



December 2017

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IMS Travel Awards: apply now

As we previously announced, the IMS has created a new category of travel award, aimed at graduate students who wish to attend an IMS sponsored or co-sponsored meeting. The **IMS Hannan Graduate Student Travel Award** was created by a bequest from the estate of Jim Hannan's widow, Bettie, who passed away this year. Jim Hannan, who was an IMS Fellow, died in 2010. You can read a little about his life and career on page 13.

The Hannan Graduate Student Travel Award funds travel and registration to attend (and possibly present a paper/poster at) an IMS sponsored or co-sponsored meeting. The travel awards are available to *IMS members who are graduate students (seeking a Masters or PhD degree) studying some area of statistical science or probability.*

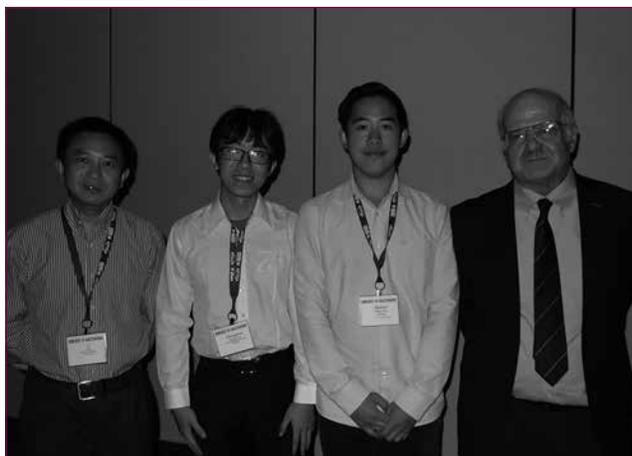
This new award is in addition to the ongoing **IMS New Researcher Travel Award**. If you are a New Researcher (awarded your PhD in 2012–17) looking for travel funds, you should apply for this award to fund travel, and possibly other expenses, to present a paper or a poster at an IMS sponsored or co-sponsored meeting (apart from the IMS New Researcher's Conference, which is funded separately).

Applicants for both these travel awards must be members of IMS, though joining at the time of application is allowed (student membership is free, and new graduate membership discounted!). The application deadline for both is **February 1, 2018**. See <http://www.imstat.org/awards/hannan.html> and <http://www.imstat.org/awards/travel.html>

One of the recipients of last year's New Researcher Travel Award was Stephen Chan. He wrote, "I was very privileged to receive the IMS Travel Award, which provided me with the opportunity to attend the annual Joint Statistical Meetings conference. Participating in JSM provided me with a great chance to network with leading experts in my research area, which I hope will lead to future collaborative research opportunities. In addition, it enhanced and widened my ability and knowledge in the area that I

am passionate about."

He added that he liked Baltimore, "a vibrant multi-cultural city with many attractions to see nearby." He hopes to attend another JSM: "With the sheer size of the conference, I was amazed at how efficiently it was organized. I am already looking forward to the next JSM!"



Two of this year's IMS New Researcher Travel Award recipients at the JSM in Baltimore. Pictured here (l-r) are Ji Zhu (Chair of the IMS Travel Awards committee), recipients Chengchun Shi and Stephen Chan, and IMS President Jon Wellner.

Volume 46 • Issue 8

December 2017

ISSN 1544-1881

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IMS Members' News

American Statistical Association honors bestowed at JSM

The ASA Founders Award is bestowed upon ASA members with long-standing and distinguished service to the association and its membership. Four people received the Founders Award at JSM, including **Nick Horton** (For long-term active involvement in ASA chapters, sections, and committees; for serving on a wide variety of committees, including the 2015 JSM Program Committee, the Education Council, the Waller Education Award Committee, and the Traveling Course Committee; for serving as chair of the Statistics Education Section, chair of the Education Workgroup on Undergraduate Curriculum Guidelines, and chair of the ASA/NCTM Joint Committee; for effective leadership on the Council of Chapters Governing Board and ASA Board of Directors; and for exceptional service and leadership in a wide variety of other professional activities) and **John Eltinge** (For extensive support of and involvement in the continual improvement of federal statistical programs, as evidenced by leadership at the Bureau of Labor Statistics and active participation on the Federal Committee on Statistical Methodology and an abundance of interagency committees; for exemplary contributions as associate editor for multiple journals and to program committees for numerous statistical conferences, including service as program chair of the Joint Statistical Meetings; for commitment to enhancing the relevance of the ASA to the federal statistical agencies; and for insightful mentoring at the local and national levels). Also honored were Wendy Martinez and Jane Pendergast.

Edward C. Bryant Scholarship: Established by Westat, this scholarship is awarded to outstanding graduate students in survey statistics. The 2017 Edward C. Bryant Scholarship recipient is **Hejian Sang** of Iowa State University.

Award of Outstanding Statistical Application: **Sudipto Banerjee** (UCLA) was one of the authors of the winning paper, an outstanding application of statistics in the physical, biological or medical sciences. The other award honorees were Abhirup Datta, Andrew Finley, Nicholas A. S. Hamm and Martin Schaap; their paper, "Non-Separable Dynamic Nearest-Neighbor Gaussian Process Models for Spatio-Temporal Data with an Application to Particulate Matter Analysis," was published in the *Annals of Applied Statistics* in 2016.

Samuel S. Wilks Memorial Award: The Wilks award honors the distinguished career of Samuel S. Wilks and is bestowed upon an individual who has made statistical contributions to the advancement of scientific or technical knowledge. The 2017 Samuel S. Wilks Memorial Award honoree is **Wayne Fuller** of Iowa State University.

Statistics in Physical Engineering Sciences Award: **Yili Hong** of Virginia Tech was one of the authors of the winning paper, "Planning Fatigue Tests for Polymer Composites," published in the *Journal of Quality Technology*. The other authors were Caleb King, Stephanie DeHart, Patrick DeFeo and Rong Pan.

Gottfried E. Noether Awards: The Noether awards were established to recognize distinguished researchers and teachers and to support the field of nonparametric statistics. The 2017 Noether Senior Scholar Award honoree is **Hans-Georg Mueller** of the University of California, Davis. The 2017 Noether Junior Scholar Award honoree is **Eric Laber** of North Carolina State University.

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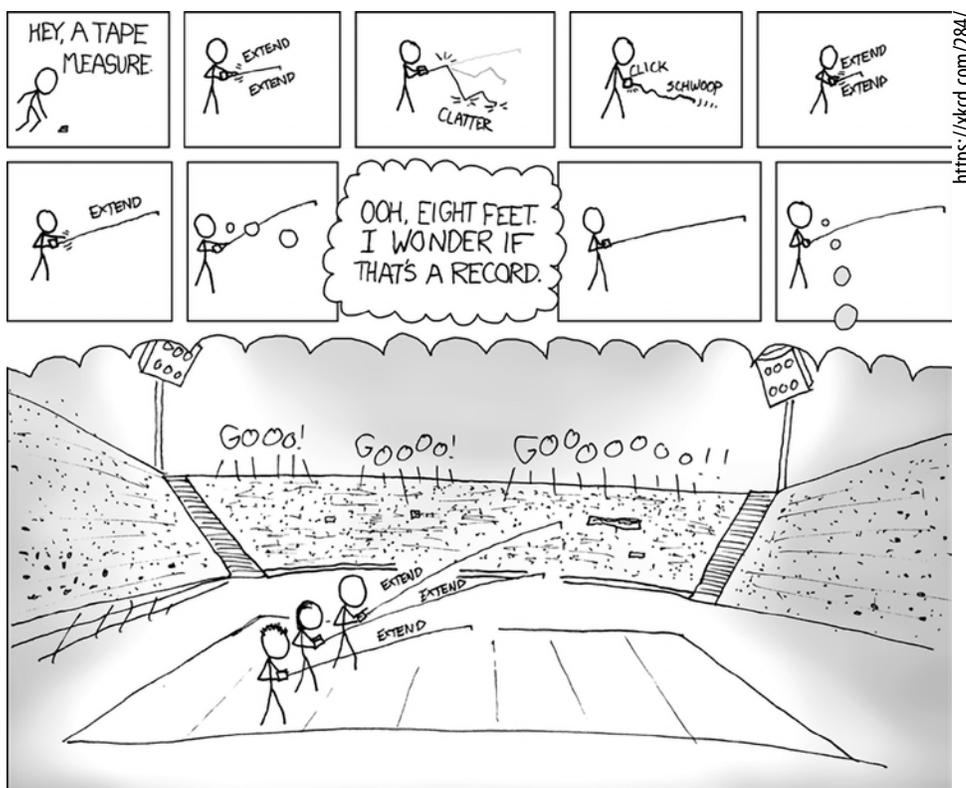
IMS Members' News

Joanne Wendelberger receives ASQ Hunter Award

The Statistics Division of the American Society for Quality (ASQ) recently honored **Joanne Wendelberger** with the 2017 William G. Hunter Award. The award recognizes Bill Hunter's many contributions, especially in promoting the use of applied statistics and statistical thinking. Joanne Wendelberger is a senior-level scientist at Los Alamos National Laboratory, having joined the Statistical Sciences Group in 1992. Earning her PhD in statistics in 1991 from the University of Wisconsin–Madison, Wendelberger was influenced by quality leaders Bill Hunter, George Box and Brian Joiner. Her research has been motivated by the need to develop solutions to complex interdisciplinary problems, with a growing focus on the interface between statistics and computer science. Her current research interests include statistical experimental design and test planning, statistical bounding and uncertainty, materials degradation modeling, sampling and analysis in large-scale computation and visualization, probabilistic computing, and education modeling. Wendelberger is a Fellow of the ASA and a senior member of the ASQ. She was the W.J. Youden Memorial Address speaker for the 2016 Fall Technical Conference and has served as an AE for *Technometrics*. In addition to her professional contributions, Wendelberger has sought opportunities to inspire the use of statistics in her local community: she has encouraged the use of statistical concepts and effective problem solving techniques for a number of community organizations and forums, including a cooperative preschool, a soccer league, a scholarship committee, and numerous educational outreach activities.

Do you love measurements? Terry Speed does! (See his column on page 17.)

This xkcd comic is for all the avid quantifiers out there...



= access published papers online

IMS Journals and Publications

Annals of Statistics: Ed George and Tailen Hsing

<http://imstat.org/aos>

<http://projecteuclid.org/aos>

Annals of Applied Statistics: Tilmann Gneiting

<http://imstat.org/aoas>

<http://projecteuclid.org/aoas>

Annals of Probability: Maria Eulalia Vares

<http://imstat.org/aop>

<http://projecteuclid.org/aop>

Annals of Applied Probability: Bálint Tóth

<http://imstat.org/aap>

<http://projecteuclid.org/aop>

Statistical Science: Cun-Hui Zhang

<http://imstat.org/sts>

<http://projecteuclid.org/ss>

IMS Collections

<http://imstat.org/publications/imscollections.htm>

<http://projecteuclid.org/imsc>

IMS Monographs and IMS Textbooks: David Cox

<http://imstat.org/cup/>

IMS Co-sponsored Journals and Publications

Electronic Journal of Statistics: Domenico Marinucci

<http://imstat.org/ejs>

<http://projecteuclid.org/ejs>

Electronic Journal of Probability: Brian Rider

<http://ejp.ejpecp.org>

Electronic Communications in Probability:

Sandrine Péché

<http://ecp.ejpecp.org>

Current Index to Statistics: George Styan

<http://www.statindex.org>

log into members' area at imstat.org

Journal of Computational and Graphical Statistics:

Diane Cook

<http://www.amstat.org/publications/jcgs>

log into members' area at imstat.org

Statistics Surveys: Donald Richards

<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: Victor Perez Abreu

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

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

Miermont, Christophe Sabot <http://imstat.org/aihpa>

<http://projecteuclid.org/aihpa>

Bayesian Analysis: Bruno Sansó

<http://ba.stat.cmu.edu>

Bernoulli: Holger Dette

<http://www.bernoulli-society.org/>

<http://projecteuclid.org/bj>

Brazilian Journal of Probability and Statistics:

Francisco Louzada Neto <http://imstat.org/bjps>

<http://projecteuclid.org/bjps>

IMS-Affiliated Journals

Observational Studies: Dylan Small

<http://www.obsstudies.org>

Probability and Mathematical Statistics: K. Bogdan,

M. Musielak, J. Rosiński, W. Szczotka, & W.A. Woyczyński

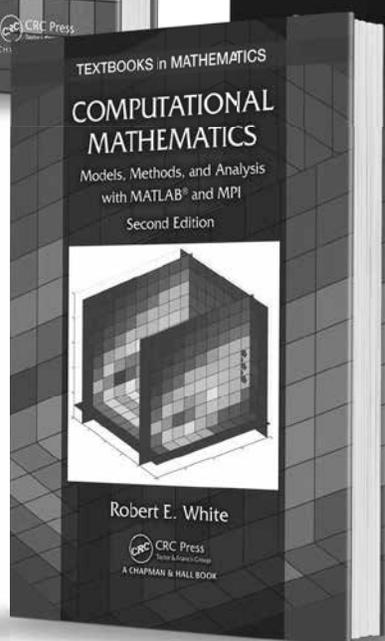
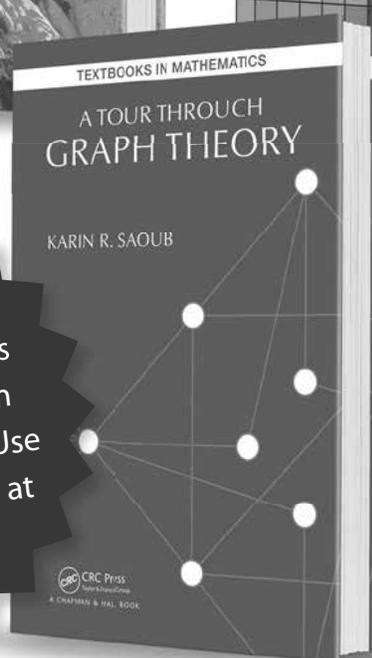
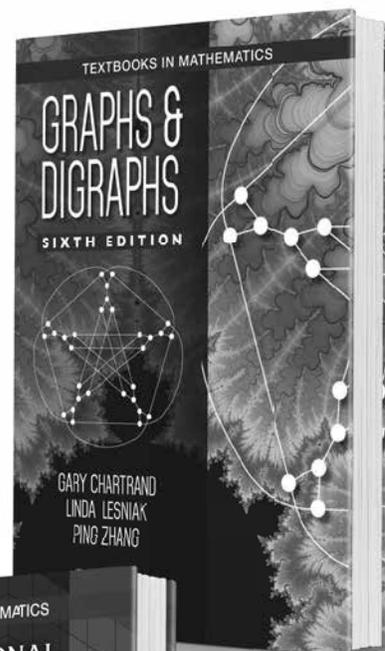
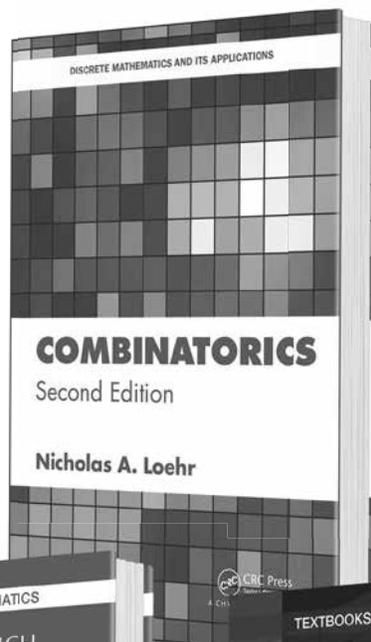
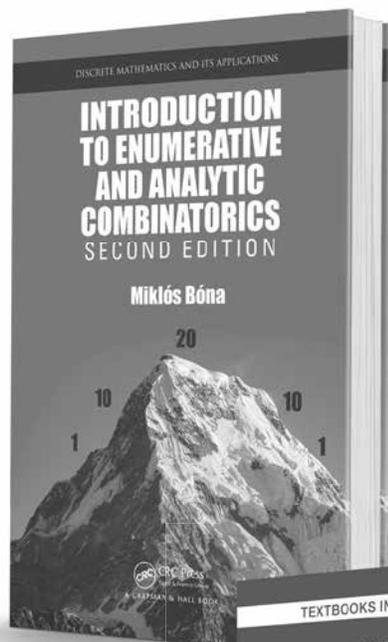
<http://www.math.uni.wroc.pl/~pms>

Stochastic Systems: Shane Henderson

<http://www.i-journals.org/ssy/>



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CANSSI: Canadian Statistical Sciences Institute

Nancy Reid writes: CANSSI is now in its third year of funding from the Natural Sciences and Engineering Research Council, and busy building for the future. The scientific flagship program continues to be the suite of Collaborative Research Team (CRT) projects, designed to build sustainable collaborations between statisticians and scientists.

To date we have supported nine CRT projects:

- **Advancements to State-Space Models for Fisheries Science**
- **Copula Dependence Modeling: Theory and Applications**
- **Statistical Modeling of the World: Computer and Physical Models in Earth, Ocean and Atmospheric Sciences**
- **Evolved Marked Point Processes with Applications to Wildland Fire Regimes**
- **Statistical Inference for Complex Surveys with Missing Observations**
- **Modern Spectrum Methods in Time Series Analysis: Applications in Physical Science, Environmental Science and Computer Modeling**
- **Joint Analysis of Neuroimaging Data: High-Dimensional Problems, Spatiotemporal Models and Computation**
- **Rare DNA Variants and Human Complex Traits**
- **Statistical Analysis of Administrative Health Databases**

CANSSI provides partial funding for several workshops each year: in October 2016 the International Conference on Statistical Distributions and their Applications, jointly organized by CANSSI and the Department of Mathematics at Central Michigan University, welcomed 190 participants from 26 countries to Niagara Falls, Canada, including, of course, many IMS members.

We also have a program of post-doctoral fellowships, and provide funding for Canadian undergraduate students to attend the undergraduate research workshops at SAMSI. CANSSI leverages its funding by promoting thematic programs at Canada's



mathematical sciences institutes: there is an upcoming program, “Risk in complex

systems: Models, applications, perceptions, and policy implications,” held at the Centre de Recherches Mathématiques in Montréal, August to December 2017.

CANSSI's scientific activities are overseen by an international Scientific Advisory Committee: the members in 2017 are Raymond Carroll, David Hand, Sallie Keller, Rogemar Mamon, Michael Newton, Douglas Nychka, Christian Robert and Nell Sedransk. We are very grateful to them for their time and advice.

We continue to work on developing international linkages: we have close ties to SAMSI and NISS, and the Director of Norway's Big Insight, Arnoldo Frigessi, is a member of our Board of Directors. We hope that there will soon be a national effort on data science in Canada, and that links between this and various organizations around the world will be a key component of the efforts of statistical sciences.

Our new **Distinguished Visitor Program** provides for special lectures by leading statistical scientists. The first DV

was Peter Guttorp, who gave an evening talk at UBC–Okanagan in October 2016 on “Understanding the local impact of a warming planet.” In November 2016, Donald Rubin gave two wonderful lectures on causality and missing data at the Fields Institute as the CANSSI-supported Distinguished Lecture Series in Statistics. In 2017, Richard Cook of the University of Waterloo visited the University of Calgary, Hilary Parker of StitchFix visited McGill University and Philippe Soulier, Université Paris-Nanterre, visited the University of Ottawa.

We provide support to Canadian universities to participate in the ASA DataFest or other datathons, after great success with this at the University of Toronto in 2016. We also launched a small program to enable statistical scientists to “kick start” new collaborations with scientists. We have established a series of six Health Sciences Collaborating Centres across the country, to strengthen links with provincial and national health agencies, and highlight the many biostatistical training efforts with which our colleagues around the country are engaged.

Please don't hesitate to contact me directly, reid@utstat.utoronto.ca, for further information about CANSSI, or to discuss how we might build linkages with you!

Participants in the ASA DataFest held at the University of Toronto with support from CANSSI



Joee Wong



CPAs and Business Advisors

Where Relationships Count.

September 8, 2017

*This is a letter from
the IMS auditors,
relating to FY2016*

To the Council
Institute of Mathematical Statistics

We have audited the financial statements of Institute of Mathematical Statistics (the “Institute”) for the year ended December 31, 2016, and have issued our report thereon dated September 8, 2017. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated May 30, 2017. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the Institute are described in Note 2 to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during 2016. We noted no transactions entered into by the Institute during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management’s knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the financial statements were:

- Management’s estimate of the amortization period for lifetime and retired memberships which determines the amount of lifetime and retired membership revenue recognized annually (amortized over 15 years and 12 years, respectively).
- Management’s allocation of expenses to functional categories based upon appropriate allocation bases.

We evaluated the key factors and assumptions used to develop these estimates in determining that they are reasonable in relation to the financial statements taken as a whole.

*Financial
statements
are at [http://
imstat.org/
officials/
reports.html](http://imstat.org/officials/reports.html)*



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To the Council
Institute of Mathematical Statistics

2

September 8, 2017

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the financial statements were:

- The disclosure in Note 4 to the financial statements of the fair value hierarchy level of investments held by the Institute.
- The disclosure of the Institute's net assets classification of endowment funds in Note 6 to the financial statements. This disclosure outlines donor-restricted endowment activity, as well as the net asset classification of the endowment funds.
- The disclosure outlining the Institute's functional categorization of expenses in Note 8 to the financial statements.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no difficulties in dealing with management in performing and completing our audit.

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. The attached schedule summarizes an uncorrected misstatement of the financial statements. Management has determined that its effect is immaterial to the financial statements taken as a whole. In addition, none of the misstatements detected as a result of audit procedures and corrected by management were material, either individually or in the aggregate, to the financial statements taken as a whole.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated September 8, 2017.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the Institute's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

See the
spreadsheet
on page 8

To the Council
Institute of Mathematical Statistics

September 8, 2017

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the Institute’s auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

This information is intended solely for the use of the Council and management of the Institute and is not intended to be, and should not be, used by anyone other than these specified parties.

Very truly yours,

Ciuni + Panichi, Inc.

CIUNI & PANICHI, INC.

Schedule referred to on page 7

| Description (Nature) of Audit Difference (AD) | Factual (F), Judgmental (J), or Projected (P) | Cause | W/P Reference | Financial Statement Effect—Amount of Over (Under) Statement of: | | | | | | |
|---|---|--|---------------|---|-------------------|-------------|-------------|-------------|----------------------|-----------------|
| | | | | Total Assets | Total Liabilities | Net Assets | Revenues | Expenses | Change in Net Assets | Working Capital |
| To record the CY effect of 2017 revenue received in the CY and recorded to revenue in the current period, rather than deferred revenue. | Factual | 2017 memberships and subscriptions were recorded as revenue in the CY. | P-1 | | (7,690) | 7,690 | 7,690 | | \$7,690 | |
| | | | | | | | | | \$0 | |
| | | | | | | | | | \$0 | |
| | | | | | | | | | \$0 | |
| | | | | | | | | | \$0 | |
| | | | | | | | | | \$0 | |
| | | | | | | | | | \$0 | |
| | | | | | | | | | \$0 | |
| Total | | | | \$0 | -\$7,690 | \$7,690 | \$7,690 | \$0 | \$7,690 | \$0 |
| Less Audit Adjustments Subsequently Booked | | | | | | | | | \$0 | |
| Unadjusted AD—Current Year (Iron Curtain Method) | | | | \$0 | -\$7,690 | \$7,690 | \$7,690 | \$0 | \$7,690 | \$0 |
| Effect of Unadjusted AD—Prior Years | | | | | | | | | \$0 | |
| Combined Current and Prior Year AD (Rollover Method) | | | | \$0 | -\$7,690 | \$7,690 | \$7,690 | \$0 | \$7,690 | \$0 |
| Financial Statement Caption Totals | | | | \$7,870,970 | 1,650,202 | \$6,220,768 | \$2,740,533 | \$1,909,430 | \$831,103 | |
| Current Year AD as % of FS Captions (Iron Curtain Method) | | | | 0.00% | -0.47% | 0.12% | 0.28% | 0.00% | 0.93% | 0.00% |
| Current and Prior Year AD as % of FS Captions (Rollover Method) | | | | 0.00% | -0.47% | 0.12% | 0.28% | 0.00% | 0.93% | 0.00% |

Financial Statements for FY2016 on IMS website

The letter from the auditors, Cuini and Panichi, Inc., which appears on the preceding three pages, refers to the Financial Statements for the fiscal year ending December 31, 2016. This document is available on the IMS website at <http://imstat.org/officials/reports.html> (as are those for previous years).

Stochastic Systems now an IMS-affiliated journal

Focusing on the interface of applied probability and operations research, *Stochastic Systems* is the flagship journal of the INFORMS Applied Probability Society and is published through a cooperative agreement between INFORMS and the IMS. This open-access journal seeks to publish high-quality papers that substantively contribute to the modeling, analysis, and control of stochastic systems.

We are delighted to announce that *Stochastic Systems* is the latest journal to become affiliated to IMS, along with *Observational Studies* (<http://obsstudies.org/>) and *Probability and Mathematical Statistics* (<http://www.math.uni.wroc.pl/~pms/>). See <http://imstat.org/publications/affiliated.html> for more information about affiliated journals.

You can read *Stochastic Systems* online: <http://www.i-journals.org/ssy/index.php>.

Open-Source Software info

In the January/February 2015 issue, Hadley Wickham wrote a column called “Impact the world by being useful” (<http://bulletin.imstat.org/2014/12/hadley-wickham-impact-the-world-by-being-useful/>). In it, he suggested that “the best way to impact the world as a data scientist or statistician is to be useful,” which, he said, we can do by (among other things) writing code and “working in the open.” He proposed that you should release your code with an open source license (<https://opensource.org/licenses>).

Evan Eubanks from the website WhoIsHostingThis? (<https://www.whoishostingthis.com>) wrote to share a resource that they have put together about Open-Source Software Licenses: <http://wiht.link/OS-licenses>

This guide (see below) shares the most popular open-source licenses currently available, with further reading (guides, tutorials and infographics).

About Open-Source Software Licenses

Open-source software is licensed so that anyone can use, alter, and share it. An open-source license (OSS) is a legal contract that determines the copyright of software. Open-source licenses have many practical uses for business and development. The open-source movement has solved many problems that plagued software developers in the past, particularly through crowdsourcing. Rapid development is much easier when millions of users can help developers test and improve the software. One of the most well-known open-source projects is Linux, a free operating system kernel built on top of the GNU operating system. Linux uses the GPL version 2 license. All open-source licenses are intended to govern how the software will be used. This includes:

- **Private Use:** the freedom to use and change software for non-commercial purposes
- **Distribution:** sharing for commercial or non-commercial use
- **Linking:** linking to free and proprietary sources
- **Patent Grants:** rights to intellectual property granted by the government
- **Sublicensing:** an agreement in which the owner of something allows people to use their software to create new things so long as whatever they create is also distributed under GPL
- **Trademarks:** a symbol or word that represents an organization or product

Open-Source Software vs Free Software

Just because software has an open-source license, does not mean it is free. It may be easy to interpret the term “open-source” to mean “free”. Both of these terms have complex definitions that are constantly changing. While all free software licenses are technically open-source, not all open-source licenses are free. Legal interpretations and enforcement of the terms and conditions contained in any given open-source license will depend on the legal jurisdiction protecting the copyright. It also depends on the country connected to that jurisdiction. The seeds of open-source licensing can be traced to free, copyleft licenses created in the United States during the 1980s. The creation of the Open Source Initiative (OSI) in 1998 has helped shape the landscape of the open-source software licensing today. The resource page lists lots of sources, with helpful definitions of key terms, organizational bodies, and historical landmarks related to open-source licensing.

If you have any questions about OSS, email Evan Eubanks: evan@teamwiht.com

Quo Vadis Data Science?

We in IMS must build the foundations of this emerging field

Data science is at a crossroads. Will it become a fundamentally applied discipline, a collection of heuristics without any coherent mathematical underpinning? Or will a rigorous foundation lead to practical new tools and algorithms with provable properties? IMS members **Sofia Olhede** and **Patrick Wolfe**, co-coordinators of the **IMS Data Science Group**, argue that the IMS should become the preeminent professional society dedicated to building the foundations of this emerging field. Join the group or volunteer to help lead it by writing to them before the end of 2017 at datascience@imstat.org, and follow the group on Twitter at [@imsdatascience](https://twitter.com/imsdatascience).

The IMS Bulletin has reported on Data Science prior to this date: Bin Yu, IMS president in 2014, even entitled her societal address “Let Us Own Data Science,” calling on probabilists and mathematical statisticians to do precisely that. Yet data science can at times seem less clearly focused on the broad mathematical and computational sciences, and more obviously connected to the application of these fields in practice. But to be rigorous and replicable, data science requires tools whose theoretical properties are well understood. Consequently, all of us in mathematical statistics and probability have an opportunity to contribute to foundational aspects of data science.

The IMS set up a data science group in 2015 and also launched its first IMS data science conference the same year, as announced by 2016 IMS president Richard Davis in his incoming agenda message. Jon Wellner highlighted the importance of data science for education in his 2017 presidential address. Foundational developments impact how and what we teach, in turn adding to what the next generation of probabilists and mathematical statisticians will learn, as recognized by the U.S. National Academies’ recent work to envision undergraduate data science education.

Whither, then, data science and the role of the IMS? Let us explore what needs to be done and how the IMS can contribute.

First, as the global conversation on data science education continues, it is more important than ever that theoretical parts of data science are given their voice and input into the debate. The IMS is a natural group to provide such input, with a unique voice, especially at the level of graduate education. At the same time, we should also increase the presence of the IMS in undergraduate and even secondary education, as the pipelines for future leading theoretical scholars should be built at the earliest stage possible.

Second, the prevalence of data science needs will alter and enhance what types of inference and prediction problems we study. This is a scientific question, and to contribute as a group we must self-organize. This means recognizing venues for publication, and organizing workshops and special sessions at larger meetings. We, as a group, must determine the best way to organize such initiatives.

Third, we can make a greater effort to



Sofia Olhede



Patrick Wolfe

connect the data science community globally, irrespective of geographic or national boundaries. Every day it seems, new centers and groupings are being organized: from Big Insight in Norway, to the Data Science Institute Vancouver in Canada, to ACEMS in Australia, to Fudan School of Data Science in China, to the Insight Centre for Data Analytics in Ireland—along with a host of activities at leading universities around the world. These centers all have a unique mixture of the mathematical sciences and the computational sciences, creating new scientific communities. By serving as a hub of communication, through IMS we can help to make sure all these excellent initiatives are aware of each other and communicate between themselves. We bring distinct expertise, augmenting and complementing sister groups such as the American Statistical Association’s Statistical Learning and Data Science Section and the Royal Statistical Society’s Data Science Section.

Fourth, data science presents policy questions relating to ethics and data governance. To ground these questions in a solid theoretical framework where we can compare and understand problems formally and precisely, we must contribute to this discussion and ensure that the foundations of data science take it into account. Because data science has policy implications, we have a unique responsibility and an opportunity to

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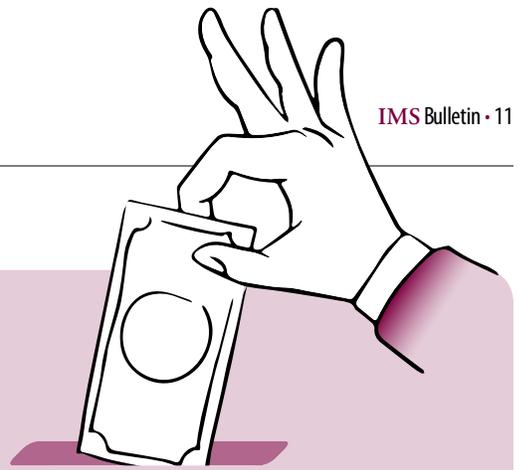
ensure that this debate is sound. Technology is developing very rapidly, and our foundational input is needed to keep pace, as described in the UK Royal Society's recent work on data governance and the Institute of Electrical and Electronics Engineers' global initiative for ethically aligned design.

Last, and perhaps most crucially for our community, data science provides us with an unprecedented opportunity to connect to, and be inspired by, real problems of societal importance. To make this connection can often be challenging, especially for new researchers and those who have so far focused only on purely theoretical challenges. We see clear and compelling opportunities to build new interfaces between impactful activities in problems in industry and government on the one hand, and the foundational underpinnings of data science on the other, and to partner with other IMS Groups such as the one for New Researchers.

If these or other data science opportunities sound interesting to you, please get in touch at datascience@imstat.org and tell us what you think! We're looking for group members, as well as to identify approximately ten volunteers before the end of 2017 to serve on the executive, helping to recruit additional members and to organize meetings and sessions. We also expect in due course to form working groups to contribute to IMS committees wherever input on data science is needed, such as the five key needs discussed above.

We are aiming explicitly for the group to encompass a broad spectrum of geographical, disciplinary, and career stage coverage, and would like explicitly to encourage members of traditionally under-represented groups within the mathematical sciences to volunteer to help lead.

Join us—we can't wait to hear from you!



Contribute to the IMS

Want to give something back? The IMS offers several opportunities for contributions to the society's programs. You can contribute by credit card or check using the form at <https://secure.imstat.org/secure/orders/donations.asp>.

The **Blackwell Lecture Fund** supports lectures in honor of David Blackwell, in order to inspire young people to emulate his achievements. The next lecture is in 2020.

The **IMS Gift Membership Program** provides IMS memberships and journals for statisticians and probabilists in regions of the world where payments in hard currency would impose a difficult financial burden.

The **Le Cam Lecture Fund** is an endowment fund set up by friends of Lucien Le Cam to memorialize his contributions to our field. The Le Cam lecturer should be an individual whose contributions have been, or promise to be, fundamental to the development of mathematical statistics or probability.

The **Open Access Fund** supports the establishment and ongoing operation of IMS's open-access publications, including *Probability Surveys*, *Statistics Surveys*, *Electronic Journal of Probability*, *Electronic Communications in Probability* and *Electronic Journal of Statistics*. Two further IMS open access ventures are the posting of all IMS journal articles to ArXiv and assistance to members in posting to ArXiv.

The **Schramm Lecture Fund** was created jointly by the IMS and the Bernoulli Society. The lecture in probability and stochastic processes is named in honor of Oded Schramm. The lecture is given annually at meetings (co)-sponsored by the IMS or the Bernoulli Society with a strong attendance by researchers in probability and stochastic processes.

The **Scientific Legacy Fund** supports the development of IMS web pages that are dedicated to ensuring the preservation of valuable historical information on IMS members and leaders of our fields. The IMS will use funds to cover costs of the development and maintenance of such pages.

The **Tweedie New Researcher Award Fund** was originally set up with donations from Richard L. Tweedie's friends and family. Funds are used to pay for the travel of the Tweedie New Researcher Award recipient to attend the IMS New Researchers Conference (immediately before JSM) and to present the Tweedie New Researcher Invited Lecture.

OBITUARY: Jayanta Kumar Ghosh

1937–2017

PROFESSOR JAYANTA K. GHOSH passed away on September 30; he was 80. J.K. Ghosh was born in Calcutta, India, on May 23, 1937. Over a period of nearly 60 years, Professor Ghosh made timely and insightful contributions to a wide swath of theoretical statistics. Sanghamitra Bandyopadhyay, the Director of the Indian Statistical Institute (ISI) said, “Through the process of asking and settling many important questions, and mentoring of our students, Professor Ghosh was, and remains, an inspiration. He commanded the respect of students, scientists and workers of the ISI for his formidable scholarship and exemplary kindness.”

Ghosh’s earliest work was influenced by Abraham Wald’s invention of the SPRT. As a twenty-something, in 1960, he studied the ASN and the efficiency of the sequential t -test, as a part of his Calcutta University PhD dissertation under the supervision of H.K. Nandi. A few years later, simultaneously and independently, with Jack Hall and Bob Wijsman, he wrote a fundamental paper formalizing the results of Charles Stein and Don Burkholder on commutativity of reduction by invariance and sufficiency. This work was later followed up by others, and was cited in Ferguson’s classic text.

Around this time, C.R. Rao was publishing his path-breaking results on second order efficiency of the MLE among asymptotically normal first order efficient estimates. Around 1970, Ghosh, jointly with his student Kasala Subrahmanyam, began his long journey into higher order asymptotics, and in well known later work with many others, established second order risk optimality of the MLE under essentially all bounded convex loss functions. It was evident that Ghosh admired MLEs (and perhaps LRT). He saw MLEs

as more-or-less Bayesian objects. In his discussion of Brad Efron’s 1975 curvature paper, Ghosh shows open disdain for frequentist statistics, likening it to Lewis Carroll’s Cheshire cat, all but dead save its ironic grin. It is not clear if he was already a committed Bayesian at that point, although he was obviously supportive of Basu’s epic articles on likelihood and information, and edited a Springer monograph compiling Basu’s main work at that point.

Professor Ghosh’s most cited work is his 1978 joint paper with Rabi Bhattacharya on the validity of Edgeworth expansions for smooth functionals in the iid or independent situations. The work is widely regarded as a masterpiece in controlling the error in the central limit theorem. Earlier, Professor Ghosh had given a very sweet alternative proof of Bahadur’s classic stochastic representation of quantiles as asymptotically linear statistics, under one less derivative than Jack Kiefer would need, but with an in probability remainder, unlike Kiefer. For many first order results, this suffices.

In the mid-80s, Ghosh became the Director of the Indian Statistical Institute (ISI). His tenure was marked by prudence and negotiation. As the ISI directorship was coming to an end, he was hired as a visiting professor at Purdue University in 1990, and tenured in 1997. On his arrival there, he converted his NSF-CBMS lectures into the well known IMS monograph on higher order asymptotics. At this time, he became the President of the International Statistical Institute.

Professor Ghosh also showed his first interests in Bayesian model selection at that time by revisiting Schwarz’s work. The interest later blossomed into full fledged work with Jim Berger and numerous other collaborators. Undoubtedly, he helped



J.K. Ghosh in 2010, during a trip to the Lake of Ozarks, MO.

Photo: Jyotishka Datta

popularize and sometimes clarify fractional Bayes factors, and objective priors custom-made for model selection. He provided clarifications and publicity for Bernardo priors, and in a long series of papers with many coauthors established Bayesian (hierarchical) resolutions of various types of Neyman–Scott quagmires. Many of these things, along with modern Bayesian computing, found their way into his Springer text on Bayesian analysis written with Mohan Delampady and Tapas Samanta.

Although for a large part of his career he concentrated on parametric models, one of his prime contributions to Bayesian statistics is the fundamental Springer book with R.V. Ramamoorthi on Bayesian nonparametrics. Later, jointly with Aad van der Vaart and his students Subhashish Ghoshal and R.V. Ramamoorthi, he wrote two major papers on consistency of Ferguson mixtures. Ghosh presented a part of this research at the International Congress of Mathematicians.

Although a theoretician, Ghosh had an interest in modeling and looking at data. He used to regularly collaborate with Bijoy Singha Mazumder and Supriya Sengupta on sediment transportation and grain size distributions. At the inspiration of Vijay Nair, jointly with Pulakesh Maiti, T.J. Rao and Bikas Sinha, he wrote a historical article on statistics in India. He was visibly proud of the heritage of the ISI, and often mentioned in conversation students and colleagues there.

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J.K. Ghosh: 1937–2017 continued

In the post Rao–Basu era, Professor Ghosh acted as a unique coalescing force for Indian statistics within India, and served as a bridge between Indian statistics and statistics in the west. Two important examples are his organizing roles in the 1974 conference at the ISI in Calcutta on Recent Trends in Statistics, and the 1980 conference at the ISI in Delhi in honor of C.R. Rao's sixtieth birthday.

Over a period of 35 years, Professor Ghosh received numerous awards. He was awarded the Bhatnagar prize by the CSIR of India in 1981, the Presidency of the statistics section of the Indian Science Congress in 1991, the Mahalanobis gold medal of the Indian Science Congress in 1998, the P.V. Sukhatme prize in statistics of the Government of India in 2000, an honorary D.Sc. degree by the B.C. Roy Agricultural University in West Bengal, India in 2006, the Lifetime Achievement award of the International Indian Statistical Association in 2010, an honorary D.Sc. degree by the ISI in 2012, and the Padma Shree award of the Government of India in 2014. He was also a Fellow of the National Academy of Science of India and the IMS.

Ghosh was a private person, but maintained committed friendships with many people. He was well read in both Indian and western literature and was fond of Tagore's poetic songs. He was spectacularly devoted to his family and was an exemplary father and husband (his wife, Ira, passed away a few weeks before him). In a clearly distinguished career, Professor Ghosh influenced the work of various spectra of statisticians at different times, was an undisputed leader of Indian statistics, and produced an enviable number of successful students. It is an extraordinary legacy.

Anirban DasGupta, Purdue University

James (Jim) Hannan, 1922–2010

Some information on the life of James Hannan, whose widow's legacy has created the Hannan Graduate Student Travel Awards (see cover article).

James F. Hannan, Fellow of the IMS and professor emeritus in the Department of Statistics and Probability at Michigan State University, died on January 26, 2010, at the age of 87. His widow, Bettie Creighton Hannan, passed away this year, leaving the IMS a legacy to create the **Hannan Graduate Student Travel Awards**.

Jim Hannan lived an interesting life, one whose fundamental research in repeated games was not fully appreciated until late in his career. During his service as a meteorologist in the Army in World War II, Jim made weather forecasts and found time to play in many poker games. His later research led to strategies for the repeated play of a game that apply to selecting the best forecaster.

Jim was born in Holyoke, Mass., on September 14, 1922. He enlisted in the US Army Air Force, serving as a meteorologist. This took him to army airbases in China by the close of the war. Following discharge from the army, Jim studied mathematics at Harvard and graduated with an MS in 1947. To prepare for doctoral work in statistics at the University of North Carolina that fall, Jim went to the University of Michigan in summer 1947, though a routine physical revealed the possibility of tuberculosis, and he was hospitalized for several months. He started his study at UNC–Chapel Hill that fall, researching compound decision theory under Herbert Robbins. Having taken time out from his research to work as an instructor at Catholic University in Washington DC, his UNC thesis was awarded in 1953; it contains results in compound decision theory, a density central limit theorem for the generalized binomial, and exact and asymptotic distributions associated with a Kolmogorov statistic. Jim started as assistant professor at Michigan State University in fall 1953, remaining there until his retirement in 2002, after a career that included major contributions to compound and empirical Bayes decision theory and other areas.

He published his work on repeated games in *Contributions to the Theory of Games* (1957). The significance of the work was only rediscovered in the 1990s and the term Hannan consistency was coined. The belated recognition of the results in the 1957 paper may be due to the cryptic writing style and notations of the author. After seeing a Hannan proof, Wassily Hoeffding is said to have remarked “What is this, a telegram?”

Jim served as the Book Review editor for the *Annals of Mathematical Statistics* from 1967–1972. He and his colleague Vaclav Fabian co-authored *Introduction to Probability and Mathematical Statistics*, Wiley, 1985.

Jim was ever generous in giving help to graduate students. Usually found in his office, he interacted with many colleagues on matters of mathematics and proofs. He enjoyed improving results and was very reluctant to submit research results until much effort was made to improve them and/or to shorten their proofs. Jim directed or co-directed the doctoral research of 20 students.

This information is condensed from Dennis Gilliland's obituary of Jim Hannan, which appeared in the April 2010 issue of the IMS Bulletin. “A Conversation with James Hannan,” conducted in spring 2008, appeared in Statistical Science: freely available at <http://projecteuclid.org/euclid.ss/128084173>

Recent papers

Statistical Science: Volume 32, No 3, August 2017

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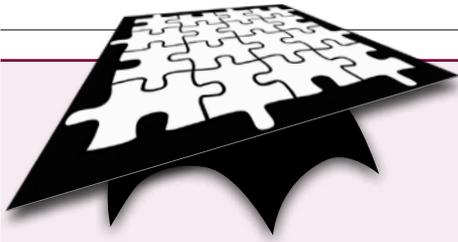
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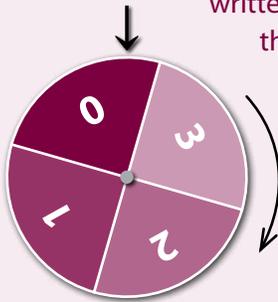
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Student Puzzle Corner 19

Guest contributor Professor Stanislav Volkov, Centre for Mathematical Sciences at Lund University in Sweden, poses this issue's puzzle:

Suppose that you have a rotating wheel with $M = 4$ numbers 0, 1, 2 and 3 equidistantly written on it, and a sequence of probabilities p_1, p_2, \dots . At time $n = 0$ the wheel has "0" on the top. Let $Y_n \in \{0, 1, 2, 3\}$ be the number which is shown on the top of the wheel at time n . For each time $n \geq 1$, with probability p_n , independently of the past, you rotate the wheel 90 degrees clockwise, so that Y_{n+1} becomes $(Y_n + 1) \bmod 4$. With the remaining probability you do nothing.



Now assume also that p_n is summable; then by the Borel–Cantelli Lemma you rotate the wheel only finitely many times; consequently $Y_n = Y_\infty$ for all sufficiently large n .

Question:

Given $Y_0 = 0$, what is the probability that $Y_\infty = 0$?

The answer should be quite a simple formula as a function of p_n . In particular, if $p_n = \frac{1}{2n^2+1}$, show that this probability is just barely smaller than $\frac{1}{2}$, namely

$$\frac{1}{4} + \frac{\sqrt{2} \cosh(\pi/2) + \sin(\pi/\sqrt{2})}{4 \sinh(\pi/\sqrt{2})}.$$

The Student Puzzle Corner contains problems in statistics or probability. Solving them may require a literature search.

Student IMS members are invited to submit solutions (to bulletin@imstat.org with subject "Student Puzzle Corner"). The deadline is **January 15, 2018**.

The names and affiliations of student members who submit correct solutions, and the answer, will be published in the following issue. The Puzzle Editor's decision is final.

Deadline: January 15, 2018

Contributing Editor Anirban DasGupta, on the solution to the previous Puzzle:



Colman Humphrey, a PhD student at the Wharton School, University of Pennsylvania, sent a solution. In general, this is a very hard problem. The likelihood function is a finite mixture of Gauss's hypergeometric functions and it may have multiple local maxima. However, it is bounded and continuous, and has a maximum. The minimax solution for fixed sample sizes would be nearly impossible, or actually impossible to find. I do not know what a minimax solution is. If we make the parameter space compact, there is a Bayes minimax solution. It is not Bayes against a Beta prior. However, one cannot do much better than the obvious natural estimate, whether it is truncated or not. As the respondent points out, consistency and asymptotically correct confidence intervals are trivially achieved. The problem was first proposed in Rao, 1952, *Advanced Statistical Methods in Biometric Research*.

Bernoulli, Vol. 24, No. 2, May 2018 continued

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Asymptotic analysis of covariance parameter estimation for Gaussian processes in the misspecified case FRANÇOIS BACHOC; 1531–1575

On branching process with rare neutral mutation AIRAM BLANCAS AND VÍCTOR RIVERO; 1576–1612

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■ **Medallion Lecture – Svante Janson**
(Uppsala University)

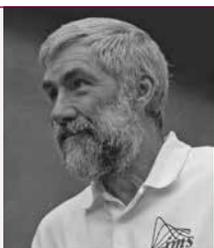
■ **Medallion Lecture – Thomas Mikosch**
(University of Copenhagen)

■ **Medallion Lecture – Sonia Petrone**
(Bocconi University Milan)

■ **Medallion Lecture – Richard Samworth**
(University of Cambridge)

Terence's Stuff: Measurement

Since his childhood, Terry Speed has loved measurements. While the methods have changed, measurement still has a central role in science, and statistics.



We've all made measurements—height, weight, area, angle, volume, distance, time, speed, temperature—to name just a few basic types. There are more exotic types, one of my favourites being the HbA1c measurement of the three-month average glucose concentration in blood, a quantity important to people with diabetes. (How can one measure a three-month average?) Some of the best elementary mathematics involves measurement (e.g. lengths and angles). Historically, statistics has been greatly indebted to measurement (think accuracy, precision, and combination of measurements), while measurement is fundamental to physics, chemistry, and biology. And in psychology and the social sciences, measurement is harder, but no less important. In a way, measurement is the link between mathematics and science. Perhaps that's why I like it so much.

As a boy, I loved taking measurements: lengths using a high quality ruler, widths using a gauge micrometer, and directions using a prismatic compass. Later, in our physics courses we “propagated errors,” and I liked the way we were always encouraged to evaluate our measurements to a greater precision than that on the visible scale. In my second course in statistics we carried out many simple experiments, measuring length, width (gauge micrometers again), time (using stopwatches), or the weight of grass we grew in the classroom (with or without fertilizer), all ways of getting data which we later analysed. (Thanks to the late Dr. Geoffrey Harcourt Jowett, and his

inspirational “Practical Experimentation as a Teaching Method in Statistics.”)

Later, I encountered work from the US National Bureau of Standards (NBS), now the National Institute of Science and Technology. The old NBS produced some wonderful statisticians: Churchill Eisenhart, William J. Youden, John Mandel. Who cannot enjoy Eisenhart's historical writings, including his 1971 ASA Presidential Address, “The Development of the Concept of the Best Mean of a Set of Measurements from Antiquity to the Present Day”? Equally engaging are Youden's article, “Enduring Values,” and Mandel's synthesis of his NBS experience in “The Statistical Analysis of Experimental Data.”

Lord Kelvin famously said, “When you can measure what you are speaking about and express it in numbers, you know something about it, but when you cannot measure it, when you cannot express it in numbers, your knowledge is of a meagre and unsatisfactory kind.” I agree. Almost all the data I encounter these days are measurements: on DNA, on RNA, on proteins, on metabolites. What never ceases to amaze me is the number and variety of methods biologists have for measuring the same quantity. The absolute or differential level of expression of a gene is fundamental to many studies in molecular biology. Forty years ago, this was done with electrophoresis-based Northern blots; thirty years ago by quantitative reverse transcription followed by the polymerase chain reaction; twenty years ago by microarrays, and serial analysis of gene expression using sequencing. About ten years ago, RNA-seq using second generation DNA-sequencing came on the scene, as did Nanostring. Another method in this series with a long history is digital drop PCR, which achieves a binary readout and then makes use of the Poisson distribution to connect the proportion of zeros (or

non-zeros) to the mean. For measuring protein expression, there is a similar diversity of methods, as there is for measuring DNA methylation, and other biomolecules, and elsewhere in science.

We sometimes hear the term *gold standard*, typically from people who believe that there is a method, usually expensive, that gives *true* answers (\pm error). The problem is always that they can't afford to use it! As a result, they use a baser method—a silver, bronze or even lead standard. I hear the term less often now, I think because people better appreciate that every measurement method has strengths and weaknesses around its dynamic range, material requirements, throughput, domain of applicability and ease of use.

A staple of measurement science is the inter-laboratory trial, where every one of a number of labs makes (usually replicate) measurements on the same set of materials, and the results are compared. An analogous situation arises when we replace labs by *methods*. How should we compare results across labs or methods, in the absence of The Truth? In the late 1960s, Mandel came up with the idea of using the *laboratory averages* for each of the materials as a surrogate for truth, and relating the individual labs to those averages by linear regression. His row-linear model gave easy visualization and insightful summary statistics, although it is not much used today. Recently, we used this model to compare three methods across 11 materials, with 280,000 measurements on each. It worked beautifully.

A gauge micrometer, like Terry's childhood one



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JSM 2018

July 28–August 2, 2018

Vancouver, Canada

[w http://ww2.amstat.org/meetings/jsm/2018/](http://ww2.amstat.org/meetings/jsm/2018/)

Join us in Vancouver, for one of the biggest statistical events of the year: with more than 6,000 attendees (including over 1,000 students) from 52 countries, and over 600 sessions, it's a busy few days! The theme is "Lead with Statistics."



IMS sponsored meetings: JSM dates for 2019–2023

IMS Annual Meeting

@ JSM 2019

**July 27–August 1,
2019, Denver, CO**

JSM 2020

August 1–6, 2020

Philadelphia, PA

IMS Annual Meeting

@ JSM 2021

**August 7–12, 2021,
Seattle, WA**

**2022 Joint Statistical
Meetings**

**August 6–11, 2022
Washington, D.C.**

IMS Annual Meeting

@ JSM 2023

**August 5–10, 2023
Toronto, ON, Canada**

IMS co-sponsored meeting

ISNPS2018: The 4th Conference of the International Society for Non-Parametric Statistics

June 11–15, 2018. Salerno, Italy

[w http://www.isnps2018.it/](http://www.isnps2018.it/)

The ISNPS (International Society of Non-Parametric Statistics) conferences take place biennially. The Fourth Conference of ISNPS is scheduled to take place in Salerno, southern Italy, next June, and is co-sponsored by the IMS, the ISI, and other organizations.

The coastal town of Salerno is 34 miles (55 km) south of Naples, less than an hour by bus or by train from Napoli Capodichino International Airport, connected to many European cities by direct flights. Salerno is also well connected with Rome, two hours by direct high speed trains.

The conference will bring forth recent advances and trends in several areas of nonparametric statistics, in order to facilitate the exchange of research ideas, promote collaboration among researchers from all over the world, and contribute to the further development of the field. The program will include plenary talks, special invited talks, invited talks, contributed talks and posters on all areas of nonparametric statistics. A roundtable discussion on the constitution of ISNPS and future conferences will also take place.

Researchers who are interested in ISNPS and/or would like to participate in its Fourth Conference by giving a contributed talk or poster are encouraged to register online or contact ISNPS at the email: isnps2018@unisa.it.

IMS co-sponsored meeting

2018 IMS Asia Pacific Rim Meeting

June 26–29, 2018

Singapore

[w https://ims-aprm2018.stat.nus.edu.sg/](https://ims-aprm2018.stat.nus.edu.sg/)

The fifth IMS Asia Pacific Rim meeting (IMS-APRM) will be held in Singapore from June 26–29, 2018. It will provide an excellent forum for researchers in Asia and the Pacific Rim, and promote communications and collaborations between researchers in this area and those from other parts of the world.

The program, covering a wide range of topics in statistics and probability, includes **Plenary Lectures** from Rick Durrett and Bin Yu, and many **Distinguished Speakers**: Vivek S. Borkar, Raymond J. Carroll, Zhen-Qing Chen, Ching-Kang Ing, Bing-Yi Jing, Samuel Kou, Satoshi Kuriki, Regina Y. Liu, Eric Moulines, Art B. Owen, Byeong Uk Park, Giovanni Peccati, John Robinson, Ingrid Van Keilegom, Fengyu Wang and Hongyu Zhao.

At a glance:

*forthcoming
IMS Annual
Meeting and
JSM dates*

2018

IMS Annual Meeting:
Vilnius, Lithuania,
July 2–6, 2018

JSM: Vancouver,
Canada, July 28–
August 2, 2018

2019

**IMS Annual Meeting @
JSM:** Denver, CO,
July 27–August 1,
2019

2020

**IMS Annual Meeting/
10th World Congress:**
Seoul, South
Korea, August
17–21, 2020

JSM: Philadelphia,
August 1–6, 2020

2021

**IMS Annual Meeting @
JSM:** Seattle, August
7–12, 2021

2022

IMS Annual Meeting:
TBC

JSM: Washington,
August 6–11,
2022

IMS co-sponsored meeting

40th Conference on Stochastic Processes and their Applications (SPA)**June 11–15, 2018. Gothenburg, Sweden****NEW** w <http://spa2018.org/>

The 40th Conference on Stochastic Processes and their Applications (SPA 2018) will be held June 11–15, 2018, at the Chalmers University of Technology in Gothenburg, Sweden.

Submission of proposals for contributed sessions, contributed talks and posters are welcomed! The organizers encourage early submissions to leave the accepted speakers plenty of time to make travel and funding arrangements. The submissions will be assessed and good proposals are accepted on a regular basis. Accepted contributed talks will be grouped into additional contributed sessions after the submission deadline, **March 2, 2018**.

Plenary speakers: Robert Adler (Technion, Israel); Francois Baccelli (U. Austin, USA and ENS, France); Mia Deijfen (U. Stockholm, Sweden); Alison Etheridge (U. Oxford, UK) – Lévy lecture; Patricia Gonçalves (U. Lisbon, Portugal); Kurt Johansson (KTH, Sweden); Olav Kallenberg (U. Auburn, USA); Davar Khoshnevisan (U. Utah, USA) – IMS Medallion lecture; Anna De Masi (U. Aquila, Italy) – IMS Medallion lecture; Mikhail Menshikov (U. Durham, UK); Annie Millet (U. Paris-1, France); Elchanan Mossel (MIT, USA); Asaf Nachmias (U. Tel Aviv, Israel); Jeffrey Steif (Chalmers, Sweden) – Doob lecture; and Nike Sun (U. Berkeley, USA).

IMS co-sponsored meeting

41st Conference on Stochastic Processes and their Applications (SPA)**July 8–12, 2019****Evanston, IL, USA**

w TBC

The 2019 Conference on Stochastic Processes and their Applications will be held in Evanston, Illinois. Details to follow.

IMS sponsored meeting

WNAR/IMS Meeting**June 24–27, 2018****Edmonton, Canada**w <http://www.wnar.org/Meetings>

Next summer's WNAR/IMS meeting will be held June 24–27, 2018, at the University of Alberta, Edmonton, Canada. The local organizers are Bei Jiang and Linglong Kong. The university's campus is located on the southern bank of the North Saskatchewan River. As one of the largest cities in Canada, Edmonton is a cultural center, with many arts and cultural events anchored in the downtown Arts District, accessible from campus by the city light rail system. Both the Edmonton Jazz Festival and Freewill Shakespeare Festival are scheduled to occur in the city during the WNAR conference dates. Most of the city has accessible bike and walking trail connections. In addition, Edmonton is a 4-hour drive from Banff National Park, Canada's oldest National Park and Alberta's most visited tourist destination. Visitors to Banff in the summer can enjoy hiking, camping, canoeing, cycling, fishing, golfing, kayaking, skateboarding, swimming, walking trails, and relaxing at the hot springs. Meeting details coming soon.

SAE2018: Small Area Estimation and Other Topics of Current Interest in Surveys, Official Statistics, and General Statistics**NEW****June 16–18, 2018****East China Normal University, Shanghai, China**w www.sae2018.com

This conference includes a celebration of Professor Danny Pfeiffermann's 75th Birthday.

Frontier Probability Days**NEW****Corvallis, OR, USA****March 29–31, 2018**

w TBC

Website coming soon...

IMS sponsored mtg

2018 IMS Annual**Meeting & 12th****Vilnius Conference****on Prob. Theory &****Math. Statistics****July 2–6, 2018****Vilnius, Lithuania****NEW** w [http://ims-](http://ims-vilnius2018.com/)[vilnius2018.com/](http://ims-vilnius2018.com/)

Program Co-chairs

Peter Bühlmann

(IMS) and Vygantas

Paulauskas (Vilnius).

Local Chair is

Remigijus Leipus.



IMS sponsored meetings

ENAR dates, 2018–2020**March 25–28, 2018: in Atlanta, GA****March 24–27, 2019: in Philadelphia, PA****March 22–25, 2020: in Nashville, TN**w <http://www.enar.org/meetings/future.cfm>

IMS co-sponsored meeting

Bernoulli/IMS 10th World Congress in**Probability and Statistics****August 17–21, 2020. Seoul, South Korea**

w TBC

The next World Congress in Probability and Statistics will be in Seoul, South Korea.

Other meetings and events around the world

ICM 2018: International Congress of Mathematicians

August 1–9, 2018. Rio de Janeiro, Brazil

[w](http://www.icm2018.org/portal/en/) <http://www.icm2018.org/portal/en/>

The Organizing Committee has released the first part of the Scientific Program for the ICM. It contains the schedule (<http://www.icm2018.org/portal/en/plenary-lectures>) of the 21 plenary lectures, eight prize lectures, the Abel and Noether special lectures, 181 invited lectures and three invited panels. The remaining part of the program, which includes short communications and poster presentations, will be released later. Registration for the congress (<http://www.icm2018.org/portal/en/how-to-apply>) and submission of short communications and posters (<http://www.icm2018.org/portal/en/short-communication>) are now open.

Bayes Comp 2018

March 26–28, 2018. Barcelona, Spain

[w](https://www.maths.nottingham.ac.uk/personal/tk/bayescomp/) <https://www.maths.nottingham.ac.uk/personal/tk/bayescomp/> Bayes Comp is a biennial conference sponsored by the ISBA section of the same name. 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.

Details about the conference, the schedule, deadline as well as the list of plenary speakers and details about invited sessions can be found in the conference website. **Registration is now open:** <https://www.maths.nottingham.ac.uk/personal/tk/bayescomp/#registration>. Young researchers whose poster/oral presentation has been approved may apply for **travel support**. Submission of travel support applications starts December 15, 2017, and ends January 15, 2018. Details on the website.

Midwest Machine Learning Symposium

June 6–7, 2018

Chicago, IL, USA

[w](http://midwest-ml.org/) <http://midwest-ml.org/>

Contact Po-Ling Loh [e polingloh@gmail.com](mailto:polingloh@gmail.com)

The Midwest Machine Learning Symposium aims to convene regional machine learning researchers for stimulating discussions and debates, to foster cross-institutional collaboration, and to showcase the collective talent of machine learning researchers at all career stages.

6th Spring School “Structural Inference in Statistics”

March 4–8, 2018

Spreewald, Germany

[w](https://www.mathematik.hu-berlin.de/de/for1735/spring-school-2018) <https://www.mathematik.hu-berlin.de/de/for1735/spring-school-2018>

PhD students and postdocs who are working in mathematical statistics, machine learning or related areas are encouraged to submit an application. The DFG-research unit FOR1735 will cover all costs for accommodation and meals, there are no registration fees. The number of available places is limited. Travel costs have to be paid by the participants. Participants are encouraged to present their work in a poster session. The application should include a CV, a letter of motivation and a short research statement in one pdf file.

IISA-2018: From Data to Knowledge, Working for a Better World

May 17–20, 2018. Gainesville, Florida, USA

[w](http://iisa2018.biostat.ufl.edu/) <http://iisa2018.biostat.ufl.edu/>

The IISA annual conference for 2018 will take place at the HPNP Complex of the University of Florida, Gainesville, Florida. The format of the conference includes plenary talks, special invited talks, invited sessions and contributed posters. The Scientific Program Committee (SPC) will strive to maintain a healthy presence of women and minority in all these categories and of young researchers (within five years of their doctoral degrees) in invited sessions. In addition, a special panel discussion on mentoring and career development, especially geared toward women statisticians is being organized. For students, the conference will provide numerous opportunities such as a student paper competition and contributed poster sessions at IISA-2018.

The SPC is currently accepting proposals for invited sessions. Please submit by January 15, 2018.

Econometrics in the Castle: “Machine Learning in Economics and Econometrics”

May 29–30, 2018. Munich, Germany

[w](http://tiny.cc/econ-in-the-castle) <http://tiny.cc/econ-in-the-castle>

The aim of the conference is to bring together economists, econometricians, statisticians and social scientists using big data methods for their applied and/or theoretical research. We welcome submissions related to all aspects of machine learning, including sparse modeling, Lasso, random forests, boosting, neural networks and deep learning, and applications in microeconomics, macroeconomics or related fields. Depending on the number of submissions, there might be a poster session as well.

Jerusalem Joint Statistical Event 2018:  **Symposium in Honor of Prof Yoav Benjamini's 70th Birthday and 10th Conference of the Eastern Mediterranean Region of the International Biometric Society (EMR-IBS) December 17–20, 2018. Jerusalem, Israel**

w <https://www.emr2018.com/>

Yoav Benjamini is one of the founding fathers of the false discovery rate (FDR) approach to multiple comparisons, which has emerged as a key tool in modern science. The symposium in his honor includes a strong lineup of invited speakers. We will again have a plenary talk in memory of Professor Marvin Zelen. Professor Zelen was a leader in the field of biostatistics and a strong supporter of the EMR, actively participating in the all the EMR conferences until the time of his passing.

Big Data Meets Survey Science  **October 25–27, 2018. Barcelona, Spain**

w <https://www.bigsurv18.org/>

BigSurv18 will bring together international researchers, practitioners, and experts to address how promising technologies and methodologies for using massive datasets can improve, supplement, or replace data and estimates from complex surveys and censuses. This conference will provide you with an opportunity to connect with individuals from around the globe who work in survey, market, and opinion research, statistics, data science, and computer science and to show them how you support innovation and data quality.

Conference on Predictive Inference and Its Applications  **May 7–8, 2018. Ames, Iowa, USA**

w <https://predictiveinference.github.io/>

The intent is to raise awareness about the importance of predictive inference and its applications, showcase research of current and emerging leaders in the field, and encourage interactions among scientists with complementary skills. See website.

28th Conference of the International Environmetrics Society (TIES 2018)  **July 16–21, 2018, Guanajuato, Mexico**

w <http://ties2018.eventos.cimat.mx/>

The International Environmetrics Society (TIES) congresses seek to

1. highlight and expand existing methods in statistics, mathematics, and computing for the advancement of environmental studies.
2. identify the important needs and directions for future research.
3. encourage the participation, interaction and multidisciplinary collaboration of scientists in relation to environmental problems.

The TIES congresses are well established and have involved many of the most eminent researchers working in the area. This 28th installment is held for the first time in Mexico and we expect it to be as successful as its predecessors.

7th Short Course on Next-Generation Sequencing: Technology and Statistical Methods  **December 18–21, 2017**

Birmingham, AL, USA

w http://www.soph.uab.edu/ssg/nhgri_r25/seventhshortcourse

Next-generation sequencing technology is impacting almost all aspects of biomedical research. This technology generates an unprecedented wealth of data that demands novel analysis strategies. While IT infrastructure and bioinformatics developments are obviously required to enable sound information extraction, sophisticated statistical methodologies and algorithms are also essential for interpreting the data. We are calling statisticians, genetic epidemiologists, bioinformaticians, and genome biologists, to discuss the statistical challenges and opportunities in next-generation sequencing data analysis. We believe that this course will provide a venue for exchanging of cutting-edge information and ideas, and fostering collaborations among methodologists, analysts, and biomedical investigators.

Sixth IMA Conference on Numerical Linear Algebra and Optimization  **June 27–29, 2018**
Edgbaston, United Kingdom

w <https://ima.org.uk/7149/6thIMANLAO/>

The success of modern codes for large-scale optimization is heavily dependent on the use of effective tools of numerical linear algebra. On the other hand, many problems in numerical linear algebra lead to linear, nonlinear or semidefinite optimization problems. The purpose of the conference is to bring together researchers from both communities and to find and communicate points and topics of common interest.

International Symposium on Forecasting  **June 17–20, 2018**
Boulder, CO, USA

w <https://isf.forecasters.org>

The International Symposium on Forecasting (ISF) is the premier forecasting conference, attracting the world's leading forecasting researchers, practitioners, and students. Through a combination of keynote speaker presentations, academic sessions, workshops, and social programs, the ISF provides many excellent opportunities for networking, learning, and fun.

30th Annual Conference on Statistics and Modeling in Human and Social Sciences  **March 27–29, 2018**

Giza, Egypt

w <http://www.feps.edu.eg/en/departments/statistics/conference/index.html>

The main goal of the annual conference is to bring together statisticians, researchers, and practitioners of Statistics and to provide them with the opportunity to present and to discuss their research findings on various areas of Statistical Sciences and their applications.

Employment Opportunities around the world

Australia: Melbourne, Victoria

University of Melbourne

Lecturer in Probability and Stochastic Processes

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37358134

Australia: Melbourne, Victoria

University of Melbourne

Lecturer / Senior Lecturer In Mathematical Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37358211

Australia: Melbourne, Victoria

University of Melbourne, School of Mathematics and Statistics

Lecturer / Senior Lecturer In Statistics (Data Science)

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37368408

Canada: Toronto, ON

University of Toronto, Department of Statistical Sciences

Assistant Professor, Teaching Stream

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37630062

Canada: Toronto, ON

University of Toronto, Department of Statistical Sciences

Assistant Professor, Data Visualization

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37925175

Canada: Toronto and Scarborough, ON

University of Toronto, Department of Computer and Mathematical Sciences

Associate Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37532638

Canada: Toronto and Scarborough, ON

Computer and Mathematical Sciences

Assistant Professor, Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37532592

Hong Kong



香港中文大學
The Chinese University of Hong Kong

Applications are invited for:-

Department of Statistics

Professors / Associate Professors / Assistant Professors

(Ref. 1700024E)

The Department of Statistics invites applications for two faculty posts at all levels. Appointment rank will be determined by the qualifications and experiences of the successful candidate.

Applicants should have (i) a Ph.D. in statistics or a related field; and (ii) high-quality research output and a strong teaching track record in all areas of statistics and risk management science.

Appointments will normally be made on contract basis for up to three years initially commencing August 2018, which, subject to mutual agreement, may lead to longer-term appointment or substantiation later. Outstanding candidates with substantial experience for Professor rank may be considered for substantive appointment forthwith.

Review of applications will commence from January 5, 2018, and will continue until the posts are filled. Further information about the Department is available at <http://www.sta.cuhk.edu.hk>.

Application Procedure

Applicants should complete the online application form and upload a cover letter, a full curriculum vitae, a statement of research and teaching interests, and copies of up to five recent publications by January 5, 2018. Applicants should also arrange for three letters of recommendation to be sent to statdept@cuhk.edu.hk.

The University only accepts and considers applications submitted online for the posts above. For more information and to apply online, please visit <http://career.cuhk.edu.hk>.

Taiwan: Taipei

Academia Sinica, Institute of Statistical Science

Regular Research Positions

The Institute of Statistical Science, Academia Sinica, is seeking candidates for tenure-track/tenured research positions at the level of assistant, associate or full research fellow available in 2018.

Candidates should have a Ph.D. degree in statistics or related areas. Application materials must include (1) a curriculum vita, (2) three letters of recommendation, and (3) representative publications and/or technical reports. Additional supporting materials such as transcripts for new Ph.D. degree recipients may also be included. Electronic submissions are encouraged. Applications should be submitted to

Dr. Yi-Hau Chen

Chair of the Search Committee

Institute of Statistical Science, Academia Sinica

128 Sec. 2 Academia Road, Taipei 11529, Taiwan, R.O.C.

Fax: +886-2-27831523

E-mail: recruit2017@stat.sinica.edu.tw

Application materials should be received by December 28, 2017 for consideration, but early submissions are encouraged.

Canada: Waterloo, ON**University of Waterloo**

Tenure-track positions in Statistics or Biostatistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=35867411

Hong Kong**The University of Hong Kong**

Tenure-Track Associate Professor/Assistant Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37622374

Hong Kong**The Chinese University of Hong Kong**

Professors / Associate Professors / Assistant Professors
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37696386

Italy: Milan,**Bocconi University**

Assistant Professor Decision Sciences
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37366915

Netherlands: Rotterdam,**Erasmus University Rotterdam**

Tenure-Track Assistant Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38029005

New Zealand: Wellington,**Victoria University of Wellington**

Post-doctoral Fellow in Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37526666

Switzerland: Lausanne,**Ecole polytechnique fédérale de Lausanne (EPFL)**

Tenure Track Assistant Professorship in Stochastic Analysis
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37699609

Switzerland: Lausanne,**Ecole polytechnique fédérale de Lausanne (EPFL)**

Professorship in Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37699323

Taiwan: Taipei,**Institute of Statistical Science, Academia Sinica**

Regular Research Positions
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=36872809

United Kingdom: Bristol,**University of Bristol**

Chairs in Mathematics and Statistical Science
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37575825

United Kingdom: Bristol,**University of Bristol**

Lecturer/Senior Lecturer/Reader in Statistical Science
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37566969

United Kingdom: Cambridge,**University of Cambridge, Pure Mathematics & Mathematical Statistics**

Research Associate in Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37847199

United Kingdom: London,**London School of Economics**

Assistant Professor in Social Statistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37273161

United States: Auburn, AL**Auburn University, Department of Mathematics & Statistics**

Assistant Professor in Data Science
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37392888

United States: Glendale, AZ**Arizona State University**

Assistant/Associate Professor (Statistics)
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37378262

United States: Berkeley, CA**UC Berkeley**

Assistant Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=36811825

United States: Berkeley, CA**UC Berkeley**

Visiting Assistant Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=36708773

United States: Los Angeles, CA**UCLA Statistics & IOES**

Statistics/IOES Faculty
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37460881

United States: Athens, GA**University of Georgia**

Tenure-track assistant professorship in Statistical Machine Learning, Department of Statistics, University of Georgia, starting August 2018. Requires Ph.D. in Statistics or a closely related discipline by August 1, 2018, and a strong commitment to teaching and research in statistical machine learning.

For details, see <http://www.stat.uga.edu>. To apply, use <http://facultyjobs.uga.edu/postings/2909>. Applications received by January 2, 2018, will be assured consideration.

The University of Georgia is an Equal Opportunity/Affirmative Action employer. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, disability, gender identity, sexual orientation or protected veteran status.

United States: Atlanta, GA**Georgia Tech**

The School of Mathematics at Georgia Tech is accepting applications for **Tenure Track Faculty in Statistics**. Applications by highly qualified candidates, and especially those from groups under-represented in the mathematical sciences, are particularly encouraged. See <http://math.gatech.edu/employment-opportunities> for more details and application instructions.

United States: Atlanta, GA**Georgia Tech**

The School of Mathematics at Georgia Tech is accepting applications for **non-tenure track Post Doc (Visiting Assistant Professor) (PD) for post-doctoral research and teaching positions** for Fall 2018. Applications by highly qualified candidates, and especially those from groups underrepresented in the mathematical sciences, are particularly encouraged.

See <http://math.gatech.edu/employment-opportunities> for more details and application instructions.

United States: Los Angeles, CA**University of California, Los Angeles**

Assistant, Associate or Full Professor of Biostatistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37629389

United States: Santa Barbara, CA**University of California, Santa Barbara**

Open Level Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37368082

United States: Santa Barbara, CA**University of California, Santa Barbara**

Assistant Professor
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37368079

United States: Stanford, CA**Stanford University Department of Biomedical Data Science**

Open Rank Faculty Search
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37849507

United States: Stanford, CA**Stanford University, Statistics Department**

Associate or Full Professor in Statistics and Probability
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=36858848

United States: Stanford, CA**Stanford University, Department of Statistics**

Assistant Professor in Statistics or Probability
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=36858837

United States: Fort Collins, CO**Colorado State University, Department of Statistics**

Tenure Track Faculty Position
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37378233

United States: Fort Collins, CO**Colorado State University, Department of Statistics**

Tenure Track Faculty Position
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37948387

United States: New Haven, CT**Yale University**

Joint Assistant, Associate, or Full Professor Positions of Computer Science and Statistics and Data Science
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37549212

United States: New Haven, CT**Yale University**

Assistant, Associate, and Full Professor Positions of Statistics and Data Science
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37549187

United States: New Haven, CT**Yale School of Public Health**

Tenure-track Faculty Positions in Biostatistics
http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37728965

United States: New Haven, CT**Yale University**

Joint Assistant, Associate, or Full Professor of Statistics and Data Science

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37723750

United States: Washington, DC**American University, Department of Mathematics & Statistics**

Assistant Professor, Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37532176

United States: Gainesville, FL**Department of Statistics, University of Florida**

Tenure-track Assistant/Associate Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37307770

United States: Moscow, ID**University of Idaho**

Two Faculty Positions: Modeling Complex Systems

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37471241

United States: Chicago, IL**Illinois Institute of Technology**

Assistant Professor/Lecturer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37607403

United States: Cambridge, MA**United States: Chicago, IL****The University of Chicago Booth School of Business**

Assistant/Associate Professor of Econometrics & Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37035862

United States: Chicago, IL**University of Illinois at Chicago**

Assistant Professor in Statistics - Tenure Track

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37549562

United States: West Lafayette, IN**Purdue University, Department of Statistics**

Assistant Professor of Statistics - Data Science and Machine Learning

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38146760

United States: Cambridge, MA**Harvard Data Science Initiative**

Data Science Postdoctoral Fellow

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37874665

United States: Williamstown, MA**Williams College**

Assistant Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=36091121



**Massachusetts
Institute of
Technology**

Come work with us!

Faculty Positions in Statistics

Massachusetts Institute of Technology – Cambridge, MA

MIT has launched a cross-Institute center focusing on research and education in Statistics and Information Systems within its newly formed Institute for Data, Systems, and Society (IDSS). Consequently, MIT is seeking candidates for faculty positions starting in July 2018 or on a mutually agreed date thereafter. Appointments will be at the assistant or untenured associate professor level, and will be made in partnership with another MIT department. Faculty duties include teaching at the undergraduate and graduate levels, research, and supervision of student research.

We will consider candidates with backgrounds and interests in the broad areas of Statistics ranging from fundamental theoretical focus to applications of Statistics in various domains in Engineering, Management, Science, Life Science and Social Science. Candidates must have a Ph.D. in Statistics, Engineering, Computer Science, Operations Research, Economics, Mathematics or a related field by the start of their employment.

Candidates must register with the Faculty Search website at <https://school-of-engineering-faculty-search.mit.edu/> and must submit application materials electronically to this website. Candidate applications should include a description of professional interests and goals in both teaching and research. In view of the joint nature of the position, candidates are encouraged to identify a home department from the School of Engineering. Each application should include a curriculum vitae and the names and addresses of three or more individuals who will provide letters of recommendation. Letter writers should submit their letters directly to MIT, preferably on the website or by mailing to the address below. Responses received by December 15, 2017 will be given priority.

Send all materials not submitted on the website to: stats-search@mit.edu

MIT is an equal opportunity employer. Women and underrepresented minorities are encouraged to apply.

<http://web.mit.edu>

United States: Ann Arbor, MI**University of Michigan Statistics**

RTG Postdoctoral associate

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37685748

United States: Detroit, MI**Wayne State University, Department of Mathematics**

Assistant/Associate Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37744527

United States: East Lansing, MI**Michigan State University**

Faculty Positions in Statistics and in Data Science

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37460832

United States: Duluth, MN**University of Minnesota-Duluth Mathematics and Statistics Dept.**

Assistant Professor Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38012717

United States: Minneapolis, MN**University of Minnesota, School of Statistics**

Tenure-track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=36748331

United States: Saint Louis, MO**Washington University in Saint Louis**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37683494

United States: Saint Louis, MO**Washington University in Saint Louis**

Lecturer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38069323

United States: New York, NY**Faculty Position in Operations Research and Information Engineering (ORIE)**

Operations Research and Information Engineering (ORIE) is available at the Cornell Tech campus in New York City.

A faculty position in Operations Research and Information Engineering (ORIE) is available at the Cornell Tech campus in New York City. The position is part of the Jacobs Technion-Cornell Institute, and we particularly encourage candidates whose work fits into the Jacobs Institute application-domain emphases in the areas of digital-physical systems (especially in urban environments) and digital health technology.

The position is within Cornell University's School of ORIE, and applicants with research interests represented within Cornell ORIE are welcome at all levels, including tenured and tenure-track. The School consists of a diverse group of high-quality researchers and educators interested in probability, optimization, statistics, simulation, and a wide array of applications such as e-commerce, supply chains, scheduling, manufacturing, transportation systems, health care, financial engineering, service systems, and network science. Cornell ORIE spans both the Ithaca and New York City campuses, but the successful candidate's teaching and research will be based in New York City. (Interested candidates can apply for a Cornell Tech in NYC position, a Cornell Ithaca ORIE position, or both, but the two campuses have different application sites; please see the Cornell Ithaca ad for the Ithaca application URL.)

Candidates must hold a Ph.D. in operations research, mathematics, statistics, or a related field by the start of the appointment, and have demonstrated an ability to conduct outstanding research at the level of tenure-track or tenured faculty in Cornell ORIE. They must also have a strong commitment to engagement outside of academia in ways that foster significant commercial or societal impact, as aligned with the mission of the Cornell Tech campus. The successful candidate will be expected to pursue an active research program, to teach Master's and Ph.D.-level graduate courses, and to supervise graduate students.

To ensure full consideration, applications should be received by December 1, 2017, but will be accepted until the position is filled. Applicants should submit a curriculum vitae, brief statements of research and teaching interests, and the names and contact information of at least three references. They should also identify one or two top publications to which they have made significant contributions. A distinguishing characteristic of research at Cornell Tech, in addition to world-class academic work, is that it engages deeply with external communities, organizations, K-12 education, and industry to address real-world problems and contexts that amplify the direct commercial and societal impact of our research. Accordingly, within a clearly identified subsection of the research statement, the candidate should address prior accomplishments and future plans related to this kind of direct commercial and/or societal impact of their research.

Applications are on-line at

<https://academicjobsonline.org/ajo/jobs/9778>

Inquiries about your application may be directed to slm339@cornell.edu.



Diversity and Inclusion are a part of Cornell University's heritage. We are a recognized employer and educator valuing AA/EEO, Protected Veterans, and Individuals with Disabilities.

United States: New York, NY**Distinguished Postdoctoral Fellow in Statistics, Columbia University**

The Department of Statistics invites applications for the newly created Distinguished Postdoctoral Fellowship in Statistics. The fellowship seeks to bring exceptional scientists of outstanding potential to Columbia University. This two-year fellowship, with no teaching obligations, is to begin between July and September 2018. The Fellow will hold the rank of postdoctoral research scientist in the Department of Statistics. A competitive annual salary will be supplemented with generous funding for conference travel and research support.

Applications in all areas of statistics and probability will be considered: the primary selection criterion will be the candidate's exceptional promise to produce high quality and visible research. Candidates must have a PhD in statistics or related field by the date of appointment. The Fellow will be expected to pursue a vigorous research agenda and to participate actively in the intellectual life of the Department.

The Department currently consists of 30 faculty members, 50 PhD students, and over 300 MA students. The department has been expanding rapidly and, like the University itself, is an extraordinarily vibrant academic community. We are especially interested in candidates who, through their research, teaching and/or service will contribute to the diversity and excellence of the academic community. Women and minorities are especially encouraged to apply. For further information about the department and our programs, please go to our web page at: <http://www.stat.columbia.edu>

All applications must be submitted through Columbia's online Recruitment of Academic Personnel System (RAPS) at <https://academicjobs.columbia.edu/applicants/Central?quickFind=65253>

The application must include the following:

- A cover letter that explains your motivation for applying for this position and indicates your choice of mentors from the statistics faculty.
- A curriculum vitae (including a list of publications)
- A brief research statement that summarizes current research interests, past accomplishments, and future research goals. It should contain a short proposal for the research activities you plan to conduct while at Columbia.
- The names of 3 references—references will be asked to upload letters of recommendation in RAPS.

Inquiries may be made to dk@stat.columbia.edu. Review of applications begins on January 15, 2018, and will continue until the position is filled.

Columbia University is an Equal Opportunity/Affirmative Action employer.

United States: New York, NY**Faculty Position Starting Fall 2018**

The Columbia University Department of Statistics invites applications for a tenure-track Assistant Professor position to begin July 1, 2018. A Ph.D. in statistics or a related field is required. Candidates will be expected to sustain an active research and publication agenda and to teach in the departmental undergraduate and graduate programs. The field of research is open to any area of statistics and probability.

The Department currently consists of 30 faculty members, 50 PhD students, and over 300 MA students. The Department has been expanding rapidly and, like the University itself, is an extraordinarily vibrant academic community. We are especially interested in candidates who through their research, teaching and/or service will contribute to the diversity and excellence of the academic community. Women and minorities are especially encouraged to apply. For further information about the Department and our programs, please go to our webpage at: <http://www.stat.columbia.edu>

All applications must be submitted through Columbia's online Recruitment of Academic Personnel System (RAPS) at <https://academicjobs.columbia.edu/applicants/Central?quickFind=65221>

The application must include a cover letter, curriculum vitae, teaching statement, research statement and the names of 3 references. References will be asked to upload letters of recommendation in RAPS.

Inquiries may be made to dk@stat.columbia.edu

Review of applications begins on December 1, 2017, and will continue until the position is filled.

Columbia University is an Equal Opportunity/Affirmative Action employer.

United States: Chapel Hill, NC**The University of North Carolina at Chapel Hill**

Assistant Professorship in Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37150963

United States: Durham, NC**Fuqua School of Business, Duke University**

Tenure Track Faculty Position in Decision Sciences

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=35757055

United States: Greensboro, NC**University of North Carolina at Greensboro, Department of Mathematics and Statistics**

Tenure-track Assistant Professor in Statistics with Specialization in High-dimensional Data Analysis

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37165266

United States: New York, NY**Columbia University****Faculty Positions in Statistics, Neuroscience and MBBI****Starting Fall 2018**

The Department of Neuroscience, the Department of Statistics, and the Mortimer B. Zuckerman Mind Brain Behavior Institute at Columbia University invite applications for two positions (tenured or tenure-track) at the assistant or associate professor level, to begin in 2018. The position in the Department of Neuroscience will focus on theoretical neuroscience. The position in the Department of Statistics will focus on the application of statistics to neuroscience with an appointment in the Department of Statistics. Both positions will include appointments as well as office and laboratory space in the Theory Center and Grossman Center of the Statistics of Mind within the Mortimer B. Zuckerman Mind Brain Behavior Institute housed in the Jerome L. Greene Science Center at Columbia.

We are seeking dynamic scientists interested in exploiting the multidisciplinary environment provided by the Zuckerman Institute and interacting with Zuckerman Institute faculty, as well as with others in the Columbia neuroscience, biological sciences, physical sciences, statistics, and machine learning communities, including the Data Science Institute.

The Zuckerman Institute brings together scientists from diverse backgrounds whose research focuses on brain function, wiring, and development. Zuckerman Institute faculty will function as full members of their home departments, and tenure will be granted by the home department.

Candidates will be expected to show expertise and an ability to lead a research program in theoretical and/or statistical neuroscience. Applicants are expected to have a strong record of scientific achievement and to demonstrate the ability to engage in innovative research and teaching. Applicants should hold a PhD in neuroscience, statistics, or a related area.

Candidates will contribute to teaching in their home departments and the Zuckerman Institute.

For further information about the departments and our activities, centers, research areas, and curricular programs, please go to our web pages at: <http://www.stat.columbia.edu>; <http://neuroscience.columbia.edu/> and <https://zuckermaninstitute.columbia.edu/>

To apply for the position in **Statistics**, please apply through the following link:

<https://academicjobs.columbia.edu/applicants/Central?quickFind=65242>

To apply for the position in **Neuroscience**, please go to the link:

<https://academicjobs.columbia.edu/applicants/Central?quickFind=65051>

The application must include a cover letter, curriculum vitae, statement of teaching philosophy, research statement, the names of 3 references and writing sample/publication. References will be asked to upload letters of recommendation in RAPS.

Review of applications will begin December 1, 2017 and continue until the position is filled.

Women and minorities are strongly encouraged to apply.

Columbia University is an Equal Opportunity/Affirmative Action employer.

More jobs at <http://jobs.imstat.org/>

United States: New York, NY**Department of Statistics and The School of Professional Studies,
Columbia University****Lecturer in Discipline Positions Starting Fall 2018**

The School of Professional Studies (SPS) at Columbia University invites applications for appointments in its Actuarial Science Program, which is administered jointly with Columbia's Department of Statistics. The positions may be filled at any rank from lecturer in discipline to senior lecturer in discipline and are effective July 1, 2018. These are full-time, non-tenure-track appointments with multi-year renewal contingent on successful reviews.

Candidates at the rank of Senior Lecturer in Discipline are expected to have substantial experience and accomplishments, and a superlative record of teaching as a lecturer, and documented evidence of pedagogical excellence in carrying out administrative or other department responsibilities.

Candidates at the rank of Lecturer in Discipline are expected to have teaching experience, documented evidence of pedagogical excellence, and evidence of professional growth and activity in the given field.

Candidates must have a degree in actuarial science or a related field, preferably post-graduate, and must demonstrate potential for excellence in teaching at the graduate level. Applicants with an earned PhD in actuarial science or statistics and professional actuarial credentials are especially encouraged to apply. Duties include teaching, advising and curriculum design. Other duties include: program development; student mentoring, and in particular, providing academic and career advice to students as they transition to practicing actuaries; and participation in the vision and direction of the actuarial science program.

The Actuarial Science program seeks individuals with a vibrant portfolio of academic study, experience and publications in one or more of the following disciplines as they relate to actuarial science:

- Life insurance
- Health insurance
- Pensions and retirement systems
- Property and Casualty insurance
- Reinsurance

Review of applications begins on January 15, 2018, and will continue until the position is filled.

All applications must be submitted through Columbia's online Recruitment of Academic Personnel System (RAPS) at <https://academicjobs.columbia.edu/applicants/Central?quickFind=65243>.

Columbia University is an Equal Opportunity/Affirmative Action employer.

United States: New York, NY**Department of Statistics
Columbia University****Limited-term Faculty Positions Starting Fall 2018**

The Department of Statistics invites applications for four-year term positions at the rank of Assistant Professor to begin July 1, 2018. A PhD in statistics or a related field is required, as is a commitment to high quality research and teaching in statistics and/or probability. Candidates will be expected to sustain an active research and publication agenda and to teach in the departmental undergraduate and graduate programs. Candidates with expertise in machine learning, big data, mathematical finance and probability area particularly encouraged to apply.

The department currently consists of 30 faculty members, 50 PhD students, and over 300 MA students. The department has been expanding rapidly and, like the University itself, is an extraordinarily vibrant academic community. We are especially interested in candidates who, through their research, teaching and/or service will contribute to the diversity and excellence of the academic community. Women and minorities are especially encouraged to apply. For further information about the department and our activities, centers, research areas, and curricular programs, please go to our web page at: <http://www.stat.columbia.edu>

All applications must be submitted through Columbia's online Recruitment of Academic Personnel System (RAPS) at <https://academicjobs.columbia.edu/applicants/Central?quickFind=65223>

The application must include a cover letter, curriculum vitae, teaching statement, research statement and the names of 3 references. References will be asked to upload letters of recommendation in RAPS.

Inquiries may be made to dk@stat.columbia.edu

Review of applications begins on December 1, 2017, and will continue until the position is filled.

Columbia University is an Equal Opportunity/Affirmative Action employer.

United States: Piscataway, NJ**Rutgers, The State University of New Jersey**

Tenure Track Faculty Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37367879**United States: Princeton, NJ****Princeton University**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37250882**United States: Princeton, NJ****Princeton University**

Associate or Full Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37250863**United States: Princeton, NJ****Princeton University**

Senior Lecturer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37707208**United States: Binghamton, NY****Binghamton University, Department of Mathematical Sciences**

Tenure-Track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37460261**United States: Ithaca, NY****Department of Statistical Science at Cornell University**

Tenured, Tenure-track, or Lecturer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37355756**United States: Ithaca, NY****Computing and Information Science at Cornell University**

Lecturer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37744886**United States: New York, NY****Data Science Institute, Columbia University**

Applied Data Scientists, Open Rank

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37549202**United States: Corvallis, OR****Oregon State University, Department of Statistics**

Tenure-Track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37914461**United States: Philadelphia, PA****Wharton Department of Statistics, University of Pennsylvania
Department Postdoctoral Researcher**

The Department of Statistics of the Wharton School, University of Pennsylvania, is seeking candidates for a Postdoctoral Researcher position in the area of statistics and/or probability. The position is designed to be a career-building step for new scholars. The primary focus is for the scholar to develop her/his research program. A light teaching load will also be part of the position. The position will start in Summer 2018 and continue for two years with a possible extension to three years. A competitive salary will be provided.

Candidates should show outstanding capacity for research, as well as excellent communication skills. Applicants must have a Ph.D. from an accredited institution.

Please visit our website, <https://statistics.wharton.upenn.edu/recruiting/dept-postdoc-position>, for a description of the department and link to submit a CV and other relevant material. Any questions should be directed by e-mail to stat.postdoc.hire@wharton.upenn.edu.

The University of Pennsylvania is an EOE. Minorities / Women / Individuals with disabilities / Protected Veterans are encouraged to apply.

United States: Philadelphia, PA**Statistical Science, Fox School of Business, Temple University**

Assistant/Associate/Full Professor Tenured, Tenure-Track and Non-Tenure Track Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37729061

Looking for a new position? Visit the jobs section on the IMS website, where you can:

- * *View job opportunities in probability and statistics, including in academia and industry*
- * *Post your resume/CV online*
- * *Create personal Job Alerts so that you never let a matching job opportunity pass you by...*

<http://jobs.imstat.org/>



United States: Philadelphia, PA**Wharton Department of Statistics, University of Pennsylvania
Tenure-track Assistant Professor**

The Department of Statistics of the Wharton School, University of Pennsylvania, is seeking applicants for a full-time, tenure-track Assistant Professor position. Applicants must show outstanding capacity and achievement in research, as well as excellent teaching and communication skills. Applicants must have a Ph.D. (expected completion by June 30, 2019 is acceptable) from an accredited institution. The appointment is expected to begin July 1, 2018.

Please visit our website, <https://statistics.wharton.upenn.edu/recruiting/facultypositions>, for a description of the department and a link to submit a CV and other relevant materials. Any questions can be sent to statistics.recruit@wharton.upenn.edu.

The University of Pennsylvania is an EOE. Minorities / Women / Individuals with disabilities / Protected Veterans are encouraged to apply.

United States: Philadelphia, PA**Wharton Department of Statistics, University of Pennsylvania
Postdoctoral Researcher with Professor Eric Tchetgen Tchetgen**

The Department of Statistics of the Wharton School, University of Pennsylvania, is seeking candidates for a Postdoctoral Researcher position under the supervision of Professor Eric Tchetgen Tchetgen. The position is designed to be a career-building step for new scholars. The primary focus is for the scholar to develop her/his research program. The position will start in January 2018, or soon thereafter, and continue for two years with a possible extension to three years. A competitive salary will be provided.

Candidates should show outstanding capacity for research in the development of statistical and epidemiologic methods. There is a particular interest in applicants with a focus on semi-parametric efficiency theory with applications in causal inference and missing data problems. Successful candidates will have opportunities to submit papers to top statistical, biostatistical, and epidemiological journals, as well as present their research at statistical and scientific meetings. Applicants must have a Ph.D. in statistics, biostatistics, epidemiology, or a related field from an accredited institution.

Please visit our website, <https://statistics.wharton.upenn.edu/recruiting/eric-tchetgen-tchetgen-postdoc-position>, for a description of the department and link to submit a CV and other relevant material. Any questions should be directed by e-mail to ett.postdoc@wharton.upenn.edu.

The University of Pennsylvania is an EOE. Minorities / Women / Individuals with disabilities / Protected Veterans are encouraged to apply.

United States: Philadelphia, PA**University of Pennsylvania, Wharton Department of Statistics**

Assistant Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21030738

United States: Philadelphia, PA**University of Pennsylvania, Wharton Department of Statistics**

Postdoctoral Researcher with Professor Eric Tchetgen Tchetgen

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37925109

United States: Philadelphia, PA**University of Pennsylvania, Wharton Department of Statistics**

Departmental Postdoctoral Researcher

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21031133

United States: Salt Lake City, UT**Mathematics Department, University of Utah**

Tenure/Tenure-Track and Postdoctoral

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37367815

United States: Fairfax, VA**George Mason University, Department of Statistics**

Tenure-Track Assistant or Associate Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37877101

United States: Norfolk, VA**Old Dominion University**

Statistics: Two Tenure-Track Assistant Professors

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37243810

United States: Seattle, WA**University of Washington, Department of Statistics**

Tenure-Track Assistant or Associate Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37537627

United States: Madison, WI**University of Wisconsin-Madison, Department of Statistics**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37024463

International Calendar of Statistical Events

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

December 2017

December 11–14: CRM, Montréal, Canada. **Risk Modeling, Management and Mitigation in Health Sciences**
w http://www.crm.umontreal.ca/2017/Sante17/index_e.php

December 11–15: Manipal, India. **Linear Algebra and its Applications** w <http://iclaa2017.com>

December 16–19: Chennai, India. **Statistical Methods in Finance 2017** w <http://www.cmi.ac.in/~sourish/StatFin2017>

 **December 18–21:** Birmingham, AL, USA. **7th Short Course on Next-Generation Sequencing: Technology and Statistical Methods** w http://www.soph.uab.edu/ssg/nhgri_r25/seventhshortcourse

January 2018

January 2–4: Kolkata, India. **PCM 125: International Conference in Statistics and Probability**
w <http://www.isid.ac.in/~pcm125spconf>

January 8–12: Chulalongkorn University, Bangkok, Thailand. **2nd Bangkok Workshop on Discrete Geometry and Statistics**
w <http://thaihep.phys.sc.chula.ac.th/BKK2018DSCR/>

January 17–19: NIMBioS at the University of Tennessee, Knoxville, TN, USA. **NIMBioS Investigative Workshop: Stoichiometric Ecotoxicology** w http://www.nimbios.org/workshops/WS_ecotox

January 22–24: Lunteren, The Netherlands. **17th Winter School on Mathematical Finance** w <https://staff.fnwi.uva.nl/p.j.c.spreij/winterschool/winterschool.html>

February 2018

February 5–16: National University of Singapore. **Meeting the Statistical Challenges in High Dimensional Data and Complex Networks**
w <http://www2.ims.nus.edu.sg/Programs/018wstat/index.php>

February 15–17: Portland, OR, USA. **Conference on Statistical Practice** w <https://ww2.amstat.org/meetings/csp/2018/index.cfm>

March 2018

March 2–3: Athens, Greece. **ICQSBEI'18: 2nd International Conference on Quantitative, Social, Biomedical and Economic Issues with emphasis on New Technologies**
w <http://icqsbei2018.weebly.com/>

 **March 4–8:** Spreewald, Germany. **6th Spring School: Structural Inference in Statistics** w <https://www.mathematik.hu-berlin.de/de/for1735/spring-school-2018>

 **March 25–28:** Atlanta, GA, USA. **ENAR Spring Meeting**
w <http://www.enar.org/meetings/future.cfm>

 **March 26–28:** Barcelona, Spain. **Bayes Comp 2018** w <https://www.maths.nottingham.ac.uk/personal/tk/bayescomp/>

March 26–29: Barcelona, Spain. **Bayes Comp 2018**
w <https://www.maths.nottingham.ac.uk/personal/tk/bayescomp/>

 **March 27–29:** Giza, Egypt. **30th Annual Conference on Statistics and Modeling in Human and Social Sciences** w <http://www.feps.edu/en/departments/statistics/conference/index.html>

  **March 29–31:** Corvallis, OR, USA. **Frontier Probability Days** w TBC

April 2018

April 24–26: Leiden, The Netherlands. **Survival Analysis for Junior Researchers 2018 (SAfJR2018)** w <http://safjr2018.com>

May 2018

 **May 7–8:** Ames, Iowa, USA. **Conference on Predictive Inference and Its Applications** w <https://predictiveinference.github.io/>

 **May 17–20:** Gainesville, Florida, USA. **IISA-2018: From Data to Knowledge, Working for a Better World** w <http://iisa2018.biostat.ufl.edu/>

 **May 29–30:** Munich, Germany. **Econometrics in the Castle: Machine Learning in Economics and Econometrics** w <http://tiny.cc/econ-in-the-castle>

June 2018

June 3–6: McGill University, Montreal, Québec, Canada. **Statistical Society of Canada 2018 Annual Meeting**

w <https://ssc.ca/en/meetings/2018-annual-meeting>

NEW June 6–7: Chicago, IL, USA. **Midwest Machine Learning Symposium** **w** <http://midwest-ml.org/>

ims June 11–15: Salerno, Italy. **ISNPS2018: The 4th Conference of the International Society for Non-Parametric Statistics** **w** <http://www.isnps2018.it/>

ims June 11–15: Gothenburg, Sweden. **40th Conference on Stochastic Processes and their Applications (SPA 2018)** **w** <http://spa2018.org/>

NEW **ims** June 16–18: Shanghai, China. **SAE2018: Small Area Estimation and Other Topics of Current Interest in Surveys, Official Statistics, and General Statistics** **w** www.sae2018.com

NEW June 17–20: Boulder, CO, USA. **International Symposium on Forecasting** **w** <https://isf.forecasters.org>

ims June 24–27: Edmonton, Canada. **WNAR/IMS Meeting** **w** <http://www.wnar.org/Meetings>

UPDATED June 24–29: Edinburgh, UK. **ISBA 2018 World Meeting** **NEW WEBSITE** **w** <https://bayesian.org/isba2018/>

ims June 26–29: Singapore. **2018 IMS Asia Pacific Rim Meeting (IMS-APRM)** **NEW** **w** <https://ims-aprm2018.stat.nus.edu.sg/>

NEW June 27–29: Edgbaston, UK. **Sixth IMA Conference on Numerical Linear Algebra and Optimization** **w** <https://ima.org.uk/7149/6thIMANLAO/>

July 2018

ims July 2–6: Vilnius, Lithuania. **Joint 2018 IMS Annual Meeting and 12th International Vilnius Conference on Probability Theory and Mathematical Statistics**

NEW WEBSITE <http://ims-vilnius2018.com/>

July 2–6: St Andrews, UK. **Sixth International Statistical Ecology Conference** **w** <http://www.isec2018.org>

July 8–13: Kyoto, Japan. **ICOTS10: Tenth International Conference on Teaching Statistics** **w** <http://icots.info/icots/10/>

July 16–20: Bristol, UK. **33rd International Workshop on Statistical Modelling** **w** <http://www.statmod.org/workshops.htm>

NEW July 16–21: Guanajuato, Mexico. **28th Conference of the International Environmetrics Society (TIES 2018)** **w** <http://ties2018.eventos.cimat.mx/>

ims July 28–August 2: Vancouver, Canada. **JSM 2018** **w** <http://ww2.amstat.org/meetings/jsm/2018/>

August 2018

August 1–9: Rio de Janeiro, Brazil. **International Congress of Mathematicians 2018 (ICM 2018)** **w** <http://www.icm2018.org/>

August 25–27: Shahrood, Iran. **ISC14: Fourteenth Iranian Statistics Conference** **w** <http://isc14.shahroodut.ac.ir>

August 26–30: Melbourne, Australia. **Joint International Society for Clinical Biostatistics and Australian Statistical Conference 2018** **w** <http://iscbasc2018.com/>

September 2018

NEW September 3–6: Cardiff, UK. **Royal Statistical Society International Conference** **w** www.rss.org.uk/conference2018

September 8–10: St Louis, Missouri, USA. **Third Workshop on Higher-Order Asymptotics and Post-Selection Inference (WHOA-PSI)** **w** <http://www.math.wustl.edu/~kuffner/WHOA-PSI-3.html>

NEW September 24–28: São Pedro, Brazil. **SINAPE 2018: Brazilian Symposium on Probability and Statistics** **w** <http://www.sinape2018.com.br/>

Continues on page 34



Vilnius, "baroque beauty of the Baltic" (says Lonely Planet) and capital of Lithuania, is the location of the 2018 IMS annual meeting (July 2–6, 2018)

International Calendar *continued*

October 2018

 **October 25–27:** Barcelona, Spain. **Big Data Meets Survey Science** **w** <https://www.bigsurv18.org/>

December 2018

 **December 17–20:** Jerusalem, Israel. **Jerusalem Joint Statistical Event 2018: Symposium in Honor of Yoav Benjamini's 70th Birthday and 10th Conference of the Eastern Mediterranean Region of the IBS** **w** <https://www.emr2018.com/>

March 2019

 **March 24–27:** Philadelphia, PA, USA. **ENAR Spring Meeting** **w** <http://www.enar.org/meetings/future.cfm>

July 2019

 **July 1–9:** Zagreb, Croatia. **11th International Conference on Extreme Value Analysis** **w** <http://web.math.hr/eva2019>

 **July 8–12:** Evanston, IL, USA. **41st Conference on Stochastic Processes and their Applications (SPA 2019)** **w** TBC

July 14–18: Leuven, Belgium. **40th Conference of the International Society for Clinical Biostatistics** **w** <http://www.icsb.info>

 **July 27–August 1:** Denver, CO, USA. **IMS Annual Meeting at JSM 2019** **w** <http://www.amstat.org/ASA/Meetings/Joint-Statistical-Meetings.aspx>

March 2020

 **March 22–25:** Nashville, TN, USA. **ENAR Spring Meeting** **w** <http://www.enar.org/meetings/future.cfm>

July 2020

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

August 2020

 **August 1–6:** Philadelphia, PA, USA. **JSM 2020** **w** <http://www.amstat.org/ASA/Meetings/Joint-Statistical-Meetings.aspx>

 **August 17–21:** Seoul, Korea. **Bernoulli/IMS World Congress on Probability and Statistics** **w** TBC

August 2021

 **August 7–12:** Seattle, WA, USA. **IMS Annual Meeting at JSM 2021** **w** <http://www.amstat.org/ASA/Meetings/Joint-Statistical-Meetings.aspx>

August 2022

 **July/August:** Location TBC. **IMS Annual Meeting** **w** TBC

 **August 6–11:** Washington DC, USA. **JSM 2022** **w** <http://www.amstat.org/ASA/Meetings/Joint-Statistical-Meetings.aspx>

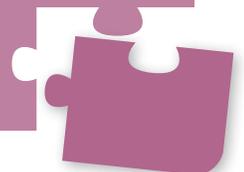
August 2023

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

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 <http://www.imstat.org/submit-meeting.html>

We'll list them here in the Bulletin, and on the IMS website too, at www.imstat.org/meetings/



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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 authors of individual articles may be asked to sign a copyright transfer to the IMS before publication.

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| 6: September | August 15 | September 1 | September 15 |
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Number 3

August 2017

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Dimitris Bertsimas and Angela King

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Importance Sampling: Intrinsic Dimension and Computational Cost
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