

January/February 2018

CONTENTS

- 1 **National Academy of Medicine elects Jewell**
- 2 **Members' news:** Nick Horton, Eric Kolaczyk, Hongzhe Li, Runze Li, Douglas Simpson, Greg Lawler, Mike Jordan, Mir Masoom Ali
- 3 **Journal news:** *EJP*, *ECP*, *Prob Surveys*; **OECD guidelines**
- 4 **Takis Konstantopoulos: new column**
- 6 **Recent papers:** *Electronic Journal of Probability*; *Electronic Communications in Probability*
- 11 **Special Invited Lecturers; New Textbook**
- 12 **Obituary:** Ron Getoor
- 13 **IMS Awards**
- 15 **Student Puzzle Corner 19; New Researcher Award**
- 16 **Meetings**
- 21 **Employment Opportunities**
- 24 **International Calendar of Meetings**
- 27 **Information for Advertisers**

Read it online:
bulletin.imstat.org



National Academy new member

The US National Academy of Medicine (NAM) has announced the election of 70 regular members and 10 international members. Among them is **Nicholas Patrick Jewell**, University of California, Berkeley.

Election to the Academy is considered one of the highest honors in the fields of health and medicine, recognizing individuals who have made major contributions to the advancement of the medical sciences, health care, and public health. A diversity of talent among NAM's membership is assured by its Articles of Organization, which stipulate that at least one-quarter of the membership is selected from fields outside the health professions, for example, from law, engineering, social sciences, and the humanities—and statistics.

The newly elected members bring NAM's total membership to 2,127 and the number of international members to 172.

IMS Fellow Nicholas P. Jewell is Professor of Biostatistics and Statistics at the University of California, Berkeley. Since arriving at Berkeley in 1981, he has held various academic and administrative positions, most notably serving as Vice Provost from 1994 to 2000. He has also served as an Assistant Professor of Statistics at Princeton University (1979–1981), and held academic appointments at the University of Edinburgh, Oxford University, the London School of Hygiene and Tropical Medicine, and at the University of Kyoto. In 2007, he was a Fellow at the Rockefeller Foundation Bellagio Study Center in Italy.

Dr. Jewell is a Fellow of IMS, the American Statistical Association, and the American Association for the Advancement of Science. He received the 2012 Marvin Zelen Leadership Award in Statistical Science from Harvard University. He is the 2005 winner of the Snedecor Award from COPSS, and won the Distinguished Teaching Award from UC Berkeley's School of Public Health in 2004. In 2000, he was honored by the Director's Award from the Federal Emergency Management Agency for providing “extraordinary leadership and vision in implementing strategies that enhance the disaster resistance of the University of California, Berkeley, and universities throughout America.” In addition the 2005 Alfred E. Alquist Award was given to UC Berkeley's SAFER program that he launched and led for many years.



Nicholas P. Jewell

Contact information

IMS Bulletin Editor: Vlada Limic

Assistant Editor: Tati Howell

Contributing Editors: Anirban DasGupta, Yoram Gat, David Hand, Takis Konstantopoulos, Xiao-Li Meng, Regina Nuzzo, Dimitris Politis, Kavita Ramanan and Terry Speed

Contact the IMS Bulletin by email:

e bulletin@imstat.org

w <http://bulletin.imstat.org>

f <https://www.facebook.com/IMSTATI>

Contact the IMS regarding your dues, membership, subscriptions, orders or change of address:

✉ IMS Dues and Subscriptions Office
9650 Rockville Pike, Suite L3503A
Bethesda, MD 20814-3998
USA

t 877-557-4674 [toll-free in USA]

t +1 216 295 5661 [international]

f +1 301 634 7099

e staff@imstat.org

Contact the IMS regarding any other matter, including advertising, copyright permission, offprint orders, copyright transfer, societal matters, meetings, fellows nominations and content of publications:

✉ Executive Director, Elyse Gustafson
IMS Business Office
PO Box 22718, Beachwood
OH 44122, USA

t 877-557-4674 [toll-free in USA]

t +1 216 295 5661 [international]

f +1 216 295 5661

e erg@imstat.org

Executive Committee

President: Alison Etheridge
president@imstat.org

President-Elect: Xiao-Li Meng
president-elect@imstat.org

Past President: Jon Wellner
president-past@imstat.org

Treasurer: Zhengjun Zhang
zjz@stat.wisc.edu

Program Secretary: Judith Rousseau
rousseau@ceremade.dauphine.fr

Executive Secretary: Edsel Peña
pena@stat.sc.edu

IMS Members' News

American Association for the Advancement of Science announces 2017 Fellows

The American Association for the Advancement of Science (AAAS) has awarded the distinction of Fellow to 396 of its members for 2017 in recognition of their contributions to science and technology, scientific leadership and extraordinary achievements across disciplines. The new AAAS Fellows will be recognized on February 17, 2018, during the Fellows Forum at the 2018 AAAS Annual Meeting in Austin, Texas. At the forum, the new Fellows will be presented with an official certificate and a unique rosette pin, the emblem of Fellowship. The gold and blue colors of the AAAS Fellows' rosette signify science and engineering, respectively.

In the AAAS Section on Statistics were five IMS members and Fellows. Congratulations to **Nicholas Jon Horton**, Amherst College; **Eric D. Kolaczyk**, Boston University; **Hongzhe Li**, University of Pennsylvania Perelman School of Medicine; **Runze Li**, Pennsylvania State University; and **Douglas G. Simpson**, University of Illinois at Urbana-Champaign.

See the full list at the American Association for the Advancement of Science website: <https://www.aaas.org/news/2017-aaas-fellows-recognized-advancing-science>

ICM 2018 Plenary Speakers Lawler, Jordan

The International Congress of Mathematicians 2018 (ICM 2018) takes place August 1–9, 2018, in Rio de Janeiro, Brazil (see <http://www.icm2018.org/>). The organizing committee have announced 21 plenary lectures, among which are two by IMS Fellows, **Gregory Lawler** and **Michael I. Jordan** (you can read the complete list

at <http://www.icm2018.org/>). The remaining part of the program, which includes short communications and poster presentations, will be released later.



Greg Lawler



Michael Jordan

Celebration of 2017 World Statistics Day at Ball State University

On October 26, Ball State University Statistics Group celebrated the 2017 United Nations

World Statistics Day. The Colloquium Speaker was Dr. **Mir Masoom Ali**, the George and Frances Ball Distinguished Professor of Statistics Emeritus, who founded the Statistics program at Ball State in 1971. He talked about the history of the Statistics program: among other things, he specifically talked about the success of the students and growth of the statistics program, now in its fifth decade. The day ended with a discussion session between Professor Ali and the statistics faculty and students.



Mir Masoom Ali

If you hear news about your colleagues,
or anything you think IMS members
would be interested in, tell us!
Email bulletin@imstat.org



Journal News

New editors for co-sponsored journals

We announce the new editors of three of our co-sponsored journals. **Andreas Kyprianou** will take over as editor of the *Electronic Journal of Probability* (from January 1, 2018 for three years), replacing Brian Rider. **Giambattista Giacomini** becomes the editor of *Electronic Communications in Probability*, replacing Sandrine Péché. **Ben Hambly** will serve a second term as the editor of *Probability Surveys*.

The *Electronic Journal of Probability* (*EJP*) publishes full-length research articles in probability theory. Short papers should be submitted first to its sister journal, *Electronic Communications in Probability* (*ECP*). *EJP* and *ECP* share the same editorial board, but with different Editors in Chief. *EJP* and *ECP* are open access official journals of IMS and the Bernoulli Society. Donations to the IMS Open Access Fund help to keep the journal free: <https://secure.imstat.org/secure/orders/donations.asp>. Read *EJP* and *ECP* online at <https://projecteuclid.org/euclid.ejp> and <https://projecteuclid.org/euclid.ecp>. These two journals have their recent papers listed in this issue, on pages 6–9.

Probability Surveys publishes survey articles in theoretical and applied probability. The style of articles may range from reviews of recent research to graduate textbook exposition. Articles may be broad or narrow in scope. The essential requirements are a well specified topic and target audience, together with clear exposition. See <http://www.imstat.org/ps/>.

OECD releases Guidelines

The Organization for Economic Cooperation and Development (OECD) has released two new publications: *Guidelines on Measuring Trust* (<http://www.oecd.org/std/oecd-guidelines-on-measuring-trust-9789264278219-en.htm>) and *Guidelines on Measuring the Quality of the Work Environment* (<http://www.oecd.org/std/oecd-guidelines-on-measuring-the-quality-of-the-working-environment-9789264278240-en.htm>).


Trust, at the interpersonal and institutional level, is a key ingredient of growth, societal well-being and governance. To improve existing measures of trust, these new Guidelines are a first attempt at providing international recommendations on collecting, publishing, and analyzing trust data to encourage their use by national statistical agencies. They also include a number of prototype survey modules on trust that national and international agencies can use in their household surveys.


Quality of the working environment depends on a wide range of factors that ultimately determine workers' well-being at the workplace. These new Guidelines aim to improve the measurement of these factors by taking stock of current data availability, reviewing the analytic and policy uses of these measures, proposing a conceptual framework, assessing the statistical quality of measures, and providing guidance on methodological challenges. They also include a number of prototype surveys modules that national and international agencies can use in their surveys.


A fully cooperative effort between the OECD, BIS, ECB, Fondazione AIB, the IMF, national central banks (Austria, Italy and Portugal), national statistical offices (Australia and Canada), and the Treasury of Canada, these publications are intended for young statisticians, students, journalists, economists, policymakers and citizens who want to know more about the statistics that are at the heart of the analysis of financial developments in OECD economies.


 = access published papers online

IMS Journals and Publications

Annals of Statistics: Ed George and Tailen Hsing
<http://imstat.org/aos>
 <http://projecteuclid.org/aos>

Annals of Applied Statistics: Tilmann Gneiting
<http://imstat.org/aoas>
 <http://projecteuclid.org/aoas>

Annals of Probability: Maria Eulalia Vares
<http://imstat.org/aop>
 <http://projecteuclid.org/aop>

Annals of Applied Probability: Bálint Tóth
<http://imstat.org/aap>
 <http://projecteuclid.org/aop>

Statistical Science: Cun-Hui Zhang
<http://imstat.org/sts>
 <http://projecteuclid.org/ss>

IMS Collections
<http://imstat.org/publications/imscollections.htm>
 <http://projecteuclid.org/imsc>


IMS Monographs and IMS Textbooks: David Cox
<http://imstat.org/cup/>


IMS Co-sponsored Journals and Publications

Electronic Journal of Statistics: Domenico Marinucci
<http://imstat.org/ejs>
 <http://projecteuclid.org/ejs>


Electronic Journal of Probability: Andreas Kyprianou
 <http://ejp.ejpecp.org>

Electronic Communications in Probability:
 Giambattista Giacomini
 <http://ecp.ejpecp.org>

Current Index to Statistics: George Styan
<http://www.statindex.org>
 log into members' area at imstat.org

Journal of Computational and Graphical Statistics:
 Diane Cook
<http://www.amstat.org/publications/jcgs>
 log into members' area at imstat.org


Statistics Surveys: Donald Richards
<http://imstat.org/ss>
 <http://projecteuclid.org/ssu>

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


IMS-Supported Journals

ALEA: Latin American Journal of Probability and Statistics: Victor Perez Abreu
 <http://alea.impa.br/english>

Annales de l'Institut Henri Poincaré (B): Gregory Miermont, Christophe Sabot
<http://imstat.org/aihp>
 <http://projecteuclid.org/aihp>


Bayesian Analysis: Bruno Sansó
 <http://ba.stat.cmu.edu>


Bernoulli: Holger Dette
<http://www.bernoulli-society.org/>
 <http://projecteuclid.org/bj>

Brazilian Journal of Probability and Statistics:
 Francisco Louzada Neto
<http://imstat.org/bjps>
 <http://projecteuclid.org/bjps>

IMS-Affiliated Journals

Observational Studies: Dylan Small
 <http://www.obsstudies.org>

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

Stochastic Systems: Shane Henderson
 <http://www.i-journals.org/ssy/>



Takis Tackles Mathematical Education



Introducing **Takis Konstantopoulos**, one of our Contributing Editors. Takis did his basic studies at NTUA in Greece where he learned a lot about many subjects (“from complex analysis to quantum mechanics, signal processing, control...”) and his MSc (on Lévy’s Brownian motion) and PhD (in stochastic networks) at UC Berkeley. He says, “I have a tremendous curiosity about

everything and enjoy connections. This is probably what made me an academic random walker from INRIA in France, UT Austin, Heriot-Watt in Edinburgh, to Uppsala in Sweden as a chair in Mathematical Statistics, always leaving a tenured position to go to the next one. I love honest applications as much as I love theory.”

A student walked into my office to say hi, a couple of years after graduating with an MSc degree, and asked, “Why didn’t you teach us the central limit theorem for dependent random variables, e.g., martingales? These are the kind of things we need at work.” (He was working in the late 90’s for an internet company on the East coast.) I replied that he was right but there’s a limit to what can be covered in a one-semester course of graduate-level probability for a mixed student audience. I was, however, very pleased to realize, once again, that it is often applications that demand more theory.

I would like to talk here about stochastics (in its all-encompassing sense), mathematics and applications, and about teaching and learning.

I do not understand the distinction between teaching and research, or the difference between theory and applications. How can one teach without being curious to discover something? What’s wrong with having an honest applied viewpoint but also being interested in theory *per se*? David Blackwell once said, “Basically, I’m not interested in doing research and I never have been. I’m interested in understanding, which is quite a different thing. And often to understand something you have to work it out yourself because no one else has done it.” This is a great attitude. If you have this attitude then, undoubtedly you also think about how to explain what you do. Unfortunately, we are told that differences ought to exist, but who says so, and for what purpose?

One problem with stochastics is that undergraduate education in “natural sciences and engineering” follows by and large the Newtonian tradition. Sets are things that a student visualizes, functions are smooth, rules and regulations are taught. (And yet, crime of crimes, geometry is gone! In Sweden and perhaps elsewhere, high

school students do not learn—see below—any demonstration of the Pythagorean theorem.) When entering the realm of stochastics, therefore, a student comes with preconceived ideas that are hard to break. So we end up teaching in a way that leaves the interesting math for later (or for never). Stochastics needs, at a fundamental level, intuition that is distinct from “Newtonian math”. And one has to work hard if one is to pass the message properly to the uninitiated. For example, when we want to argue that $\mathbb{P}(A)$ is less than or equal to $\mathbb{P}(B)$ then we really are working at the logic level: A implies B . This innocuous thing, something that we may smile at, is not something we teach at the Newtonian level.

As for measure theory, why not have it as part of a beginning course, just like we have some elements of analysis as part of a calculus course? I’m not suggesting proving Carathéodory’s theorem, but merely present a way for a student to become familiar with the language, some tools, and usage of the subject. Too controversial? Perhaps, but it can be done if we steal some time from endless calculus drills. Because stochastics is more fundamental to the whole of mathematics than ever before.

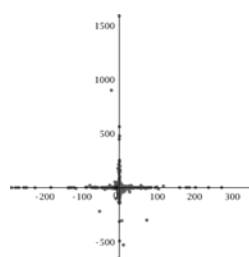
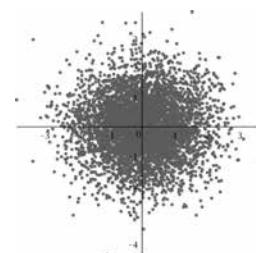
Learning:

I must insist that nothing can be learned unless understood, at some level. If a proof is possible at the student’s level, one must learn it (or them). For more advanced topics, there is always something that we can explain, even when we teach “stats for poets”. Say a student tells you that a normal density is a bell-shaped curve and you wish to convince him or her that that’s not good enough. Well, do a scatter plot of 5000 points (x, y) drawn from the product normal density.

You see a fuzzy circle [right]. Repeat with, say, a Cauchy density which, to me, looks like a bell-shaped curve too. You get a fuzzy cross [below left]. At this point, sub-exponentiality can also be invoked or explained: if $x+y$ is big, then chances are that either x or y (but

not both) is

big. This should trigger the students’ curiosity, and the better ones will ask questions. The point is always to trigger curiosity and to provide constructive challenges.



Continues on page 5

Proofs:

Do you do proofs, or not? For me, it depends on the level, background, and goal. For example, schoolchildren must learn a proof of the Pythagorean theorem in order to learn it. I insist that every undergraduate probability course have a proof of the strong law of large numbers for an easy case (Bernoulli variables). That's instructive and not hard at all. (After all, we are talking about the fundamental theorem of probability.) A proof is not just a means of establishing the veracity of a statement. Each proof tells its own story and gives new light. Algebra colleagues do proofs in their courses right away. A student ought to know not only the formula for the geometric sum $p^1 + p^2 + \dots + p^n$, but also why it is so. Here is a personal story again: A student once thought he had to compute $1^p + 2^p + \dots + n^p$ instead of the above sum. "That's harder," I said, "but, if p is a positive integer then it's also a geometric sum, if you view it the right way". Well, the student turned out to be a bright one so I could show him what the "right way" was. (Question to the reader: do you see what I mean? And do you see why this sum is relevant to probability?)

At a more advanced level, I advocate rigor but also perspective. In particular, give a perspective of why stochastics is important both in applications and in other fields of "deterministic" mathematics. Persi Diaconis told me once that a famous analyst had asked him what's so special with a probability measure. This sort of thing can be discussed in a more advanced class, as a starting point for giving connections. The usual remark that probability is just measure theory together with independence is as misleading as saying that Erdős's probabilistic method is just the first axiom of probability theory (the empty set always has probability 0 or, equivalently, if there exists a \mathbb{P} such that $\mathbb{P}(A) > 0$ then A is nonempty). Because this does not convey the struggle, for example, of Yitang Zhang (and of Daniel Goldston, János Pintz and Cem Yıldırım) who showed, essentially using this method, that there is a c such that there are infinitely many successive primes at a distance less than c (which is probably 2). Probability measures come with a whole bag of intuition, new ideas, new techniques, new problems and new ways of thinking. Who would have thought that coupling can be useful in analysis? For example, (regular) conditional probability provides a means for constructing a natural measure on a manifold by "restricting" the natural uniform measure sitting in the ambient space through a procedure called disintegration (see, e.g., J.T. Chang and D. Pollard, Conditioning as disintegration, *Statistica Neerlandica* 51, 287–317, 1997). The statistical way of thinking offers a lot to many fields of mathematics. At the minimum, it often guides one to ask the right questions. The list is very big but I'm constrained here by space.

In closing, I am reflecting on Yoram Gat's column in the October/November 2017 issue, "Learning as the replication of knowledge," (<http://bulletin.imstat.org/2017/10/pro-bono-statistics-learning-as-the-replication-of-knowledge/>) in which he rightly wonders, *inter alia*, if there are lessons devoted to how learning occurs. In several countries in Europe, younger faculty members are supposed to be trained by attending very lengthy pedagogical courses. However, I have not met any single individual (in mathematical sciences) who has found these courses useful at all, other than learning some practical matters. Those courses advocate the point of view that learning is independent of the subject or the discipline. I do not agree with this. In my opinion, and experience, learning mathematics is very different from learning literature, although I would be the first to recommend to a mathematician to spend some time reading good literature.

A question

A question to all of you, then: what is your opinion and experience of pedagogical courses? In my accumulated experience, I have observed that independent thought is increasingly discouraged. And that the system of rewards (exams) is very little correlated with knowledge obtained. In a large number of universities, students receive vocational training, they learn by rote and are merely being taught how to pass exams. Last but not least, let us take a look at how students are prepared in schools. In the Swedish educational system, mathematics has virtually been eliminated from schools. Some more daring schools offer courses in gaming (<https://www.thelocal.se/20160224/swedish-school-starts-elite-training-for-gamers>) while others make it mandatory that students take a class in playing Minecraft (<https://www.thelocal.se/20130109/45514>) as they think that this encourages thinking. *Does it?*

Does teaching Minecraft in schools encourage children to develop their thinking skills?



Wikimedia/Kevin Jarrett

Recent papers: *Electronic Journal of Probability*

The *Electronic Journal of Probability* (EJP) publishes full-length research articles in probability theory. Short papers should be submitted first to its sister journal, *Electronic Communications in Probability* (ECP). EJP and ECP share the same editorial board, but with different Editors in Chief. EJP and ECP are open access official journals of IMS and the Bernoulli Society. Donations to the IMS Open Access Fund help to keep the journal free: <https://secure.imstat.org/secure/orders/donations.asp>. Read it at <https://projecteuclid.org/euclid.ejp>

Volume 22: 2017

Hitting probabilities of random covering sets in tori and metric spaces . . .	ESA JÄRVENPÄÄ, MAARIT JÄRVENPÄÄ, HENNA KOIVUSALO, BING LI, VILLE SUOMALA, AND YIMIN XIAO; PAPER 1, 18 PP.
Quantitative de Jong theorems in any dimension	CHRISTIAN DÖBLER AND GIOVANNI PECCATI; PAPER 2, 35 PP.
Erratum: Nonlinear filtering for reflecting diffusions in random environments via nonparametric estimation	MICHAEL A. KOURITZIN, WEI SUN, AND JIE XIONG; PAPER 3, 2 PP.
Pathwise uniqueness for an SPDE with Hölder continuous coefficient driven by α -stable noise	XU YANG AND XIAOWEN ZHOU; PAPER 4, 48 PP.
A central limit theorem for the spatial Λ -Fleming-Viot process with selection	RAPHAËL FORIEN AND SARAH PENINGTON; PAPER 5, 68 PP.
One-point localization for branching random walk in Pareto environment	MARCEL ORTGIESE AND MATTHEW I. ROBERTS; PAPER 6, 20 PP.
Stochastic differential equations with sticky reflection and boundary diffusion	MARTIN GROTHAUS AND ROBERT VOSSHALL; PAPER 7, 37 PP.
Uniform in time interacting particle approximations for nonlinear equations of Patlak-Keller-Segel type	AMARJIT BUDHIRAJA AND WAI-TONG LOUIS FAN; PAPER 8, 37 PP.
Mixing time of the fifteen puzzle	BEN MORRIS AND ANASTASIA RAYMER; PAPER 9, 29 PP.
Double roots of random polynomials with integer coefficients	OHAD N. FELDHEIM AND ARNAB SEN; PAPER 10, 23 PP.
Uniqueness of critical Gaussian chaos	JANNE JUNNILA AND EERO SAKSMAN; PAPER 11, 31 PP.
Intersection and mixing times for reversible chains	YUVAL PERES, THOMAS SAUERWALD, PERLA SOUSI, AND ALEXANDRE STAUFFER; PAPER 12, 16 PP.
Intermediate disorder directed polymers and the multi-layer extension of the stochastic heat equation	IVAN CORWIN AND MIHAI NICA; PAPER 13, 49 PP.
Conditional survival distributions of Brownian trajectories in a one dimensional Poissonian environment in the critical case	MARTIN KOLB AND MLADEN SAVOV; PAPER 14, 29 PP.
Growth-fragmentation processes and bifurcators	QUAN SHI; PAPER 15, 25 PP.
Critical window for the configuration model: finite third moment degrees	SOUVIK DHARA, REMCO VAN DER HOFSTAD, JOHAN S.H. VAN LEEUWAARDEN, AND SANCHAYAN SEN; PAPER 16, 33 PP.
Functional central limit theorem for subgraph counting processes	TAKASHI OWADA; PAPER 17, 38 PP.
Local limit of the fixed point forest	TOBIAS JOHNSON, ANNE SCHILLING, AND ERIK SLIVKEN; PAPER 18, 26 PP.
On asymptotic behavior of the modified Arratia flow	VITALII KONAROVSKIY; PAPER 19, 31 PP.
Inversion, duality and Doob h -transforms for self-similar Markov processes	LARBI ALILI, LOÏC CHAUMONT, PIOTR GRACZYK, AND TOMASZ ŻAK; PAPER 20, 18 PP.
Asymptotics of heights in random trees constructed by aggregation	BÉNÉDICTE HAAS; PAPER 21, 25 PP.
Local law for the product of independent non-Hermitian random matrices with independent entries	YURIY NEMISH; PAPER 22, 35 PP.
Functional Erdős-Rényi law of large numbers for nonconventional sums under weak dependence	YURI KIFER; PAPER 23, 17 PP.
Transportation—cost inequalities for diffusions driven by Gaussian processes	SEBASTIAN RIEDEL; PAPER 24, 26 PP.
Local law for random Gram matrices	JOHANNES ALT, LÁSZLÓ ERDŐS, AND TORBEN KRÜGER; PAPER 25, 41 PP.
Measure-valued Pólya urn processes	CÉCILE MAILLER AND JEAN-FRANÇOIS MARCKERT; PAPER 26, 33 PP.
Asymptotics of self-similar growth-fragmentation processes	BENJAMIN DADOUN; PAPER 27, 30 PP.
On generalized Gaussian free fields and stochastic homogenization	YU GU AND JEAN-CHRISTOPHE MOURRAT; PAPER 28, 21 PP.
Bootstrap percolation on products of cycles and complete graphs	JANKO GRAVNER AND DAVID SIVAKOFF; PAPER 29, 20 PP.
Universality of random matrices with correlated entries	ZILIANG CHE; PAPER 30, 38 PP.
Reflected Brownian motion: selection, approximation and linearization	MARC ARNAUDON AND XUE-MEI LI; PAPER 31, 55 PP.
Finitely dependent insertion processes	AVI LEVY; PAPER 32, 19 PP.
Absorbing-state transition for Stochastic Sandpiles and Activated Random Walks	VLADAS SIDORAVICIUS AND AUGUSTO TEIXEIRA; PAPER 33, 35 PP.
Perturbations of Voter model in one-dimension	C.M. NEWMAN, K. RAVISHANKAR, AND E. SCHERTZER; PAPER 34, 42 PP.
Geometry of infinite planar maps with high degrees	TIMOTHY BUDD AND NICOLAS CURIEN; PAPER 35, 37 PP.
A Liouville hyperbolic souvlaki	JOHANNES CARMESIN, BRUNO FEDERICI, AND AGELOS GEORGAKOPOULOS; PAPER 36, 19 PP.
Rigorous results for a population model with selection I: evolution of the fitness distribution	JASON SCHWEINSBERG; PAPER 37, 94 PP.
Rigorous results for a population model with selection II: genealogy of the population	JASON SCHWEINSBERG; PAPER 38, 54 PP.
The Brownian net and selection in the spatial Λ -Fleming-Viot process	ALISON ETHERIDGE, NIC FREEMAN, AND DANIEL STRAULINO; PAPER 39, 36 PP.

Ricci curvature bounds for weakly interacting Markov chains	MATTHIAS ERBAR, CHRISTOPHER HENDERSON, GEORG MENZ, AND PRASAD TETALI; PAPER 40, 23 PP.
An Eyring–Kramers law for the stochastic Allen–Cahn equation in dimension two	NILS BERGLUND, GIACOMO DI GESÙ, AND HENDRIK WEBER; PAPER 41, 27 PP.
Fluctuations for mean-field interacting age-dependent Hawkes processes.	JULIEN CHEVALLIER; PAPER 42, 49 PP.
Mean-field behavior for nearest-neighbor percolation in $d > 10$	ROBERT FITZNER AND REMCO VAN DER HOFSTAD; PAPER 43, 65 PP.
Extremes and gaps in sampling from a GEM random discrete distribution	JIM PITMAN AND YURI YAKUBOVICH; PAPER 44, 26 PP.
Scaling limits for the critical Fortuin–Kasteleyn model on a random planar map II: local estimates and empty reduced word exponent	EWAIN GWYNNE AND XIN SUN; PAPER 45, 56 PP.
Weak error for the Euler scheme approximation of diffusions with non-smooth coefficients	VALENTIN KONAKOV AND STÉPHANE MENOZZI; PAPER 46, 47 PP.
Multifractal analysis for the occupation measure of stable-like processes.	STÉPHANE SEURET AND XIAOCHUAN YANG; PAPER 47, 36 PP.
Regularity of stochastic kinetic equations.	ENNIO FEDRIZZI, FRANCO FLANDOLI, ENRICO PRIOLA, AND JULIEN VOVELLE; PAPER 48, 42 PP.
Positivity of the time constant in a continuous model of first passage percolation	JEAN-BAPTISTE GOUÉRÉ AND MARIE THÉRET; PAPER 49, 21 PP.
Disorder relevance without Harris Criterion: the case of pinning model with γ -stable environment	HUBERT LACONIN AND JULIEN SOHIER; PAPER 50, 26 PP.
Errata to “Processes on unimodular random networks”.	DAVID ALDOUS AND RUSSELL LYONS; PAPER 51, 4 PP.
Construction and Skorohod representation of a fractional K -rough path	AURÉLIEN DEYA; PAPER 52, 40 PP.
Asymptotic freeness for rectangular random matrices and large deviations for sample covariance matrices with sub-Gaussian tails	BENJAMIN GROUX; PAPER 53, 40 PP.
Muttalib–Borodin ensembles in random matrix theory—realisations and correlation functions	PETER J. FORRESTER AND DONG WANG; PAPER 54, 43 PP.
Hypoelliptic multiscale Langevin diffusions: large deviations, invariant measures and small mass asymptotics	WENQING HU AND KONSTANTINOS SPILIOPOULOS; PAPER 55, 38 PP.
Stationary gap distributions for infinite systems of competing Brownian particles	ANDREY SARANTSEV AND LI-CHENG TSAI; PAPER 56, 20 PP.
Averaged vs. quenched large deviations and entropy for random walk in a dynamic random environment	FIRAS RASSOUL-AGHA, TIMO SEPPÄLÄINEN, AND ATILLA YILMAZ; PAPER 57, 47 PP.
Long Brownian bridges in hyperbolic spaces converge to Brownian trees.	XINXIN CHEN AND GRÉGORIE MIERMONT; PAPER 58, 15 PP.
A weak Cramér condition and application to Edgeworth expansions	JÜRGEN ANGST AND GUILLAUME POLY; PAPER 59, 24 PP.
Local circular law for the product of a deterministic matrix with a random matrix	HAOKAI XI, FAN YANG, AND JUN YIN; PAPER 60, 77 PP.
A duality principle in spin glasses	ANTONIO AUFFINGER AND WEI-KUO CHEN; PAPER 61, 17 PP.
Transport–entropy inequalities on locally acting groups of permutations	PAUL-MARIE SAMSON; PAPER 62, 33 PP.
Exit laws of isotropic diffusions in random environment from large domains	BENJAMIN FEHRMAN; PAPER 63, 37 PP.
Eigenvector statistics of sparse random matrices	PAUL BOURGADE, JIAOYANG HUANG, AND HORNG-TZER YAU; PAPER 64, 38 PP.
Spatial asymptotics for the parabolic Anderson model driven by a Gaussian rough noise	XIA CHEN, YAOZHONG HU, DAVID NUALART, AND SAMY TINDEL; PAPER 65, 38 PP.
Scaling limit of the uniform prudent walk	NICOLAS PÉTRÉLIS, RONGFENG SUN, AND NICCOLÒ TORRI; PAPER 66, 19 PP.
A branching random walk among disasters	NINA GANTERT AND STEFAN JUNK; PAPER 67, 34 PP.
Moment bounds for SPDEs with non-Gaussian fields and application to the Wong–Zakai problem	AJAY CHANDRA AND HAO SHEN; PAPER 68, 32 PP.
Poisson statistics for 1d Schrödinger operators with random decaying potentials.	SHINICHI KOTANI AND FUMIHIKO NAKANO; PAPER 69, 31 PP.
Metastability in the reversible inclusion process.	ALESSANDRA BIANCHI, SANDER DOMMERS, AND CRISTIAN GIARDINÀ; PAPER 70, 34 PP.
Harnack inequalities for SDEs driven by time-changed fractional Brownian motions.	CHANG-SONG DENG AND RENÉ L. SCHILLING; PAPER 71, 23 PP.
On uniqueness and blowup properties for a class of second order SDEs.	ALEJANDRO GOMEZ, JONG JUN LEE, CARL MUELLER, EYAL NEUMAN, AND MICHAEL SALINS; PAPER 72, 17 PP.
On explicit approximations for Lévy driven SDEs with super-linear diffusion coefficients	CHAMAN KUMAR AND SOTIRIOS SABANIS; PAPER 73, 19 PP.
Limiting empirical distribution of zeros and critical points of random polynomials agree in general.	TULASI RAM REDDY; PAPER 74, 18 PP.
On the chemical distance in critical percolation	MICHAEL DAMRON, JACK HANSON, AND PHILIPPE SOSOE; PAPER 75, 43 PP.
Path large deviations for interacting diffusions with local mean-field interactions in random environment	PATRICK E. MÜLLER; PAPER 76, 56 PP.
Distances in scale free networks at criticality	STEFFEN DEREICH, CHRISTIAN MÖNCH, AND PETER MÖRTERS; PAPER 77, 38 PP.
Continuity of the time and isoperimetric constants in supercritical percolation	OLIVIER GARET, RÉGINE MARCHAND, EVIATAR B. PROCACCIA, AND MARIE THÉRET; PAPER 78, 35 PP.
The hard-edge tacnode process for Brownian motion	PATRIK L. FERRARI AND BÁLINT VETŐ; PAPER 79, 32 PP.
Reversing the cut tree of the Brownian continuum random tree	NICOLAS BROUTIN AND MINMIN WANG; PAPER 80, 23 PP.
Conditions for ballisticity and invariance principle for random walk in non-elliptic random environment	MARK HOLMES AND THOMAS S. SALISBURY; PAPER 81, 18 PP.
Time-changes of stochastic processes associated with resistance forms.	DAVID CROYDON, BEN HAMBLY, AND TAKASHI KUMAGAI; PAPER 82, 41 PP.
Rigid representations of the multiplicative coalescent with linear deletion	JAMES B. MARTIN AND BALÁZS RÁTH; PAPER 83, 47 PP.
Scaling limit of the uniform infinite half-plane quadrangulation in the Gromov–Hausdorff–Prokhorov–uniform topology.	EWAIN GWYNNE AND JASON MILLER; PAPER 84, 47 PP.
Inequalities for critical exponents in d -dimensional sandpiles	SANDEEP BHUPATIRAJU, JACK HANSON, AND ANTAL A. JÁRAI; PAPER 85, 51 PP.
Phase transitions of extremal cuts for the configuration model	SOUVIK DHARA, DEBANKUR MUKHERJEE, AND SUBHABRATA SEN; PAPER 86, 29 PP.

Multivariate central limit theorems for Rademacher functionals with applications	KAI KROKOWSKI AND CHRISTOPH THÄLE; PAPER 87, 30 PP.
No percolation in low temperature spin glass	NOAM BERGER AND RAN J. TESSLER; PAPER 88, 19 PP.
Boundary arm exponents for SLE	HAO WU AND DAPENG ZHAN; PAPER 89, 26 PP.
Mixing and cut-off in cycle walks	ROBERT HOUGH; PAPER 90, 49 PP.
Duality and hypoellipticity: one-dimensional case studies	LAURENT MICLO; PAPER 91, 32 PP.
Asymptotic direction for random walks in mixing random environments	ENRIQUE GUERRA AND ALEJANDRO F. RAMÍREZ; PAPER 92, 41 PP.
Renormalizability of Liouville quantum field theory at the Seiberg bound	FRANÇOIS DAVID, ANTTI KUPIAINEN, RÉMI RHODES, AND VINCENT VARGAS; PAPER 93, 26 PP.
Long time asymptotics of unbounded additive functionals of Markov processes	FUQING GAO; PAPER 94, 21 PP.
Local limits of Markov branching trees and their volume growth	CAMILLE PAGNARD; PAPER 95, 53 PP.
An iterative technique for bounding derivatives of solutions of Stein equations	CHRISTIAN DÖBLER, ROBERT E. GAUNT, AND SEBASTIAN J. VOLLMER; PAPER 96, 39 PP.
A tightness criterion for random fields, with application to the Ising model	MARCO FURLAN AND JEAN-CHRISTOPHE MOURRAT; PAPER 97, 29 PP.
Invariant measures for stochastic functional differential equations	OLEG BUTKOVSKY AND MICHAEL SCHEUTZOW; PAPER 98, 23 PP.
Harmonic moments and large deviations for a supercritical branching process in a random environment	ION GRAMA, QUANSHENG LIU, AND ERIC MIQUEU; PAPER 99, 23 PP.
Boundaries of planar graphs: a unified approach	TOM HUTCHCROFT AND YUVAL PERES; PAPER 100, 20 PP.
GUE corners limit of q -distributed lozenge tilings	SEVAK MKRTCHYAN AND LEONID PETROV; PAPER 101, 24 PP.
Extreme statistics of non-intersecting Brownian paths	GIA BAO NGUYEN AND DANIEL REMENIK; PAPER 102, 40 PP.

Recent papers: *Electronic Communications in Probability*

Electronic Communications in Probability (ECP) is also an open access IMS/Bernoulli Society official journal. Read the journal online at <https://projecteuclid.org/euclid.ejp>

Volume 22: 2017

The Intrinsic geometry of some random manifolds	SUNDER RAM KRISHNAN, JONATHAN E. TAYLOR, AND ROBERT J. ADLER; PAPER 1, 12 PP.
A heat flow approach to the Godbillon-Vey class	DIEGO S. LEDESMA; PAPER 2, 6 PP.
Application of stochastic flows to the sticky Brownian motion equation	HATEM HAJRI, MINE CAGLAR, AND MARC ARNAUDON; PAPER 3, 10 PP.
Recurrence and transience properties of multi-dimensional diffusion processes in self-similar and semi-selfsimilar random environments	SEIICHIRO KUSUOKA, HIROSHI TAKAHASHI, AND YOZO TAMURA; PAPER 4, 11 PP.
Recurrence of multiply-ended planar triangulations	ORI GUREL-GUREVICH, ASAF NACHMIAS, AND JUAN SOUTO; PAPER 5, 6 PP.
Universal large deviations for Kac polynomials	RAPHAËL BUTEZ AND OFER ZEITOUNI; PAPER 6, 10 PP.
On recurrence and transience of multivariate near-critical stochastic processes	GÖTZ KERSTING; PAPER 7, 12 PP.
Yet another condition for absence of collisions for competing Brownian particles	TOMOYUKI ICHIBA AND ANDREY SARANTSEV; PAPER 8, 7 PP.
Stable limit theorem for U-statistic processes indexed by a random walk	BRICE FRANKE, FRANÇOISE PÈNE, AND MARTIN WENDLER; PAPER 9, 12 PP.
Necessary and sufficient conditions for the r -excessive local martingales to be martingales	MIKHAIL URUSOV AND MIHAIL ZERVOS; PAPER 10, 6 PP.
Product space for two processes with independent increments under nonlinear expectations	QIANG GAO, MINGSHANG HU, XIAOJUN JI, AND GUOMIN LIU; PAPER 11, 12 PP.
The set of connective constants of Cayley graphs contains a Cantor space	SÉBASTIEN MARTINEAU; PAPER 12, 4 PP.
Indicable groups and $pc < 1$	ARAN RAOUFI AND ARIEL YADIN; PAPER 13, 10 PP.
First passage percolation on a hyperbolic graph admits bi-infinite geodesics	ITAI BENJAMINI AND ROMAIN TESSERA; PAPER 14, 8 PP.
Erratum: Optimal linear drift for the speed of convergence of an hypoelliptic diffusion	ARNAUD GUILLIN AND PIERRE MONMARCHÉ; PAPER 15, 2 PP.
Self-averaging sequences which fail to converge	ERIC CATOR AND HENK DON; PAPER 16, 12 PP.
Some connections between permutation cycles and Touchard polynomials and between permutations that fix a set and covers of multisets	ROSS G. PINSKY; PAPER 17, 9 PP.
Convergence of complex martingales in the branching random walk: the boundary	KONRAD KOLESKO AND MATTHIAS MEINERS; PAPER 18, 14 PP.
Remarks on spectral gaps on the Riemannian path space	SHIZAN FANG AND BO WU; PAPER 19, 13 PP.
Galton-Watson probability contraction	MOUMANTI PODDER AND JOEL SPENCER; PAPER 20, 16 PP.
The existence phase transition for two Poisson random fractal models	ERIK I. BROMAN, JOHAN JONASSON, AND JOHAN TYKESSON; PAPER 21, 8 PP.

Improved bounds for the mixing time of the random-to-random shuffle	CHUAN QIN AND BEN MORRIS; PAPER 22, 7 PP.
Note on A. Barbour's paper on Stein's method for diffusion approximations	MIKOŁAJ J. KASPRZAK, ANDREW B. DUNCAN, AND SEBASTIAN J. VOLLMER; PAPER 23, 8 PP.
Stein type characterization for G-normal distributions	MINGSHANG HU, SHIGE PENG, AND YONGSHENG SONG; PAPER 24, 12 PP.
Two observations on the capacity of the range of simple random walks on Z_3 and Z_4	YINSHAN CHANG; PAPER 25, 9 PP.
Kesten's incipient infinite cluster and quasi-multiplicativity of crossing probabilities	DEEPAN BASU AND ARTEM SAPOZHNIKOV; PAPER 26, 12 PP.
An elementary approach to Gaussian multiplicative chaos	NATHANAËL BERESTYCKI; PAPER 27, 12 PP.
About the constants in the Fuk-Nagev inequalities	EMMANUEL RIO; PAPER 28, 12 PP.
Survival asymptotics for branching random walks in IID environments	JÁNOS ENGLÄNDER AND YUVAL PERES; PAPER 29, 12 PP.
The frog model with drift on \mathbb{R}^d	JOSHUA ROSENBERG; PAPER 30, 14 PP.
Piecewise constant local martingales with bounded numbers of jumps	JOHANNES RUF; PAPER 31, 5 PP.
Marčenko–Pastur law for Kendall's tau	AFONSO S. BANDEIRA, ASAD LODHIA, AND PHILIPPE RIGOLLET; PAPER 32, 7 PP.
Uniform convergence to the Q-process	NICOLAS CHAMPAGNAT AND DENIS VILLEMONAIS; PAPER 33, 7 PP.
A note on Malliavin smoothness on the Lévy space	EIJA LAUKKARINEN; PAPER 34, 12 PP.
On the relaxation rate of short chains of rotors interacting with Langevin thermostats	NOÉ CUNEO AND CHRISTOPHE POQUET; PAPER 35, 8 PP.
A note on continuous-time stochastic approximation in infinite dimensions	JAN SEIDLER AND FRANTIŠEK ŽÁK; PAPER 36, 13 PP.
Large deviations for biorthogonal ensembles and variational formulation for the Dykema–Haagerup distribution	RAPHAËL BUTEZ; PAPER 37, 11 PP.
On the Semi-classical Brownian Bridge Measure	XUE-MEI LI; PAPER 38, 15 PP.
A functional limit theorem for excited random walks	ANDREY PILIPENKO; PAPER 39, 9 PP.
On stochastic heat equation with measure initial data	JINGYU HUANG; PAPER 40, 6 PP.
On the real spectrum of a product of Gaussian matrices	NICK SIMM; PAPER 41, 11 PP.
Signature inversion for monotone paths	JIawei CHANG, NICK DUFFIELD, HAO NI, AND WEIJUN XU; PAPER 42, 11 PP.
Energy optimization for distributions on the sphere and improvement to the Welch bounds	YAN SHUO TAN; PAPER 43, 12 PP.
Nonlinear filtering with degenerate noise	DAVID JAURES FOTSA–MBOGNE AND ETIENNE PARDOUX; PAPER 44, 14 PP.
Cutoff for Ramanujan graphs via degree inflation	JONATHAN HERMON; PAPER 45, 10 PP.
Some properties for Itô processes driven by G-Brownian motion	XINPENG LI AND FALEI WANG; PAPER 46, 10 PP.
The moving particle lemma for the exclusion process on a weighted graph	JOE P. CHEN; PAPER 47, 13 PP.
Asymptotic number of caterpillars of regularly varying Λ -coalescents that come down from infinity	BATI ŞENGÜL; PAPER 48, 12 PP.
On the multifractal local behavior of parabolic stochastic PDEs	JINGYU HUANG AND DAVAR KHOSHNEVISAN; PAPER 49, 11 PP.
On the threshold of spread-out voter model percolation	BALÁZS RÁTH AND DANIEL VALESIN; PAPER 50, 12 PP.
Inequalities for the Gaussian measure of convex sets	MICHAEL R. TEHRANCHI; PAPER 51, 7 PP.
A Markov chain representation of the normalized Perron–Frobenius eigenvector	RAPHAËL CERF AND JOSEBA DALMAU; PAPER 52, 6 PP.
Stochastic invariance of closed sets for jump-diffusions with non-Lipschitz coefficients	EDUARDO ABI JABER; PAPER 53, 15 PP.
On the sub-Gaussianity of the Beta and Dirichlet distributions	OLIVIER MARCHAL AND JULYAN ARBEL; PAPER 54, 14 PP.
Donsker-type theorems for correlated geometric fractional Brownian motions and related processes	PETER PARCZEWSKI; PAPER 55, 13 PP.
Convergence rates of the random scan Gibbs sampler under the Dobrushin's uniqueness condition	NENG-YI WANG; PAPER 56, 7 PP.
An inequality for the heat kernel on an Abelian Cayley graph	THOMAS MCMURRAY PRICE; PAPER 57, 8 PP.
Multidimensional quadratic BSDEs with separated generators	ASGAR JAMNESHAN, MICHAEL KUPPER, AND PENG LUO; PAPER 58, 10 PP.
Note on a one-dimensional system of annihilating particles	VLADAS SIDORAVICIUS AND LAURENT TOURNIER; PAPER 59, 9 PP.
Information loss on Gaussian Volterra process	ARTURO VALDIVIA; PAPER 60, 5 PP.
Second order behavior of the block counting process of beta coalescents	YIER LIN AND BASTIEN MALLEIN; PAPER 61, 8 PP.
A Cramér type moderate deviation theorem for the critical Curie–Weiss model	VAN HAO CAN AND VIET-HUNG PHAM; PAPER 62, 12 PP.
Singularities of the density of states of random Gram matrices	JOHANNES ALT; PAPER 63, 13 PP.
An ergodic theorem for partially exchangeable random partitions	JIM PITMAN AND YURI YAKUBOVICH; PAPER 64, 10 PP.
Boundary rules and breaking of self-organized criticality in 2D frozen percolation	JACOB VAN DEN BERG AND PIERRE NOLIN; PAPER 65, 15 PP.
Noncentral limit theorem for the generalized Hermite process	DENIS BELL AND DAVID NUALART; PAPER 66, 13 PP.
On magic factors in Stein's method for compound Poisson approximation	FRASER DALY; PAPER 67, 10 PP.
Radix sort trees in the large	STEVEN N. EVANS AND ANTON WAKOLBINGER; PAPER 68, 13 PP.

12th International Vilnius Conference on Probability Theory and Mathematical Statistics

2018 IMS Annual Meeting on Probability and Statistics

Venue | Vilnius University Life Sciences Center

July 2 – 6, 2018 | Vilnius, Lithuania



- **Wald Lectures – Luc Devroye**
(McGill University Montreal)
- **Le Cam Lecture – Ruth Williams**
(UC San Diego)
- **Neyman Lecture – Peter Bühlmann**
(ETH Zurich)
- **Schramm Lecture – Yuval Peres**
(Microsoft Research Redmond)
- **Vilnius Lecture – Liudas Giraitis**
(Queen Mary University of London)

- **Medallion Lecture – Jean Bertoin**
(University of Zurich)
- **Medallion Lecture – Svante Janson**
(Uppsala University)
- **Medallion Lecture – Thomas Mikosch**
(University of Copenhagen)
- **Medallion Lecture – Sonia Petrone**
(Bocconi University Milan)
- **Medallion Lecture – Richard Samworth**
(University of Cambridge)

www.ims-vilnius2018.com

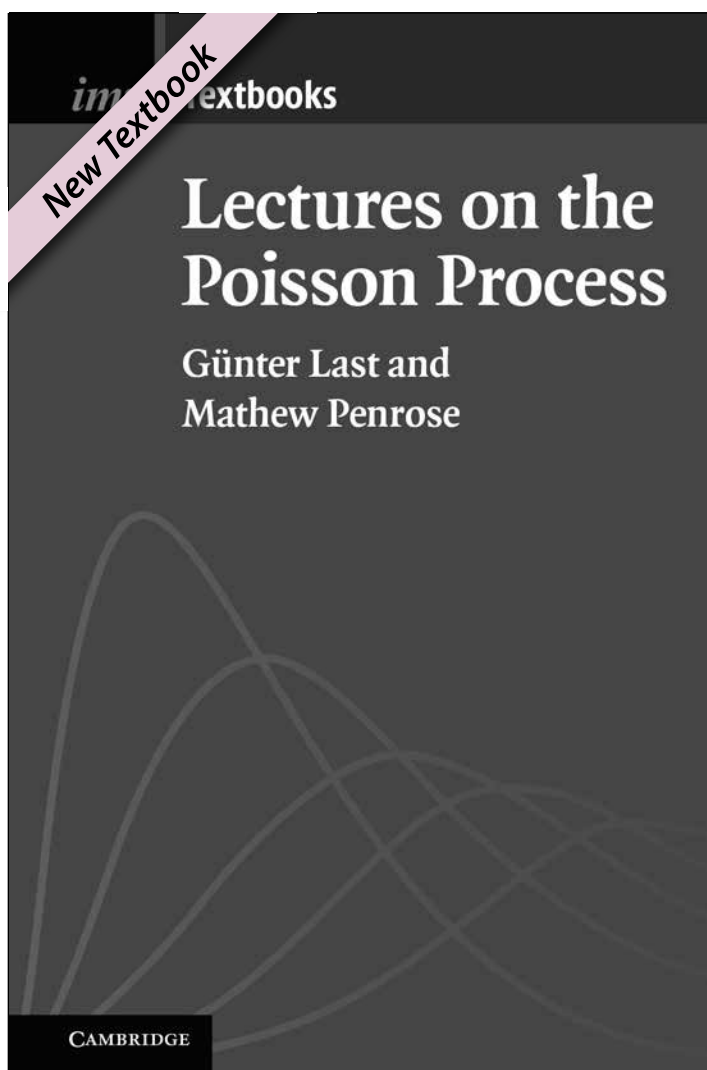
IMS Special Invited Lecturers in 2018

Coming up in 2018, we have a number of special lectures at IMS sponsored and co-sponsored meetings.

Most of these will be delivered at the **IMS Annual Meeting in Vilnius**, held in conjunction with the 12th International Vilnius Conference on Probability Theory and Mathematical Statistics (July 2–6, 2018). The Wald Lectures will be delivered by **Luc Devroye**; the 2018 Le Cam Lecturer is **Ruth Williams**; the Neyman Lecturer is **Peter Bühlmann**, and the Schramm Lecturer is **Yuval Peres**. Six Medallion lectures will also be given at this meeting, by **Jean Bertoin**, **Svante Janson**, **Thomas Mikosch**, **Sonia Petrone**, **Richard Samworth** and **Allan Sly**. See <http://ims-vilnius2018.com/plenary-speakers/>

Anthony Davison and **Ming Yuan** will give their Medallion lectures at JSM in Vancouver (July 28–August 2, 2018). See <https://ww2.amstat.org/meetings/jsm/2018/index.cfm>

SPA 2018, the 40th Stochastic Processes and their Applications conference in Gothenburg, Sweden (June 11–15, 2018) will feature two Medallion lectures, by **Anna De Masi** and **Davar Khoshnevisan**. (The conference will also feature a Lévy lecture from Alison Etheridge, a Doob lecture from Jeffrey Steif, and ten Plenary lectures from Robert Adler, Francois Baccelli, Mia Deijfen, Patricia Gonçalves, Kurt Johansson, Olav Kallenberg, Mikhail Menshikov, Annie Millet, Asaf Nachmias and Nike Sun.) See <http://spa2018.org/programme/plenary-speakers/>



IMS Textbooks: *Lectures on the Poisson Process*

Günter Last, Karlsruhe Institute of Technology, and
Mathew Penrose, University of Bath

The Poisson process, a core object in modern probability, enjoys a richer theory than is sometimes appreciated. This volume develops the theory in the setting of a general abstract measure space, establishing basic results and properties as well as certain advanced topics in the stochastic analysis of the Poisson process. Also discussed are applications and related topics in stochastic geometry, including stationary point processes, the Boolean model, the Gilbert graph, stable allocations, and hyperplane processes. Comprehensive, rigorous, and self-contained, this text is ideal for graduate courses or for self-study, with a substantial number of exercises for each chapter. Mathematical prerequisites, mainly a sound knowledge of measure-theoretic probability, are kept in the background, but are reviewed comprehensively in the appendix. The authors' approach is informed both by their research and by their extensive experience in teaching at undergraduate and graduate levels.



**IMS members
are entitled
to a 40%
discount.
Order your
copy from
cambridge.
org/ims**

Hardback
\$89.99 \$53.99
Paperback
\$34.99 \$20.99
eBook
\$28.00 \$16.80

OBITUARY: Ronald K. Getoor

1929–2017

RONALD KAY GETOOR, Professor Emeritus in the Department of Mathematics at the University of California, San Diego, died peacefully at his home on October 28, 2017. He was 88.

Getoor was born in Royal Oak, Michigan, on February 9, 1929. He attended the University of Michigan, receiving an A.B. in Mathematics in 1950, an M.S. in Mathematics in 1951, and a PhD in Mathematics in 1954 under the direction of Arthur H. Copeland. Getoor spent two post-doctoral years (1954–1956) at Princeton University as a Fine Instructor. At Princeton, he came in contact with William Feller, Kiyoshi Itô, and Henry P. McKean, Jr. (then Feller's student). Itô had a profound impact on Getoor, influencing the direction of his research in the years that followed. Getoor was appointed Assistant Professor at the University of Washington in 1956, arriving in the same year as his future collaborator Robert M. Blumenthal. Getoor had advanced to Full Professor by the time he moved south to the nascent Mathematics Department at UC San Diego in 1966. He spent the rest of his career at UC San Diego, achieving the highly distinguished rank of Professor Above-Scale. Although he formally retired in 2000, he continued an active research program until about 2010. Getoor visited various other institutions over the years, including MIT in 1959–60 under an NSF postdoctoral fellowship and Stanford University on a sabbatical.

Getoor was one of the leaders in the growth of Probability Theory that began in the 1950s and continues to this day. His research career spanned more than 50 years, and during that time he focused on the study of stochastic processes, principally Markov processes. In the late 1950s, Getoor and Blumenthal set out to understand the

then-recent work of Gilbert Hunt on the connection between Markov processes and potential theory (extending the connections between Brownian motion and Newtonian potential theory that were known to Perron, Wiener, Kakutani, and others). They succeeded in this mission, and developed a detailed theory of the “additive functionals” of such Markov processes, resulting in the foundational work *Markov Processes and Potential Theory*, which appeared in 1968. Offshoots of this program were illuminating and groundbreaking work on stable processes and on the local times of Markov processes. This work has had a lasting impact on the field, and is frequently cited even today.

Shortly after moving to San Diego, Getoor started a second long-term collaboration with Michael J. Sharpe, who joined the UC San Diego mathematics faculty in 1967. Their joint work covered an impressive stretch, from abstract results on general Markov processes to detailed investigation of the intricate behavior of Bessel processes. Perhaps the most important of this work was the influential paper “Conformal Martingales” and their extensive work on last-exit times and excursions.

Starting in the early 1980s, Getoor became interested in the so-called Kuznetsov process, which is the stationary version of a given strong Markov process, with time extending to infinity in both directions. Such a process provides a probabilistic embodiment of the analytic duality relationship that was a cornerstone of the earlier work with Blumenthal. This path-wise view of “time reversal” became a key tool in the detailed study of the excessive measures of a Markov process. These studies, some in collaboration with Patrick J. Fitzsimmons, culminated in Getoor's



Ron Getoor

definitive monograph on the subject *Excessive Measures*, which appeared in 1990.

Over his career, Getoor published more than 100 research articles and three books. Two of these books have been mentioned above; the third is the brief Markov processes: Ray processes and right processes (1975), which describes with admirable lucidity how the “Ray-Knight compactification” can be used in the study of strong Markov processes. Getoor's papers are notable for their clarity of exposition and attention to detail.

Getoor was elected a Fellow of the IMS in 1971, and was among the inaugural class of Fellows of the American Mathematical Society, in 2013. He was an invited speaker at the 1970 International Congress of Mathematicians (ICM) in Nice.

Getoor was a dedicated teacher and mentor. Over the years he taught mathematics courses at all levels. He supervised the Ph.D. theses of nine students at UC San Diego, and he hosted post-doctoral visits to UC San Diego of several other mathematicians. Along with Kai Lai Chung and Erhan Çinlar, he founded in 1981 the “Seminar on Stochastic Processes,” a yearly gathering of “kindred spirits working on stochastic processes” with the aim of stimulating discussion and collaboration. The “Seminar” has continued uninterrupted for more than 35 years.

As one of the senior members of the mathematics department, Getoor helped shape the growth of the department and

especially of the probability group, as UC San Diego grew over the years. He was known within the department and around campus for his sage advice and was tapped to serve on the all important Academic Senate Committee on Academic Personnel (then called the Budget Committee). Once the faculty club was built in 1988, Getoor enjoyed lunching at Euclid's table with mathematics colleagues and mathematics buffs from around campus; he also helped advise the club by serving on its Board of Directors.

As a young man Getoor was a competitive table tennis player and won a state championship. Throughout his life, Getoor enjoyed the outdoors, including hiking, body surfing (particularly at Scripps, Torrey Pines and Del Mar), and he enjoyed road trips to wine country, the California and Pacific Northwest coasts, and national parks. He was an avid fan of classical music and the opera, attending the San Diego Opera as a season subscriber for many years.

Ron is survived by his second wife Anne Westbrook Getoor, his daughter Lise Getoor who is a professor in the Computer Science department at UC Santa Cruz, his brother Richard Getoor of Cincinnati, OH, his sister Jackie Kuthy of Fort Lauderdale, FL, stepchildren Thomas Westbrook and John Westbrook, step grandchildren Emma, Lilli, Marian, and Philip, and nieces and nephews including Donna Beshgetoor of San Diego.

Those wishing to honor Ron Getoor's memory are asked to donate to the Ronald Getoor Memorial Fund for Mathematical Probability Research at UC San Diego. Donations can be made online at <http://bit.ly/GetoorMemorialFund>. A memorial gathering will be scheduled at a later date for family, friends and colleagues.

*Patrick J. Fitzsimmons, Michael J. Sharpe and Ruth J. Williams,
University of California, San Diego*

Awards: Nominate or apply now!

Nominate for Carver Award or Fellowship

The **Carver Medal** was created by the IMS in honor of Harry C. Carver, for exceptional service specifically to the IMS. It is open to any IMS member who has not previously been elected President. See <http://imstat.org/awards/carver.html>.

Deadline February 1.

IMS Fellows demonstrate distinction in research in statistics or probability, by publication of independent work of merit; alternatively, as well-established leaders whose contributions to the field of statistics or probability other than original research is judged of equal value; or whose work has contributed greatly to the utility of and the appreciation of these areas. Candidates for fellowship should have been members of the IMS for at least two years. See <http://imstat.org/awards/fellows.htm>. **Deadline January 31.**

IMS Child Care Initiative

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. The next one is in Vilnius, Lithuania, July 2–6, 2018: <http://ims-vilnius2018.com/>.

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)
- 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 meeting to provide child care, the IMS can reimburse 80% of the cost of their travel, up to \$250.

Apply for a Travel Award

Applications are open for two types of travel awards. The **IMS Hannan Graduate Student Travel Award** funds travel and registration to attend (and possibly present a paper/poster at) an IMS sponsored or co-sponsored meeting, and are for *IMS members who are graduate students (seeking a Masters or PhD degree) studying some area of statistical science or probability*. If you are a New Researcher (awarded your PhD in 2012–17) looking for travel funds, you should apply for the **IMS New Researcher Travel Award** to fund travel, and possibly other expenses, to present a paper or a poster at an IMS sponsored or co-sponsored meeting. See <http://www.imstat.org/awards/hannan.html> and <http://www.imstat.org/awards/travel.html>. See <http://imstat.org/awards/travel.html>. **Deadline February 1.**





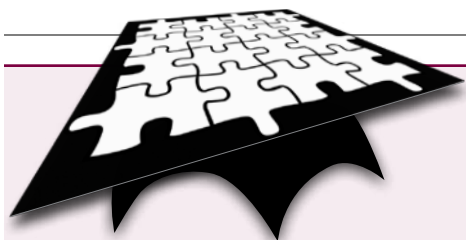
IMS members get a
40% discount

Order your copy now from
cambridge.org/ims

BRADLEY EFRON
TREVOR HASTIE

COMPUTER AGE STATISTICAL INFERENCE

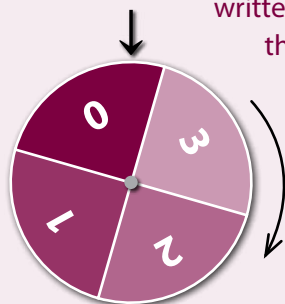
ALGORITHMS, EVIDENCE, AND DATA SCIENCE



Student Puzzle Corner 19

A reminder of last issue's puzzle, posed by guest contributor Stanislav Volkov, Centre for Mathematical Sciences at Lund University in Sweden:

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



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

Question:

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

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

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

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

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

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

Deadline: January 15, 2018

Bernoulli Society New Researcher Award

The Bernoulli Society welcomes submissions to the New Researcher Award. Each awardee will deliver a 30-minute talk during the ISI World Congress in Malaysia in 2019 (August 18–23, 2019, in Kuala Lumpur, Malaysia: see <http://www.isi2019.org/>), and will receive funding of up to 1000€ (roughly US\$1150) to offset their travel and other expenses. *Bernoulli News* will publish their pictures and a paragraph about their work.

Interested candidates should submit a three-page synopsis of their presentation, along with their CV, to ber.soc.yra@gmail.com by **February 28, 2018**.

Eligible candidates are active researchers in Mathematical Statistics who, at the time of submission, are regular members of the Bernoulli Society and are within five years of receiving their PhD. Female candidates get one extra year for each child born since receiving their PhD.



IMS meetings around the world

Joint Statistical Meetings: 2018–2023

IMS sponsored meeting

JSM 2018

July 28–August 2, 2018. Vancouver, Canada

<http://ww2.amstat.org/meetings/jsm/2018/>

Abstract submission is open for contributed papers/posters, speed presentations, topic-contributed papers/panels, and roundtable discussions. <http://ww2.amstat.org/meetings/jsm/2018/submissions.cfm#abstracts> Join us in Vancouver, for one of the biggest statistical events of the year: with more than 6,000 attendees (including over 1,000 students) from 52 countries, and over 600 sessions, it's a busy few days! The theme is "Lead with Statistics."



IMS sponsored meetings: JSM dates for 2019–2023

IMS Annual Meeting @ JSM 2019	JSM 2020	IMS Annual Meeting @ JSM 2021	2022 Joint Statistical Meetings	IMS Annual Meeting @ JSM 2023
July 27–August 1, 2019, Denver, CO	August 1–6, 2020 Philadelphia, PA	August 7–12, 2021, Seattle, WA	August 6–11, 2022 Washington, D.C.	August 5–10, 2023 Toronto, ON, Canada

IMS co-sponsored meeting

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

June 11–15, 2018. Salerno, Italy

<http://www.isnps2018.it/>

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

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

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

IMS co-sponsored meeting

Frontier Probability Days

Corvallis, OR, USA. March 29–31, 2018

[w](#) TBC

IMS co-sponsored meeting

2018 IMS Asia Pacific Rim Meeting

June 26–29, 2018

Singapore

<https://ims-aprm2018.stat.nus.edu.sg/>

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

The program, covering a wide range of topics in statistics and probability, includes **Plenary Lectures** from Rick Durrett and Bin Yu, and many Distinguished Speakers.

IMS co-sponsored meeting

Elastic Functional and Shape Data Analysis

July 16–20, 2018

Ohio State University, Columbus, OH, USA

<https://stat.osu.edu/cbms-efsd>

NSF is funding one CBMS Regional Conference in statistics in 2018. The lecturer is Anuj Srivastava, Florida State.

At a glance:

*forthcoming
IMS Annual
Meeting and
JSM dates*

2018

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

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

2019

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

2020

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

JSM: Philadelphia,
August 1–6, 2020

2021

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

2022

IMS Annual Meeting:
TBC

JSM: Washington,
August 6–11,
2022

IMS co-sponsored meeting

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

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

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

Plenary speakers: Robert Adler, Francois Baccelli, Mia Deijfen, Alison Etheridge (Lévy lecture), Patricia Gonçalves, Kurt Johansson, Olav Kallenberg, Davar Khoshnevisan (IMS Medallion lecture), Anna De Masi (IMS Medallion lecture), Mikhail Menshikov, Annie Millet, Elchanan Mossel, Asaf Nachmias, Jeffrey Steif (Doob lecture), and Nike Sun.

IMS co-sponsored meeting

The 6th Workshop on Biostatistics and Bioinformatics**May 4–6, 2018. Atlanta, GA****w** <https://math.gsu.edu/yichuan/2018Workshop/>

The 6th Workshop on Biostatistics and Bioinformatics will take place May 4–6, 2018, in Atlanta. The goal of the workshop is to stimulate research and to foster the interaction of researchers in Biostatistics and Bioinformatics. It will provide the opportunity for faculty and graduate students to meet with top researchers in small groups, identify important directions for future research, and facilitate research collaboration.



The keynote speaker is **Hongyu Zhao**, the Ira V. Hiscock Professor of Biostatistics and Professor of Statistics and Genetics at Yale University, and recipient of the Mortimer Spiegelman Award. Invited sessions and a poster session are also part of the workshop.

Partial travel awards will be awarded to select conference participants as priority will be given to senior graduate students, post-graduate, recent PhDs, junior faculty, and under-represented groups.

NEW

IMS co-sponsored meeting

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

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



IMS co-sponsored meeting

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

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

IMS sponsored meeting

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

Next summer's WNAR/IMS meeting will be held June 24–27, 2018, at the University of Alberta, Edmonton, Canada. The local organizers are Bei Jiang and Linglong Kong. Details coming soon.

IMS sponsored mtg

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

Program Co-chairs Peter Bühlmann (IMS) and Vygantas Paulauskas (Vilnius). Local Chair is Remigijus Leipus.



IMS sponsored meetings

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

Register by February 1, 2018 to receive early bird rates. Preliminary program is online.

IMS co-sponsored meeting

Bernoulli/IMS 10th World Congress in Probability and Statistics
August 17–21, 2020. Seoul, South Korea
w TBC
 The next World Congress in Probability and Statistics will be in Seoul, South Korea.

Other meetings and events around the world

Meeting the Statistical Challenges in High Dimensional Data and Complex Networks

February 5–16, 2018

National University of Singapore

NEW WEBSITE:

[w http://ims.nus.edu.sg/events/2018/wstat/index.php](http://ims.nus.edu.sg/events/2018/wstat/index.php)

The program of this two-week workshop aims at showing the role of modern statistical methods in complex data and serves to support interactions among mathematicians, statisticians, engineers and scientists working in the interface of experiment, computation, analysis and statistics. Two workshops with a few special lectures will focus on the development of new statistical methods in high dimensional data and complex networks with their interactions in scientific and social sciences. It seeks to foster activity and collaboration on all aspects of the effects of the high dimensional data analysis and social networks.

Please note the new meeting website.

11th International Conference on Extreme Value Analysis

July 1–5, 2019

Zagreb, Croatia

[w http://web.math.hr/eva2019](http://web.math.hr/eva2019)

The 11th International Conference on Extreme Value Analysis will take place in Zagreb, Croatia. It will schedule presentations on all Probabilistic and Statistical aspects of Extreme Value Analysis and applications in Climate and Atmospheric Science, Industrial Risks, Geosciences, Hydrology, Finance, Economics and Insurance, Biosciences, Physics, and Telecommunications and Stochastic Networks. All students, researchers, practitioners, and scientists with interests in statistics of extremes are welcome.

International Total Survey Error Workshop (ITSEW)

June 4–6, 2018

Durham, NC, USA

[w https://dism.ssri.duke.edu/itsew-2018](https://dism.ssri.duke.edu/itsew-2018)

Contact: Alexandra Cooper cooper@duke.edu

The 2018 ITSEW, hosted by the Duke Initiative on Survey Methodology and the Odum Institute for Research in Social Science at the University of North Carolina is aimed at statisticians, survey managers and methodologists, pollsters, public opinion researchers, and marketing research professionals focused on survey quality and the challenges of combined data products. Through presentations and exchange of information the workshop aims to support a better understanding of total survey error.

The 7th Symposium on Conformal and Probabilistic Prediction with Applications (COPA 2018)

June 11–13, 2018

Maastricht, The Netherlands

[w http://clrc.rhul.ac.uk/copa2018/index.html](http://clrc.rhul.ac.uk/copa2018/index.html)

Conformal prediction was developed originally at the end of the 1990s and summarized in the monograph “Algorithmic Learning in a Random World”, Springer, New York, 2005. The main purpose of this method is to complement predictions delivered by various algorithms of Machine Learning with provably valid measures of their accuracy and reliability under the assumption that the observations are independent and identically distributed. Conformal prediction is a universal tool in several senses; in particular, it can be used in combination with any known machine learning algorithm, such as SVM, Neural Networks, Ridge Regression, etc. It has been applied to a variety of problems from diagnostics of depression to the behaviour of bots.

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

ISBA World Meeting

June 24–29, 2018. Edinburgh, UK

[w https://bayesian.org/isba2018/](https://bayesian.org/isba2018/)

The world meeting of the International Society for Bayesian Analysis (ISBA) will take place in Edinburgh, a beautiful and historical location closely associated with Thomas Bayes, who studied logic and theology at the University of Edinburgh as an undergraduate (circa 1719–1722).

The meeting will include foundational lectures presented by Alan Gelfand, Anthony O’Hagan, Judith Rousseau, and Ed George. In addition, keynote speakers include Nicolas Chopin, Montse Fuentes, Steve MacEachern, and Michael Jordan.

ISBA 2018 is the continuation of the traditional Valencia/ISBA Meetings regularly held since 1979. They represent a unique event where the Bayesian community gathers together to discuss recent advances and the future of the profession.

Recent Trends in Continuous and Discrete Probability

June 18–21, 2018

Georgia Tech in Atlanta, GA.

w <https://pwp.gatech.edu/rtip/>

The purpose of the conference is to bring researchers, including graduate students and postdocs, together to share recent results at the front of many areas of probability. The topics include spatial stochastic systems, like percolation and spin systems, growth models, random matrices, stochastic differential equations, and stochastic homogenization. The conference is supported by the NSF.

Main courses (four one-hour lectures each) are given by: **Marek Biskup** (UCLA) and **Jonathan Mattingly** (Duke).

Invited speakers include: Louis-Pierre Arguin (CUNY); Rodrigo Bañuelos (Purdue); Fabrice Baudoin (Connecticut); Gerandy Brito (Georgia Tech); Shirshendu Ganguly (Berkeley); Jack Hanson (CUNY); David Herzog (Iowa State); Jessica Lin (McGill); Firas Rassoul-Agha (Utah); and Philippe Sosoe (Cornell).

We will have several 15-minute talks by graduate students, selected by application. We ask that students submit applications to give talks and to obtain support for lodging by February 1, 2018. To do so, please send your name, address, affiliation, whether you would like to give a 15-minute talk, and a reference letter from your supervisor, to organizers Michael Damron (mdamron6@math.gatech.edu) and Christian Houdré (houdre@math.gatech.edu).

Attendees, please register at the website by March 1, 2018.

Harmonic Analysis for Stochastic PDEs

July 10–13, 2018. Delft, The Netherlands

w <http://fa.its.tudelft.nl/spde/>

We have limited space for contributed talks. If you want to contribute a talk, please send us your preliminary title and abstract. Registration fee includes conference dinner and excursion.

Model Selection, Regularization and Inference

July 12–14, 2018

University of Vienna, Austria,

w <http://www.univie.ac.at/seam/inference2018/>

The workshop is centered around the general theme of estimation and inference in situations where shrinkage methods based on model selection or regularization are employed, including high-dimensional scenarios where the number of parameters exceeds the sample size.

Invited speakers include Alexandre Belloni (Duke), Yoav Benjamini (Tel Aviv), Rudy Beran (UC Davis), Larry Brown (UPenn), Noureddine El Karoui (UC Berkeley), Lucas Janson (Harvard), Adel Javanmard (USC), Hannes Leeb (U. Vienna), Ian McKeague (Columbia), David Preinerstorfer (ULB), Lukas Steinberger (U. Freiburg), Jon Taylor (Stanford), and Ryan Tibshirani (Carnegie Mellon).

Contributed presentations are welcome! Please submit your extended abstract or paper to benedikt.poetscher@univie.ac.at before March 15, 2018.

Symposium on Data Science and Statistics

Beyond Big Data: Leading the Way

May 16–19, 2018. Reston, Virginia, USA

w <https://ww2.amstat.org/meetings/sdss/2018/>

Abstract submission by January 18, 2018.

Each presentation to focus on one of the following six tracks: Data Science; Statistical Machine Learning; Computational Statistics; Data Visualization; Computing Science; Applications.

The 2018 Symposium on Data Science and Statistics (SDSS) will be held in honor of **Edward J. Wegman**, who has done seminal work in many areas within the interface of statistics and computing science—as well as data visualization—and has been a driving force in creating the SDSS and its predecessors.

CHAOS2018: International Conference on Non-Linear Analysis and Modeling, Theory and Applications

June 5–8, 2018

Rome, Italy

w <http://www.cmsim.org/>

You are kindly invited to participate and to submit an Abstract, Paper, Invited Talk and/or an Invited Session (3–6 papers) to the forthcoming Nonlinear Systems Conference titled: 11th Chaotic Modeling and Simulation International Conference (CHAOS2018, 5–8 June 2018). The submissions page is now open.

Chaos theory is developed rapidly the last decades. With CHAOS2018 International Conference we celebrate 11 years of active presence in the field via the annual conference, the proceedings and publications in books and the CMSIM Journal (www.cmsim.eu).

For more information please visit the conference website above or send email to Secretariat@cmsim1.org.

Looking forward to welcome you in Rome for the Conference,
Prof. Christos H Skiadas,
Conference Co-Chair

2018 European Meeting of Statisticians

July 22–26, 2018

Palermo, Italy

w TBC
The next European Meeting of Statisticians, sponsored by the European Regional Committee (ERC) of the Bernoulli Society, will be held in Palermo, Italy, from July 22nd to July 26th. The programme committee is composed of: Lutz Dümbgen (chair), Anne Gégout-Petit (ERC Programme coordinator), Angelo Mineo (Local organizing committee representative), Holger Dette, Ingrid Glad, Irène Gijbels, Omiros Papaspiliopoulos and Qiwei Yao.

Statistics Annual Winter Workshop: Semi-Parametric & Non-Parametric Statistics in the Era of Big Data

January 19–20, 2018

University of Florida, Gainesville, FL

[w https://informatics.institute.ufl.edu/event/statistics-annual-winter-workshop-semi-parametric-non-parametric-statistics-in-the-era-of-big-data/](https://informatics.institute.ufl.edu/event/statistics-annual-winter-workshop-semi-parametric-non-parametric-statistics-in-the-era-of-big-data/)



In recent years, the availability of high-throughput data from genomic, finance, environmental, marketing applications (among others) has created an urgent need for methodology and tools for analyzing high-dimensional data. The explosion of data, due to advances in science and IT, has left almost no field untouched. It is not uncommon to see datasets of sizes in terabytes and/or with millions of covariates. The field of nonparametric and semi-parametric statistics is quickly evolving and expanding to adapt to the challenges posed by big data. A variety of new techniques have been developed. Some of these techniques leverage the recent developments in the parallel and distributed computing, while others rely on appropriate sparsity assumptions to reduce the effective number of covariates. In addition, recent work has shown that many of these methodologies drastically reduce computation time while retaining the optimality properties of the standard non-parametric and semiparametric methods. Despite important breakthroughs in the last few years, a lot of unanswered questions remain. In an effort to address this, the proposed workshop will bring together individuals who have done path-breaking work in this field.

Guest speakers:

Moulinath Banerjee, University of Michigan: *Intelligent Sampling for Estimating Change Points in Very Long Sequential Data*

Guang Cheng, Purdue University: *Can We Do Statistical Inference in a Non-Asymptotic Way?*

Subhashis Ghoshal, North Carolina State University: *Bayesian Analysis of Brain Connectome Data for Studying Alzheimer Disease*

Yanyuan Ma, Pennsylvania State University: *On Estimation of General Index Model for Survival Data*

Hans-Georg Mueller, University of California at Davis: *Frechet Regression and Applications*

Annie Qu, University of Illinois at Urbana-Champaign: *Cluster Analysis of Longitudinal Profiles with Subgroups*

Bodhisattva Sen, Columbia University: *Spatial Adaptivity in Trend Filtering*

Wei Biao Wu, University of Chicago: *Testing for Trends in High-dimensional Time Series*

Cun-Hui Zhang, Rutgers University: *Simultaneous Bootstrap Inference with High-Dimensional Data*

Applications of Spatial Data: Ecological Niche Modeling May 16–18, 2018, at NIMBioS, University of Tennessee, Knoxville

[w http://www.nimbios.org/tutorials/SpatialDataENM](http://www.nimbios.org/tutorials/SpatialDataENM)

Now accepting applications.

Objectives: The distribution of a species may be influenced by an array of factors. The combination of these factors results in the ecological niche, the set of conditions that allow a species to exist in a geographic area. However, defining these conditions is difficult, due to the complexity of natural systems. One approach to characterizing the ecological niche uses spatial data GIS software. The objectives of this tutorial are to teach participants the concepts of ecological niche modeling, introduce them to select analytical techniques (formatting data in GIS; running Maximum Entropy (MaxEnt) models), and present how to interpret and apply spatial analyses. Participants will further be familiarized with several commonly-used and/or newly-available online spatial data resources. Participants will be provided datasets to use in hands-on simulations, but can also bring their own data if desired.

This tutorial is intended for advanced graduate students, postdocs, and faculty who are interested in learning how to incorporate ecological niche modeling into their research. Some basic knowledge of GIS software and ecology is preferred. Little to no programming will be involved, with ecological niche modeling and spatial analysis conducted using existing applications (MaxEnt) and packages in QGIS and R.

Application deadline: **February 15, 2018**

NIMBioS Tutorial: The Search for Selection June 18–22, 2018, at NIMBioS, University of Tennessee, Knoxville

[w http://www.nimbios.org/tutorials/selection](http://www.nimbios.org/tutorials/selection)

The intended audience is advanced graduate students, postdocs, and faculty with an interest in searching for targets of selection, be they particular genomic sequences or particular traits. Given the breadth of this topic, we expect students from functional genomics, population and evolutionary genetics, ecology, paleobiology, functional morphology, and statistics (as well as other fields). The background required is some basic introduction to population and/or quantitative genetics.

Application deadline: **February 1, 2018**

2018 Women in Statistics and Data Science Conference October 18–20, 2018 Cincinnati, Ohio

[w https://ww2.amstat.org/meetings/wds/2018/](https://ww2.amstat.org/meetings/wds/2018/)

Visit the website to join the mailing list. Concurrent & Speed abstract submission will be March 1–April 19, 2018.

Employment Opportunities around the world

Canada: Toronto, ON

University of Toronto, Department of Statistical Sciences

Assistant Professor, Data Visualization

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

Hong Kong: Shatin

The Chinese University of Hong Kong

Professors / Associate Professors / Assistant Professors

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

Netherlands: Rotterdam

Erasmus University Rotterdam

Tenure-Track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38029005

New Zealand: Auckland

The University of Auckland

Lecturer in Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38501042

New Zealand: Wellington

Victoria University of Wellington

Lecturer / Senior Lecturer Statistics and Data Science

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38317882

Saudi Arabia: Thuwal

KAUST (King Abdullah University of Science and Technology)

Faculty Position in Data Science

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38294586

Sweden: Stockholm

KTH, Royal Institute of Technology

Postdoc

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38183763

Switzerland: Lausanne

Ecole polytechnique fédérale de Lausanne (EPFL)

Tenure Track Assistant Professorship in Stochastic Analysis

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37699609

Switzerland: Lausanne

Ecole polytechnique fédérale de Lausanne (EPFL)

Professorship in Statistics

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

Taiwan: Taipei

Institute of Statistical Science, Academia Sinica

Regular Research Positions

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

UK: Cambridge

University of Cambridge, Pure Mathematics & Mathematical Statistics

Research Associate in Statistics

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

UK: Coventry

University of Warwick

Assistant/Associate Professor of Statistics, Reader, Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38447146

UK: London

Imperial College London

Senior Lecturer/Reader/Chair in Biostatistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38457345

United States: Berkeley, CA

UC Berkeley

Visiting Assistant Professor

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

United States: Berkeley, CA

UC Berkeley

Lecturer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38181129

United States: Stanford, CA

Stanford University Department of Biomedical Data Science

Open Rank Faculty Search

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

United States: Stanford, CA

Stanford University, Statistics Department

Associate or Full Professor in Statistics and Probability

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=36858848

United States: Stanford, CA

Stanford University, Department of Statistics

Assistant Professor in Statistics or Probability

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=36858837

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

Tenure Track Faculty Position

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37948387**United States: New Haven, CT****Yale School of Public Health**

Tenure-track Faculty Positions in Biostatistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37728965**United States: New Haven, CT****Yale University**

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

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37723750**United States: Washington, DC****Georgetown University, Department of Mathematics & Statistics**

Director of Graduate Studies, Mathematics & Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38297180**United States: Grinnell, IA****Grinnell College**

Assistant Professor of Mathematics and Statistics - Two-year Position

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38180071**United States: West Lafayette, IN****Purdue University, Department of Statistics**

Assistant Professor of Statistics - Data Science and Machine Learning

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38146760**United States: West Lafayette, IN****Purdue University - Department of Statistics**

Continuing Lecturer of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38414690**United States: Lawrence, KS****Department of Mathematics, University of Kansas**

Black-Babcock Visiting Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38173842**United States: Cambridge, MA****Harvard Data Science Initiative**

Data Science Postdoctoral Fellow

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37874665**United States: Ann Arbor, MI****University of Michigan Statistics**

RTG Postdoctoral associate

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37685748**United States: Detroit, MI****Wayne State University, Department of Mathematics**

Assistant/Associate Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37744527**United States: Duluth, MN****University of Minnesota-Duluth Mathematics and Statistics Dept.**

Assistant Professor Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38012717**United States: Minneapolis, MN****University of Minnesota, School of Statistics**

Tenure-track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=36748331**United States: Saint Louis, MO****Washington University in Saint Louis**

Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37683494**United States: Saint Louis, MO****Washington University in Saint Louis**

Lecturer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38069323**United States: Durham, NC****Fuqua School of Business, Duke University**

Tenure Track Faculty Position in Decision Sciences

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=35757055**United States: Princeton, NJ****Princeton University**

Senior Lecturer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37707208**United States: Ithaca, NY****Computing and Information Science at Cornell University**

Lecturer

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37744886

United States: Corvallis, OR**Oregon State University, Department of Statistics**

Tenure-Track Assistant Professor

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37914461**United States: Philadelphia, PA****Statistical Science, Fox School of Business, Temple University**

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

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37729061**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****Wharton Department of Statistics, University of Pennsylvania
Postdoctoral Researcher with Professor Eric Tchetgen Tchetgen**

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

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

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

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

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

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

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

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

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

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

Postdoctoral Researcher with Professor Eric Tchetgen Tchetgen

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=37925109**United States: Philadelphia, PA****University of Pennsylvania, Wharton Department of Statistics**

Departmental Postdoctoral Researcher

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=21031133**United States: Memphis, TN****The University of Memphis**




Assistant Professor, Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=38481800**United States: Fairfax, VA****George Mason University, Department of Statistics**

Tenure-Track Assistant or Associate Professor of Statistics

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

International Calendar of Statistical Events


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

January 2018

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



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

January 17–19: NIMBioS, Knoxville, TN, USA. **Stoichiometric Ecotoxicology** http://www.nimbios.org/workshops/WS_ecotox

 **January 19–20:** Gainesville, FL, USA. **Statistics Annual Winter Workshop: Semi-Parametric & Non-Parametric Statistics in the Era of Big Data** <https://informatics.institute.ufl.edu/event/statistics-annual-winter-workshop-semi-parametric-non-parametric-statistics-in-the-era-of-big-data/>

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

February 2018

 **February 5–16:** Singapore. **Meeting the Statistical Challenges in High Dimensional Data and Complex Networks**  <http://ims.nus.edu.sg/events/2018/wstat/index.php>

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

March 2018

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

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

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

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

March 26–29: Barcelona, Spain. **Bayes Comp 2018**

<https://www.maths.nottingham.ac.uk/personal/tk/bayescomp/>



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

 **March 29–31:** Corvallis, OR, USA. **Frontier Probability Days** [w TBC](#)


April 2018

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

May 2018

  **May 4–6:** Atlanta, GA, USA. **6th Workshop on Biostatistics and Bioinformatics** <https://math.gsu.edu/yichuan/2018Workshop/>

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

 **May 16–18:** NIMBioS, Knoxville, TN, USA. **Applications of Spatial Data: Ecological Niche Modeling** <http://www.nimbios.org/tutorials/SpatialDataENM>

 **May 16–19:** Reston, VA, USA. **Symposium on Data Science and Statistics** <https://ww2.amstat.org/meetings/sdss/2018/>

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

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

June 2018


June 3–6: McGill University, Montreal, Québec, Canada. **Statistical Society of Canada 2018 Annual Meeting** <https://ssc.ca/en/meetings/2018-annual-meeting>

NEW June 4–6: Durham, NC, USA. **International Total Survey Error Workshop (ITSEW)** [w](https://dism.ssri.duke.edu/itsew-2018) <https://dism.ssri.duke.edu/itsew-2018>

NEW June 5–8: Rome, Italy. **CHAOS2018: International Conference on Non-Linear Analysis and Modeling, Theory and Applications** [w](http://www.cmsim.org/) <http://www.cmsim.org/>

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

NEW June 11–13: Maastricht, The Netherlands. **The 7th Symposium on Conformal and Probabilistic Prediction with Applications (COPA 2018)** [w](http://clrc.rhul.ac.uk/copa2018/index.html) <http://clrc.rhul.ac.uk/copa2018/index.html>

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

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

 June 16–18: Shanghai, China. **SAE2018: Small Area Estimation and Other Topics of Current Interest in Surveys, Official Statistics, and General Statistics** [w](http://www.sae2018.com) www.sae2018.com

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

NEW June 18–21: Georgia Tech in Atlanta, GA, USA. **Recent Trends in Continuous and Discrete Probability** [w](https://pwp.gatech.edu/rtip/) <https://pwp.gatech.edu/rtip/>

NEW June 18–22: NIMBioS, Knoxville, TN, USA. **NIMBioS Tutorial: The Search for Selection** [w](http://www.nimbios.org/tutorials/selection) <http://www.nimbios.org/tutorials/selection>


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

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

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

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

July 2018


 July 2–6: Vilnius, Lithuania. **Joint 2018 IMS Annual Meeting and 12th International Vilnius Conference on Probability Theory and Mathematical Statistics** [w](http://ims-vilnius2018.com/) <http://ims-vilnius2018.com/>

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

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

NEW July 10–13: Delft, The Netherlands. **Harmonic Analysis for Stochastic PDEs** [w](http://fa.its.tudelft.nl/spde/) <http://fa.its.tudelft.nl/spde/>

NEW July 12–14: University of Vienna, Austria. **Model Selection, Regularization and Inference** [w](http://www.univie.ac.at/seam/inference2018/) <http://www.univie.ac.at/seam/inference2018/>

NEW  July 16–20: Columbus, OH, USA. **CBMS Regional Conference: Elastic Functional and Shape Data Analysis** [w](https://stat.osu.edu/cbms-efsa) <https://stat.osu.edu/cbms-efsa>

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

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

NEW July 22–26: Palermo, Italy. **2018 European Meeting of Statisticians** [w](#) TBC

 July 28–August 2: Vancouver, Canada. **JSM 2018** [w](http://www2.amstat.org/meetings/jsm/2018/) <http://www2.amstat.org/meetings/jsm/2018/>

August 2018

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

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

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

September 2018

September 3–6: Cardiff, UK. **Royal Statistical Society International Conference** [w](http://www.rss.org.uk/conference2018) www.rss.org.uk/conference2018

International Calendar *continued*

September 2018 *continued*

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

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

October 2018

NEW October 18–20: Cincinnati, OH, USA. **2018 Women in Statistics and Data Science Conference**
w <https://ww2.amstat.org/meetings/wds/2018/>

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

December 2018

December 17–20: Jerusalem, Israel. **Jerusalem Joint Statistical Event 2018** **w** <https://www.emr2018.com/>

March 2019

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

July 2019

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

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

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

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

August 2019

NEW August 18–23: Kuala Lumpur, Malaysia. **ISI2019: 62nd International Statistical Institute World Statistics Congress 2019**
w <http://www.isi2019.org/>

March 2020

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

July 2020

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

August 2020

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

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

August 2021

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

August 2022

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

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

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

You can email the details to Elyse Gustafson at erg@imstat.org, or you can submit the details yourself at <http://www.imstat.org/submit-meeting.html>

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

Membership and Subscription Information

Journals

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.

Individual Memberships

Each individual member receives the *IMS Bulletin* (print and/or electronic) and may elect to receive one or more of the five scientific journals. Members pay annual dues of \$105. An additional \$89 is added to the dues of members for each scientific journal selected (\$53 for *Stat Sci*). **Reduced membership** dues are available to full-time students, new graduates, permanent residents of countries designated by the IMS Council, and retired members.

Individual and General Subscriptions

Subscriptions are available on a calendar-year basis. **Individual subscriptions** are for the personal use of the subscriber and must be in the name of, paid directly by, and mailed to an individual. Individual subscriptions for 2018 are available to *The Annals of Applied Probability* (\$204), *The Annals of Applied Statistics* (\$204), *The Annals of Probability* (\$204), *The Annals of Statistics* (\$204), *Statistical Science* (\$168), and *IMS Bulletin* (\$115). **General subscriptions** are for libraries, institutions, and any multiple-readership use. Institutional subscriptions for 2018 are available to *The Annals of Applied Probability*, *The Annals of Applied Statistics*, *The Annals of Probability*, and *The Annals of Statistics* (each title \$505 online only / \$559 print+online), *Statistical Science* (\$288/\$317), and *IMS Bulletin* (\$132 print). Airmail rates for delivery outside North America are \$149 per title.

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.

The *IMS Bulletin* (ISSN 1544-1881) is published eight times per year in January/February, March, April/May, June/July, August, September, October/November and December, by the Institute of Mathematical Statistics, 3163 Somerset Dr, Cleveland, Ohio 44122, USA. Periodicals postage paid at Cleveland, Ohio, and at additional mailing offices. Postmaster: Send address changes to Institute of Mathematical Statistics, 9650 Rockville Pike, Suite L3503A, Bethesda, MD 20814-3998.

Copyright © 2018 by the Institute of Mathematical Statistics. Printed by The Sheridan Press, 450 Fame Avenue, Hanover, PA 17331, USA.

Information for Advertisers

General information: The *IMS Bulletin* and webpages are the official news organs of the Institute of Mathematical Statistics. The *IMS Bulletin*, established in 1972, is published 8 times per year. Print circulation is around 4,000 paper copies, and it is also free online in PDF format at <http://bulletin.imstat.org>, posted online about two weeks before mailout (average downloads over 8,000). Subscription to the *IMS Bulletin* costs \$115. To subscribe, call 877-557-4674 (US toll-free) or +1 216 295 2340 (international), or email staff@imstat.org. The IMS website, <http://imstat.org>, established in 1996, receives over 30,000 visits per month. Public access is free.

Advertising job vacancies

A single 60-day online job posting costs just **\$295.00**. 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>

Advertising meetings, workshops and conferences

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

Rates and requirements for display advertising

Display advertising allows for placement of camera-ready ads for journals, books, software, etc. A camera-ready ad should be sent as a grayscale PDF/EPS with all fonts embedded. Email your advert to Audrey Weiss, IMS Advertising Coordinator admin@imstat.org or see <http://bulletin.imstat.org/advertise>

	Dimensions: width x height	Rate
1/3 page	4.9" wide x 4" high (125 x 102 mm)	\$260
1/2 page	7.5" wide x 4" high (190 x 102 mm)	\$325
2/3 page	4.9" wide x 8" high (125 x 203 mm)	\$380
Full page (to edge, including 1/8" bleed)	8.75" wide x 11.25" high (222 mm x 286 mm)	\$430
Full page (within usual <i>Bulletin</i> margins)	7.5" wide x 9.42" high (190 mm x 239 mm)	\$430

Deadlines and Mail Dates for *IMS Bulletin*

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	June 15	July 1	July 15
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

* Note that the August 2018 issue has an early deadline of June 15

the
next
issue is
March
2018

Read IMS Bulletin
articles online at
<http://bulletin.imstat.org>



DEADLINES
for
submissions
February 1, then
March 15

Please see inside
the back cover for
subscription details
and information for
advertisers, including
all our **deadlines and**
requirements

Journal
alerts

For alerts and special
information on all the
IMS journals, sign up
at the IMS Groups site
<http://lists.imstat.org>

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

ims

IMS: Organized September 12, 1935

THE ANNALS
of
STATISTICS

AN OFFICIAL JOURNAL OF THE
INSTITUTE OF MATHEMATICAL STATISTICS

- A likelihood ratio framework for high-dimensional semiparametric regression
YANG NING, TIANQI ZHAO AND HAN LIU 2299
- A new perspective on boosting in linear regression via subgradient optimization and
relatives ROBERT M. FREUND, PAUL GRIGAS AND RAHUL MAZUMDER 2328
- On the validity of resampling methods under long memory
SHUYANG BAI AND MURAD S. TAQQU 2365
- CoCoLasso for high-dimensional error-in-variables regression
ABHIRUP DATTA AND HUI ZOU 2400
- Consistent parameter estimation for LASSO and approximate message passing
ALI MOUSAVI, ARIAN MALEKI AND RICHARD G. BARANIUK 2427
- Support recovery without incoherence: A case for nonconvex regularization
PO-LING LOH AND MARTIN J. WAINWRIGHT 2455
- Optimal design of fMRI experiments using circulant (almost-)orthogonal arrays
YUAN-LUNG LIN, FREDERICK KIN HING PHOA AND MING-HUNG KAO 2483
- Adaptive Bernstein–von Mises theorems in Gaussian white noise KOLYAN RAY 2511
- Targeted sequential design for targeted learning inference of the optimal treatment rule
and its mean reward
ANTOINE CHAMBAZ, WENJING ZHENG AND MARK J. VAN DER LAAN 2537
- Nonparametric goodness-of-fit tests for uniform stochastic ordering
CHUAN-FA TANG, DEWEI WANG AND JOSHUA M. TEBBS 2565
- Selecting the number of principal components: Estimation of the true rank of a noisy
matrix YUNJIN CHOI, JONATHAN TAYLOR AND ROBERT TIBSHIRANI 2590
- Extended conditional independence and applications in causal inference
PANAYIOTA CONSTANTINOU AND A. PHILIP DAWID 2618
- A weight-relaxed model averaging approach for high-dimensional generalized linear
models TOMOHIRO ANDO AND KER-CHAU LI 2654
- Structural similarity and difference testing on multiple sparse Gaussian graphical models
WEIDONG LIU 2680
- Estimating a probability mass function with unknown labels
DRAGI ANEVSKI, RICHARD D. GILL AND STEFAN ZOHREN 2708
- Optimal sequential detection in multi-stream data HOCK PENG CHAN 2736

Ann. Statist. Dec 2017
<http://projecteuclid.org/euclid.aos>