

January/February 2015

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Peter Bickel honored by ETH

Peter Bickel received a Doctor *honoris causa* from ETH Zurich on November 22, 2014. The translation (from German) of the laudatio reads "...for fundamental contributions in semiparametric, robust and high-dimensional statistics, and for seminal influence in mathematical statistics and its applications." (The full text, in German, is at <https://www.ethz.ch/content/dam/ethz/main/news/eth-tag/Dokumente/2014/eth-tag-2014-laudatio-bickel.pdf>)

Peter Bickel is Professor of Statistics at the University of California, Berkeley. He has served as President of IMS and the Bernoulli Society, and gave the Wald Lectures in 1980 and the Rietz lecture in 2004. He has been a Guggenheim (1970) and MacArthur (1984) Fellow, was the first COPSS Presidents' Award winner, and he gave the COPSS Fisher Lecture in 2013. He was awarded an honorary Doctorate degree from the Hebrew University, Jerusalem, in 1986, and the CR and Bhargavi Rao Prize in 2009. Peter is a member of the American Academy of Arts and Sciences, the US National Academy of Sciences and the Royal Netherlands Academy of Arts and Sciences. In 2006, he was appointed to the knightly grade of Commander in the Order of Oranje-Nassau by Her Majesty Queen Beatrix of The Netherlands, for his extraordinary services and professional contributions. (He is also a contributing editor of the *IMS Bulletin*!) Read more about the ETH Day at <https://www.ethz.ch/en/news-and-events/events/eth-day/eth-day-2014.html>

Peter Bickel (left) with Peter Bühlmann, who read the laudatio



ETH Zürich/Giulia Marthaler

Read it online at
<http://bulletin.imstat.org>



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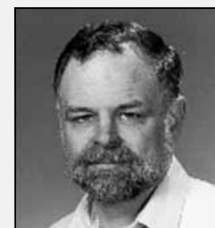
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IMS Members' News

RIP: Steven F Arnold, Eugene Dynkin, Moshe Shaked, Henry Teicher and Marvin Zelen

We are saddened to bring news that five of our community have passed away recently. We do not yet have full details, but obituaries will appear for these colleagues in due course.

Steven F. Arnold, Professor of Statistics at Pennsylvania State University, passed away December 6. He was born in 1944 in Milwaukee, WI, and is survived by his wife Rana and two children. Professor Arnold made significant contributions to multivariate analysis, linear models, patterned covariances, repeated measures, and invariance. He authored the highly successful *Theory of Linear Models* (Wiley, 1981) and *Mathematical Statistics* in 1990. With A. Stuart and K. Ord, he coauthored the revision of the classic Kendall-Stuart Inference text in 1998.



Steven F. Arnold

Eugene Dynkin, Cornell University's A.R. Bullis Professor of Mathematics emeritus, died November 14, aged 90. Laurent Saloff-Coste described him as a "worldwide leader in probability theory and a superb lecturer who dazzled generations of students." He was also a world-class algebraist. Dynkin was an IMS Fellow. See the announcement at <http://www.news.cornell.edu/stories/2014/11/mathematician-eugene-dynkin-dies-90>



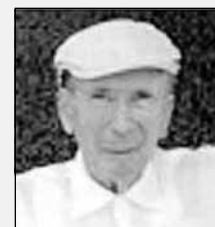
Eugene Dynkin

Moshe Shaked, also an IMS Fellow, was professor emeritus in the Department of Mathematics at The University of Arizona. He passed away October 28, aged 69. Moshe received his MS from the Hebrew University in Jerusalem and his PhD from the University of Rochester. He had visiting positions at Stanford University and the University of British Columbia. He also held faculty positions at the University of New Mexico and Indiana University. He co-wrote with J. George Shanthikumar *Stochastic Orders*.



Moshe Shaked

Rutgers Statistics Department professor emeritus **Henry Teicher** passed on November 12 at the age of 92. In a notice published in the *New York Times* he was described as "a pillar of the department before his retirement [who] continued to be admired for his outstanding scholarship. His wide recognition led to visiting appointments at Stanford, Columbia, New York University and the University of Perugia. His classic book with Y.S. Chow on probability theory educated generations of graduate students. He was elected fellow of the IMS in recognition of his seminal research in mathematical statistics and probability." (See <http://www.legacy.com/obituaries/nytimes/obituary.aspx?n=henry-teicher&pid=173254273>)



Henry Teicher

Professor **Marvin Zelen** of the Department of Biostatistics of the Harvard School of Public Health (HSPH) passed away on November 15, at age 87. Karen Feldscher said, "He was known as a giant in the field of biostatistics, as well as a man of vision, generosity, and warmth. He is credited with transforming HSPH's biostatistics department into a best in the country." Read more at <http://www.hsph.harvard.edu/news/features/in-memoriam-prof-marvin-zelen-a-tremendous-force-in-biostatistics/>



Marvin Zelen

IMS Awards

There is still time to nominate someone for IMS Fellowship or to receive the Harry C. Carver Award, or to apply for an IMS Travel Award.

IMS Fellowship: IMS Fellows have demonstrated distinction in research in statistics or probability by publication of independent work of merit (this may be waived in the case of a candidate of well-established leadership whose contributions to the field of statistics or probability other than original research shall be judged of equal value; or a candidate of well-established leadership in the application of statistics or probability, whose work has contributed greatly to the utility of and the appreciation of these areas.) All nominations must be received by **January 31, 2015**. Please visit <http://www.imstat.org/awards/fellows.htm> for details.

Harry C. Carver Award: Can you think of someone who has given exceptional service to the IMS, and who has not been President? Nominate that person for the 2015 Carver Medal, created by the IMS in honor of Harry C. Carver, founding editor of *The Annals of Mathematical Statistics* and one of the founders of the IMS. The medal will be awarded at JSM in Seattle, in August 2015. Nominations must be received by **February 1, 2015**. Please visit <http://www.imstat.org/awards/carver.html> for details.

IMS Travel Award: The purpose of the IMS Travel Award is 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 Researchers' Conference, as that is already funded separately), for those who otherwise would not be able to attend the meeting. The travel awards are available to IMS members who are New Researchers, i.e. awarded a PhD within the 5 years immediately preceding the year of the application deadline or who has or will receive her/his PhD in the same year as the application deadline. Application Joining IMS at the time of application is allowed (New Researchers qualify for reduced rates). Application deadline is **February 1, 2015**. Please visit <http://imstat.org/awards/travel.html> for details.

Nominations Sought for Spiegelman Award

The Applied Public Health Statistics Section of the American Public Health Association (APHA) invites nominations for the 2015 Mortimer Spiegelman Award, which honors a statistician below the age of 40 in the calendar year of the award who has made outstanding contributions to health statistics, especially public health statistics.

The award serves to: honor the outstanding achievements of both the recipient and Spiegelman; encourage further involvement in public health by the finest young statisticians; and increase awareness of APHA and the Applied Public Health Statistics Section in the academic statistical community.


Eligible candidates must have been born in 1976 or later. Please email a nominating letter that states the candidate's date of birth and how their contributions relate to public health concerns, up to three letters of support, and the candidate's CV to the award committee chair, Amy Herring, at aherring@bios.unc.edu. Nominations are due by **April 1, 2015**.


Presidential Address video and slides



We printed **Bin Yu's** IMS Presidential Address in the October/November issue. Bin reprised her talk at the New Researchers' Conference, where it was filmed: you can watch the video at <http://www.youtube.com/watch?v=920jsYQJC1U>. The accompanying slides are at Bin's website: <https://www.stat.berkeley.edu/~binyu/ps/papers2014/IMS-pres-address14-yu.pdf>


 = access published papers online

IMS Journals and Publications

Annals of Statistics: Peter Hall and Runze Li
<http://imstat.org/aos>
 <http://projecteuclid.org/aos>

Annals of Applied Statistics: Stephen Fienberg
<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: Timo Seppäläinen
<http://imstat.org/aap>
 <http://projecteuclid.org/aoap>

Statistical Science: Peter Green
<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: George Michailidis
<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: Thomas Lee
<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

Annales de l'Institut Henri Poincaré (B): Thierry Bodineau & Lorenzo Zambotti <http://imstat.org/aihps>
 <http://projecteuclid.org/aihps>

Bayesian Analysis: Marina Vannucci
 <http://ba.stat.cmu.edu>


Bernoulli: Eric Moulines
<http://www.bernoulli-society.org/>
 <http://projecteuclid.org/bj>

Brazilian Journal of Probability and Statistics: Nancy Lopes Garcia <http://imstat.org/bjps>
 <http://projecteuclid.org/bjps>

Stochastic Systems: Peter W Glynn
 <http://www.i-journals.org/ssy/>

IMS-Affiliated Journals

ALEA: Latin American Journal of Probability and Statistics: Servet Martinez
 <http://alea.impa.br/english>

Probability and Mathematical Statistics: K. Bogdan, M. Musiel, J. Rosiński, W. Szczotka, & W.A. Woyczyński
 <http://www.math.uni.wroc.pl/~pms>

Meeting report: *Bangladesh Academy of Sciences*

Statistics seminar at Bangladesh Academy of Sciences

Professor Shahjahan Khan is an elected Member of the International Statistical Institute, and a member of IMS. He is a Fellow of the UK's Royal Statistical Society. He served as the President of ISOSS from 2005–2011. He reports on a statistics seminar at which he contributed:

The Bangladesh Academy of Sciences (BAS) organised a seminar on the “Dominant Role of Statistics in Contemporary Science and Technology” at its auditorium in the Bangladesh Science Museum Buildings in Dhaka on 1 October 2014. The speaker of the seminar was Professor Shahjahan Khan, University of Southern Queensland, Australia and Founding Chief Editor of the *Journal of Applied Probability and Statistics (JAPS)*, who was elected as an Expatriate Fellow of BAS last year.

The seminar was attended by a record audience, and the presentation covered various contemporary problems in the area of health, medicine, engineering, climate, environment, big data etc., and highlighted how statistics is playing an increasingly dominant role in state-of-the-art research in solving the complex issues of our time. Some interesting comments emphasizing the importance of statistics in the medical and physical sciences were made by the audience.

The President of BAS, Professor Mesbahuddin Ahmad, presided over the seminar, and the Secretary of BAS, Prof Khawaja M S Aziz introduced the speaker. In addition to the members on the executive committee of BAS a large number of scientists, including the immediate past President of BAS, Professor M Shamsher Ali, a former President of Bangladesh Statistical Association, Professor M Kabir,

and Professor Liaquat Ali, Vice-Chancellor, Bangladesh University of Health Sciences, along with a number of senior biostatisticians and statisticians, participated in the event.

Later in the session, the President of BAS presented a copy of the Academy's Year Book to Professor Shahjahan Khan along with some memorabilia.

The Bangladesh Academy of Sciences was established in 1973 with Dr Kudrat-e-Khuda as the Founding President and 13 Fellows to promote research in pure and applied sciences and enhance their practical applications to national welfare in Bangladesh. The Academy is the leading scientific organization of scientists of eminence in Bangladesh and represents the scientific community of the country. Currently there are 112 elected Fellows of the Academy.



Shahjahan Khan (at podium) was the keynote speaker

NISS Workshop: Analyzing Complex Survey Data with Missing Item Values

The National Institute of Statistical Sciences (NISS), a nonprofit organization that fosters high-impact cross-disciplinary and cross-sector research involving statistical sciences, held a workshop for its affiliates and others on October 17 at the Bureau of Labor Statistics Conference Center in Washington, DC. More than 70 people attended the workshop, titled “Analyzing Complex Survey Data with Missing Item Values.”

The workshop focused on the current state of research and applications for work with incomplete data and imputation for

complex designs, technology transfer, application context, and dominant features that affect feasibility and statistical properties. Later in the day, the group discussed prospective joint work they could conduct.

Speakers included John Eltinge, Bureau of Labor Statistics; Phil Kott, RTI International; Rod Little, University of Michigan; Shu Yang, Harvard School of Public Health; Joe Schafer, U.S. Census Bureau; Kirk White, U.S. Census Bureau; Martha Stinson, U.S. Census Bureau; Tim Keller, USDA National

Agricultural Research Service; Jerry Reiter, Duke University; Jae-kwang Kim, Iowa State University; and Paul Biemer, RTI International and The Odum Institute at The University of North Carolina. There also was a working session, “Challenging Problems with Incomplete Data and Imputation in Large-Scale Federal Surveys,” with Geoffrey Paulin of the U.S. Census Bureau.

Copies of all the presentations can be found at the NISS website: <https://www.niss.org/events/niss-workshop-analyzing-complex-survey-data-missing-item-values>

XL-Files: Pray with me, statistically



Xiao-Li Meng writes:

Perhaps because of my adventure a year ago officiating Yves and Victoria's happy wedding (see December 2013 XL-Files), I was invited back to the same church a year later to speak, for five minutes, at one of its Morning Prayers. Repeating my reaction to the Ig Nobel invitation (Oct/Nov 2013 XL-Files), I said yes without blinking and without knowing what's actually involved.

"Oh Lord, what does a statistician know about prayer?" Almost surely nothing, of course. But as a statistician, I need to practice what I preach (no pun intended): fully embracing the unknown, and uncertainty, as sources of excitement, not merely sources of income. Indeed and not surprisingly, uncertainty, and its identical twin, information, ultimately carried my morning prayer. In case you don't believe me, the audio record is at <https://soundcloud.com/harvard/xiao-li-meng-wednesday-october?in=harvard/sets/morning-prayers-memorial-church> (my part starts at position 7:15). The text is given below, for those who prefer reading, instead of listening to, preaching in Chinglish!

Let me begin by quoting Philip Yancey, from his book, *Prayer: Does It Make Any Difference?* "Prayer is not a means of removing the unknown and unpredictable elements in life, but rather a way of including the unknown and unpredictable in the outworking of the grace of God in our lives."

No one could remove the unknown and unpredictable. Almost all of us hate uncertainty and love information, at least most of the time. But fewer of us have realized that information and uncertainty are two sides of the same coin: that is, variation. A world without uncertainty by definition is a world without variation, where the concept of information, or knowing things, becomes meaningless. If I sent you today to Logan airport to pick up a new student, no matter how detailed the description of her I provide you, the information is completely useless if everyone at the airport has an identical appearance. Now imagine how boring (and scary) that scene is!

So as long as you appreciate information and predictability, you will also have to be excited by uncertainty and unpredictability, even if you are not a statistician. And I do mean *excited*, much as you were as a child, seeing a giant unopened gift box, or as a retiree, fighting that weighty unseen creature on an expensive fishing line. Yes, that giant gift box could turn out to be empty, or worse, full of trash (instead of cash). Yes, that heavy creature could be a shark amusing itself with the sea bass you waited hours for, and now you have to cut the line unless you want to cut short your life. But before that happens, you can still enjoy it—or rather, have faith—that the Unknown waiting for you is God's next gift, perhaps in disguise.

Yes, it's cruel when a giant gift box turns out to be a giant trash can. But could that just be God's way of giving you an early lesson about not being seduced by packaging without checking content? Yes, it's frustrating when hours of waiting and your best fishing line both become an animal's sport. But again perhaps it is God's way of reminding you that it's still not too late to set yourself free from that insatiable desire that has dragged you down all your life?

Of course, these may all just be rhetorical

questions to you. And they could well be, if you are among the *lucky* few who have drawn the right lottery numbers from God's hat. Or should I say the *unlucky* ones? Winning the lottery or being struck by lightning are both events with extremely small probabilities, events any statistically sound mind should not expect. Yet we label the former as being lucky, signifying our desire, and the latter as unlucky, expressing our fear. But these are just two sides, lucky and unlucky, of another coin: extremely rare events.

There is a yet another, and closely related, coin. You may have heard the saying that "There isn't enough room in your mind for both worry and faith. You must decide which one will live there." The very fact that you need to make a choice between the two suggests that they are two sides of the same coin – both are about anticipating events filled with uncertainty. The difference is merely another example of the link between unlucky and lucky: worry fears the worst outcome, and faith helps us to work towards the best.

Let me conclude by suggesting that you always carry with you the three statistical coins I gave you this morning. Any time you feel uncertain, unlucky, or worried, just flip one or two, or perhaps all three, of them. It can make you feel more informed and lucky, and most importantly, it might help you to strengthen your faith.

Amen.



Impact the world by being useful

Hadley Wickham writes:

The best way to impact the world as a data scientist or statistician is to be useful. This column gives my advice on being useful:

- Write code
- Work in the open
- Teach
- Tell the world

(There are lots of other ways to be useful, but this is my path.)

Write code

Every modern statistical and data analysis problem needs code to solve it. You shouldn't learn just the basics of programming, spend some time gaining mastery. Improving your programming skills pays off because code is a force multiplier: once you've solved a problem once, code allows you to solve it much faster in the future. As your programming skill increases, the generality of your solutions improves: you solve not just the precise problem you encountered, but a wider class of related problems (in this way programming

skill is very much like mathematical skill).

Finally, sharing your code with others allows them to benefit from your experience.

I'm partial towards R packages (<http://r-pkgs.had.co.nz>) as a way of writing and distributing code. R packages are great because they include not just R code, but also documentation, sample data, compiled C/C++ code, and tests. R packages are easily accessible by millions of R users because getting your code on to their computer is just a single function call (`devtools::install_github()` or `install.packages()`).

In the open

Writing code is much easier if you don't do it alone. Your goal should not be to strive in solitude for years before releasing the perfect package. Instead, work in the open, publishing not only the final product but every intermediate stage. If you work this way, you'll get feedback much earlier in the process, and your motivation will remain high because you know people care.

There are two keys to working in the open. First, release your code with an open source license (<http://opensource.org/licenses>). There are many licenses to pick from, but try not to get bogged down in the details. I recommend starting at <http://choosealicense.com> which summarizes the most important licenses. Second, learn to use Git (<http://git-scm.com>) and GitHub (<https://github.com>). Git is a vital tool for collaboration and GitHub gives your code a home on the web where others can easily view it, report bugs, and suggest improvements.

Teach people

Once you've got some code that does something useful, you need to show people how to use it. Start by describing it in text. If you're writing an R package, write a vignette



Hadley Wickham

(<http://r-pkgs.had.co.nz/vignettes.html>), a long form document that describes how to apply your package to solve real problems.

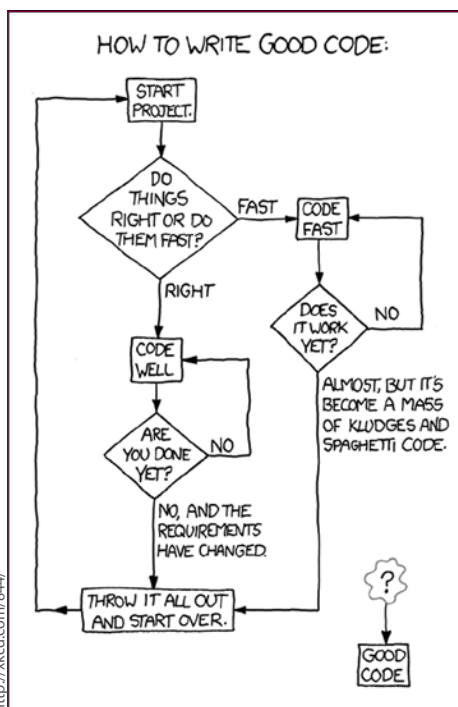
The key to effective teaching is put yourself in the mind of a novice. Always start with the motivation: why should someone care about your package? What awesome things does your package make easy? Show some examples of the cool stuff, and then dive into the details. I find that writing about my code improves its quality: it forces me recognize the rough edges, inconsistencies and missing special cases.

If you have the opportunity to teach in person, take it! When you teach in person, you can only cover a small fraction of the material that you've written about, but it is incredibly helpful because it gives immediate feedback on what's hard to understand and what is easy.

Tell the world

It doesn't matter how great your work is if no-one knows about it. If you want to have an impact on the world, you need to think about marketing. While many academics think marketing is a dirty word, it's not actually about tricking people into using your tools. Instead, it's about making other people's lives easier by letting them know about your awesome tools.

There's lots to say about marketing and I'm certainly no expert. But I think the most



important thing to remember is that it's not about you. It doesn't matter how many hours you've spent developing the software, or how many awards you've won, or how fantastically wonderful your code is. Instead, get out of the picture, and explain why using your code will make life easier. Kathy Sierra has a great blog post about this in the context of talks: *Presentation skills considered harmful* (<http://seriouspony.com/blog/2013/10/4/presentation-skills-considered-harmful>). (In fact, I'd strongly encourage you to read every article on her old (<http://headrush.typepad.com>) and new (<http://seriouspony.com/blog/>) blogs.)

Concretely, I think the best way to let people know about your work is to post updates on a blog and on Twitter.

Role models

There are many great role models who are applying these principles every day. Here are a handful who I'm particularly impressed by:

- The Simply Statistics group has a great blog and an active Twitter account,
- @simplystats. They have been teaching thousands of people about statistics and data science with their Coursera courses (<http://simplystatistics.org/courses/>). I also love Jeff Leek's open guides to sharing data, writing packages, reviewing papers and more (<https://github.com/jtleek>).
- ROpenSci (<http://ropensci.org/community/>) is a community of scientists who are developing R packages to make open science easier. To date, they have published over 30 packages to CRAN. They also organize 'hackathons' and tutorials to help scientists get better at programming and data analysis.
- Hilary Mason (<http://www.hilarymason.com>) and Alyssa Frazee (<http://alyssafrazee.com>) have great blogs. They don't post that frequently, but when they do you're guaranteed to get insightful code and analysis.
- Jenny Bryan (<http://www.stat.ubc.ca/~jenny/>) is active on Twitter and GitHub (<https://github.com/jennybc>)

and publishes all of her teaching materials (<http://www.stat.ubc.ca/~jenny/teach.html>) in the open. She's also (as far as I know) the world's only professional Ultimate (Frisbee) statistician!

If you want to have an impact on the world, start applying these principles today!

Agree? Disagree? Please let me know your thoughts at hadley@rstudio.com or @hadleywickham, or comment on the *Bulletin* website.



Got something to say?
Post a comment on the
Bulletin website at
<http://bulletin.imstat.org>



IMS Child Care Initiative: *apply by June 1*

The purpose of the IMS Child Care Initiative is to encourage and support the participation at IMS Annual Meetings of IMS members who have child care responsibilities. This year's meeting is at JSM in Seattle, WA, USA, August 8–13, 2015.

The IMS will reimburse members 80% of the costs of privately arranged child care* (for a dependent under the age of 13) at the IMS Annual Meeting, up to a maximum of US\$250 per family. Priority will be given to those presenting papers or posters at the meeting. Not more than 40 grants may be awarded. For details, see <http://imstat.org/meetings/childcare.htm>

A letter requesting funds must be submitted to IMS Executive Director, Elyse Gustafson, at the IMS office (see panel on page 2 for address) by June 1. The letter should include the following:

- The member's name and email address,
- Copy of registration, and copy of receipt for abstract submission (if applicable), and
- Projected amount of child care expenses for the time of the meeting.

After the meeting, please submit a complete receipt showing total amount of child care expenses, dates of care and names and birth dates of dependents, together with the claiming member's name and address.

* If, instead of hiring a child care provider, the member chooses to bring an unpaid family member or friend to the JSM to provide child care, the IMS can reimburse 80% of the cost of their travel, up to \$250.

IMS-ASC Sydney: A Personal View

Thilaksha Tharanganie, who is a PhD student in the Department of Econometrics and Business Statistics at Monash University, wrote to share her experiences from the Australian Statistical Conference in conjunction with the Institute of Mathematical Statistics Annual Meeting 2014.

In July 2014, I presented my PhD research work at the IMS–FPS Conference (Finance, Probability and Statistics conference, held 2–5 July, at the University of Technology, Sydney). This was an IMS co-sponsored satellite conference to the joint Australian Statistical Conference (ASC) in conjunction with the IMS Annual Meeting 2014, held 7–10 July at the Australian Technology Park, Sydney. I was fortunate enough to attend both conferences and I encountered invaluable experiences by attending the ASC–IMS 2014. There are no



Thilaksha Tharanganie photographed at ASC–IMS 2014

words to fully capture and articulate my gratitude to my supervisor, Professor Rob J Hyndman, for offering me funding.

Being an “apprentice researcher” who is aiming to become a fully independent researcher, my participation in conferences opens up doors to the wider world. The ASC–IMS 2014 brought together leading academic experts, practitioners

and junior researchers, with a great turnout from 35 countries.

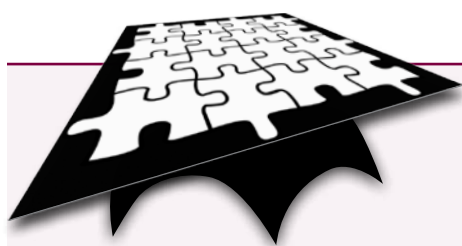
The keynote speakers and invited sessions from eminent scholars, for instance Professors Terry Speed, Peter Hall and Alastair Scott, highlighted many aspects in the field of Statistics. The conference was well organized with numerous parallel sessions concentrating on important contributions and identifying emerging directions where Statistics will play an essential role in the future. Listening to various presentations obviously enhanced my confidence in being able to present professionally and deal with questions from the audience comfortably.

The 77th IMS Annual Meeting was open to all delegates; a key session was the IMS Presidential Address by then-President Professor Bin Yu, and the IMS Awards Session. Congratulations to all award recipients and a humble thank you to IMS for supporting new researchers who otherwise would not be able to attend the ASC–IMS 2014.

Apart from this, the IMS Reception, the SSAI International Engagement Dinner and Young Statisticians Dinner held on the first two days of the conference, were delightful social events. These spectacular events helped me to share research and working experiences with academic and industry professionals. Vitally, the network built with young statisticians from different parts of the world will carry throughout my whole life.

My thanks go to the conference organizers, SSAI and IMS, for a fruitful and enjoyable event.

Overall, my full participation in the ASC–IMS 2014 meeting was indeed a memorable experience and a terrific learning experience.



Student Puzzle Corner 7

Student Puzzle number 7, on the subject of RMT, Random Matrix Theory, was set in the last issue. The deadline for student members to submit their answers is January 15, 2015. You can read the puzzle at <http://bulletin.imstat.org/2014/11/student-puzzle-corner-7-deadline-january-15/>

The Student Puzzle Corner contains one or two problems in statistics or probability. Sometimes, solving the problems may require a literature search. Current student IMS members are invited to submit solutions electronically (to bulletin@imstat.org with subject “Student Puzzle Corner”). The deadline is **January 15, 2015**. The names and affiliations of (up to) the first 10 student members to submit correct solutions, and the answer to the problem, will be published in the next issue of the Bulletin. The Editor’s decision is final.

OBITUARY: James B. MacQueen

1929–2014

IMS FELLOW JAMES B. MACQUEEN passed away on July 15, 2014, at the age of 85 after a long illness. He is survived by his wife, Ann, their three children, Donald, Kate and Mary, and five grandchildren.

Professor MacQueen lived his academic career on the faculty of UCLA's Graduate School of Management from 1962 until his death. He earned his bachelor's degree in psychology at Reed College, Oregon, in 1952 and his master's of science and PhD, both in psychology, from the University of Oregon in 1954 and 1958 respectively. Prior to joining the faculty at UCLA, Professor MacQueen had a distinguished career that included academic appointments at the University of Oregon and University of California, Berkeley, and at the Western Management Science Institute at UCLA with Professor Jacob Marshak.

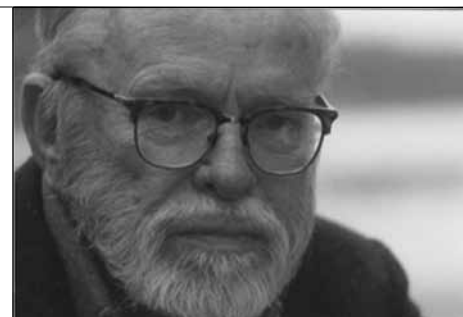
Jim's research interests lay in providing mathematical formulations of human processes. In his first important paper¹, written in 1960 with Rupert Miller, he investigated a large class of optimal stopping problems. This paper contains, as a special case, the first mention of the house-hunting problem. In Economics, this is called the job search problem or the problem of selling an asset and has spawned a large area of research.

Another field in which Jim was a pioneer is in the development of what he called k -means². This a method of detecting clusters in multivariate data by partitioning the

sample space into k sets with small within-class variance. The value of k may also be chosen by the data.

Another interesting invention of his is what Jim called a "linear martingale"³ and what friends and colleagues call a "Macingale". This is a sequence of random variables for which the expectation of the next observation given the past observations is a fixed linear combination of the recent past. The main result is a remarkable generalization of Doob's martingale convergence theorem.

In the area of Markov Processes, Jim had a special love of modelling Markov chains. In describing such chains, one may give the transition probabilities or one may give a balanced set of weights on the arcs. The advantage of using balanced weights is that the stationary distribution (as well as the transition probabilities) may easily be deduced. The trick is to set up the weights in a balanced, meaningful way. In the paper "Circuit Processes"⁴ Jim does this by assigning weights to a set of circuits on the states of the chain. These ideas are expanded



Jim MacQueen

in a beautiful way in his paper, "Markov Sculpture"⁵.

Jim had an outgoing personality, easily made friends, and was always cheerful and humorous. He was without ego, and always willing to give credit to others. He excelled in giving fresh ideas, sometimes rather outrageous for shock value, for problems that needed to be solved. He loved the out of doors and hiking in the Bighorn Mountains of Wyoming.

He was an avid player of Kriegspiel in Los Angeles, at Berkeley and at scholarly meetings. In Kriegspiel he was known to be daring and willing to try out new strategies. Lloyd Shapley once said that he always learned something from playing Jim. His bright and engaging personality will be missed by all who knew him.

*Professor Thomas S. Ferguson
Departments of Mathematics and of Statistics,
University of California at Los Angeles*

References:

- [1] "Optimal Persistence Policies" (with Rupert G. Miller), *Operations Research*, 8, 362–380, 1960.
- [2] "Some Methods for Classification and Analysis of Multivariate Observations", *Proceedings of the Fifth Berkeley Symposium on Mathematical Statistics and Probability*, 1, 281–297, 1967.
- [3] "A Linear Extension of the Martingale Convergence Theorem", *Annals of Probability*, 1, 263–271, 1973.
- [4] "Circuit Processes", *Annals of Probability*, 9, 604–610, 1981.
- [5] "Markov Sculpture" in *Statistics, Probability and Game Theory, Papers in Honor of David Blackwell*, Institute of Mathematical Statistics Lecture Notes – Monograph Series, 30, 1996.

If you hear of the passing of an IMS member, please let us know so we can organize an obituary.
Email bulletin@imstat.org



Recent papers: *Electronic Journal of Probability*

Volume 19 (papers 21*–109)

The Electronic Journal of Probability publishes full-length research articles in probability theory. Access papers at <http://ejp.ejpecp.org/>

* Papers 1–20 of volume 19 were listed in the January/February 2014 issue.

21. Asymptotics for the number of blocks in a conditional Ewens–Pitman sampling model STEFANO FAVARO, SHUI FENG
22. The limiting process of N -particle branching random walk with polynomial tails JEAN BÉRARD, PASCAL MAILLARD
23. Invariant measure of the stochastic Allen–Cahn equation: the regime of small noise and large system size FELIX OTTO, HENDRIK WEBER, MARIA G. WESTDICKENBERG
24. On the non-Gaussian fluctuations of the giant cluster for percolation on random recursive trees JEAN BERTOIN
25. Excursions of excited random walks on integers ELENA KOSYGINA, MARTIN P. W. ZERNER
26. The shape of large balls in highly supercritical percolation ANNE-LAURE BASDEVANT, NATHANAËL ENRIQUEZ, LUCAS GERIN, JEAN-BAPTISTE GOUÉRÉ
27. Subadditivity of matrix ϕ -entropy and concentration of random matrices JOEL A. TROPP, RICHARD YUHUA CHEN
28. The contact process with fast voting RICK DURRETT, THOMAS LIGGETT, YUAN ZHANG
29. The small noise limit of order-based diffusion processes BENJAMIN JOURDAIN, JULIEN REYGNER
30. The hitting time of zero for a stable process ALEXEY KUZNETSOV, ANDREAS E. KYPRIANOU, JUAN CARLOS PARDO, ALEXANDER R. WATSON
31. Recurrence of bipartite planar maps JAKOB ERIK BJÖRNBERG, SIGURDUR ÖRN STEFÁNSSON
32. A stochastic differential equation with a sticky point RICHARD BASS
33. Isotropic local laws for sample covariance and generalized Wigner matrices BLOEMENDAL ALEX, LÁSZLÓ ERDŐS, ANTTI KNOWLES, HORNG-TZER YAU, JUN YIN
34. Convergence of the eigenvalue density for Laguerre beta ensembles on short scales PHILIPPE SOSOE, PERCY WONG
35. Continuum percolation for quermass model DAVID COUPIER, DAVID DEREUDRE
36. Müntz linear transforms of Brownian motion LARBI ALILI, CHING-TANG WU
37. On the expectation of normalized Brownian functionals up to first hitting times ROMUALD ELIE, MATHIEU ROSENBAUM, MARC YOR
38. Variance–Gamma approximation via Stein’s method ROBERT EDWARD GAUNT
39. Thermodynamic formalism and large deviations for multiplication-invariant potentials on lattice spin systems JEAN-RENÉ CHAZOTTES, FRANK REDIG
40. Infinite dimensional forward-backward stochastic differential equations and the KPZ equation SERGIO ALMADA MONTER, AMARJIT BUDHIRAJA
41. Branching random walks and contact processes on Galton–Watson trees WEI SU
42. Spread of visited sites of a random walk along the generations of a branching process PIERRE ANDREOLETTI, PIERRE DEBS
43. Low rank perturbations of large elliptic random matrices SEAN O’ROURKE, DAVID RENFREW
44. Maximum principle for quasilinear stochastic PDEs with obstacle LAURENT DENIS, ANIS MATOUSSI, JING ZHANG
45. Volumetric properties of the convex hull of an n -dimensional Brownian motion RONEN ELDAN
46. A variance inequality for Glauber dynamics applicable to high and low temperature regimes FLORIAN VÖLLERING
47. Geometry and percolation on half planar triangulations GOURAB RAY
48. 1–2 model, dimers and clusters ZHONGYANG LI
49. Non-trivial linear bounds for a random walk driven by a simple symmetric exclusion process RENATO SOARES DOS SANTOS
50. Constructive quadratic functional quantization and critical dimension HARALD LUSCHGY, GILLES PAGÈS
51. Invariant manifolds with boundary for jump-diffusions DAMIR FILIPOVIĆ, STEFAN TAPPE, JOSEF TEICHMANN
52. Random walk with long-range constraints YINON SPINKA, RON PELED
53. Subcritical contact processes seen from a typical infected site ANJA STURM, JAN M. SWART
54. Central limit theorem for eigenvectors of heavy tailed matrices FLORENT BENAYCH-GEORGES, ALICE GUIONNET
55. From flows of Λ -Fleming–Viot processes to lookdown processes via flows of partitions CYRIL LABBÉ
56. Local limits of conditioned Galton–Watson trees: the condensation case ROMAIN ABRAHAM, JEAN-FRANÇOIS DELMAS
57. Vulnerability of robust preferential attachment networks MAREN ECKHOFF, PETER MÖRTERS
58. Complete localisation and exponential shape of the parabolic Anderson model with Weibull potential field ARTIOM FIODOROV, STEPHEN MUIRHEAD
59. Sensitivity analysis for stochastic chemical reaction networks with multiple time-scales ANKIT GUPTA, MUSTAFA KHAMMASH
60. Markovian loop soups: permanent processes and isomorphism theorems PATRICK J. FITZSIMMONS, JAY S. ROSEN
61. Multidimensional fractional advection–dispersion equations and related stochastic processes MIRKO D’OVIDIO, ROBERTO GARRA
62. A population model with non-neutral mutations using branching processes with immigration HONGWEI BI, JEAN-FRANCOIS DELMAS

63. On the exit time from a cone for Brownian motion with drift	RODOLPHE GARBIT, KILIAN RASCHEL
64. The evolving beta coalescent	GÖTZ KERSTING, JASON SCHWEINSBERG, ANTON WAKOLBINGER
65. Ergodic properties for α -CIR models and a class of generalized Fleming–Viot processes	KENJI HANDA
66. Portmanteau inequalities on the Poisson space: mixed regimes and multidimensional clustering	SOLESNE BOURGUIN, GIOVANNI PECCATI
67. On the replica symmetric solution of the K-sat model	DMITRY PANCHENKO
68. The convex distance inequality for dependent random variables, with applications to the stochastic travelling salesman and other problems	DANIEL PAULIN
69. First critical probability for a problem on random orientations in $G(n, p)$	SVEN ERICK ALM, SVANTE JANSON, SVANTE LINUSSON
70. Regenerative tree growth: structural results and convergence	JIM PITMAN, DOUGLAS RIZZOLO, MATTHIAS WINKEL
71. The Gaussian free field in interlacing particle systems	JEFFREY KUAN
72. Malliavin matrix of degenerate SDE and gradient estimate	ZHAO DONG, XUHUI PENG
73. The scaling limit of uniform random plane maps, via the Ambjørn–Budd bijection	JÉRÉMIE L. BETTINELLI, EMMANUEL JACOB, GRÉGORIE MIERMONT
74. Evolutionary games on the lattice: best-response dynamics	STEPHEN EVILSIZOR, NICOLAS LANCHIER
75. Quadratic variations for the fractional-colored stochastic heat equation	SOLEDAD TORRES, CIPRIAN A. TUDOR, FREDERICK G. VIENS
76. Hölder continuity property of the densities of SDEs with singular drift coefficients.	MASAFUMI HAYASHI, ARTURO HIGA KOHATSU, GO YUKI
77. A Brascamp–Lieb type covariance estimate	GEORG MENZ
78. Percolation on uniform infinite planar maps	LAURENT MÉNARD, PIERRE NOLIN
79. Height representation of XOR-Ising loops via bipartite dimers	CÉDRIC BOUTILLIER, BÉATRICE DE TILIÈRE
80. Free infinite divisibility for beta distributions and related ones	TAKAHIRO HASEBE
81. Random partitions in statistical mechanics	NICHOLAS M. ERCOLANI, SABINE JANSEN, DANIEL UELTSCHI
82. Rank deficiency in sparse random GF[2] matrices	RICHARD W. R. DARLING, MATHEW D. PENROSE, ANDREW R. WADE, SANDY L. ZABELL
83. Sum of arbitrarily dependent random variables	RUODU WANG
84. Small deviations for time-changed Brownian motions and applications to second-order chaos	DANIEL DOBBS, TAI MELCHER
85. A Gaussian process approximation for two-color randomly reinforced urns	LIXIN ZHANG
86. A sequential empirical CLT for multiple mixing processes with application to β -geometrically ergodic Markov chains	HEROLD DEHLING, OLIVIER DURIEU, MARCO TUSCHE
87. Local probabilities for random walks with negative drift conditioned to stay nonnegative	DENIS DENISOV, VLADIMIR VATUTIN, VITALI WACHTEL
88. Fluctuation exponents for directed polymers in the intermediate disorder regime	GREGORIO R. MORENO FLORES, TIMO SEPPÄLÄINEN, BENEDEK VALKÓ
89. Tightness of the recentered maximum of log-correlated Gaussian fields	JAVIER ACOSTA
90. Strong completeness for a class of stochastic differential equations with irregular coefficients	XIN CHEN, XUE-MEI LI
91. $W_{1,+}$ -interpolation of probability measures on graphs	ERWAN HILLION
92. Moment bounds and concentration inequalities for slowly mixing dynamical systems	SÉBASTIEN GOUËZEL, IAN MELBOURNE
93. A lognormal central limit theorem for particle approximations of normalizing constants	JEAN BÉRARD, PIERRE DEL MORAL, ARNAUD DOUCET
94. Martingale inequalities and deterministic counterparts	MATHIAS BEIGLBÖCK, MARCEL NUTZ
95. On the heat kernel and the Dirichlet form of Liouville Brownian motion	RÉMI RHODES, CHRISTOPHE GARBAN, VINCENT VARGAS
96. A compact containment result for nonlinear historical superprocess approximations for population models with trait-dependence	SANDRA KLIEM
97. The harmonic measure of balls in critical Galton–Watson trees with infinite variance offspring distribution	SHEN LIN
98. An Itô type formula for the fractional Brownian motion in Brownian time	IVAN NOURDIN, RAGHID ZEINEDDINE
99. Euclidean partitions optimizing noise stability	STEVEN HEILMAN
100. Causal interpretation of stochastic differential equations	NIELS RICHARD HANSEN, ALEXANDER SOKOL
101. Fine regularity of Lévy processes and linear (multi)fractional stable motion	PAUL BALANÇA
102. New Berry–Esseen bounds for non-linear functionals of Poisson random measures	PETER EICHELSBACHER, CHRISTOPH THÄLE
103. Joint CLT for several random sesquilinear forms with applications to large-dimensional spiked population models	WANG QINWEN, SU ZHONGGEN, YAO JIANFENG
104. Convergence in L_p and its exponential rate for a branching process in a random environment	CHUNMAO HUANG, QUANSHENG LIU
105. Discrepancy estimates for variance bounding Markov chain quasi-Monte Carlo	JOSEF DICK, DANIEL RUDOLF
106. Walking within growing domains: recurrence versus transience	AMIR DEMBO, RUOJUN HUANG, VLADAS SIDORAVICIUS
107. The approach of Otto–Reznikoff revisited	GEORG MENZ
108. Random stable looptrees	NICOLAS CURIEN, IGOR KORTCHEMSKI
109. Subdiffusive concentration in first passage percolation	MICHAEL DAMRON, JACK HANSON, PHILIPPE SOSOE

Recent: *Electronic Communications in Probability*

Volume 19 (papers 8*–83)

The *Electronic Communications in Probability (ECP)* publishes short research articles in probability theory.

Access papers at <http://ecp.ejpecp.org/> * Papers 1–7 of volume 19 were listed in the January/February 2014 issue.

8. On runs, bivariate Poisson mixtures and distributions that arise in Bernoulli arrays ÉRIC MARCHAND, DJILALI AIT Aoudia, FRANÇOIS PERRON, LATIFA BEN HADJ SLIMENE
9. Long-range order in a hard disk model in statistical mechanics ALEXISZ TAMÁS GAÁL
10. Logarithmic Sobolev and Poincaré inequalities for the circular Cauchy distribution YUTAO MA, ZHENGLIANG ZHANG
11. On the risk-sensitive cost for a Markovian multiclass queue with priority RAMI ATAR, ANINDYA GOSWAMI, ADAM SHWARTZ
12. Large deviation principles for words drawn from correlated letter sequences FRANK DEN HOLLANDER, JULIEN POISAT
13. Geometric stable processes and related fractional differential equations LUISA BEGHIN
14. Recurrence for vertex-reinforced random walks on \mathbb{Z} with weak reinforcements. ARVIND SINGH
15. Erratum: The impact of selection in the Λ Wright-Fisher Model CLÉMENT FOUCART
16. Coupling for drifted Brownian motion on an interval with redistribution from the boundary IDDO BEN-ARI
17. Mixing of the noisy voter model HARISHCHANDRA RAMADAS
18. Law of large numbers for critical first-passage percolation on the triangular lattice CHANG-LONG YAO
19. Hedging of game options under model uncertainty in discrete time YAN DOLINSKY
20. Erratum: A note on Kesten's Choquet-Deny lemma SEBASTIAN MENTEMEIER
21. The travel time in a finite box in supercritical Bernoulli percolation RAPHAËL CERF
22. On a dyadic approximation of predictable processes of finite variation PIETRO SIORPAES
23. Uniqueness of the infinite homogeneous cluster in the 1-2 model ZHONGYANG LI
24. Localization for controlled random walks and martingales ORI GUREL-GUREVICH, YUVAL PERES, OFER ZEITOUNI
25. Maximal weak-type inequality for stochastic integrals ADAM OSEKOWSKI
26. Convergence of the fourth moment and infinite divisibility: quantitative estimates. OCTAVIO ARIZMENDI, ARTURO JARAMILLO
27. Reconstructing the environment seen by a RWRE NINA GANTERT, JAN NAGEL
28. A strong law of large numbers for branching processes: almost sure spine events SIMON C HARRIS, MATTHEW I ROBERTS
29. Stochastic Volterra equations under perturbations ANNA KARCZEWSKA, CARLOS LIZAMA
30. When are increment-stationary random point sets stationary? ANTOINE GLORIA
31. Exponential ergodicity of killed Lévy processes in a finite interval MARTIN KOLB, MLADEN SVETOSLAVOV SAVOV
32. Large deviation bounds for the volume of the largest cluster in 2D critical percolation DEMETER KISS
33. Local semicircle law with imprimitive variance matrix OSKARI HEIKKI AJANKI, LÁSZLO ERDŐS, TORBEN KRÜGER
34. From minimal embeddings to minimal diffusions ALEXANDER MATTHEW GORDON COX, MARTIN KLIMMEK
35. Fractional smoothness of functionals of diffusion processes under a change of measure STEFAN GEISS, EMMANUEL GOBET
36. Optimization of joint p -variations of Brownian semimartingales EMMANUEL GOBET, NICOLAS LANDON
37. Large deviations for excursions of non-homogeneous Markov processes ANATOLI MOGULSKII, EUGENE PECHERSKY, ANATOLI YAMBARTSEV
38. Continuous-Time Portfolio Optimisation for a Behavioural Investor with Bounded Utility on Gains MIKLÓS RÁSONYI, ANDREA SOFIA MEIRELES RODRIGUES
39. Scale-free and power law distributions via fixed points and convergence of (thinning and conditioning) transformations RICHARD ARRATIA, THOMAS M. LIGGETT, MALCOLM J. WILLIAMSON
40. Bernoulli and self-destructive percolation on non-amenable graphs DANIEL AHLBERG, VLADAS SIDORAVICIUS, JOHAN TYKESSON
41. Large deviations for weighted sums of stretched exponential random variables NINA GANTERT, KAVITA RAMANAN, FRANZ REMBART
42. Lower bounds for bootstrap percolation on Galton-Watson trees KAREN GUNDERSON, MICHAL PRZYKUCKI
43. Uniqueness of degenerate Fokker-Planck equations with weakly differentiable drift whose gradient is given by a singular integral DEJUN LUO
44. The power of choice combined with preferential attachment YURY MALYSHKIN, ELLIOT PAQUETTE
45. On differentiability of stochastic flow for a multidimensional SDE with discontinuous drift OLGA ARYASOVA, ANDREY PILIPENKO
46. Mixing under monotone censoring JIAN DING, ELCHANAN MOSSEL
47. A spectral decomposition for the block counting process of the Bolthausen-Sznitman coalescent MARTIN MÖHLE, HELMUT PITTERS
48. Optimizing a variable-rate diffusion to hit an infinitesimal target at a set time JEREMY THANE CLARK
49. Ergodicity of the Airy line ensemble IVAN CORWIN, XIN SUN

50. A short proof of a symmetry identity for the q -Hahn distribution	GUILLAUME BARRAQUAND
51. The probability that planar loop-erased random walk uses a given edge	GREGORY LAWLER
52. Disjoint crossings, positive speed and deviation estimates for first passage percolation	GHURUMURUHAN GANESAN
53. On criteria of disconnectedness of Λ -Fleming-Viot support	XIAOWEN ZHOU
54. Growing random 3-connected maps or Comment s'enfuir de l'Hexagone	LOUIGI ADDARIO-BERRY
55. A maximal inequality for supermartingales	BRUCE HAJEK
56. On free stable distributions	TAKAHIRO HASEBE, ALEXEY KUZNETSOV
57. L_1 -distance for additive processes with time-homogeneous Lévy measures	PIERRE ETORÉ, ESTER MARIUCCI
58. Weak and strong solutions of general stochastic models	THOMAS G. KURTZ
59. Concentration of random polytopes around the expected convex hull	DANIEL J. FRESEN, RICHARD A. VITALE
60. On functional weak convergence for partial sum processes	DANIJEL KRIZMANIC
61. A connection of the Brascamp-Lieb inequality with Skorokhod embedding	YUU HARIYA
62. A counter example to central limit theorem in Hilbert spaces under a strong mixing condition	DAVIDE GIRAUDO, DALIBOR VOLNY
63. Concentration inequalities for Gibbs sampling under $d_{1/2}$ -metric	NENG-YI WANG
64. Last zero time or maximum time of the winding number of Brownian motions	IZUMI OKADA
65. A property of Petrov's diffusion	STEWART N. ETHIER
66. A note on general sliding window processes	NOGA ALON, OHAD NOY FELDHEIM
67. A generalized Pólya's urn with graph based interactions: convergence at linearity	JUN CHEN, CYRILLE LUCAS
68. A characterization of the Poisson process revisited	BENJAMIN NEHRING
69. A renewal version of the Sanov theorem	MAURO MARIANI, LORENZO ZAMBOTTI
70. Conditional persistence of Gaussian random walks	FUCHANG GAO, ZHENXIA LIU, XIANGFENG YANG
71. Erratum: Transience and recurrence of rotor-router walks on directed covers of graphs	ECATERINA SAVA-HUSS, WILFRIED HUSS
72. A multidimensional version of noise stability	JOE NEEMAN
73. Stochastic Perron's method for optimal control problems with state constraints	DMITRY B. ROKHLIN
74. Weak convergence of the number of zero increments in the random walk with barrier	ALEXANDER MARYNYCH, GLIB VEROVKIN
75. A note on the times of first passage for 'nearly right-continuous' random walks	MATIJA VIDMAR
76. Monotone interaction of walk and graph: recurrence versus transience	AMIR DEMBO, RUOJUN HUANG, VLADAS SIDORAVICIUS
77. Some limit results for Markov chains indexed by trees	PETER CZUPPON, PETER PFAFFELHUBER
78. Wald for non-stopping times: the rewards of impatient prophets	ALEXANDER E HOLROYD, YUVAL PERES, JEFFREY E STEIF
79. Recurrence for the frog model with drift on \mathbb{Z}^d	CHRISTIAN DÖBLER, LORENZ PFEIFROTH
80. On harmonic functions of killed random walks in convex cones	JETLIR DURAJ
81. A note on the strong formulation of stochastic control problems with model uncertainty	MIHAI SIRBU
82. Large gaps asymptotics for the 1-dimensional random Schrödinger operator	STEPHANIE S.M. JACQUOT
83. Lower bounds on the smallest eigenvalue of a sample covariance matrix.	PAVEL YASKOV

IMS Invited Sessions at JSM 2015

JSM 2015 will take place in Seattle, Washington, from August 8–13, 2015. IMS Invited Program Chairs Igor Pruenster (University of Torino, Italy) and Antonio Lijoi (University of Pavia, Italy) have been hard at work organizing 30 sessions. Here's an overview.

IMS Special Invited Lectures (9)

The **Wald Lectures** by Susan A. Murphy (Michigan, USA) are titled: 1. *Sequential decision making & personalized treatment: the future is now!* 2. *Off-line data analysis methods and learning algorithms for constructing mobile treatment policies*, and 3. *Continual, on-line learning in sequential decision making*. The **Le Cam Lecture** by Jon Wellner (Washington, USA) is *Maximum likelihood in modern times: the ugly, the bad, and the good*. There are four **Medallion Lectures**: **Jiashun Jin** (Carnegie Mellon U, USA), *New approaches to spectral clustering, with applications to gene microarrays and social network community detection*; **Michael Kosorok** (UNC Chapel Hill, USA), *Recent developments in machine learning for personalized medicine*; **John Lafferty** (Chicago, USA), *Computational tradeoffs in statistical estimation*; and **Nicolai Meinshausen** (ETH Zürich, Switzerland), *Causal discovery with confidence using invariance principles*. And the **IMS Presidential Address** by **Erwin Bolthausen** on *Some thoughts about the relationship between statistics and probability theory*.

IMS invited sessions (21)

Annals of Statistics Special Invited Session: Recent advances on estimation of high-dimensional matrices. [Organizers: Peter Hall and Runze Li] Speakers: Tony Cai (Pennsylvania); Sourav Chatterjee (Stanford); Iain Johnstone (Stanford); Cun-Hui Zhang (Rutgers)

Functional data analysis I. [John Aston] Speakers: Alexander Aue (UC Davis); Jeng-Min Chiou (Academia Sinica, Taiwan); Victor Panaretos (EPF Lausanne, Switzerland)

Heavy tails with applications to networks. [Richard A. Davis] Speakers: Shankar Bhamidi (UNC Chapel Hill); Sidney Resnick (Cornell); Gennady Samorodnitsky (Cornell)

Advances in Bayesian modeling. [Ed George] Speakers: James Berger (Duke); Carlos Carvalho (UT Austin); Robert McCulloch (Chicago); Veronika Rockova (Pennsylvania)

Coverage of nonparametric credible sets. [Subhashis Ghosal] Speakers: Judith Rousseau (Paris Dauphine); Catia Scricciolo (Bocconi); Aad van der Vaart (Leiden); Subhashis Ghosal (NCSU)

Recent advances in quantile regression. [Xuming He] Speakers: Roger Koenker (Illinois Champaign); Ruosha Li (Pittsburgh); Davy Paindaveine (Libre Bruxelles, Belgium)

Bayesian approaches for complex health data. [Amy H. Herring] Speakers: Daniele Durante (Padova, Italy); Alejandro Jara (Pontificia Catolica, Chile); Tsuyoshi Kuniyama (Duke); Anne Presanis

(Medical Research Council, Cambridge)

Statistical methods for big genomic data analysis. [Haiyan Huang] Speakers: Sunduz Keles (Wisconsin Madison); Zhijin Jean Wu (Brown); Haiyan Huang (Berkeley); Terry Speed (Berkeley)

Bayesian nonparametric models for Bioinformatics and beyond [Wes Johnson] Speakers: Peter Mueller (UT Austin); Babak Shababha (Irvine); Marina Vannucci (Rice); Steve MacEachern (Ohio State)

Statistics for high-frequency data. [Per Mykland] Speakers: Jean Jacod (Paris 6); Neil Shephard (Harvard); Per Mykland (Chicago)

High-dimensional statistics and computational methods. [Sahand Negahban] Speakers: Alekh Agarwal (Microsoft Research); Sewoong Oh (Illinois Urbana Champaign); Pradeep Ravikumar (UT Austin); Yin Xia (UNC Chapel Hill)

Innovation in survey statistics and applications. [Jean Opsomer] Speakers: Emily Berg (Iowa State); Jay Breidt (Colorado State); David Haziza (Montreal); Lynne Stokes (Southern Methodist)

Functional data analysis II. [Victor Panaretos] Speakers: John Aston (Cambridge); Aurore Delaigle (Melbourne); Giles Hooker (Cornell); Hans-Georg Müller (UC Davis)

Bayesian Computation II. [Omiros Papaspiliopoulos] Speakers: Mark Girolami (Warwick); Pierre Jacob (Harvard); Jonathan Weare (Chicago); Dawn Woodard (Cornell)

Causal Modeling. [Thomas Richardson] Speakers: Marloes Maathuis (ETH Zürich); Ilya Shpitser (Southampton); Eric Tchetgen Tchetgen (Harvard); Peter Aronow (Yale) – Discussant

Bayesian Computation I. [Christian Robert] Speakers: Ryan Adams (Harvard); Michael Betancourt (Warwick); Douglas VanDerwerken (Duke); Christian Robert (Paris Dauphine)

Recent developments on machine learning and data mining. [Xiaotong Shen] Speakers: Annie Qu (Illinois Urbana Champaign); Marten Wegkamp (Cornell); Bin Yu (UC Berkeley); Yunzhang Zhu (Ohio State)

Tradeoffs in resource-constrained statistical learning. [Aarti Singh] Speakers: John Duchi (Stanford); Philippe Rigollet (Princeton); Aarti Singh (Carnegie Mellon); Alekh Agarwal (Microsoft Research) – Discussant

Statistical inference for SDEs. [Michael Sorensen] Speakers: Adeline Leclercq Samson (Grenoble); Lan Zhang (Illinois Chicago); Omiros Papaspiliopoulos (Pompeu Fabra); Michael Sorensen (Copenhagen)

Post-selection inference. [Jonathan Taylor] Speakers: Adel Javanmard (Southern California); Tracy Ke (Chicago); Joshua Loftus (Stanford); Kai Zhang (UNC Chapel Hill)

Inference under shape constraints. [Ingrid Van Keilegom] Speakers: Lutz Duembgen (Bern); Mary Meyer (Colorado State); Richard Samworth (Cambridge); Bodhisattva Shen (Columbia)

Terence's Stuff: GLMs and GLIM

Terry Speed recalls the devising of generalized linear models (GLMs) and pays tribute to their inventors, John Nelder and Robert Wedderburn.



Sometimes I wonder whether I have learned anything since I was a student. I usually conclude “a few things.” Recently, thinking about RNA-seq data sets involving >20,000 counts, I remembered the arrival of generalized linear models (GLMs) and generalized linear interactive modelling (GLIM), and how dramatically they changed my professional life.

As a student I had learned that when analysing “non-normal” quantities such as binary data, counts or proportions, there were a couple of options: transform and use a standard linear model, or follow Fisher (or Berkson) and do a probit (logit) analysis. Elsewhere in my course I learned about exponential families, but that was theoretical, not applied statistics. We all knew that the binomial, Poisson and normal distributions formed exponential families, and had sufficient statistics, but this wasn't seen as having any implications for the analysis of “real” data. Nelder and Wedderburn's 1972 *JRSSA* paper introducing GLMs changed all this for me, and I think for many others. It was a synthesis, uniting several existing models and methods under a novel framework, and suggesting new ones. At that time, the toolbox of the applied statistician seemed to be an ad hoc collection of disconnected tricks that worked with data, and this was immediately appealing as something new, useful and intellectually satisfying. Also novel was the role of the iteratively reweighted least squares algorithm for fitting GLMs. I had learned the usual variants on Newton's method, and Fisher scoring for maximizing likelihoods, but had never before viewed

an algorithm as a central part of statistical thinking. In his 2003 *Statistical Science* interview with Stephen Senn, Nelder suggested that the original idea for GLMs came from his knowledge of “a set of models which had a single algorithm for their fitting,” and that “Wedderburn's knowledge about the exponential families” then came in to complete the synthesis. Here was one of Britain's leading statisticians admitting that he was not familiar with the basics of exponential families. But perhaps even worse, “a rather eminent statistical journal to which [the paper] was submitted first, turned it down flat without any opportunity to resubmit.” Nothing really new, not enough theorems, no asymptotics. This would not happen these days, would it? (Just joking.)

In the period immediately following the publication of the 1972 paper, there were a number of extensions of GLMs, including ones with constraints, and the very valuable notion of quasi-likelihood, both due to Wedderburn. This was just the beginning of what one might term the GLM industry: efforts to exploit the synthesis, to cover more and more of the routine tasks we need to carry out. At that time I was working in Perth, Australia, where our (mathematics) department had ample funds for visitors, and I formed the idea of inviting Robert Wedderburn to visit Perth to tell us about GLMs. Upon inquiring I was surprised and deeply saddened to learn that not long before he had died of anaphylactic shock from an insect bite while on a holiday.

Two years after the paper was published, the GLIM software was released, a product of the Royal Statistical Society's Working Party on Statistical Computing that was initially chaired by Nelder. I don't remember exactly when we got our hands on it in Perth, but it was relatively early on, due to the close relationship between statisticians in the CSIRO and those at Rothamsted. This was

revolutionary for me. I'd made very limited use of statistical computing until then. I found the business of submitting blocks of punched cards to the computer centre tedious, as I was never careful enough to get it right first time. With GLIM, I could pretend that I was a computer whiz, and I did. The original GLM paper had a section entitled THE MODELS IN THE TEACHING OF STATISTICS, and I agreed wholeheartedly with what the authors said there. GLIM gave us the ability to put those fine sentiments into practice. For a short time I embraced GLMs and GLIM with all the zeal of new convert. I even gave a couple of short courses about them. I particularly liked the fact that the theory of GLMs could be summarized on a single page. Equipped with this single page and a version of GLIM installed on their computer, people with theoretical backgrounds in statistics could experience the joys of applying statistics in a one-day course, starting from scratch. I saw several do so.

GLMs now have a firm place in the statistical canon. The shift from microarray to sequence data for gene expression occurred about six years ago, and statistically, this involved a shift from normal linear models to generalized linear models. We are deeply indebted to Nelder and Wedderburn's insights and industry for providing the tools we need to analyse these important data.

Robert Wedderburn, pictured at Cambridge Statistical Laboratory in 1969. Wedderburn's life was tragically cut short when he died of a bee sting, aged 28



Photo courtesy of Cambridge Statistical Laboratory, with thanks to Julia Blackwell

IMS meetings around the world

IMS sponsored meeting

2015 ENAR/IMS Spring Meeting

March 15–18, 2015

Hyatt Regency, Miami, Florida, USA

[w](http://www.enar.org/meetings/spring2015/index.cfm) <http://www.enar.org/meetings/spring2015/index.cfm>

ENAR program chair: Mithat Gönen, Memorial Sloan Kettering Cancer Center. ENAR associate program chair: Brisa Sánchez, University of Michigan. IMS program chair: Lurdes Y. T. Inoue, University of Washington.

The 2015 ENAR Spring Meeting will be held at the Hyatt Regency Miami, in Miami, FL, from March 15–18. The meeting brings together researchers and practitioners from academia, industry and government, connected through a common interest in Biometry. There are two workshops immediately before the meeting: for junior biostatistics researchers (<http://www.enar.org/meetings/JuniorResearch/index.cfm>) and “Fostering Diversity in Biostatistics” workshop (<http://www.enar.org/meetings/diversity/index.cfm>)

Tilmann Gneiting will present the IMS Medallion Lecture “Uncertainty Quantification in Complex Simulation Models Using Ensemble Copula Coupling”. The ENAR President’s Invited Address will be given by David L. DeMets on “Big Data, Big Opportunities, Big Challenges.”

The online abstract submission deadline has passed; February 16, 2015 is the deadline for room reservations at Hyatt Regency Miami.

See website for additional hotel and travel information.



ENAR: 2016–2018

IMS sponsored meeting

2016 ENAR/IMS Spring Meeting

March 6–9, 2016, Austin, Texas

[w](http://www.enar.org/meetings.cfm) <http://www.enar.org/meetings.cfm>

IMS sponsored meeting

2017 ENAR/IMS Spring Meeting

March 12–15, 2017, Washington DC

[w](http://www.enar.org/meetings.cfm) <http://www.enar.org/meetings.cfm>

IMS sponsored meeting

2018 ENAR/IMS Spring Meeting

March 25–28, 2018, Atlanta, GA

[w](http://www.enar.org/meetings.cfm) <http://www.enar.org/meetings.cfm>

IMS co-sponsored meeting

Fifth International Workshop in Sequential Methodologies (IWSM)

June 22–24, 2015

Columbia University, New York, NY

[w](#) TBC

At a glance:

forthcoming
IMS Annual
Meeting and
JSM dates

2015

IMS Annual Meeting

@ JSM: Seattle, WA,
August 8–13, 2015

2016

IMS Annual Meeting/ 9th World Congress:

Toronto, Canada,
July 11–15, 2016

JSM: Chicago, IL,
July 30 – August 4,
2016

2017

IMS Annual Meeting

@ JSM: Baltimore,
MD, July 29 –
August 3, 2017

2018

IMS Annual Meeting: TBD

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

2019

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

Joint Statistical Meetings: 2015–2020

JSM 2015

August 8–13, 2015, Seattle, WA

[w](http://amstat.org/meetings/jsm/2015) <http://amstat.org/meetings/jsm/2015>



Online submission of abstracts, invited posters, introductory overview lectures, topic contributed, and contributed abstracts is open, until February 2, 2015.

See page 14 for the list of 30 IMS invited sessions. These include three Wald Lectures by Susan A. Murphy (Michigan, USA), the Le Cam Lecture by Jon Wellner (Washington, USA), and four Medallion Lectures: Jiashun Jin (Carnegie Mellon U, USA), Michael Kosorok (UNC Chapel Hill, USA), John Lafferty (Chicago, USA) and Nicolai Meinshausen (ETH Zürich, Switzerland). And there's the IMS Presidential Address by Erwin Bolthausen.



IMS sponsored meeting

JSM 2016

July 30–Aug 4, 2016,
Chicago, IL

[w](http://amstat.org/meetings/jsm/) <http://amstat.org/meetings/jsm/>

IMS sponsored meeting

IMS Annual Meeting

@ JSM 2017:
July 29–August 3,
2017
Baltimore, MD

IMS sponsored meeting

JSM 2018

July 28–August 2,
2018
Vancouver, Canada

IMS sponsored meeting

IMS Annual Meeting

@ JSM 2019
July 27–August 1,
2019
Denver, CO

IMS sponsored meeting

JSM 2020

August 1–6, 2020
Philadelphia, PA

IMS co-sponsored meeting

NEW

22nd ASA/IMS Spring Research Conference (SRC 2015)**May 20–22, 2015, Cincinnati, Ohio****w** <http://www.cvent.com/d/44qpkn>

The 22nd ASA/IMS Spring Research Conference (SRC 2015) on Statistics in Industry and Technology will be hosted by Procter & Gamble and held in Cincinnati, Ohio, at the Hyatt Regency, May 20–22, 2015. The theme is *Bridging Statistics Research and Application to Foster Innovation*, with topics including the design and analysis of experiments, computer experiments, big data, quality improvement and control, measurement systems, consumer research, statistical computing and applications to consumer products, the Air Force, and industry and government. Keynote speakers include Vijay Nair (University of Michigan) and Sallie Keller (Virginia Tech). The SRC promotes cross-disciplinary research in statistical methods and collaboration between researchers and practitioners.

We encourage you to **submit a contributed talk** to the conference. To present a contributed talk, please submit a title and abstract via the SRC 2015 website (deadline **April 1, 2015**). A number of \$600 scholarships will be available to selected student and early career presenters. Details on the website, or contact the Contributed Program Chair, Byran Smucker, at smuckerb@miamioh.edu.

IMS co-sponsored meeting

Probability Theory and Combinatorial Optimization**March 14–15, 2015, Duke University, Durham, NC****w** <http://sites.duke.edu/steele2015/>

Specific areas of coverage include random structures and algorithms, random graphs, probabilistic combinatorial optimization, and concentration inequalities. The conference honors J. Michael Steele's contributions to probability theory and combinatorial optimization on his 65th birthday. Invited speakers: David Aldous, Sourav Chatterjee, Luc Devroye, James A. Fill, David Gamarnik, Gábor Lugosi, Alexander Sasha Rakhlin, Sneha Subramanian, Ruth Williams, Joseph E. Yukich, J. Michael Steele. Registration is free, but required.

IMS co-sponsored meeting

Statistics and Exoplanets**August 3–5, 2015****Honolulu, Hawaii****w** <http://exostats.org>

Statistics and Exoplanets is a Focus Meeting of the XXIX General Assembly of the International Astronomical Union (IAU); you will need to register for the IAU GA meeting in order to attend this meeting: see <http://www.astronomy2015.org/>.

IMS sponsored meeting

WNAR/IMS Annual Meeting**June 14–17, 2015 [PLEASE NOTE NEW DATES]**

UPDATED

Boise State University, Boise, Idaho**w** <http://wnar.org/meetings/>**Call for IMS members to organize invited sessions:**

The program committee for the 2015 Western North American Region of The International Biometric Society (WNAR)/IMS Annual Meeting is soliciting invited session proposals. An invited session should bring together a small number of speakers (3–4) on a particular statistical topic. The speakers could include a discussant. We encourage the submission of proposals covering a wide range of topics in the theory and application of statistics to health, biological and life sciences. Proposals should include:

1. Your name, affiliation, and contact information
2. Proposed session title and keywords
3. Description of and motivation for the proposed session
4. Speaker (and discussant, if applicable) names, affiliations,

contact information, and tentative talk titles

Invited session proposals should be sent by email to the WNAR Program Chair, Layla Parast: parast@rand.org by **January 31, 2015**. Proposals will be evaluated by the joint WNAR/IMS program committee and session organizers will be informed by mid-March of acceptance, rejection or revision (on topic and speakers). Please note that acceptance of a proposal comes without any financial compensation for the session organizer or speakers.

IMS co-sponsored meeting

10th Conference on Bayesian Nonparametrics**June 22–26, 2015, Raleigh, NC, USA****w** <https://stat.duke.edu/bnp10/>

BNP is an official section meeting of the ISBA's Bayesian nonparametrics section. Abstract submission is open for invited and keynote talks (deadline February 1, 2015) and for posters (deadline May 1, 2015 or until max capacity reached, whichever is earlier).

IMS co-sponsored meeting

9th International Conference on Extreme Value Analysis: EVA 2015**June 15–19, 2015, Ann Arbor, Michigan****w** <http://sites.lsa.umich.edu/eva2015>

The ninth international conference on Extreme Value Analysis will take place at the University of Michigan, Ann Arbor. It will feature recent research on the probability and statistics of extreme value phenomena and its important applications to climate and weather, finance, insurance, engineering and computer science. All students, researchers, practitioners, and scientists with interests in statistics of extremes are welcome. Abstracts are due February 27, 2015: see <http://sites.lsa.umich.edu/eva2015/abstract-submission>. Decisions on accepted talks/posters announced (by e-mail) by March 16, 2015. Registration is open now.

More IMS meetings around the world

IMS co-sponsored meeting

38th Conference on Stochastic Processes and their Applications July 13–17, 2015, Oxford, United Kingdom

w <http://spa2015.oxford-man.ox.ac.uk>

The 38th Conference on Stochastic Processes and their Applications (SPA) will take place in Oxford, UK, from July 13–17, 2015. The conference is hosted by the Oxford-Man Institute of Quantitative Finance, the Mathematical Institute and the Department of Statistics, and is co-sponsored by IMS and the Bernoulli Society.

A full list of confirmed plenary speakers can be found at <http://spa2015.oxford-man.ox.ac.uk/people> (it includes two **Medallion lectures**, from Grégory Miermont and Scott Sheffield; a **Schramm Lecture** from Michel Ledoux; and a **Doob Lecture** from Terence Tao).

Registration will open soon; to be notified when it does, fill out the form at <http://spa2015.oxford-man.ox.ac.uk/register-interest>.

IMS co-sponsored meeting

International Symposium in Statistics (ISS) 2015 July 6–8, 2015, Memorial University, St. John's, Canada

w <http://www.iss-2015-stjohns.ca/>

The ISS-2015, on *Parametric and Semi-parametric Inferences for Spatial-temporal, and Multi-dimensional Familial-longitudinal Data*, is planned to discuss the methodological advances and challenges in the analysis of continuous and discrete correlated data both in parametric and semi-parametric setup.

The main topics of interest of this symposium are:

- Multivariate analysis in a wider non-normal elliptical distribution setup;
- Multivariate analysis for longitudinal categorical data;
- Time series volatility models;
- Spatial-temporal data analysis;
- Familial longitudinal data analysis in semi-parametric setup.

It is also of interest to discuss further challenges in analysis when data may contain measurement errors, missing values, and/or outliers, for example. The scientific program will include keynote, special invited, invited, and contributed paper sessions.

IMS co-sponsored meeting

9th World Congress on Probability and Statistics July 11–15, 2016, Toronto, Canada

w <http://www.fields.utoronto.ca/programs/scientific/16-17/WC2016/>

This meeting is jointly sponsored by the Bernoulli Society and the IMS. The Scientific Programme Chair is Alison Etheridge. The Local Chair is Tom Salisbury.

IMS co-sponsored meeting

2015 Workshop on Finance, Insurance, Probability and Statistics (FIPS 2015)

June 25–27, 2015

Rutgers Student Center, New Brunswick, New Jersey

w <http://www.fsrm.rutgers.edu/fips2015>

The primary purpose of the workshop is to bring together a global cast of leading academic experts, practitioners and junior researchers to share research that underscores the contributions of Probability and Statistics to the development of quantitative models, methods, techniques and technologies in the fields of Finance and Insurance.

IMS co-sponsored meeting

INFORMS Applied Probability Society Conference 2015 July 5–8, 2015, Istanbul, Turkey

w TBC

The next APS meeting will be held at the Koç University campus (Istanbul, Turkey) on July 5–8, 2015. Details to follow.

IMS sponsored meeting

2015 IMS-China Conference on Statistics and Probability July 1–4, 2015

Kunming, Yunnan, P. R. China

w <http://www.2015imschina.com>

Contact: Qiwei Yao q.yao@lse.ac.uk

The fifth IMS-China International Conference on Statistics and Probability will be held in Kunming, China, from July 1–4, 2015. Its scientific program will cover a wide range of topics in probability, statistics and their related areas. The conference will also provide an excellent forum for scientific exchanges and for forging new research collaborations.

IMS co-sponsored meeting

2015 European Meeting of Statisticians July 6–10, 2015

Amsterdam, The Netherlands

w <http://ems2015.nl/>

The European Meeting of Statisticians (EMS) is the main conference in statistics and probability in Europe. It is organized in a roughly two-yearly schedule and is sponsored by the European Regional Committee of the Bernoulli Society. The program consists of invited and contributed lectures, and posters, addressing a full range of subjects in statistics and its many applications.

The conference will be held at the campus of the VU University Amsterdam, from Monday, July 6 to Friday, July 10, 2015.

Other meetings around the world

NIMBioS Investigative Workshop:

NEW

Neurobiology of Expertise

March 11–13, 2015**NIMBioS, University of Tennessee, Knoxville**

w http://www.nimbios.org/workshops/WS_expertise

Network sciences and complex systems theory provide exemplar mathematical formalisms to approach the analysis of multimodal and highly complicated neuroscience datasets. This investigative workshop aims to synthesize these and other state of the art applications of mathematics in order to systematize and unify multidisciplinary and multiscale work on expert human performance. The workshop will bring together researchers from multiple disciplines in order to better understand the existing mathematical challenges and explore new directions in modeling genomic to behavioral signatures of performance in humans and animal models for perceptual, motor and analytical expertise domains. Workshop goals are to identify challenges and frontiers in mechanistic modeling, prediction, signal processing and machine learning as well as novel neurotechnologies for data acquisition in order to facilitate uncovering the underlying neural mechanisms of expertise. This investigative workshop will bring together top researchers from diverse fields to share insights and methods and address long-standing and emerging conceptual problems.

Participation in the workshop is by application only. Individuals with a strong interest in the topic are encouraged to apply, and successful applicants will be notified within two weeks of the application deadline. If needed, financial support for travel, meals, and lodging is available for workshop attendees. Application deadline: December

15, 2014

1st Annual International Conference on Formal Sciences

NEW**June 29–July 2, 2015****Athens, Greece**

w <http://athensformal.com>

Call for Papers and Participation

The aim of the conference is to bring together scholars and students of Formal Systems, such as logic, mathematics, statistics, theoretical computer science, information theory, game theory, systems theory, decision theory, and portions of linguistics. You may participate as panel organizer, presenter of one paper, chair of a session or observer.

Fee structure information is available on www.athensformal.com/fees.htm.

Special arrangements will be made with a local luxury hotel for a limited number of rooms at a special conference rate. In addition, a number of special events will be organized: a Greek night of entertainment with dinner, a special one-day cruise to selected Greek islands, an archaeological tour of Athens and a one-day visit to Delphi. Details of the social program are available at <http://www.athensformal.com/2015/SOC-FOR.htm>.

Please submit an abstract (email only) following the instructions at <http://athensformal.com/2015/CALL-FOR.htm> by January 12, 2015. If you want to participate without presenting a paper, i.e. organize a panel (session, mini conference), chair a session, review papers to be included in the conference proceedings or books, contribute to the editing of a book, or any other contribution, please send an email to Dr. Gregory T. Papanikos, Honorary Professor, University of Stirling, UK (gregory.papanikos@stir.ac.uk).

Seymour Sherman Lecture and Conference

NEW**May 15–17, 2015****Bloomington, Indiana**

w <http://pages.iu.edu/~rdlyons/sherman/2015.html>

Contact Russell Lyons rdlyons@indiana.edu
This conference will feature 16 young researchers at the forefront of different sub-fields of probability relating to Sherman's work, mainly statistical physics and probability. The Sherman Lecturer will be Andrea Montanari (Stanford). Full support is available for graduate students, who should apply by March 15, 2015.

4th International Conference on Quantitative and Qualitative Methodologies in the Economic and Administrative Sciences

NEW**May 21–22, 2015, Athens, Greece**

w <https://sites.google.com/site/icqqmeas2015/>

Contact Christos Frangos cfragos@teiath.gr
The conference aims to facilitate the interaction between the world of business and the academic community. The organizers of this conference have the ambition to establish a forum for discussion on the theory and applications of the quantitative and qualitative methods in small and medium or large enterprises in a range of business sectors such as industry, commerce, tourism, health, public sector, shipping industry and financial services.

THEMATIC PROGRAM ON STATISTICAL INFERENCE, LEARNING, AND MODELS FOR

JANUARY - JUNE, 2015

BIG DATA

This thematic program emphasizes both applied and theoretical aspects of statistical inference, learning and models in big data. The opening conference will serve as an introduction to the program, concentrating on overview lectures and background preparation. Workshops throughout the program will highlight cross-cutting themes, such as learning and visualization, as well as focus themes for applications in the social, physical and life sciences. It is expected that all activities will be webcast using the FieldsLive system to permit wide participation. Allied activities planned include workshops at PIMS in April and May and CRM in May and August.

(All meetings at the Fields Institute in Toronto unless specified)

January 12–23, 2015: Opening Conference and Boot Camp

Organizing Committee: Nancy Reid (Chair), Sallie Keller, Lisa Lix, Bin Yu

January 26–30, 2015: Workshop on Big Data and Statistical Machine Learning

Organizing committee: Ruslan Salakhutdinov (Chair), Dale Schuurmans, Yoshua Bengio, Hugh Chipman, Bin Yu

February 9–13, 2015: Workshop on Optimization and Matrix Methods in Big Data

Organizing Committee: Stephen Vavasis (Chair), Anima Anandkumar, Petros Drineas, Michael Friedlander, Nancy Reid, Martin Wainwright

February 23–27, 2015: Workshop on Visualization for Big Data: Strategies and Principles

Organizing Committee: Nancy Reid (Chair), Susan Holmes, Snehalata Huzurbazar, Hadley Wickham, Leland Wilkinson

March 23–27, 2015: Workshop on Big Data in Health Policy

Organizing Committee: Lisa Lix (Chair), Constantine Gatsonis, Sharon-Lise Normand

April 13–17, 2015: Workshop on Big Data for Social Policy

Organizers: Sallie Keller (Chair), Robert Groves, Mary Thompson

June 13–14, 2015: Closing Conference

Organizing Committee: Nancy Reid (Chair), Sallie Keller, Lisa Lix, Hugh Chipman, Ruslan Salakhutdinov, Yoshua Bengio, Richard Lockhart. To be held at AARMS of Dalhousie University.

For more information, participant support and registration, please visit www.fields.utoronto.ca/programs/scientific/14-15/bigdata

HiPMoS 2015: High Performance Modelling and Simulation 2015

NEW

May 26–29, 2015, Varna, Bulgaria

<https://www.dem.unina2.it/hipmos/>

Call for papers (deadline February 13, 2015)

High Performance Modeling and Simulation 2015 will be held in the framework of the 29th European Conference on Modelling and Simulation (ECMS 2015). Modeling and simulation are widely considered essential tools in many areas of science and engineering for the prediction and analysis of complex systems and natural phenomena. They often require a significant amount of computational resources with data sets typically scattered across different geographical locations. Furthermore, the development of such complex modelling and simulation environments usually requires collaborative efforts from researchers with different domain knowledge and expertise, possibly at different locations. High performance computing is arguably required to deal with the behaviour and complexity of such large-scale systems.

HiPMoS 2015 is organized as a multi-session track and includes Special Sessions on *Modelling and Simulation of Data Intensive Systems (HiPMoS-DIS)* and *Probability and statistical methods for modelling and simulation of high performance information systems (HiPMoS-ProbStat)*. The development trends of modern information technologies lead to the constant growth of complexity of information systems and call for their high performance. Stochastic nature of flows that information systems need to serve and presence of stochastic internal processes that influence their behavior justifies the use of probabilistic modeling and simulation when one needs to analyze their performance. Despite increasing complexity obvious requirement for system's high performance which ensures, for example, low response times and accuracy, remains unchanged and it calls for advanced methods of modeling and simulation. Such methods must not be limited to those which ensure fast computations but include also those which provide new suitable (from the point of view of high performance) approaches for representation and analysis of system's component and system as a whole. Details of topics covered and paper submission instructions are on the website.

Employment Opportunities around the world

Canada: Mississauga, ON

University of Toronto, Department of Mathematical and Computational Sciences

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20866874

China: Haidian, Beijing

Tsinghua University, Center for Statistical Science

Multiple Faculty Openings at All Ranks (Assistant, Associate and Full Professor)

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20852617

Hong Kong:

The Hong Kong University of Science and Technology, Department of Information Systems, Business Statistics and Operations Management

Tenure-track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20091709

Singapore

National University of Singapore, Department of Statistics and Applied Probability Faculty Positions

Applications are invited for regular positions in Statistics. A PhD in Statistics or a related field is required. The appointments can be in any area of Statistics at any level. For appointment at Associate Professor or Professor level, the applicant should have an outstanding record in research, and demonstrated leadership in teaching and service. For appointment at Assistant Professor level the applicants should have demonstrated potential for excellence in research, teaching and service. There is no deadline for applications but the search will continue until all positions are filled.

Applicants should send an application letter and a CV and arrange for at least THREE reference letters to be sent directly to the Department.

Applications should be mailed by post or via e-mail to: *Search Committee, Department of Statistics and Applied Probability, National University of Singapore, 6 Science Drive 2, Singapore 117543*. E-mail: stasec@nus.edu.sg

NUS offers internationally competitive remuneration, generous research support and funding, relocation assistance and other benefits. The Department of Statistics and Applied Probability has close to 30 faculty, making us one of the largest Departments in Asia. We provide a stimulating environment for our Faculty to develop professionally.

For more information about the University, Faculty of Science, Department and terms of service, visit our websites:

University: <http://www.nus.edu.sg/>

Faculty of Science: <http://www.science.nus.edu.sg/>

Department: <http://www.stat.nus.edu.sg/>

Terms of Service: <http://www.nus.edu.sg/careers/potentialhires/workinginnus/benefits.html>

Italy: Milan

Bocconi University, Department of Decision Sciences

Full Professor Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21285682

Kazakhstan: Astana

Nazarbayev University

Associate/ Full Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21172220

Saudi Arabia:

KAUST (King Abdullah University of Science and Technology)

Faculty Positions in Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20944621

Taiwan: Taipei

Institute of Statistical Science, Academia Sinica

Regular Research Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19863582

Employment Opportunities *continued*

United Kingdom: Cambridge

University of Cambridge, Department of Pure Mathematics and Mathematical Statistics

Research Fellow in Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21285954

United Kingdom: Bristol

The University of Bristol

Professor of Statistical Science (equivalent of US Full Professor)

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21231669

United Kingdom: Bristol

The University of Bristol

Lecturers in Statistical Science (equivalent to US Assistant/ Associate Professor)

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21231583

United Kingdom: Edinburgh

University of Edinburgh & BioSS

Principal Researcher in Applied Statistical Methodology, BioSS & Reader/Senior Lecturer in Statistics, University of Edinburgh

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21139999

United Kingdom: Cambridge

Department of Pure Mathematics and Mathematical Statistics

Research Associate

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21504124

United Kingdom: Cambridge

University of Cambridge, Statistical Laboratory

Lectureship in Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21282461

United Kingdom: Coventry

University of Warwick

Assistant Professor of Data Science

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21238395

United Kingdom: Coventry

University of Warwick

Harrison Early Career Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21310046

United States: Fayetteville, AR

University of Arkansas - Department of Mathematical Sciences

Tenure Track Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21031307

United States: Berkeley, CA

University of California, Berkeley, Statistics Department

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20556599

United States: Berkeley, CA

University of California, Berkeley, Statistics Department

Lecturer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20685929

United States: Davis, CA

University of California, Davis, Department of Statistics

Lecturer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20869251

United States: Davis, CA

University of California, Davis, Department of Statistics

Faculty Positions: Assistant/Associate/Full

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19427512

United States: Fullerton, CA

California State University, Fullerton, Math Dept

Tenure Track Faculty Position - Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20318003

United States: La Jolla, CA

UC San Diego Department of Family and Preventive Medicine

Assistant or Associate Adjunct Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21351131

United States: Los Angeles, CA

UCLA, Department of Statistics

Tenure Track Faculty

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20569738

United States: Los Angeles, CA

University of Southern California

Tenure-Track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20456651

United States: Los Angeles, CA**University of Southern California- Marshall School of Business**

Open Rank Professor of Data Sciences & Operations- Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20963699**United States: Riverside, CA****University of California Riverside, Department of Statistics**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20821531**United States: Stanford, CA****Stanford University, Department of Statistics**

Assistant Professor (Tenure-track)

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20159915**United States: Stanford, CA****Stanford University, Department of Statistics**

Stein Fellow

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20159907**United States: New Haven, CT****Yale University**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21322495**United States: Ames, IA****Iowa State University**

Assistant, Associate, or Full Professor in Statistics and Applied Probability

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20788735**United States: Ames, IA****Iowa State University, Departments of Statistics and Political Science**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21313717**United States: Iowa City, IA****University of Iowa**

Assistant Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20651868**United States: Chicago, IL****The University of Chicago Booth School of Business**

Assistant/Associate Professor of Econometrics and Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20783547**United States: Chicago, IL****University of Chicago, Department of Statistics**

Associate Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20963730**United States: Chicago, IL****University of Chicago, Department of Statistics**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20963565**United States: Chicago, IL****University of Chicago, Department of Statistics**

William H. Kruskal Instructor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20963526**United States: Chicago, IL****University of Illinois at Chicago**

Assistant Professor/Associate Professor/Full Professor - Tenure Track/Tenured

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20824344**United States: Chicago, IL****University of Illinois at Chicago**

Research Assistant Professor (Postdoc - Non-Tenure Track)

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20824330**United States: Chicago, IL****University of Illinois at Chicago**

Assistant Professor/Associate Professor/Full Professor - Tenure Track/Tenured

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20824344**United States: DeKalb, IL****Northern Illinois University**

Assistant Professor, Statistics (Position 6083)

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20652647

Employment Opportunities *continued*

United States: Boston, MA

Boston University

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20159265

United States: Bridgewater, MA

Bridgewater State University

Department of Mathematics, Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20379307

United States: Cambridge, MA

Massachusetts Institute of Technology (MIT)

Statistics Faculty Position

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21182317

United States: Lowell, MA

University of Massachusetts Lowell

Assistant/Associate Professor - Statistics - Mathematical Science

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20571145

United States: East Lansing, MI

Michigan State University

Teaching Specialist

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21031572

United States: Minneapolis, MN

University of Minnesota

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21152859

United States: Charlotte, NC

UNCC-University of North Carolina at Charlotte

Assistant Professor in Biostatistics #4661

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21070839

United States: Lincoln, NE

University of Nebraska Lincoln, Department of Statistics

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21323107

United States: South Sioux City, NE

Great West Casualty Company

Predictive Modeler

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20848682

United States: Las Vegas, NV

University of Nevada, Las Vegas - UNLV

Chair of the Department of Mathematical Sciences

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20877000

United States: Reno, NV

University of Nevada, Reno Dept of Mathematics & Statistics

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21236645

United States: Ithaca, NY

Cornell University

Two Faculty Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20336322

United States: New York, NY

Statistics Group in the Department of Information, Operations & Management Sciences at the Stern School of Business, New York University

Tenure-track faculty position in Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20669146

United States: Columbus, OH

Alliance Data

Predictive Analytics Intern

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21209236

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

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

United States: Pittsburgh, PA

Carnegie Mellon University

Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19839207

United States: Altoona, PA**Tenure Track Position-Mathematics/Statistics**

Penn State Altoona invites applications for a tenure-track position in either Statistics or Mathematics to begin in Fall 2015. Candidates must have a Ph.D. in Statistics or Mathematics, a strong interest in teaching undergraduate statistics, and an established research program. Responsibilities for the position include teaching courses in statistics and/or mathematics at both the entry level and advanced undergraduate level, and contributing to our baccalaureate program in Mathematics. Qualified applicants in all areas will be considered.

Applicants should submit a letter of application establishing their qualifications; a current vita; a description of teaching philosophy and evidence of teaching effectiveness; a statement of research interests; transcripts (official transcripts required at the time of an interview); and three letters of reference. Letters of reference should be submitted through <http://mathjobs.org/jobs>, and all other application materials must be submitted through both <http://mathjobs.org/jobs> and <http://apptrkr.com/547558>. Review of applications will begin the week of January 1, 2015 and continue until the position is filled.

As a four year degree granting college of The Pennsylvania State University, Penn State Altoona has access to all of the resources of a major research university. Penn State Altoona offers a competitive salary and an attractive benefits package.

For additional information about the Department of Mathematics and Statistics at Penn State Altoona, please visit <http://www.altoona.psu.edu/math/>

More information about Penn State Altoona and its surrounding area may be found at <http://www.altoona.psu.edu/>

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**United States: Brookings, SD****South Dakota State University**

Assistant or Associate Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=19393789

United States: Memphis, TN**University of Memphis**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21241162

United States: Lubbock, TX**Texas Tech University, Department of Mathematics & Statistics**

Tenure-track assistant professors

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20820129

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

Tenure/Tenure-Track Faculty Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21216905

United States: Seattle, WA**University of Washington, Departments of Statistics & Computer Science and Engineering**

Assistant or Associate Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21284002

United States: Tacoma, WA**UW Tacoma**

Assistant Professor of Applied Mathematics or Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21077889

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

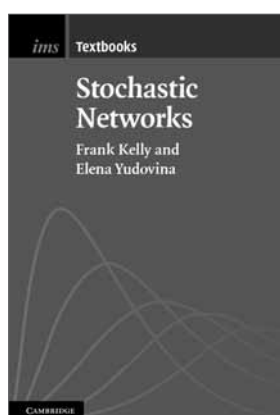
Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=20219484



The Institute of Mathematical Statistics presents

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Stochastic Networks

Frank Kelly, University of Cambridge, and
Elena Yudovina, University of Michigan Ann Arbor

Communication networks underpin our modern world, and provide fascinating and challenging examples of large-scale stochastic systems. Randomness arises in communication systems at many levels: for example, the initiation and termination times of calls in a telephone network, or the statistical structure of the arrival streams of packets at routers in the Internet. How can routing, flow control and connection acceptance algorithms be designed to work well in uncertain and random environments? This compact introduction illustrates how stochastic models can be used to shed light on important issues in the design and control of communication networks. It will appeal to readers with a mathematical background wishing to understand this important area of application, and to those with an engineering background who want to grasp the underlying mathematical theory. Each chapter ends with exercises and suggestions for further reading.

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International Calendar of Statistical Events

IMS meetings are highlighted in maroon with the  logo, and new or updated entries have the **NEW** or **UPDATED** symbol. **t** means telephone, **f** fax, **e** email and **w** website. Please submit your meeting details and any corrections to Elyse Gustafson at erg@imstat.org

January 2015

January 4–7: Trident Hyderabad, India. **IX International Multiple Comparisons Procedures (MCP) Conference** **w** <http://www.mcp-conference.org/hp/2015/>

January 12–16: Kolkata, India. **International Conference on Robust Statistics 2015** **w** <http://www.isical.ac.in/~icors2015/>

NEW **January 12–23:** Toronto, Canada. Opening Conference and Boot Camp [*Fields Big Data program*] **w** www.fields.utoronto.ca/programs/scientific/14-15/bigdata

January 15–16: NIMBioS at the University of Tennessee, Knoxville. **Lymphoid Cells in Acute Inflammation** **w** http://www.nimbios.org/workshops/WS_lymphoid

January 26–28: Lunteren, The Netherlands. **14th Winter School on Mathematical Finance** **w** <https://staff.fnwi.uva.nl/p.j.c.spreij/winterschool/winterschool.html>

NEW **January 26–30:** Toronto, Canada. Workshop on Big Data and Statistical Machine Learning [*Fields Big Data program*] **w** www.fields.utoronto.ca/programs/scientific/14-15/bigdata

February 2015

NEW **February 9–13:** Toronto, Canada. Workshop on Optimization and Matrix Methods in Big Data [*Fields Big Data program*] **w** www.fields.utoronto.ca/programs/scientific/14-15/bigdata


February 16–20: Wrocław University of Technology, Poland. **12th Workshop on Stochastic Models, Statistics and Their Applications** **w** <http://www.smsa2015.rwth-aachen.de>

NEW **February 23–27:** Toronto, Canada. Workshop on Visualization for Big Data: Strategies and Principles [*Fields Big Data program*] **w** www.fields.utoronto.ca/programs/scientific/14-15/bigdata

March 2015

NEW **March 11–13:** Knoxville, Tennessee. NIMBioS Investigative Workshop: Neurobiology of Expertise **w** http://www.nimbios.org/workshops/WS_expertise

 **March 14–15:** Duke University, Durham, NC. **Probability Theory and Combinatorial Optimization** **w** <http://sites.duke.edu/steele2015/>

 **March 15–18:** Miami, Florida. **2015 ENAR/IMS Spring Meeting** **w** <http://www.enar.org/meetings.cfm>

March 16–18: Islamia College University, Peshawar, Pakistan. **13th International Conference on Statistical Sciences** **w** <http://www.isoss.net/conferences>

March 23–26: London, UK. **Limit Theorems in Probability** **w** <http://www.imperial.ac.uk/~amijatov/IP/LimitTheorems/LTP.html>

NEW **March 23–27:** Toronto, Canada. Workshop on Big Data in Health Policy [*Fields Big Data program*] **w** www.fields.utoronto.ca/programs/scientific/14-15/bigdata

April 2015

April 8–10: NIMBioS, Knoxville, Tennessee, USA. **Information and Entropy** **w** http://www.nimbios.org/workshops/WS_entropy

NEW **April 13–17:** Toronto, Canada. Workshop on Big Data for Social Policy [*Fields Big Data program*] **w** www.fields.utoronto.ca/programs/scientific/14-15/bigdata


May 2015

NEW **May 15–17:** Bloomington, Indiana. Seymour Sherman Lecture and Conference **w** <http://pages.iu.edu/~rdlyons/sherman/2015.html>

International Calendar *continued*

May 2015 *continued*

May 18–29: Singapore. **Workshop on New Directions in Stein's Method** **w** <http://www2.ims.nus.edu.sg/Programs/015wstein/>

NEW  **May 20–22:** Cincinnati, Ohio. **22nd ASA/IMS Spring Research Conference (SRC 2015)** **w** <http://www.cvent.com/d/44qpkn>

NEW **May 21–22:** Athens, Greece. **4th International Conference on Quantitative and Qualitative Methodologies in the Economic and Administrative Sciences** **w** <https://sites.google.com/site/icqqmeas2015/>

May 26–28: Haikou, Hainan, China. **24th International Workshop on Matrices and Statistics (IWMS-2015)** **w** <http://iwms2015.csp.escience.cn/dct/page/1>

NEW **May 26–29:** Varna, Bulgaria. **HiPMoS 2015: High Performance Modelling and Simulation 2015** (special session on ProbStat) **w** <https://www.dem.unina2.it/hipmos/>

May 31–June 5: Ascona, Switzerland. **Workshop on Statistical Learning of Biological Systems from Perturbations** **w** <http://www.cbg.ethz.ch/news/ascona2015>


June 2015

June 7–10: Oslo, Norway. **Colloquium of the International Actuarial Association** **w** <http://www.actuaries.org/oslo2015>

NEW **June 13–14:** Toronto, Canada. **Closing Conference [Fields Big Data program]** at AARMS of Dalhousie University. **w** www.fields.utoronto.ca/programs/scientific/14-15/bigdata

June 15–19: Aarhus, Denmark. **Aarhus Conference on Probability, Statistics and Their Applications** **w** <http://thiele.au.dk/events/conferences/2015/aarhus/>

June 15–19: Ann Arbor, Michigan. **9th International Conference on Extreme Value Analysis: EVA 2015** **w** <http://sites.lsa.umich.edu/eva2015>

NEW  **June 14–17 [PLEASE NOTE NEW DATES]:** Boise State University, Idaho, USA. **2015 WNAR/IMS Annual Meeting** **w** <http://wnar.org/meetings>

 **June 22–24:** Columbia University, New York, NY. **Fifth International Workshop in Sequential Methodologies (IWSM)** **w** TBC

June 22–25: NIMBioS, Knoxville, TN. **Research Collaboration Workshop for Women in Mathematical Biology** **w** http://www.nimbios.org/education/WS_wwmb.html

 **June 22–25:** Raleigh, NC, USA. **10th Conference on Bayesian Nonparametrics** **w** <https://stat.duke.edu/bnp10/>

 **June 25–27:** Rutgers Student Center, New Brunswick, NJ. **2015 Workshop on Finance, Insurance, Probability and Statistics (FIPS 2015)** **w** <http://www.fsrn.rutgers.edu/fips2015>

Meeting organizer's to-do list




www.imstat.org/submit-meeting.html

June 29–July 2: Athens, Greece. **9th Annual International Conference on Statistics** **w** <http://www.atiner.gr/statistics.htm>

NEW June 29–July 2: Athens, Greece. **1st Annual International Conference on Formal Sciences** **w** <http://athensformal.com>

June 30–July 4: Piraeus, Greece. **16th Applied Stochastic Models and Data Analysis International Conference (ASMDA)** **w** <http://www.asmda2015.com>


July 2015

 July 1–4: Kunming, Yunnan, P. R. China. **2015 IMS-China International Conference on Statistics and Probability** **w** <http://www.2015imschina.com>

 July 5–8: Istanbul, Turkey. **INFORMS Applied Probability Society Conference 2015** **w** TBC

 July 6–8: Memorial University, St John's, Canada. **International Symposium in Statistics (ISS 2015) Parametric and Semi-parametric Inferences for Spatial-temporal, and Multi-dimensional Familial-longitudinal Data.** **w** <http://www.iss-2015-stjohns.ca>

 July 6–10: Amsterdam, The Netherlands. **2015 European Meeting of Statisticians** **w** <http://ems2015.nl/>

 July 13–17: Oxford, UK. **38th Conference on Stochastic Processes and Applications** **w** [please note new website address] <http://spa2015.oxford-man.ox.ac.uk>

July 20–24: Pescara, Italy. **ISIPTA'15** **w** <http://www.sipta.org/isipta15>

July 26–31: Rio de Janeiro, Brazil. **2015 ISI World Statistics Congress** **w** <http://www.isi2015.ibge.gov.br/>

August 2015

 August 3–5: Honolulu, HI. **Statistics and Exoplanets** **w** <http://exostats.org>

 August 8–13: Seattle, WA. **IMS Annual Meeting at JSM 2015.** **w** <http://amstat.org/meetings/jsm/2015>

See page 14 for the complete list of 30 IMS Invited Sessions, including the Wald, Le Cam and Medallion Lectures, and the IMS Presidential Address. Join us in Seattle!



August 10–14: Beijing, China. **8th International Congress of Industrial and Applied Mathematics** **w** <http://www.iciam2015.cn/>

September 2015

September 21–25: Vienna, Austria. **8th International Workshop on Simulation** **w** <http://iws.boku.ac.at/index.php>

March 2016

 March 6–9: Austin, Texas. **2016 ENAR/IMS Spring Meeting** **w** <http://www.enar.org/meetings.cfm>

June 2016

June 20–23: Geneva, Switzerland. **ICES-V, the 5th International Conference on Establishment Statistics** **w** TBC

June 20–24: University of California at San Diego. **Stochastic Networks Conference** **w** TBD


International Calendar *continued*

Toronto, Canada: location for the Ninth World Congress in Probability and Statistics, and the 2016 IMS Annual Meeting


<http://www.fields.utoronto.ca/programs/scientific/16-17/WC2016/>

July 2016

 July 11–15: Toronto, ON, Canada. **IMS Annual Meeting at 9th World Congress in Probability and Statistics**
w <http://www.fields.utoronto.ca/programs/scientific/16-17/WC2016/>

 July 30 – August 4: Chicago, USA. **JSM 2016** w <http://amstat.org/meetings/jsm/>

July 2017

 July 29 – August 3: Baltimore, USA. **IMS Annual Meeting at JSM 2017** w <http://amstat.org/meetings/jsm/>

July 2018

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

July 2019

 July 27–August 1: Denver, CO, USA. **IMS Annual Meeting at JSM 2019** w <http://amstat.org/meetings/jsm/>

August 2020

 August 1–6: Philadelphia, PA, USA. **JSM 2020** w TBC

Are we missing something? If you know of any statistics or probability meetings which aren't listed here, please let us know.

You can email the details to Elyse Gustafson at erg@imstat.org, or you can submit the details yourself at <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 scientific journals of the Institute of Mathematical Statistics are *The Annals of Statistics*, *The Annals of Probability*, *The Annals of Applied Statistics*, *The Annals of Applied Probability*, and *Statistical Science*. The *IMS Bulletin* is the news organ of the Institute.

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Individual and General Subscriptions

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IMS Bulletin

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

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A single 60-day online job posting costs just **\$275.00**. We will also include the basic information about your job ad (position title, location, company name, job function and a link to the full ad) in the *IMS Bulletin* at no extra charge. See <http://jobs.imstat.org>

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Meeting announcements in the *Bulletin* and on the IMS website at <http://imstat.org/meetings> are free. Send them to Elyse Gustafson; see http://www.imstat.org/program/prog_announce.htm

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Issue	Deadline	Online by	Mailed
1: January/February	December 1	December 15	January 1
2: March	February 1	February 15	March 1
3: April/May	March 15	April 1	April 15
4: June/July	May 1	May 15	June 1
5: August	July 1	July 15	August 1
6: September	August 15	September 1	September 15
7: Oct/Nov	September 15	October 1	October 15
8: December	November 1	November 15	December 1

the next issue is March 2015

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DEADLINES for submissions February 1, then March 15

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Articles

- Classification algorithms using adaptive partitioning
PETER BINEV, ALBERT COHEN, WOLFGANG DAHMEN AND RONALD DEVORE 2141
- Optimal computational and statistical rates of convergence for sparse nonconvex learning
problems ZHAORAN WANG, HAN LIU AND TONG ZHANG 2164
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