ASMDA2019 papers for the new publications.

The SMTDA2020 event will also host the Demographics2020 International Workshop. The main focus is on Health State and the optimal retirement age. More information is related to a recent work on estimating the “Health Expenditure per Age Group”. To join the ongoing international study send a message that you intend to contribute in a Demography publication, to Prof. Christos H Skiadas, Conference Chair: skiadas@cmsim.net.

Conference topics


Special techniques and algorithms: Neural Networks, Genetic and Fuzzy Algorithms, Support Vector Machine, Monte Carlo Methods, Chaotic Simulation.
2020 PIMS-CRM Probability Summer School
June 1–26, 2020
Vancouver, BC, Canada
w http://www.math.ubc.ca/Links/ssprob20/
The 2020 PIMS-CRM Probability Summer School will take place at the University of British Columbia, Vancouver, BC, Canada.

The school features 4-week courses by Ivan Corwin (Interacting particle systems, growth models, stochastic PDEs and directed polymers through the lens of the stochastic six vertex model) and Frank den Hollander (Metastability for interacting particle systems).

Short courses of three lectures each will also be given by Paul Bourgade (Branching processes in random matrix theory and number theory), Jean-François Le Gall (Brownian geometry on the sphere), and Nike Sun (Statistical physics of random constraint satisfaction problems).

Support for local accommodation is available for some participants with a December 31 2019 deadline for application. Applications for support and registration may be done online at the webpage below beginning in September 2019. More information may be found at: http://www.math.ubc.ca/Links/ssprob20/

8th Symposium on Conformal and Probabilistic Prediction with Applications (COPA 2019)
September 8–11, 2019
Lilia Hotel, Gold Sands, Bulgaria
w http://clrc.rhul.ac.uk/copaa2019/
The main purpose of conformal prediction is to complement predictions delivered by various algorithms of Machine Learning with provably valid measures of their accuracy and reliability under the assumption that the observations are independent and identically distributed. It was originally developed in the late 1990s and early 2000s but has become more popular and further developed in important directions in recent years.

Conformal prediction is a universal tool in several senses; in particular, it can be used in combination with any known machine-learning algorithm, such as SVM, Neural Networks, Ridge Regression, etc. It has been applied to a variety of problems from diagnostics of depression to drug discovery to the behaviour of bots.

A sister method of Venn prediction was developed at the same time as conformal prediction and is used for probabilistic prediction in the context of classification. Among recent developments are adaptations of conformal and Venn predictors to probabilistic prediction in the context of regression.

The COPA series of workshops is a home for work in both conformal and Venn prediction, as reflected in its full name “Conformal and Probabilistic Prediction with Applications”. The aim of this symposium is to serve as a forum for the presentation of new and ongoing work and the exchange of ideas between researchers on any aspect of Conformal and Probabilistic Prediction and their applications to interesting problems in any field.

Invited Speakers
Professor Alexander Balinsky (Cardiff School of Mathematics, UK): Mathematics of Deep Learning. Deep Learning is another name for a set of algorithms that use a neural network as an architecture. In the past few years, Deep Learning has generated much excitement due to many breakthrough results in speech recognition, computer vision and text processing. This recent success has been due to new mathematical techniques, the availability of inexpensive, parallel hardware (GPUs, computer clusters) and massive amounts of data. This powerful way of processing data can be used to address an ever-growing number of problems, and its impact on science and society is increasing exponentially. In this talk we present mathematical foundations of Deep Learning, relations with physics, features extraction and interpretability. We also explain mathematics behind adversarial attacks and how to protect against them. Several new mathematical problems will be presented.

Professor Peter McCullagh (Department of Statistics, University of Chicago, USA): Prediction and exchangeable processes. This talk will present an overview of recent and not-so-recent work on a variety of exchangeable processes, including partition processes where the observation space is the set of partitions of [n] or equivalence relations on [n], and ordered partition processes where the observation space is the set of partial rankings of [n]. The connection with fiducial processes, Dirichlet processes and survival processes will be discussed.
Employment Opportunities around the world

Australia: Melbourne, Victoria
University of Melbourne
Lecturer/Senior Lecturer Statistics (Data Science)
https://jobs.imstat.org/job/49886904

Australia: Melbourne, Victoria
University of Melbourne
Lecturer/Senior Lecturer (Mathematical Statistics)
https://jobs.imstat.org/job/49886748

Canada: Vancouver, British Columbia
University of British Columbia
Assistant Professor (Tenure Track)
https://jobs.imstat.org/job/50139802

Macau
Department of Mathematics, University of Macau (UM)
Assistant/Associate Professor in Statistics
https://jobs.imstat.org/job/49213132

Switzerland: Fribourg
University of Fribourg, Fac SciMed, Dep Mathematics
Professor of Mathematics
https://jobs.imstat.org/job/50151017

Switzerland: Lausanne
EPFL
Professorship in Statistics
https://jobs.imstat.org/job/47120981

Switzerland: Lausanne
EPFL
Assistant Professor of Applied Mathematics
https://jobs.imstat.org/job/49973294

Switzerland: Lausanne
EPFL
Assistant Professor of Mathematics
https://jobs.imstat.org/job/49973286

Taiwan: Taipei
Institute of Statistical Science, Academia Sinica
Tenure-Track Faculty Positions
The Institute of Statistical Science, Academia Sinica, is pleased to invite applications for our tenure-track faculty positions. Academia Sinica, the most preeminent academic research institution in Taiwan, offers a secured research environment facilitated with rich collaboration opportunities as well as the freedom of conducting independent research. With a strong tradition of theoretical and interdisciplinary research, the Institute of Statistical Science is aiming for global excellence in mathematical statistics and various statistical applications.

Applications are invited for tenure-track appointments as Full/Associate/Assistant Research Fellows (equivalent to Full/Associate/Assistant Professors in Universities) in the Institute of Statistical Science, Academia Sinica, to commence on August 1, 2020 or as soon as possible thereafter. Applicants should possess a PhD degree in Statistics, Biostatistics, Computer Science, Data Science or related areas, and should submit: (1) a cover letter, (2) an up-to-date curriculum vita, (3) a detailed publication list, (4) a research proposal, (5) three letters of recommendation, (6) representative publications and/or technical reports and (7) advisers’ names of master and PhD degrees. Additional supporting materials such as transcripts for new PhD degree recipients may also be included. Electronic submissions are encouraged. Applications should be submitted to

Dr. Yen-Tsung Huang, Chair of the Search Committee
Institute of Statistical Science, Academia Sinica
128 Sec. 2 Academia Road, Taipei 11529,
Taiwan, R.O.C.
Fax: +886-2-27886833
Email: recruit@stat.sinica.edu.tw

Application materials should be received by December 27, 2019 for consideration, but early submissions are encouraged.
## Employment Opportunities around the world

**Taiwan: Taipei City**  
Institute of Statistical Science, Academia Sinica  
Tenure-Track Faculty Positions  
[See display advertisement on previous page]  
https://jobs.imstat.org/job/49747539

**United States: Modesto, CA**  
E. & J. Gallo Winery  
Statistician  
https://jobs.imstat.org/job/49606310

**United States: Los Angeles, CA**  
University of California, Los Angeles  
Tenure-Track Assistant Faculty Position in Biostatistics Department  
https://jobs.imstat.org/job/49767947

**United States: La Jolla, CA**  
IDA Center for Communications Research  
Research Staff Member  
https://jobs.imstat.org/job/50332370

**United States: West Lafayette, IN**  
Department of Statistics, Purdue University  
Department Head/Professor  
https://jobs.imstat.org/job/50389502

**United States: Baltimore, MD**  
Johns Hopkins University, Whiting School of Engineering,  
Department of Applied Mathematics and Statistics  
Department Head  
https://jobs.imstat.org/job/49711818

**United States: Minneapolis, MN**  
University of Minnesota, School of Statistics and Department of  
Psychology  
Tenure Track Assistant Professor  
https://jobs.imstat.org/job/50075025

**United States: Springfield, MO**  
Missouri State University, Department of Mathematics  
Tenure Track Assistant Professor of Statistics  
https://jobs.imstat.org/job/50239456

**United States: New York, NY**  
The Herbert and Florence Irving Institute for Cancer Dynamics of  
Columbia University  
Research Scientist (Open Rank)  
https://jobs.imstat.org/job/49850220

**United States: University Park, PA**  
Penn State University  
Tenure Track Faculty Positions  
https://jobs.imstat.org/job/49212272

**United States: Seattle, WA**  
University of Washington  
Chair, Department of Statistics  
https://jobs.imstat.org/job/50331839

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::: Search our online database of the latest jobs around the world for free at https://jobs.imstat.org :::
International Calendar of Statistical Events

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

September 2019


NEW September 8–11: Gold Sands, Bulgaria. 8th Symposium on Conformal and Probabilistic Prediction with Applications (COPA 2019) w http://clrc.rhul.ac.uk/copa2019/


September 22–26: Hannover, Germany. 29th European Safety and Reliability Conference (ESREL 2019) w https://esrel2019.org/


October 2019


October 17–19: Knoxville, TN, USA. Design and Analysis of Experiments w https://haslam.utk.edu/dae2019

October 18–20: Kusadasi, Turkey. 5th International Researchers, Statisticians and Young Statisticians Congress w https://www.irsysc2019.com/

October 23: Storrs, CT, USA. 25th Pfizer/ASA/UConn Distinguished Statistician Colloquium: Arthur Dempster w https://events.stat.uconn.edu/pfizer/

November 2019

November 4–5: Boston, MA, USA. Quantitative Challenges in Cancer Immunology and Immunootherapy w https://www.hsph.harvard.edu/2019-pqg-conference/


December 2019

December 2–6: Mérida, México. XV CLAPEM: Latin American Congress of Probability and Mathematical Statistics
http://clapem2019.eventos.cimat.mx/


**January 2020**


**February 2020**


**March 2020**


**June 2020**

**NEW** June 1–26: Vancouver, BC, Canada. 2020 PIMS-CRM Probability Summer School w http://www.math.ubc.ca/Links/ssprob20/

**NEW** June 2–5: Barcelona, Spain. 6th Stochastic Modeling Techniques and Data Analysis International Conference (SMTDA2020). Also featuring Demographics 2020 Workshop w www.smtda.net


**NEW** June 21–24 [tentative]: Anchorage, Alaska, USA. 2020 WNAR/IMS/JR (Japanese Region) meeting w http://wnar.org/page-18098


**July 2020**

July 5–11: Portoroz, Slovenia. 8th European Congress of Mathematics. w http://www.8ecm.si/


Continues on page 25
International Calendar continued

July 2020 continued


August 2020


March 2021

March 14–17: Baltimore, MD, USA. ENAR Spring Meeting w http://www.enar.org/meetings/future.cfm

August 2021


August 2022


August 2023

August 5–10: Toronto, ON, Canada. IMS Annual Meeting at JSM 2023 w http://www.amstat.org/ASA/Meetings/Joint-Statistical-Meetings.aspx

August 2024


August 2025


March 2022

March 27–30: Houston, TX, USA. ENAR Spring Meeting w http://www.enar.org/meetings/future.cfm

July 2022

July/August [exact dates TBC]: London, UK. IMS Annual Meeting w TBC


Are we missing something? If you know of any statistics or probability meetings which aren’t listed here, please let us know. You can email the details to Elyse Gustafson at erg@imstat.org, or you can submit the details yourself at https://www.imstat.org/ims-meeting-form/
We’ll list them here in the Bulletin, and on the IMS website too, at imstat.org/meetings-calendar/
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The IMS Bulletin publishes articles and news of interest to IMS members and to statisticians and probabilists in general, as well as details of IMS meetings and an international calendar of statistical events. Views and opinions in editorials and articles are not to be understood as official expressions of the Institute’s policy unless so stated; publication does not necessarily imply endorsement in any way of the opinions expressed therein, and the IMS Bulletin and its publisher do not accept any responsibility for them. The IMS Bulletin is copyrighted and the authors of individual articles may be asked to sign a copyright transfer to the IMS before publication.

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

IMS: Organized September 12, 1935

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THE ANNALS of APPLIED PROBABILITY

AN OFFICIAL JOURNAL OF THE INSTITUTE OF MATHEMATICAL STATISTICS

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