IMS Bulletin



December 2012

CONTENTS

- 1 New Researchers Conference
- 2 Members' News: S. Rao Jammalamadaka, Alan Karr, Dipak Dey
- 3 Blackwell Lecture Fund; AIHP Prize Papers
- 4 Bulletin columnists
- 5 IMS awards: still time to nominate or apply
- 6 Mentoring opportunities
- 7 **Anirban's Angle:** Right or Wrong, Our Confidence Intervals
- 8 **Recent papers:** Statistical Science; Bernoulli
- 9 **Terence's Stuff:** Does it work in practice?
- 10 IMS meetings
- 15 Other meetings
- **19 Employment Opportunities**
- 25 International Calendar of Statistical Events
- 27 Information for Advertisers

New Researchers Conference

15th IMS New Researchers Conference, jointly sponsored by the IMS and the SSC August 1–3, 2013

Centre de recherches mathématiques, Montréal, Québec, Canada

The 15th IMS New Researchers Conference is an annual meeting organized under the auspices of the Institute of Mathematical Statistics, and jointly sponsored this year by the Statistical Society of Canada. It will be held just prior to the 2013 Joint Statistical Meetings in Montréal.

The purpose of the conference is to promote interaction and networking among new researchers in probability and statistics. The participants will have the opportunity to present their research via a short expository talk and a poster, in addition to mingling throughout the day. The contributed talks will be complemented by longer talks by four plenary speakers: Aurore Delaigle (University of Melbourne), Stephen E. Fienberg (Carnegie Mellon University), Jeffrey Rosenthal (University of Toronto) and Terry Speed (University of California at Berkeley), as well as the IMS President Hans Rudolf Künsch (ETH Zürich), and the winner of the 2013 Tweedie Award. Panels on teaching, mentoring of graduate students, publishing and funding will take place during the last day of the conference.

Any young researcher who has received a PhD in or after 2008, or expects to defend his or her thesis by the end of 2013, is eligible to attend. Due to limited space, participation is *by invitation only*. To apply, please submit a letter of interest, curriculum vitae, as well as a title and an abstract of your presentation, via the website at http://www.math.mcgill.ca/nrc2013/

Deadline for receipt of applications is February 1, 2013. Higher priority will be given to first-time applicants. Women and minorities are encouraged to apply. Contingent on the availability of funds, financial support for travel and accommodation may be provided. However, participants are strongly encouraged to seek partial funding from other sources.



Montreal takes its name from Mount Royal, the triplepeaked hill located in the heart of the city, or Mont Réal as it was spelled in Middle French. Montreal is the second largest French-speaking city in the Western world, after Paris. Eh bien, allons-y!

IMS Bulletin

Volume 41 • Issue 8 December 2012 ISSN 1544-1881

Contact information

IMS Bulletin Editor: Dimitris Politis Assistant Editor: Tati Howell Contributing Editors: Peter Bickel, Anirban DasGupta, Nicole Lazar, Rick Durrett, Terry Speed

Contact the IMS Bulletin by email:

e bulletin@imstat.org

w http://bulletin.imstat.org

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:	Hans R. Künsch president@imstat.org
President-Elect:	Bin Yu
	president-elect@imstat.org
Past President:	Ruth Williams
	president-past@imstat.org
Treasurer:	Jean Opsomer
	jopsomer@stat.colostate.ed
Program Secretary:	Judith Rousseau

rousseau@ceremade.dauphine.fr

Executive Secretary: Aurore Delaigle a.delaigle@ms.unimelb.edu.au

IMS Members' News

Swedish University gives Honorary Doctorate to Jammalamadaka

Professor S. Rao Jammalamadaka, Department of Statistics and Applied Probability, University of California, Santa Barbara, USA, who is an ISI Member and Fellow of the ASA and IMS, has been awarded an Honorary Doctorate by the Faculty of Forest Sciences, the Swedish University of Agricultural Sciences, Sweden, in an elaborate ceremony held on October 6, 2012.

The citation reads, in part, "Professor Jammalamadaka is a very well-known statistician with broad research interests which include both theoretical and applied statistics. His contacts with researchers in Sweden and at the Faculty of Forest Sciences over the past 25 years, resulted in significant research with practical impact as well as several PhD theses at the Swedish University of Agricultural Sciences." The



S. Rao Jammalamadaka

Award came with a Doctoral gold ring, a ceremonial hat, and a Diploma. Recent recipients of this Honorary Doctoral degree in Forestry include His Majesty

Carl XVI Gustaf, King of Sweden, and IKEA founder Ingvar Kamprad.

Mentorship Award for Dey

Dipak Dey from the University of Connecticut recently won the UConn AAUP Edward C. Marth Mentorship Award. The award recognizes those who encourage and reward outstanding mentoring of graduate students.

Alan Karr receives Johns Hopkins University honor

Alan Karr, director of the US National Institute of Statistical Sciences (NISS), was honored



by Johns Hopkins University and given lifetime membership to their Society of Scholars for his dedication over the many years he spent at the university. Pictured with Karr (center) are his former colleagues John Wierman and Daniel Naiman.

Blackwell Lecture Fund

The Blackwell Lecture Fund will be used to support a lecture in honor of David Blackwell. The purpose of this lecture is to honor Blackwell, to keep his name alive and to inspire young people to emulate his achievements. The first lecture is expected to be presented in 2014.

Donations to the fund can be made online at https://secure.imstat.org/secure/orders/ donations.asp.

Thank you to all those who have made donations so far: Anonymous; David Aldous; Kenneth and Selma Arrow; David Banks; Alicia and Robert Bell; Peter and Nancy Bickel; Estate of David Blackwell; Karl and Aimee Broman; Linda Zhao and Lawrence Brown; Joan Fujimura and Kjell Doksum; Jianqing Fan; Joseph Gastwirth; Andrew and Caroline Gelman; Kenneth Griffin; Ben Hansen; Barry and Kang Ling James; Iain Johnstone; Barbara Rosario and Michael Jordan; Joseph and Caroline Ann Mitchell Kadane; Karen Kafadar; Su Yeon Kim; Jing Lei; Susan and Terrance Murphy; Mary Louise and George Roussas; Mary Jennings and Donald Sarason; Juliet Shaffer; S. and D. Shreve; Terence and Freda Speed; Virginia and Stephen Stigler; CJ Stone; Guo-Qiang Zhang and Jiayang Sun; Richard Tapia; Michael Waterman; Joseph Yahav; Zhaohui and Yuhong Yang; Qiwei Yao; Bin Yu and Ke-Ning Shen; and Ji Zhu.

Watch future issues of the Bulletin for donors to our many other funds.

Annales de l'Institut Henri Poincaré Prize

Thierry Bodineau and Lorenzo Zambotti are Editors of the *Annales de l'Institut Henri Poincaré*. They write:

Every two years, the Probability and Statistics section of the *Annales de l'Institut Henri Poincaré* (*AIHP*) awards two prizes, of \$1,500 each, for the best papers published in the journal during those two years. The selection of the best articles is a collective decision made by all the board members and the different papers which have been awarded over the last years reflect the variety of topics in probability and in statistics which are published every year in the journal.

For 2010, the prize was awarded to Christina Goldschmidt (who is an IMS member) and Bénédicte Haas, for their paper "Behavior near the extinction time in self-similar fragmentations I: The stable case" (Volume 46, number 2, 338–368). The important contribution of their paper is a very precise analysis of a stable fragmentation process before its extinction.

The prize for the best paper published in 2011 was given to "Giant vacant component left by a random walk in a random *d*-regular graph" by Jirí Cerný, Augusto Teixeira, and David Windisch (Volume 47, number 4, 929–968). In this article, a sharp phase transition with explicit critical value was derived, for the first time, for the vacant component left by a random walk in a random *d*-regular graph.

AIHP subscribers can read the papers at http://projecteuclid.org/aihp. If you are not currently a subscriber to *AIHP*, you can subscribe at the same time as renewing your IMS membership. A one-year subscription costs \$72. More information about this IMS-supported journal can be found at http://imstat.org/aihp/

access published papers online

IMS Journals and Publications

Annals of Statistics: Peter Bühlmann and Tony Cai http://imstat.org/aos @http://projecteuclid.org/aos

Annals of Applied Statistics: Bradley Efron http://imstat.org/aoas @http://projecteuclid.org/aoas

Annals of Probability: Krzysztof Burdzy http://imstat.org/aop @http://projecteuclid.org/aop

Annals of Applied Probability: Andrew Barbour http://imstat.org/aap @http://projecteuclid.org/aoap

Statistical Science: Jon Wellner 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: David Ruppert http://imstat.org/ejs Mhttp://projecteuclid.org/ejs

Electronic Journal of Probability: Michel Ledoux @http://ejp.ejpecp.org

Electronic Communications in Probability: Anton Bovier Mhttp://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: Richard Levine http://www.amstat.org/publications/jcgs

log into members' area at imstat.org

Statistics Surveys: Lutz Dümbgen http://imstat.org/ss @http://projecteuclid.org/ssu

Probability Surveys: Laurent Saloff-Coste http://imstat.org/ps @http://www.i-journals.org/ps/

IMS-Supported Journals

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

Bayesian Analysis: Herbie Lee Mttp://ba.stat.cmu.edu

Bernoulli: Richard Davis http://www.bernoulli-society.org/ @http://projecteuclid.org/bj

Brazilian Journal of Probability and Statistics: Silvia Ferrari http://imstat.org/bjps @http://projecteuclid.org/bjps

Stochastic Systems: Peter W Glynn Mttp://www.i-journals.org/ssy/

IMS-Affiliated Journals

ALEA: Latin American Journal of Probability and Statistics: Claudio Landim @http://alea.impa.br/english

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

Bulletin columns

Rick's Ramblings is Going Online

Rick Durrett bids us farewell—in this publication, at least:

My ideas for columns come at random times, which in many cases does not mesh well with the *Bulletin* publication schedule. In addition, an online column has several advantages over a paper one:

- One does not have to worry about the fact that one page is 800 words.
- Online columns can have hyperlinks to supplementary materials.
- Columns can be edited after they are published.

For these and similar reasons, I have decided it is time to ramble on. At this point, I am not sure what the best venue is for my blog, so I would welcome advice on how to do this. In any case you can find my columns or a link to their location on my home page http://www.math.edu/~rtd/



Rick Durrett

And coming soon...





We are pleased to introduce a new Contributing Editor to *IMS Bulletin* readers—though he probably needs no introduction to many of you. Xiao-Li Meng is the Dean of Harvard University's Graduate School of Arts and Sciences (GSAS), Whipple V. N. Jones Professor and

former chair of Statistics at Harvard, an Honorary Professor of the University of Hong Kong, and a faculty affiliate at the Center of Health Statistics at the University of Chicago. He is well known for his depth and breadth in research, his innovation and passion in pedagogy, and his vision and effectiveness in administration, as well as for his engaging and entertaining style as a speaker and a writer.

Meng, a native of Shanghai, China, started his academic career at the age of 19, when he obtained a Bachelor of Science degree in Mathematics from Fudan University. After two years of teaching at China Textile University, he went back to Fudan and received a Diploma in Graduate Study in Mathematical Statistics in 1986. He then entered the Harvard Statistics Department, from which he was awarded his PhD in 1990. He was on the faculty of the University of Chicago from 1991 to 2001, before returning to Harvard as Professor of Statistics. He was appointed as the department chair in 2004, and the Whipple V. N. Jones Professor in 2007. He was appointed GSAS Dean effective August 15, 2012.

Meng has authored more than 100 publications in more than a dozen theoretical and methodological areas, and was ranked by Science Watch (May/June 2002) as one of the world's top-25 most-cited mathematicians for articles published and cited during 1991–2000. His work spans from theoretical foundations of statistical inferences (e.g., the interplay among Bayesian, frequentist, and fiducial perspectives; quantify ignorance via invariance principles; multi-party inferences), to statistical methods and computation (e.g., posterior predictive p-value; EM algorithm; Markov chain Monte Carlo; bridge and path sampling), to a wide range of applications in natural, social, and medical sciences and engineering (e.g., complex statistical modeling in astronomy and astrophysics; quantifying statistical information in genetic studies; detecting and estimating trends in environmental and geophysical measurements; measuring disparities in Latino and Asian mental health services; assessing reporting delay in AIDS surveillance systems; and de-noising and de-mosaicing in digital cameras).

A fuller biography and list of his many honors is on Harvard's website at http://www.gsas.harvard.edu/biography/biography.php

Look out for his first Bulletin column, coming soon.

IMS Awards: still time to nominate or apply!

Tweedie New Researcher Award

Richard L. Tweedie played a significant role throughout his professional career in mentoring young colleagues at work and through professional society activities. With funds donated by his friends and family, the IMS created the "Tweedie New Researcher Award" to finance the winner to present the "Tweedie New Researcher Invited Lecture" at the IMS New Researchers Conference.



Richard Tweedie

Next year's conference will be held in Montreal, immediately before JSM 2013 (details of the New Researchers Conference will be announced soon).

To be eligible for the 2013 award, the new researcher must have received their doctoral degree in 2007–2012, and the nominee should be a member of the IMS at time of nomination.

The nomination deadline is December 1, 2012.

For details and requirements of the nomination process, please visit http://www.imstat.org/awards/tweedie.html

Laha Travel Award

With funds from a generous bequest by the late Professor Radha Govind Laha, IMS established the Laha Awards to provide funds for students and new researchers to travel to present a paper at the IMS Annual Meeting (see the article on the previous page for comments from some of this year's recipients).

The 2013 award will provide funds for travel to the Joint Statistical Meetings (JSM) in Montreal, Canada, from August 3–8, 2013: see http://amstat.org/meetings/jsm/2013/index.cfm.

In selecting these awards, first priority is given to students, second priority to New Researchers within 2 years of PhD degree at the date of the meeting. Applicants must be members of IMS, though joining at the time of application is allowed. And don't

forget that student membership is free (see http://www.imstat.org/membership/student. htm for details) and New Researchers also qualify for substantially reduced rates. To become a member, please see http://www. imstat.org/orders/

Application deadline is February 1, 2013.

For more information on the application process, please visit http://www.imstat. org/awards/laha.html



Radha Govind Laha

IMS Fellowship

The candidate for IMS Fellowship shall have demonstrated distinction in research in statistics or probability, by publication of independent work of merit. This qualification may be waived in the case of:

- a candidate of well-established leadership whose contributions to the field of statistics or probability other than original research shall be judged of equal value; or
- (2) a candidate of well-established leadership in the application of statistics or probability, whose work has contributed greatly to the utility of and the appreciation of these areas.

Candidates for Fellowship should be members of IMS on December 1 of the year preceding their nomination, and should have been members of the IMS for at least two years.

All nominations must be received by January 31, 2013.

For details and requirements of the nomination process, please visit http://www.imstat.org/awards/fellows.htm

Harry C. Carver Medal

Nominations are invited for the Carver Medal, created by the IMS in honor of Harry C. Carver, founding editor of *The Annals of Mathematical Statistics* and one of the founders

of the IMS. The medal is for exceptional service specifically to the IMS and is open to any member of the IMS who has not previously been elected President.

The medal will be awarded at a ceremony during the next IMS Annual Meeting. (Last year's winner, Peter Jagers, was not able to come to the World Congress to receive his medal, so his will be awarded next year along with the 2013 medal.)

All nominations must be received by February 1, 2013. Please visit http://www.imstat.org/awards/carver.html



| Mentoring opportunities

Web-based mentoring for students in statistics at Universities in developing countries

http://statmentoring.nr.no

Would you like to mentor a PhD or masters student in a developing country from a distance, over the internet? Join us at http://statmentoring.nr.no.

Statistical communities, academic and governmental, are growing in many developing countries, and statisticians play key roles in production, decision and government, from health to agriculture, from business to energy, from transport to education. But resources and infrastructure are still incomplete. This mentoring programme is based on volunteering senior statisticians, from all over the world, who act as mentors over the internet for PhD and masters students in the developing countries, in particular in Africa and Asia. We use the internet to create a network of support and mentoring, at the individual level.

Mentoring works like this. PhD students and masters students from developing countries enrol the programme by filling out a form available on the web site http:// statmentoring.nr.no. Volunteer mentors also join the programme by registering on the same web site. The tutor will typically be a professor or senior professional statistician at a university in North America, Europe or Australia. In Norway, we match each student with a mentor, taking into account language, area of research, gender and more. Student and mentor will have contact by email. This programme is not able to provide funding for travel and therefore mentoring is at a distance.

Mentoring means:

- Providing access to scientific material (papers, chapters of books, preprints etc) and software.
- Suggesting appropriate reading.
- Suggesting journals to which the student could submit her/his papers.
- Suggesting conferences, summer schools, workshops to attend, and signposting to funding possibilities.
- Helping with preparing presentations.
- Discussing job and career opportunities, help in writing CV. *Important note:*

the mentor does not provide funding for studies.

 Occasionally, helping solve problems related to the thesis. Important: the mentor has no responsibilities with respect to the progression of the studies of the student. Mentoring does not mean supervision.

Mentor in applied statistics

We are looking for new mentors, especially in applied statistics. Join the programme from our web page http://statmentoring. nr.no! Email your colleagues!

You can also help the programme by emailing information on statmentoring. nr.no to students you know in Africa and Asia. If you cc us too, then this will help to create a contact network in these countries.

This mentoring programme is run by members of the International Statistical Institute and the Bernoulli Society based in Oslo, Norway, including Magne Aldrin and Arnoldo Frigessi. You can email them at statmentoring@nr.no.



Anirban's Angle: Right or Wrong, Our Confidence Intervals

Contributing Editor Anirban DasGupta writes: A wonderful thing about tenure is that once I had it, I never had to control my irresistible urge to waste my time on the most useless of all things. The other day, a close friend said to me, "But I was *almost* right!" I have not the slightest notion why this pedantic remark of a friend made me wonder if our everyday confidence intervals (sets) are almost right even when they are wrong, and squarely right when they are right. At the clear risk of saying things that were all done a long time ago, I want to report a few simple, but perhaps interesting, facts on *how* right are our confidence sets when they are right, and how wrong are they when they are wrong, and how does the dimension of the problem affect the answers, precisely.

Simplicity has its virtues, so, how about starting with a simple example that we can easily relate to. Take the *t* interval, say C_n , $\overline{X} \pm t_{\alpha/2,n-1} \frac{s}{\sqrt{n}}$ for the mean μ of a one-dimensional CDF *F* with a finite variance. Its margin of error is of course $\delta_n = t_{\alpha/2,n-1} \frac{s}{\sqrt{n}}$. When our *t* interval misses the true μ , the amount by which it misses, say d_n , is the distance of μ from the appropriate endpoint of C_n . Expressed in units of the margin of error, the amount by which we miss is $w_n = \frac{d_n}{\delta_n}$; d_n and δ_n both go down at the rate \sqrt{n} , and it seemed as though w_n is a better index practically, than simply d_n . I wanted to understand how large w_n is when the *t* interval fails, for example, what is $E_F(w_n | \mu \notin C_n)$.

Of course, I did simulate it first. I simulated for seven choices of *F*, *N*(0, 1), standard double exponential, t_3 , *U*[-1, 1], Beta(1/2, 1/2), Poisson(4), and χ_4^2 , using in each case a simulation size of 8000 and $\alpha = .05$, n = 50, a gentle sample size. My simulation averages of w_n (conditioned on failure) in the seven cases were .23, .18, .19, .22, .21, .20, and .24. I understood the simulations to mean that the 95% *t* interval misses μ by about 20% of the margin of error when it misses. But why are the simulation averages all so tantalizingly close to 20% although the distributions simulated are very different?

We must then expect that there is a theorem here. It turns out that whenever F has a finite variance,

$$E_F(w_n \mid \mu \notin C_n) \rightarrow \frac{2\phi(z_{\alpha/2})}{\alpha z_{\alpha/2}} - 1 = .1927 \text{ for } \alpha = .05$$

which explains why my simulation averages all hovered around .2. We can say more: we have, for w > 0,

$$P_F(w_n > w \mid \mu \notin C_n) \rightarrow \frac{2[1 - \Phi(z_{\alpha/2} + w)]}{\alpha}$$

I will apply this to predicting a US Presidential election later. Higher order expressions for $P_F(w_n > w | \mu \notin C_n)$ are derivable (in non-lattice cases) by using results in Hall (1987, *AOP*).

The other side of the coin is how *right* is the interval when it

is right, for example, $E_F(\frac{|X-\mu|}{\delta_a}| \mu \in C_n)$. And here, it turns out that this converges to $2[\phi(0)-\phi(z_{\alpha/2})] = .3657$ for $\alpha = .05$;

$$\frac{2[\varphi(0)-\varphi(z_{\alpha/2})]}{(1-\alpha)z_{\alpha/2}} = .3657 \text{ for } \alpha = .$$

that is, when we succeed, *whatever be our F*, the true μ is about 63% deep inside the interval from its boundary. I will let others decide if these two numbers [.1927 and .3657] are good or bad.

For the extension to higher dimensions, a little more notation is unavoidable. I let *F* be a CDF in *p*-space with a covariance matrix Σ , which I treat as known, and as my confidence set I take the usual (Gaussian) ellipsoid centered at the sample mean and oriented by Σ . The known Σ assumption does not affect first order asymptotics in this problem, if *p* is held fixed. One can write a formula:

$$E(w_n \mid \mu \notin C_n) = \frac{\sqrt{2}\Gamma\left(\frac{p+1}{2}\right)}{\alpha I\left(\frac{p}{2}\right)\sqrt{\frac{2}{\chi_{a,p}^2}}} P(\chi_{p+1}^2 > \chi_{\alpha,p}^2).$$

Now, the analogous limit result on $E_F(w_n | \mu \notin C_n)$ needs a bit more work, as one needs to use higher order Stirling approximations to the Gamma function, and Edgeworth expansions for a χ^2 statistic, and Cornish-Fisher expansions for a χ^2 percentile, and then collect terms. My personal curiosity was about large p, and it turned out that $\varphi(z_n)$

$$E(w_n \mid \mu \notin C_n) = \frac{\frac{\varphi(z_\alpha)}{\alpha} - z_\alpha}{\sqrt{2p}} + O(p^{-1});$$

so, in units of the margin of error, the amount by which the ellipsoid misses, when it does, goes down with the number of dimensions at the rate $\frac{1}{\sqrt{p}}$. The higher the dimension, when we miss, the more true μ is just around the corner.

I close the circle by returning to one dimension. Take the case of predicting a very close US Presidential election. Stratification and nonresponse aside, we are dealing with a binomial p. If we poll $n \ge 6765$ voters, and use a 90% Wald interval, then the pollster may state that the poll's margin of error is at most 1%, and in case, by misfortune, the poll is wrong, the true p is within at most another half a percentage point with a 90% probability. Very many public polls use only about 1000 voters. If we poll only 1000 voters, we can claim that our margin of error is at most 2.6%, and in case our poll is wrong, the true p is within at most another 1.5% with a 90% probability.

This story remains the same for essentially all LAN problems. The corresponding Bayesian problems are similar.

There. Now I must find myself some other completely useless thought to keep me entertained!

Recent papers

Statistical Science: Volume 27, number 3, August 2012

Access papers at http://projecteuclid.org/ss

Multivariate Bayesian Logistic Regression for Analysis of Clinical Study Safety Issues	WILLIAM DUMOUCHEL; 319-339
Discussion of "Multivariate Bayesian Logistic Regression for Analysis of Clinical Trial Safety Issues" by W. DuMou	chel BRADLEY W. MCEVOY AND RAM C. TIWARI; 340-343
Discussion of "Multivariate Bayesian Logistic Regression for Analysis of Clinical Trial Safety Issues" by W. DuMou	chel DON BERRY; 344-345
An Answer to Multiple Problems with Analysis of Data on Harms?	
Rejoinder	WILLIAM DUMOUCHEL; 348-349
Regularization of Case-Specific Parameters for Robustness and Efficiency	. YOONKYUNG LEE, STEVEN N. MACEACHERN AND YOONSUH JUNG; 350-372
Quantum Computation and Quantum Information	
Analysis of 1:1 Matched Cohort Studies and Twin Studies, with Binary Exposures	
and Binary Outcomes ARVID SJÖLANDER, ANNA L. V. JOHANSSON, CECILIA LUN	DHOLM, DANIEL ALTMAN, CATARINA ALMQVIST AND YUDI PAWITAN; 395-411
Models for Paired Comparison Data: A Review with Emphasis on Dependent Data	MANUELA CATTELAN; 412-433
Pao-Lu Hsu (Xu, Bao-lu): The Grandparent of Probability and Statistics in China	DAYUE CHEN AND INGRAM OLKIN; 434-445

Bernoulli: Volume 18, number 4, November 2012

Access papers at http://projecteuclid.org/bj

A Ferguson–Klass–LePage series representation of multistable multifracti	onal motions and related processesR. LE GUEVEL AND J. LEVY VEHEL;
1099-1127	
Coupling property and gradient estimates of Lévy processes via the symb	${ m pol}$
Extended Itô calculus for symmetric Markov processes	
Distributions of exponential integrals of independent increment processe	25
related to generalized gamma convolutions	ANITA BEHME, MAKOTO MAEJIMA, MUNEYA MATSUI AND NORIYOSHI SAKUMA; 1172-1187
Convergence of some random functionals of discretized semimartingales	
ε-Strong simulation of the Brownian path	ALEXANDROS BESKOS, STEFANO PELUCHETTI AND GARETH ROBERTS; 1223-1248
Bootstrap confidence intervals for isotonic estimators in a stereological p	roblem
Asymptotics for a Bayesian nonparametric estimator of species variety	STEFANO FAVARO, ANTONIO LIJOI AND IGOR PRÜNSTER; 1267-1283
Continuity and differentiability of regression M functionals	MARÍA V. FASANO, RICARDO A. MARONNA, MARIELA SUED AND VÍCTOR J. YOHAI; 1284-1309.
Uniform approximation of Vapnik–Chervonenkis classes	TERRENCE M. ADAMS AND ANDREW B. NOBEL; 1310-1319
On a characterization of ordered pivotal sampling	
Conditional large and moderate deviations for sums	
of discrete random variables. Combinatoric applications	
Uniform convergence of the empirical cumulative distribution function	
under informative selection from a finite population	DANIEL BONNÉRY, F. JAY BREIDT AND FRANÇOIS COQUET; 1361-1385
Sensitivity of the limit shape of sample clouds from meta densities	
Convergence of the largest eigenvalue of normalized sample covariance r	natrices
when p and n both tend to infinity with their ratio converging to zer	o
Model checks for the volatility under microstructure noise	
Inference of seasonal long-memory aggregate time series	

I Terence's Stuff: Does it work in practice?

For many statisticians, working in theory is the same as working in practice. Terry Speed begs to disagree.



Any of us are in the business of inventing novel statistical methods or improving upon existing ones. That is, we try to find new ways of answering a question, in context, with some kind of data. The question, the context or the data may be new, or all three may be familiar, and we want to do better than others who have gone before us. Our goal is to discover a method that will *work in practice.* How can we tell?

Papers summarizing research of this kind typically take the following form. After reviewing previous work, they describe their new method. Next, they might apply it to *simulated* data that mimics the *real* data for which their method was designed. If so, they will compare their results with the (known) *truth*, and also with the results obtained using other methods. They need to do well in these comparisons to be publishable. Finally, they might apply their new method to some *real* data. If so, they must then decide how good their answers are, and whether they are as good as those obtained using other methods.

All of this sounds straightforward, yet there are pitfalls. Let's call the first approach the simulation test, and the second the real data test, and look at each a little more. Remember, the goal is to determine how well a method *works in practice*.

The first point I want to make is this: simulated data is not real data. Most simulations use idealized models which we know don't accurately describe real data. We hope the difference doesn't matter in practice. We learn from simulations (approximately) how a method works in theory, without theory. The simulation test can only be as good as our ability to simulate data that embodies *all* features of the real data *relevant* to the performance of our method in practice. But we will never know what these are. Simulation can be very helpful for theory and methods development, but not for learning how a method works in practice.

The second point I want to make is this: few real datasets come equipped with truth that will permit us to assess the effectiveness of our new methods. At times they will, and when they do, we should treasure them. For example, with prediction in time-series, or with classification using a training and test set, you can apply your method to new data for which the answers are known. (I'll pass over the harder-but important-question of whether the data you use to demonstrate that your new method works adequately reflects the data to which your method will be applied in the future.) Suppose that you are estimating regression coefficients or testing hypotheses in the social sciences. In how many such contexts will you know the true value of the coefficients or the true status of the hypotheses? In this situation you will probably rely on indirect arguments, surrogates for the truth, or criteria that are necessary but not sufficient, to suggest that your method works on real data. You might consider the sizes or the signs of the regression coefficients, and argue that they are plausible. Or you might look at a histogram of *p*-values, and show that it is fairly uniform, apart from a spike near zero. Or you might apply your model to independent datasets and seek consistent results.

I don't think we can expect easy answers to the question, "Does it work in practice?" Indeed, it may be as hard as deciding, "In what circumstances can we pass from this observed association to a verdict of causation?" That is, we may want to satisfy several criteria, and even then not be sure. We should seek agreement on what these criteria might be, and I'd put positive and negative controls and replication high on the list. Specially created datasets can help.

Positive and negative controls? Biologists have been dealing with these issues for decades. They have a highly-developed framework for determining whether a method works in practice, one which makes extensive use of controls of different kinds, including (context-specific) positive and negative controls. Definitions and an introduction to their approach can be found in *Experimental Design for Biologists* by David V. Glass. We statisticians have a lot to learn from them.

Let me end by recounting a recent experience. I was talking to statisticians about removing *unknown* unwanted variation from microarray data using negative controls (variables with regression coefficients known or expected to be zero). When I described how to use positive controls (variables with regression coefficients known or expected to be non-zero) to see if our method worked in practice, my audience looked lost (*mea culpa*). I then asked them, "How do we tell whether a statistical method works in practice?" The first, and loudest, answer was, "*By simulation!*"

The quotation below is attributed variously to computer scientist Jan van de Snepscheut, and to Yogi Berra...

In theory, there is no difference between theory and practice. But in practice, there is,

I IMS meetings around the world

IMS Annual Meetings, 2013 & 2014

IMS sponsored meeting

IMS Annual Meeting @ JSM 2013 August 3–8, 2013: Montréal, Canada

w http://amstat.org/meetings/jsm/2013/ JSM Program Chair: Bhramar Mukherjee

The meeting will be held at the Palais de congrès de Montréal, in Montréal, Québec, Canada. The theme for JSM 2013 is *"Celebrating the International Year of Statistics."* Leading statistical societies have joined forces to declare 2013 the International Year of Statistics (http://statistics2013.org/) in order to promote the importance of our discipline to the broader scientific community, business and government data users, media, policymakers, employers, students, and the general public. As the largest gathering of statisticians in the world, the JSM embodies the spirit of the International Year, showcasing both fundamental contributions of statistical research and applications of statistics. The theme emphasizes the unique opportunity presented by the JSM program to highlight the power and impact of statistics on all aspects of science and society worldwide.

2013 also marks the 300th anniversary of the publication of Jacob Bernoulli's *Ars Conjectandi* in 1713. In recognition of this, IMS and the Bernoulli Society are jointly sponsoring the Ars Conjectandi lecture; the speaker will be David Spiegelhalter. KEY DATES:

December 3 – February 4: submit abstracts, invited posters, IOLs, topic and regular contributed abstracts.

May 1: register and reserve housing.

Joint Statistical Meetings dates, 2013–2018

IMS sponsored meeting

JSM 2013: August 3–8, 2013, Montreal, Canada w http://amstat.org/meetings/jsm/2013

IMS sponsored meeting

JSM 2014: August 2–7, 2014, Boston, USA w http://amstat.org/meetings/jsm/

IMS sponsored meeting

IMS Annual Meeting @ JSM 2015: August 8–13, 2015, Seattle, USA w http://amstat.org/meetings/jsm/

MontréalCanada

IMS sponsored meeting 2014 IMS Annual Meeting July 7–11, 2014 Sydney, Australia w TBC

The 2014 IMS Annual Meeting in Sydney, Australia, will feature the second Schramm Lecture, by Terry Lyons. Details of the meeting will follow, but you can mark your calendars now!



IMS sponsored meeting JSM 2016: July 30 – August 4, 2016, Chicago, USA w http://amstat.org/meetings/jsm/

IMS sponsored meeting

IMS Annual Meeting @ JSM 2017: July 29 – August 3, 2017, Baltimore, USA

w http://amstat.org/meetings/jsm/

IMS sponsored meeting

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

At a glance:

forthcoming IMS Annual Meeting and JSM dates

2013

IMS Annual Meeting @ JSM: Montréal,

Canada, August 3–8, 2013

2014

IMS Annual Meeting: Sydney, Australia, July 7–11, 2014

JSM: Boston, MA, August 2–7, 2014

2015

IMS Annual Meeting

@ JSM: Seattle, WA, August 8–13, 2015

2016

IMS Annual Meeting: TBD

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

2017

IMS Annual Meeting

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

2018

IMS Annual Meeting: TBD

IMS co-sponsored meeting

Seminar on Stochastic Processes 2013 March 14–16, 2013 Duke University/UNC-Chapel Hill

w http://depts.washington.edu/ssproc/index.php

The Seminar on Stochastic Processes (SSP) in 2013 will be co-hosted by Duke University and the University of North Carolina at Chapel Hill. The local organizers will be Amarjit Budhiraja and Jonathan Mattingly. In 2013, some additional activities of particular interest to new researchers will be organized by the IMS Committee on New Researchers. These activities will be coordinated with the main SSP program. They will begin the day before the main SSP program, with some activity on March 13, 2013.

Invited speakers: Tom Kurtz (Kai Lai Chung Lecture); Neil O'Connell; Marta Sanz-Solé; Allan Sly; Frederi Viens.

IMS co-sponsored meeting

4th IMS-China International Conference on Statistics and Probability June 30 – July 4, 2013 Chengdu, China

w http://imscn2013.swufe.edu.cn

The IMS-China International Conferences promote communication and collaboration between researchers in China and those from other parts of the world. The previous three conferences in this series were successfully held in Hangzhou, Weihai and Xi'an, China, respectively. We are pleased to announce the 4th IMS-China International Conference on Statistics and Probability 2013. The scientific program of this conference will cover a wide range of topics in probability, statistics and their related areas, focusing on recent developments and the state of the art in a variety of modern research topics and in applications. It will provide an excellent forum for scientific communication and collaboration for researchers. For more information, you may contact the scientific program chair: Runze Li e rli@stat.psu.edu. Please check the conference website for updated information.

IMS co-sponsored meeting

ISBA Regional Meeting and International Workshop/Conference on Bayesian Theory and Applications (IWCBTA) January 6–10, 2013, Varanasi, India

w www.bhu.ac.in/isba

IMS Rep on Program Committee: Dipak Dey

The DST Centre for Interdisciplinary Mathematical Sciences, Banaras Hindu University, is organizing the ISBA Regional Meeting in conjunction with International Workshop/ Conference on Bayesian Theory and Applications (IWCBTA) from January 6–10, 2013. The meeting is co-sponsored by the International Society for Bayesian Analysis (ISBA), the Indian Bayesian Society and the Indian Chapter of ISBA. A few tutorials will be offered on January 6–7. The afternoon of January 7 will have the Inaugural session of the ISBA Regional Meeting and IWCBTA. The main contributed and invited presentations will begin from January 8, 2013, with poster presentations each evening.

IMS co-sponsored MCMSki IV

January 6–8, 2014 Chamonix, France w http://www.pages. drexel.edu/~mwl25/ mcmski/ At this fifth joint meeting of IMS and ISBA, nightly poster sessions will offer substantial opportunity for informal learning and interaction.

ENAR, 2013-2016

IMS sponsored meeting

2013 ENAR/IMS Spring Meeting March 10–13, 2013 Orlando, Florida, USA

w http://www.enar.org/meetings.cfm

.....

IMS sponsored meeting 2014 ENAR/IMS Spring Meeting March 16–19, 2014 Baltimore, Maryland, USA

w http://www.enar.org/meetings.cfm

IMS sponsored meeting

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

IMS sponsored meeting

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

IMS co-sponsored meeting

9th Cornell Probability Summer School July 15–26, 2013

Cornell University, Ithaca, NY, USA

w http://www.math.cornell.edu/Colloquia/ colloquia.html

IMS Rep on Program Committees: Laurent Saloff-Coste

The main lecturers are Alexei Borodin, MIT (*Integrable Probability*), Ronald Meester, Vrije Universiteit Amsterdam (*The Combinatorial Approach to the Ising Model*) and Elchanan Mossel, Berkeley (*Probability Models of Information Exchange on Networks*).

The scientific organizers are Laurent Saloff-Coste and Lionel Levine. Please contact conference secretary Anastasia Raymer e araymer@math.cornell.edu with any questions regarding the summer school.

More IMS meetings around the world

IMS co-sponsored meeting

Ninth Conference on Bayesian **Nonparametrics** June 10-14, 2013 Amsterdam, The Netherlands w http://www.bnp9.win.tue.nl/ e bnp9info@gmail.com IMS Representative(s) on Program Committees: Subhashis Ghosal The 9th Conference on Bayesian Nonparametrics will be held June 10–14, 2013, in Amsterdam, The Netherlands. The Bayesian Nonparametrics (BNP) conference is a biannual international meeting bringing together leading experts and talented young researchers working on applications and theory of nonparametric Bayesian statistics. It is an official section meeting of the Bayesian nonparametrics section of the International Society for Bayesian Analysis (ISBA) and is co-sponsored by the IMS.

The program committee of BNP9 invites submissions for contributed talks and posters from any area of Bayesian nonparametrics and related topics. See the abstract submission page. Deadline for submission: October 15, 2012.

Several speakers have been invited and have accepted to give a talk at BNP9, including four distinguished plenary lectures, from: David Dunson (Duke), Michael Jordan (Berkeley), Gareth Roberts (Warwick), and Judith Rousseau (Paris Dauphine). Other invited speakers so far include: Eduard Belitser (Eindhoven); Emily Fox (Pennsylvania); Sasha Gnedin (London); Peter Green (Bristol); Jim Griffin (Kent); Lancelot James (Hong Kong); Bartek Knapik (VU Amsterdam); Luis Nieto-Barjas (Mexico); Sonia Petrone (Milano); Silke Rolles (TU Munich); Botond Szabo (Eindhoven); and Stephen Walker (Kent).

IMS co-sponsored meeting

36th Conference on Stochastic Processes and their Applications July 29 – August 2, 2013 University of Colorado, Boulder, USA w http://math.colorado.edu/spa2013/ The week of SPA is especially busy in Boulder, and we strongly recommend

reserving rooms as early as possible. Rooms are already being held under "SPA2013" at a number of hotels, details can be found at http://math.colorado.edu/spa2013/?page______id=21.

SPA2013 will feature the inaugural Schramm Lecture by Itai Benjamini; and an IMS Medallion Lecture from Bálint Virág (University of Toronto). There will also be a Lévy Lecture by Gérard Ben Arous (Courant) and a Doob Lecture from Neil O'Connell (Warwick).

Other invited lecturers are Zhen-Qing Chen (Washington); Ron Doney (Manchester); Hugo Duminil-Copin (Genève); Pablo Ferarri (Buenos Aires); József Fritz (Budapest); Tadahisa Funaki (Tokyo); Niels Jacob (Swansea); Vadim Kaimanovich (Ottawa); Jeremy Quastel (Toronto); Kavita Ramanan (Brown); Qi-Man Shao (Hong Kong); Amandine Veber (École Polytechnique); and Ofer Zeitouni (Minnesota & Weizmann).

IMS co-sponsored meeting

37th Conference on Stochastic Processes and Applications July 28 – August 1, 2014 Buenos Aires, Argentina

w TBA

The location has been announced for the 37th Conference on Stochastic Processes and Applications (SPA), which will take place in Buenos Aires during the week July 28 to August 1, 2014.

IMS co-sponsored meeting

2013 ICSA International Conference December 20–23, 2013 Hong Kong, China w TBA IMS Rep: Elizaveta Levina, Department of Statistics, University of Michigan

IMS co-sponsored meeting

International Conference Ars Conjectandi 1713–2013 October 15–16, 2013, Basel, Switzerland w http://www.statoo.ch/bernoulli13/ 2013 marks the 300th anniversary of the publication of Jacob Bernoulli's book, Ars Conjectandi, in 1713. A meeting has been organized to celebrate this: the "International Conference Ars Conjectandi 1713–2013" will be held October 15–16, 2013, in Basel, Switzerland.

IMS Reps on the program committee are Hans Künsch and Lutz Dümbgen.

IMS co-sponsored meeting

The 20th Annual ASA/IMS Spring Research Conference (SRC) on Statistics in Industry and Technology June 20–22, 2013 Los Angeles, CA

w http://www.stat.ucla.edu/src2013/ Contact: Hongquan Xu **e** hqxu@stat.ucla. edu

The aim of the SRC is to promote cross-disciplinary research in statistical methods in engineering, science and technology. This is to be interpreted broadly to cover a wide range of application areas including biotechnology, information, manufacturing sciences and environment. The conference is intended to stimulate interactions among statisticians, researchers in the application areas, and industrial practitioners. A number of **student scholarships** will be provided to selected graduate students who submit contributed papers.

IMS co-sponsored meeting

15th IMS New Researchers Conference, jointly sponsored by the IMS and the SSC August 1–3, 2013

Centre de recherches mathématiques, Montréal, Québec, Canada w http://www.math.mcgill.ca/nrc2013/

The 15th IMS New Researchers Conference is an annual meeting organized under the auspices of the Institute of Mathematical Statistics, and jointly sponsored this year by the Statistical Society of Canada. It will be held just prior to the 2013 Joint Statistical Meetings in Montréal.

The purpose of the conference is to promote interaction and networking among new researchers in probability and statistics. The participants will have the opportunity to present their research via a short expository talk and a poster, in addition to mingling throughout the day. The contributed talks will be complemented by longer talks by four plenary speakers: Aurore Delaigle (University of Melbourne), Stephen E. Fienberg (Carnegie Mellon University), Jeffrey Rosenthal (University of Toronto) and Terry Speed (University of California at Berkeley), as well as the IMS President Hans Rudolf Künsch (ETH Zürich), and the winner of the 2013 Tweedie Award. Panels on teaching, mentoring of graduate students, publishing and funding will take place during the last day of the conference.

Any young researcher who has received a PhD in or after 2008, or expects to defend his or her thesis by the end of 2013, is eligible to attend. Due to limited space, participation is *by invitation only*. To apply, please submit a letter of interest, curriculum vitae, as well as a title and an abstract of your presentation, via the website at http://www.math.mcgill.ca/nrc2013/

Deadline for receipt of applications is February 1, 2013. Higher priority will be given to first-time applicants. Women and minorities are encouraged to apply. Contingent on the availability of funds, financial support for travel and accommodation may be provided. However, participants are strongly encouraged to seek partial funding from other sources.

IMS co-sponsored meeting

2013 IMS Workshop on Finance, Probability and Statistics June 19–21, 2013

National University of Singapore (NUS), Singapore

w http://cqf.nus.edu.sg/IMSworkshop-FPS2013

IMS Representative on Program Committees: Tze-Leung Lai The 2013 IMS Workshop on Finance: Probability and Statistics (FPS) will be held at the National University of Singapore (NUS) on June 19-21, 2013.

This is the third IMS FPS Workshop; the previous two were held in 2011 and 2012 at Columbia University and the University of California at Berkeley, respectively. The focus of the workshop is on the use of probabilistic and statistical analysis and models for problems arising in finance. By bringing together both leading experts and junior researchers, the workshop will highlight important contributions made through the use of statistics and probability, and identify emerging issues where statistics and probability promise to play an important role in the future.

The plenary speakers include F. Delbaen (ETH), J.C. Duan (NUS), P. Forsyth (U. Waterloo), X. Guo (UC Berkeley), A. Novikov (UTS), S. Peng (Shandong U.), Philip Protter (Columbia U.), H. Xing (SBU). In addition, there are invited sessions and contributed sessions.

Registration starts on December 1, 2012. Participants who are interested in giving talks should send emails to ims-fps2013@nus. edu.sq.

This workshop is part of the program on Nonlinear Expectations, Stochastic Calculus under Knightian Uncertainty, and Related Topics, which runs from June 3 to July 12,



The campus of the National University of Singapore

2013, and is jointly organized by the Institute for Mathematical Sciences and the newly established Centre for Quantitative Finance at the National University of Singapore:

http://www2.ims.nus.edu.sg/Programs/013wnlinear/index.php.



Other meetings around the world



Upcoming SAMSI Workshops:

SAMSI-FODAVA Workshop on Interactive Visualization and Analysis of Massive Data December 10–12, 2012

SAMSI, Research Triangle Park, NC

w www.samsi.info/workshop/samsi-fodava-workshop-interactive-visualization-and-analysismassive-data-december-10-12-20

Registration deadline is November 16, 2012.

SAMSI-SAVI Workshop on Topics in Probability December 18–20, 2012 Chennai Mathematical Institute, Siruseri, Tamilnadu, India w www.samsi.info/workshop/samsi-savi-workshop-topics-probability-december-18-20-2012

SAMSI-NCAR Workshop on Massive Datasets in Environment and Climate February 13–15, 2013

Mesa Lab, National Center for Atmospheric Research, Boulder, CO

w www.samsi.info/workshop/samsincar-workshop-massive-datasets-environment-andclimate-february-13-15-2013

SAMSI Undergraduate Workshop: Data Driven Decisions in Healthcare February 21–22, 2013 (NOTE DATE CHANGE) SAMSI, Research Triangle Park, NC

w www.samsi.info/workshop/undergraduate-workshop-february-21-22-2013

As part of its Education and Outreach Program for 2012-2013, the Statistical and Applied Mathematical Sciences Institute (SAMSI) will offer a two-day undergraduate workshop on topics of current interest in statistics and applied mathematics. In addition to an overview of current and planned SAMSI Research Programs, the program topic Data Driven Decisions in Healthcare will be covered in some depth. This workshop will be held on Thursday, February 21 and Friday, February 22, 2013 at SAMSI. Participants are urged to arrive on Wednesday evening and will be able to begin their return home by 12 noon on Friday. Applications received by Friday, January 25, 2013, will receive full consideration. SAMSI will reimburse appropriate travel expenses as well as provide food and lodging. Send questions to ugworkshop@samsi.info

SAMSI-SAVI Workshop on Environmental Statistics March 4–6, 2013 SAMSI, Research Triangle Park, NC

w http://www.samsi.info/workshop/samsi-savi-workshop-environmental-statisticsmarch-4-6-2013

Registration deadline is February 8, 2013.

Bayesian methods in Biostatistics and Bioinformatics December 17–19, 2012 Barcelona, Spain

w http://www.irbbarcelona.org/index. php/en/events/barcelona-bioconferences/ bayesian-methods-in-biostatistics-andbioinformatics

Registration & abstract submission open. Chairs: David Rossell, Omiros Papaspiliopoulos, Donald Berry. The conference brings together statisticians and biomedical researchers and covers medical statistics & public health, bioinformatics and systems biology, model selection and computation. We welcome contributed talks and posters. There is no registration fee, but the number of participants is limited.

Sixth YES (Young European Statisticians) workshop January 28–29, 2013

EURANDOM, The Netherlands

w http://www.eurandom.nl/events/ workshops/2013/YES_VI/ The subject of the 6th YES (Young European Statisticians) workshop is "Statistics for Complex and High Dimensional Systems". Tutorial speakers are Eric Kolaczyk (Boston University), Tom Snijders (University of Oxford and University of Groningen), and Martin Wainwright (University of California, Berkeley).

For PhD students and postdocs this workshop will provide an excellent opportunity to get into the rapidly developing field of statistics for complex networks. Following this YES workshop, there will be another workshop at EURANDOM on complex networks. This enables younger statisticians to learn more on recent developments after having learned the basics of the field! For more information on YES-VI, see the website.

Next Generation Sequencing: Technology & Statistical Methods December 10–13, 2012 Birmingham, AL, USA

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

The University of Alabama at Birmingham's Section on Statistical Genetics is pleased to announce the second annual NHGRIfunded Short Course on Next Generation Sequencing. Focusing on next-generation sequencing technology, which generates an unprecedented wealth of data, this four-day course will offer an interactive program to enhance researchers' ability to understand & use statistical genetic methods, as well as implement and interpret sophisticated NGS data analyses.

Topics to include:

Intro (Sequencing for variation & functional genomics); Technical overview of NGS; Primary Data Analysis; Copy Number & Structural Variants; Re-sequencing; Computing Needs for NGS; DNA Sequence Variant Annotation & Analysis; RNA-seq; Genome-scale DNA methylation analysis; ChIP-seq; Rare Variants Association Analysis; Whole Genome 3D Regulation Analysis, Integrative Bioinformatics, Challenges & the Best Practice in Large scale NGS Analysis: Lessons from 1000 Genomes. Speakers:

From HudsonAlpha Institute: Greg Barsh, Shawn Levy, Devin Absher, Braden Boone, Greg Cooper, Jay Gertz, Richard Myers; From other institutions: Suzanne M. Leal, Baylor College; Shili Lin, Ohio State Univ.; Yun Li, Univ. of North Carolina. From UAB: Jonas Almeida, David Crossman, Xiangqin Cui, Hemant Tiwari, Degui Zhi.

29th European Meeting of Statisticians July 20–25, 2013 Budapest, Hungary w http://ems2013.eu/

The abstract submission for the 29th European Meeting of Statisticians (20–25 July 2013, Budapest) is now open.

Prospective authors are invited to submit their abstracts by midnight, 15 March, 2013. It is also possible to suggest complete organised contributed sessions (streams) of 4 authors until 28th February the latest, see the end of the Abstract Submission page on the website (http://ems2013.eu/site/index. php?page=en/Abstract_submission) for guidance. In order to submit the abstract of your proposed contribution you need to make your abstract registration first, then go to the Abstract Login page and upload your abstract files. (Please note that abstracts are accepted only in LaTeX format, according to the given template. In addition to the source LaTeX file, please upload a compiled version in PDF format as well.)

Invited speakers and organised contributed paper session (stream) participants, should fill in the \sessiontitle{} command in their abstract, while general contributed paper authors should type the invited session topic code they think to be the closest to their contribution, into the box on the upload page.

The updated preliminary programme of the Meeting is available at http://ems2013. eu/site/index.php?page=en/Program

For updated news, please visit the conference website.

In case of any questions, please do not hesitate to contact us. We are looking forward to meeting you in Budapest, László Márkus (Chair, Local Organising Committee) and Eszter Zsigmond (Head, EMS 2013 Conference Secretariat)

Workshop on Statistical Genomics and Data Integration for Personalized Medicine May 12–17, 2013 Ascona, Switzerland

w http://www.cbg.ethz.ch/news/ascona2013 Contact: Darlene Goldstein darlene. goldstein@epfl.ch

This workshop is a forum for (i) dissemination of cutting-edge developments and (ii) the identification of open data analysis problems. Targeted areas: clinical trial designs for personalized medicine; statistical and machine learning methods for identifying reproducible biomarkers and genomic signatures; new strategies for analysis and integration of heterogeneous, high-dimensional data types; applications to disease prevention, diagnosis, prognosis and therapy; statistical computing advances for these problems.



If you're organizing a meeting and want its details listed here, please visit the "submit a meeting" webpage and fill in the details. Easy.

http://imstat.org/ submit-meeting.html

It's free publicity!

More meetings around the world

15th Applied Stochastic Models and Data Analysis International Conference (ASMDA 2013) June 25–28, 2013

Barcelona, Spain

w http://www.asmda.es

The forthcoming International Conference ASMDA 2013 will take place in Mataró (Barcelona) Spain.

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

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

The publications of the conference include:

- 1. The Book of Abstracts in Electronic and in Paper form
- 2. Electronic Proceedings in CD and in the web in a permanent website
- 3. Publications in International Journals

For more information and Abstract/Paper submission and Special Session Proposals please visit the conference website at http://www.asmda.es and submit your contributions to secretariat@asmda.es

Conference on Advanced Statistical Methods for Underground Seismic Event Monitoring and Verification March 7–8, 2013

Arlington, Virginia, USA

w http://stat.rutgers.edu/conferences/monitoringandverification2013

This one and half day conference is sponsored by NSF and Rutgers University. It focuses on the important area of underground seismic event monitoring and verification. Its objective is to promote close collaboration between statisticians and other scientists in the field to investigate the potential new approaches by combining state-of-art statistical methods with advanced sensor technology.

The conference will bring statisticians and the other experts in the field together to discuss the current status of field, to exchange ideas, and to brainstorm novel approaches. The experts in related federal agencies will share their vision and experience and also any urgent specific problems. The conference will also serve a venue to generate new interests among statisticians to this field, to enlist statisticians to bring in their new statistical ideas and approaches to deal with this important problem, and to attract and educate next generation statisticians and scientists to work in this area.

33rd International Symposium on Forecasting June 23–26, 2013 Seoul, Korea

w http://forecasters.org/isf/

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

ISF 2013 will take place at KAIST College of Business in Seoul, Korea.



Conference on Applied Statistics in Ireland (CASI) 2013 May 15–17, 2013 Clane, Co Kildare, Ireland

w www.casi.ie

CASI 2013 will be held at The Westgrove Hotel in Clane, Co Kildare which is approximately 40 minutes drive from Dublin airport. The invited speakers are Andreas Buja (Pennsylvania), Trevor Hastie (Stanford), Friedrich Leisch (Vienna) and Marian Scott (Glasgow). The call for papers will open in January 2013 and registration will open in February 2013.

Innovations in Design, Analysis, and Dissemination: Frontiers in Biostatistical Methods April 18–19, 2013

Kansas City, Missouri

w http://community.amstat.org/KWMChapter/AnnualSymposium/

The Kansas-Western Missouri Chapter of the American Statistical Association, the Department of Biostatistics at The University of Kansas Medical Center, and Cerner Corporation are pleased to announce the 6th Annual symposium "Innovations in Design, Analysis, and Dissemination: Frontiers in Biostatistical Methods." This event will take place April 18th - April 19th, 2013 at Cerner Corporation's World Headquarters campus in Kansas City, Missouri.

The Keynote Address will be delivered by Dr. Sharon-Lise T. Normand of Harvard University. Dr. Normand is a professor of health care policy in the Department of Health Care Policy at Harvard Medical School and the Department of Biostatistics at the Harvard School of Public Health. She also serves as Director of the Massachusetts Data Analysis Center (Mass-DAC). The title of her talk is Statistical Methods for Assessing the Comparative Safety and Effectiveness of Medical Devices: Distributed Networks, Auxiliary Data Sources, and Learning Curves.

Dr. Thomas Love will be providing a pre-symposium short course entitled "Using Propensity Scores to Design and Analyze Observational Studies" during the morning session on April 18th. Dr. Love is a professor in the Department of Medicine and Department of Epidemiology & Biostatistics at Case Western Reserve University and Director of the Biostatistics and Evaluation Unit at the Center for Health Care Research & Policy at CWRU – MetroHealth Medical Center.

To recognize the International Year of Statistics, Dr. Marie Davidian, William Neal Reynolds Professor, Department of Statistics at North Carolina State University and President-Elect of the American Statistical Association will present the ASA Presidential Address in Honor of the International Year of Statistics. For more information about the International Year of Statistics, visit www.statistics2013.org.

Registration, schedule of events, and additional details can be found at http://community.amstat.org/KWMChapter/AnnualSymposium/. Please check back for updates.

Lévy Processes and Self-similarity 2013 October 28 – November 9, 2013 Tunis, Tunisia

w http://levy-autosimilarity-tunis2013.math.cnrs.fr/index.html A CIMPA school will be coupled with a conference under the name "Lévy Processes and Self-similarity 2013". The conference is a follow up to those organised in Clermont-Ferrand (2002), Toulouse (2005), Angers (2009) and Le Touquet-Paris-Plage (2011). Further details can be found on http://levy-autosimilarity-tunis2013.math. cnrs.fr/index.html

The event will take place in Tunis (Tunisia) during October 28th – November 9th, 2013. It is organized as follows:

Lévy and self-similar Processes will be studied under many aspects through a series of five lectures: Philippe Biane: "Free probability and free Lévy processes"; Loïc Chaumont: "An introduction to self-similar processes"; Sonia Fourati: "Complex analysis and exit problem for Lévy processes"; Jean Jacod: "Lévy Processes and Statistics"; and René Schilling: "Probabilistic and analytic aspects of subordination."

The conference "Lévy Processes and Self-similarity" will be held during the second week.

XVII Brazilian School of Probability (XVII EBP) August 4–10, 2013 Mamburaha, DJ. Brazil Harstian new confermed

Mambucaba, RJ, Brazil [location now confirmed]

w http://www.im.ufrj.br/ebp17/

The Brazilian School of Probability (EBP) has been organized each year since 1997 by initiative of the Brazilian probabilistic community and planned as a forum for the discussion of new ideas and developments in Probability and related areas. It is an opportunity to detect new research directions and to establish new collaborations, and an excellent occasion for students to start their scientific life. The EBP has been organized by IMPA, IME-USP, IMECC-UNICAMP, UFMG and by UFPE, with the participation of IM-AGIMB and INCTMat, and has received support of several scientific societies and research agencies.

The 17th edition of the Brazilian School of Probability (XVII EBP) will be organized by IM-UFRJ and IMPA. At this occasion we shall celebrate more than thirty years of friendship and scientific interaction between the group of mathematical physics and probability of Roma and L'Aquila and our group of probability in Brazil. The event will be held in Mambucaba, Rio de Janeiro, from August 4 to August 10, 2013.



Postdoctoral Fellowships for 2013-2014

Postdoctoral fellowships are available (up to 6) at the Statistical and Applied Mathematical Sciences Institute (SAMSI) for either of the two SAMSI Research Programs for 2013-14: **Computational Methods in the Social Sciences (CMSS)** and **Low-Dimensional Structure in High-Dimensional Systems (LDHD)**. Appointments will begin in August 2013 and will typically be for two years, although they can also be arranged for one year. Appointments are made jointly between SAMSI and one of its partner universities, where teaching is a possibility. Extremely competitive salaries, travel stipend, and health insurance will be offered.

The CMSS program will focus on statistical and computational methods applied to the social sciences, with a particular focus on up-to-date methods for exploiting the potential of large social science datasets. The three principal themes of the program will be:

(a) Social Networks, with a focus on statistical design and inference problems, causal inference, respondent-driven sampling, event data and clustering;

(b) Agent-Based Models, with a focus on data assimilation, calibration and statistical inference;

(c) Statistical Methodology for Censuses and Surveys, covering such topics as complex models for survey data, statistical inference and asymptotics, missing data and data imputation, combining data from multiple surveys and the application of spatial statistics to small-area estimation.

For additional information on this program, please see: http://www.samsi.info/CMSS

The LDHD program will address methodological, theoretical, and computational challenges posed by high-dimensional mathematical and statistical models with limited data. It will focus on low-dimensional structures that approximate or encapsulate the given data. Probability and statistics, geometry, topology, and computer science will be combined in theory and in applications such as image and signal analysis, networks, genetics and genomics, dynamical systems, and machine learning.

For additional information on this program, please see: http://www.samsi.info/LDHD

Criteria for selection for SAMSI Postdoctoral Fellows include demonstrated research ability in statistical and/or applied mathematical sciences, interest and (to a lesser degree) experience in the SAMSI program areas and vision, together with strength in computation and in verbal and written communication. The deadline for full consideration is December 15, 2012, although later applications will be considered as resources permit.

In your cover letter, please specify which of the two SAMSI research programs you are applying to (CMSS or LDHD) and why you would be a good fit for SAMSI and that program.

To apply, go to mathjobs.org, SAMSIPD2013 Job #3759

Employment Opportunities around the world

Australia: Melbourne

University of Melbourne, Department of Mathematics and Statistics

Lecturer (Level B) Probability Theory and Stochastic Processes http://jobs.imstat.org/c/job.cfm?site_ id=1847&jb=11231075

Australia: Wollongong

University of Wollongong, School of Mathematics & Applied Statistics

Lecturer in Statistics http://jobs.imstat.org/c/job.cfm?site_ id=1847&jb=11237538

Germany: Heidelberg

Karlsruhe Institute of Technology, Department of Mathematics

Professorship (tenure) http://jobs.imstat.org/c/job.cfm?site_ id=1847&jb=11047799

Hong Kong

The Hong Kong University of Science and Technology

Non-Tenure Track Teaching Position for Business Statistics at HKUST http://jobs.imstat.org/c/job.cfm?site_ id=1847&jb=8746034

Israel: Haifa

Technion – Israel Institute of Technology Postdoctoral Fellow http://jobs.imstat.org/c/job.cfm?site_

id=1847&jb=11217168

New Zealand: Auckland

Faculty of Health and Environmental Sciences, AUT University

Associate Professor / Professor of Biostatistics / Epidemiology http://jobs.imstat.org/c/job.cfm?site_ id=1847&jb=11115781

Hong Kong: Shatin



THE CHINESE UNIVERSITY OF HONG KONG

Applications are invited for:-

Department of Statistics Professor(s) / Associate Professor(s) / Assistant Professor(s) (*Ref. 1213/070(408)/2*)

The Department invites applications for faculty post(s) at all levels. Applicants should have (i) a PhD degree; and (ii) strong research and teaching records in statistics. The appointee(s) will (a) teach undergraduate and postgraduate courses in statistics and risk management; (b) conduct high-quality research; and (c) assist in the administration of the Department. Applicants with exceptionally strong credentials may be considered for appointment at higher levels as Professor or Associate Professor. Applications will be accepted until the post(s) are filled.

Salary and Fringe Benefits

Salary will be highly competitive, commensurate with qualifications and experience. The University offers a comprehensive fringe benefit package, including medical care, a contract-end gratuity for appointments of two years or longer, and housing benefits for eligible appointees. Further information about the University and the general terms of service for appointments is available at *http://www.per.cuhk.edu.hk*. The terms mentioned herein are for reference only and are subject to revision by the University.

Application Procedure

Please send full curriculum vitae, a detailed list of publications and if available, abstracts of selected published papers, to the Personnel Office, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong by post or by fax (no. (852) 3943 1462), preferably by December 31, 2012. The Personal Information Collection Statement will be provided upon request. Please quote the reference number and mark 'Application - Confidential' on cover.

Singapore

National University of Singapore Department of Statistics and Applied Probability Faculty Position

Applications are invited for regular positions in Statistics. A PhD in Statistics or a related field is required. All areas of Statistics will be considered. Applications will be considered at all levels of appointment. Applicants should send an application letter and a CV and arrange for at least THREE reference letters to be sent directly to the Department.

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

There is no closing date for applications. The search will continue until all positions are filled. NUS offers internationally competitive remuneration, generous research support and funding, relocation assistance and other benefits.

Taiwan: Taipei

Institute of Statistical Science, Academia Sinica

Regular Research Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=10984387 The Institute of Statistical Science, Academia Sinica, is seeking outstanding candidates for regular research positions at the level of assistant, associate or full research fellow available in 2013. Candidates in all areas of Statistics will be considered. Candidates should have a PhD in statistics or related fields. Application materials must include (1) a curriculum vitae, (2) three letters of recommendation and (3) representative publications and/or technical reports. Additional supporting materials such as transcripts for new PhD applicants may also be included. Except for the letters of recommendation, electronic submissions are encouraged. Applications should be submitted to

Dr. Su-Yun Huang Chair of the Search Committee Institute of Statistical Science, Academia Sinica 128 Sec. 2 Academia Road, Taipei 11529, Taiwan, R.O.C. f +886-2-27831523 e syhuang@stat.sinica.edu.tw

Applications should be completed by December 31, 2012 for full consideration.

United Kingdom: Cambridge

University of Cambridge, Statistical Laboratory, Department of Pure Mathematics and Mathematical Statistics

University Lectureships in Statistics http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11384162

United Kingdom: Cambridge

University of Cambridge, Statistical Laboratory, Department of Pure Mathematics and Mathematical Statistics

Postdoctoral Research Associates in Statistics http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11384125

United Kingdom: Cambridge

University of Cambridge, Statistical Laboratory, Department of Pure Mathematics and Mathematical Statistics

University Lectureship in Probability http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11384121

United Kingdom: Cambridge

University of Cambridge, Statistical Laboratory, Department of Pure Mathematics and Mathematical Statistics

Postdoctoral Research Fellowship in Probability http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11383999

United Kingdom: Coventry University of Warwick, Department of Statistics

Faculty and Postdoctoral Positions http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11196832

United States: Tempe, AZ

Arizona State University Assistant Professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11158767

United States: Los Angeles, CA

UCLA Departments of Statistics and Human Genetics

Joint faculty position in Statistics/Human Genetics http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11079550

United States: Los Angeles, CA

UCLA Department of Mathematics Faculty Positions 2013-12 http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=10847409

United States: San Francisco, CA

Department of Mathematics, San Francisco State University

Assistant or Associate Professor of Mathematics (tenure-track) in Biostatistics or Statistics http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11160209

United States: Stanford, CA

Stanford Statistics Department Assoc or Full Prof - tenured http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11096178

United States: Stanford, CA

Stanford Statistics Department Asst Prof and Stein Fellow http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11096103

United States: Fort Collins, CO

Colorado State University-Department of Statistics Special Appointment Assistant Professor Http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11237479

United States: Golden, CO

Colorado School of Mines Assistant Professor - Applied Statistics http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11169816

United States: Storrs, CT

University of Connecticut, Department of Statistics

Three Faculty Positions Available http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11146016

United States: Storrs, CT

University of Connecticut Assistant Professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=10917375

United States: Washington, DC

American University Assistant Professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11088636

United States: Washington, DC

Office of the Comptroller of the Currency Financial Economist http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11280452

United States: Atlanta, GA

Georgia Inst. of Technology Faculty Positions http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11145653

United States: Ames, IA

Iowa State University Department of Statistics and Department of Mathematics Assistant or Associate Professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11178657

United States: Chicago, IL

Website Solutions US Consultant http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11051124

United States: DeKalb, IL

Northern Illinois University Tenure-Track Statistics Assistant Professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11079420

United States: Urbana-Champaign, IL

Department of Statistics, University of Illinois at Urbana-Champaign Assistant Professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11005056

United States: Boston, MA

Boston University, Department of Mathematics and Statistics Assistant Professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=10988328

United States: Cambridge, MA

Harvard University Statistics Department Assistant Professor, Professor of Statistics http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11096713

United States: Medford, MA

Tufts University, Department of Mathematics Norbert Wiener Assistant Professorship http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11177958

United States: Williamstown, MA

Williams College Assistant Professor of Statistics http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=10554589

United States: East Lansing, MI

Michigan State University Assistant to Full Professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11119226

United States: Columbia, MO

University of Missouri Postdoctoral Researcher http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11108010

United States: University, MS

University of Mississippi Assistant Professor, tenure-track http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11187760

United States: Chapel Hill, NC

University of North Carolina at Chapel Hill Assistant Professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11071444

United States: Chapel Hill, NC

University of North Carolina at Chapel Hill,Department of Statistics and Operations Research Lecturer http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11118903

United States: New York, NY

Department of Statistics Columbia University Faculty Position Starting Fall 2013

The Department of Statistics invites applications for a faculty position in applied/interdisciplinary statistics to begin July 1, 2013. The position may be filled at any rank from tenure-track assistant professor through full professor with tenure. A PhD in statistics or a related field and commitment to high quality research and teaching in statistics and/or probability are required. Candidates will be expected to sustain an active research and publication agenda and to teach in the departmental undergraduate and graduate programs. The department currently consists of 22 faculty members, 40 PhD students, and over 100 MS students. The department has been expanding rapidly and, like the University itself, is an extraordinarily vibrant academic community. For further information about the department and our activities, centers, research areas, and curricular programs, please go to our web page at: http://www.stat.columbia. edu

Please initiate the application process at https://academicjobs. columbia.edu/applicants/Central?quickFind=56982

At Columbia's Recruitment of Academic Personnel (RAPS) secure website linked above, applicants at all ranks are asked please to create the applicant profile and upload the Curriculum Vitae. The completion of this brief process in RAPS is indicated by a confirmation number which the applicant should retain.

To complete the application process, applicants at all ranks must submit materials through Head Hunter at https://editorialexpress. com/hhc. The Department of Statistics positions will be visible in Head Hunter by clicking on "Positions" after logging in to the Candidate Application Interface.

In Head Hunter, applicants for this position at the assistant professor or non-tenured associate professor rank should submit a cover letter, Curriculum Vitae, a brief statement of their research plans, one writing sample, and arrange for three letters of reference to be sent on their behalf. Applicants at the tenured associate professor or full professor rank should submit a cover letter, Curriculum Vitae, and a statement of research.

Please note that an application will not be considered complete unless the process is completed in **both** Head Hunter and the Columbia RAPS system.

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

Review of applications begins on December 15, 2012 and will continue until the position is filled.

Columbia University is an Equal Opportunity/Affirmative Action employer.

United States: Charlotte, NC

University of North Carolina at Charlotte, Department of Mathematics and Statistics Assistant Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11043294

United States: Raleigh, NC

North Carolina State University / Department of Statistics Tenure Track Professor Positions

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=10932658

United States: West Long Branch, NJ

Monmouth University Assistant Professor Mathematics http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11071997

United States: Piscataway, NJ

Rutgers, The State University of NJ, Department of Statistics and Biostatistics Assistant Professor, Tenure Track http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11071391

United States: Brockport, NY

The College at Brockport

Assistant Professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=10945183

United States: Ithaca, NY

Cornell University Visiting Assistant Professor-Statistical Science http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11188128

United States: Ithaca, NY

Cornell University

Faculty Positions in Applied Operations Research http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11188071

United States: Columbus, OH

Mathematical Biosciences Institute

Postdoctoral Fellow http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11079768

United States: Columbus, OH

Mathematical Biosciences Institute

Early Career Award http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11079758

United States: Ithaca, NY

Faculty Positions in Applied Operations Research

Cornell is a community of scholars, known for intellectual rigor and engaged in deep and broad research, teaching tomorrow's thought leaders to think otherwise, care for others, and create and disseminate knowledge with a public purpose.

Cornell University's School of Operations Research and Information Engineering (ORIE) seeks to fill one or more tenured/tenure-track faculty positions in Applied Operations Research on the Ithaca campus. Applicants with research interests in supply chain/logistics, information engineering/ technology, energy/sustainability, OR and healthcare, or statistics are of primary interest.

Requisite is a strong interest in the broad mission of the School, an ability and willingness to teach at all levels of the program, strong potential for leadership in research and education, and a PhD in Operations Research, Mathematics, Statistics, or a related field by the start of the appointment. Salary will be appropriate to qualifications and engineering school norms.

Cornell ORIE is a diverse group of high-quality researchers and educators interested in probability, optimization, statistics, simulation, and a wide array of applications such as manufacturing, supply chains, scheduling, transportation systems, health care, financial engineering, service systems and network science. We value mathematical and technical depth and innovation, and experience with applications and practice. Ideal candidates will have correspondingly broad training and interests.

Please apply online at https://academicjobsonline.org/ajo/jobs/2053 with a cover letter, CV, statements of teaching and research interests, sample publications, list of references and, for junior applicants, a doctoral transcript. Applications will be reviewed beginning December 1, 2012 and will be accepted until these positions are filled.

ORIE and the College of Engineering at Cornell embrace diversity and seek candidates who can contribute to a welcoming climate for students of all races and genders. Cornell University seeks to meet the needs of dual career couples, has a Dual Career program, and is a member of the Upstate New York Higher Education Recruitment Consortium to assist with dual career searches. Visit http://www.unyherc.org/home/ to see positions available in higher education in the upstate New York area. Cornell University is an equal opportunity, affirmative action educator and employer. We strongly encourage qualified women and minority candidates to apply.

Find us online at http://hr.cornell.edu/jobs or Facebook.com/CornellCareers



Diversity and inclusion have been and continue to be a part of our heritage. Cornell University is a recognized EEO/AA employer and educator.

United States: Corvallis, OR

Oregon State University Department of Statistics

Associate/Full Professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11338685

United States: Eugene, OR

University of Oregon, Biology or Mathematics

Assistant, Associate, or Full Professor Biology or Math http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11051717

United States: Newtown, PA

The College Board

Statistician http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11097324

United States: Pittsburgh, PA

Carnegie Mellon University

Applications are invited for possible teaching-track position. Carnegie Mellon offers a collegial faculty environment, combining disciplinary and cross-disciplinary research with thriving undergraduate and graduate programs. This position emphasizes teaching, program administration, and curriculum development. All areas of statistics are welcome, and curriculum development, and joint appointments with other units at Carnegie Mellon are possible. See http://www.stat.cmu.edu (email: hiring@stat.cmu.edu). Send CV, relevant transcripts, teaching statement, and three recommendation letters to: *Faculty Search Committee, Statistics, Carnegie Mellon University, Pittsburgh, PA 15213, USA.* Application screening begins immediately, continues until positions closed. Women and minorities are encouraged to apply. AA/EOE.

United States: Pittsburgh, PA

Carnegie Mellon University

Applications are invited for possible tenure-track and visiting positions. Carnegie Mellon offers a collegial faculty environment, emphasizing a combination of disciplinary and cross-disciplinary research and teaching. All areas of statistics are welcome, and joint appointments with other units in the Pittsburgh area are possible. We especially encourage women and minorities to apply. Details at http://www.stat. cmu.edu (email: hiring@stat.cmu.edu). Application screening begins immediately and continues until positions closed. Send CV, research papers, relevant transcripts and three letters of recommendation to: *Chair, Faculty Search Committee, Department of Statistics, Carnegie Mellon University, Pittsburgh, PA 15213, USA*. AA/EOE.

United States: Philadelphia, PA

Wharton Department of Statistics, University of Pennsylvania

Tenure-track or Tenured Position(s) http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11170282

United States: Clemson, SC

Clemson University Department of Mathematical Sciences Tenure-track position http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11364167

United States: Brookings, SD

South Dakota State University

Assistant Professor of Statistics http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11203966

United States: Knoxville, TN

University of Tennessee Post doctoral http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11337859

United States: Austin, TX

The University of Texas at Austin, McCombs School of Business & the Division of Statistics & Scientific Computation Assistant Professor of Statistics

http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11213928

United States: Lubbock, TX

Texas Tech University, Department of Math. & Statistics Tenure-track assistant professor http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=10872076

United States: Salt Lake City, UT

University of Utah, Department of Mathematics Tenure/Tenure-Track http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11280257

United States: Seattle, WA

Fred Hutchinson Cancer Research Center Systems Analyst/Programmer II (SC 24900) http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11237073

United States: Seattle, WA

Fred Hutchinson Cancer Research Center

Post-Doctoral Research Fellow (ML 24916) http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11347725

United States: College Station, TX

Faculty Positions: Department of Statistics, Texas A&M University

The Department of Statistics at Texas A&M University anticipates multiple open-rank positions (tenure/tenure-track) 09/13. Salary is open dependent upon qualifications presented. A PhD/DSc degree in Statistics (or a closely related field) or the completion of all requirements for the degree prior to beginning employment is required. Job duties will include teaching three courses per academic year, computer intensive research, as well as to seek research funding. These positions are open to all areas of research. Successful candidates are expected to have a strong commitment to research and teaching. The department has a strong tradition of theoretical and interdisciplinary research. Current faculty members actively collaborate with colleagues in the Colleges of Science, Agriculture and Life Sciences, Engineering, Geosciences, Veterinary Medicine, Medicine, Public Health, as well as the Faculties of Genetics, Nutrition and Toxicology. Excellent computing facilities are available and highly competitive startup funding is anticipated.

The Department of Statistics is especially interested in candidates who can contribute to the diversity and excellence of the academic community through their research, teaching and/or service. Texas A&M University is an equal opportunity employer. The University is dedicated to the goal of building a culturally diverse and pluralistic faculty and staff committed to teaching and working in a multicultural environment and strongly encourages applications from women, minorities, individuals with disabilities and veterans. In addition, the University has established a partner placement program and will be particularly responsive to the needs of dual-career couples.

Please submit a current vita with three letters of reference to hiring@stat.tamu.edu or mail to:

Faculty Search Committee, Department of Statistics, Texas A&M University, 3143 TAMU, College Station, TX 77843-3143

Evaluation of applications will begin November 1, 2012. Applications will continue to be accepted until the position is filled. For more information on our department and the research interests of our faculty, please visit our web site at www.stat.tamu.edu.

United States: Milwaukee, WI

Marguette University, MSCS Department

Assistant Professor, August 2013 http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11060502

United States: Milwaukee, WI

University of Wisconsin-Milwaukee Assistant/Associate Professor in Actuarial Science http://jobs.imstat.org/c/job.cfm?site_id=1847&jb=11178224

International Calendar of Statistical Events

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

December 2012

December 2–7: Atlantic City, NJ, USA. **68th Annual Deming Conference on Applied Statistics w** www.demingconference.com

December 13–14: Miami, FL. **Spatial Statistics Conference w** www. bus.miami.edu/ssc/

December 15–17: Chandigarh, India 21st International Conference on Interdisciplinary Mathematics, Statistics and Computational Techniques (IMSCT 2012-FIM XXI) w http://imsct2012.puchd. ac.in/index.php

December 18–20: Chennai Mathematical Institute, India. SAMSI-SAVI Workshop on Topics in Probability w www. samsi.info/workshop/samsi-savi-workshop-topics-probabilitydecember-18-20-2012

December 19–22: Doha, Qatar. 12th Islamic Countries Conference on Statistical Sciences (ICCS-12) w www.iccs12.isoss.net

December 24–25: Burdwan, West Bengal, India. Young Statisticians Meet: An International Conference w http://www.buruniv.ac.in/ Notices/UBUR_2012032_NOT_WEBPAGE.pdf

December 27–29: Dhaka, Bangladesh. Statistics in Planning and Development: Bangladesh Perspective w TBC

January 2013

January 2–5: Chennai, India. 2013 IISA Conference Statistics, Science, and Society: New Challenges and Opportunities w http:// iisaconference.info/

January 6–10: Varanasi, India. **ISBA Regional Meeting and International Workshop/Conference on Bayesian Theory and Applications (IWCBTA) w** www.bhu.ac.in/isba

January 9–12: San Diego, CA. AWM Workshop for Women Graduate Students and Recent PhDs w https://sites.google.com/ site/awmmath/

January 18–19: Gainesville, Florida. Winter Workshop on New Directions in Monte Carlo Methods w http://www.stat.ufl.edu/ symposium/2013/index.html

January 21–23: Lunteren, The Netherlands. 12th Winter school on Mathematical Finance w http://staff.science.uva.nl/~spreij/ winterschool/winterschool.html

January 28–29: EURANDOM, The Netherlands. Sixth YES (Young European Statisticians) workshop w http://www.eurandom. nl/events/workshops/2013/YES_VI/

February 2013

February 7–8: Melbourne, Australia. Young Statisticians Conference 2013 w http://ysc2013.com/

February 7–8: Brussels, Belgium. Actuarial and Financial Mathematics Conference 2013: Interplay between Finance and Insurance w http://www.afmathconf.ugent.be/

February 13–15: Boulder, CO. SAMSI-NCAR Workshop on Massive Datasets in Environment and Climate w www.samsi.info/ workshop/samsincar-workshop-massive-datasets-environment-andclimate-february-13-15-2013

February 21–22: SAMSI, Research Triangle Park, NC. SAMSI Undergraduate Workshop: Data Driven Decisions in Healthcare w www.samsi.info/workshop/undergraduate-workshopfebruary-21-22-2013

March 2013

March 4–6: SAMSI, Research Triangle Park, NC. SAMSI-SAVI Workshop on Environmental Statistics w http://www. samsi.info/workshop/samsi-savi-workshop-environmental-statisticsmarch-4-6-2013

March 7–8: Arlington, Virginia, USA. Conference on Advanced Statistical Methods for Underground Seismic Event Monitoring and Verification w http://stat.rutgers.edu/conferences/ monitoringandverification2013

Ims March 10–13: Orlando, Florida. 2013 ENAR/IMS Spring Meeting. **w** http://www.enar.org/meetings.cfm

March 12–14: Brisbane, Australia. NatStats 2013: "A better informed Australia: the role of statistics in building the nation" w http://www.nss.gov.au/blog/natstats.nsf

March 14–16: Duke University/UNC-Chapel Hill. Seminar on Stochastic Processes w http://depts.washington.edu/ssproc/index.php

April 2013

April 18–19: Kansas City, Missouri. Innovations in Design, Analysis, and Dissemination: Frontiers in Biostatistical Methods w http://community.amstat.org/KWMChapter/AnnualSymposium/

April 22–25: Tel Aviv, Israel. 7th Meeting of the Eastern Mediterranean Region International Biometric Society w https:// event.pwizard.com/ims/index.py?

International Calendar continued

May 2013

May 12–17: Ascona, Switzerland. Workshop on Statistical Genomics and Data Integration for Personalized Medicine w http://www.cbg.ethz.ch/news/ascona2013

May 15–17: Clane, Co Kildare, Ireland. Conference on Applied Statistics in Ireland (CASI) 2013 w www.casi.ie

May 21–25: Rimini, Italy. 7th International Workshop on Simulation w http://www2.stat.unibo.it/iws/

May 27–31: Aalborg, Denmark. Summer School on Topics in Space-Time Modeling and Inference w http://csgb.dk/ activities/2013/space-timemodeling/

June 2013

June 6–8: Milano, Italy. 8th Bayesian Inference in Stochastic Processes w www.mi.imati.cnr.it/conferences/BISP8/

June 6–9: Toruń, Poland. German-Polish conference on Probability Theory and Mathematical Statistics w http://www.gpps.umk.pl/

June 10–12: Stockholm, Sweden. 4th Nordic-Baltic Biometric Conference (NBBC13) w http://nbbc13.org/

June 10–14: Amsterdam, The Netherlands. **9th Conference on Bayesian Nonparametrics w** http://www.bnp9.win.tue.nl/

June 11–14: Stockholm, Sweden. International Cramér Symposium on Insurance Mathematics w www2.math.su.se/icsim

WEW June 19–21: NUS, Singapore. 2013 IMS Workshop on Finance, Probability and Statistics w http://cqf.nus.edu.sg/ IMSworkshop-FPS2013

June 20–22: Los Angeles, CA. 20th Annual ASA/IMS Spring Research Conference (SRC) on Statistics in Industry and Technology w http://www.stat.ucla.edu/src2013/

June 23–26: Seoul, Korea. 33rd International Symposium on Forecasting w http://forecasters.org/isf/

June 25–28: Barcelona, Spain. 15th Applied Stochastic Models and Data Analysis International Conference (ASMDA 2013) w http://www.asmda.es

June 30 – July 4: Chengdu, China. 4th IMS-China International Conference on Statistics and Probability. Runze Li **e** rli@stat.psu.edu **w** http://imscn2013.swufe.edu.cn

July 2013

July 8–12: Palermo, Italy. 28th IWSM (International Workshop on Statistical Modelling) w http://iwsm2013.unipa.it/

July 8–12: ShangHai, China. 2013 Extreme Value Analysis conference w http://eva.fudan.edu.cn

Lims July 15–26: Cornell University, Ithaca, NY. 9th Cornell Probability Summer School w http://www.math.cornell.edu/ Colloquia/colloquia.html

July 20–25: Budapest, Hungary. 29th European Meeting of Statisticians (EMS2013) w http://www.ems2013.eu

July 29 – August 2: University of Colorado, Boulder, USA. 36th Conference on Stochastic Processes and their Applications w http://math.colorado.edu/spa2013/

August 2013

New Researchers Conference, jointly sponsored by the IMS and the SSC w http://www.math.mcgill.ca/nrc2013/

Lims August 3–8: Montréal, Canada. IMS Annual Meeting at JSM2013. w http://amstat.org/meetings/jsm/

August 4–10: XVII Brazilian School of Probability (XVII EBP), Mambucaba, RJ, Brazil **w** http://www.im.ufrj.br/ebp17/

August 5–9: Guanajuato, Mexico. Mathematics Congress of the Americas w http://www.mca2013.org/

August 13-16: Braunschweig, Germany. Building Bridges: Probability, Statistics and Applications w https://www. tu-braunschweig.de/stochastik/tagungen/building-bridges

August 24–31: Hong Kong. 59th ISI World Statistics Congress w www.isi2013.hk

October 2013

Lims October 15–16: Basel, Switzerland. International Conference *Ars Conjectandi* 1713–2013 w http://www.statoo.ch/bernoulli13/

October 28 – November 9: Tunis, Tunisia. Lévy Processes and Self-similarity 2013 w http://levy-autosimilarity-tunis2013.math. cnrs.fr/index.html

December 2013

Lims December 20–23: Hong Kong, China. 2013 ICSA International Conference w TBC

December 28–31: CRRAO AIMSCS, India. **Statistics 2013**: www.statistics2013-conference.org.in

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 and Organizational 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 \$108. An additional \$59 is added to the dues of members for each scientific journal selected (\$35 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. **Organizational memberships** are available to departments, corporations, government agencies and other similar research institutions at \$163 per year.

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 2012 are available to *The Annals of Applied Probability* (\$177), *The Annals of Applied Statistics* (\$177), *The Annals of Probability* (\$177), *The Annals of Statistics* (\$177), *Statistical Science* (\$153), and *IMS Bulletin* (\$118). General subscriptions are for libraries, institutions, and any multiple-readership use. General subscriptions for 2012 are available to *The Annals of Applied Probability* (\$390), *The Annals of Statistics* (\$425), *Statistical Science* (\$225), and *IMS Bulletin* (\$97). Airmail rates for delivery outside North America are \$118 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 © 2012 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 2,000 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 \$90. 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 \$250.00. 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	4.93" x 4" (125.2 x 102 mm)	\$215
1/2 page	7.5" x 4" (190 x 102 mm)	\$270
2/3 page	4.93" x 8" (125.2 x 203 mm)	\$325
Full page (to edge, including 1/8" bleed)	8.75" x 11.25" (222 mm x 285.8 mm)	\$380
Full page (within usual <i>Bulletin</i> margins)	7.5" x 9.42" (190 mm x 239.3 mm)	\$380

Deadlines and Mail Dates for IMS Bulletin

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

the **next** January/ February 2013

Read it online at the new website: bulletin.imstat.org

DEADLINES submissions December 1, then **February 1**

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

Journal

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: Organized September 12, 1935

http:// Adp. October 2012 http:// projecteuclic.org/2012 gaoge THE ANNALS of APPLIED PROBABILITY

AN OFFICIAL JOURNAL OF THE INSTITUTE OF MATHEMATICAL STATISTICS

Articles

The total path length of split trees NICOLAS BROUTIN AND CECILIA HOLMGREN 1745 Spreading speeds in reducible multitype branching random walkJ. D. BIGGINS 1778 Convergence of stochastic gene networks to hybrid piecewise deterministic processes A. CRUDU, A. DEBUSSCHE, A. MULLER AND O. RADULESCU 1822

Tracking a random walk first-passage time through noisy observations MARAT V. BURNASHEV AND ASLAN TCHAMKERTEN 1860

Optimal scaling of random walk Metropolis algorithms with discontinuous target densities PETER NEAL, GARETH ROBERTS AND WAI KONG YUEN 1880

Self-similar solutions in one-dimensional kinetic models: A probabilistic view FEDERICO BASSETTI AND LUCIA LADELLI 1928

Fast approach to the Tracy–Widom law at the edge of GOE and GUE IAIN M. JOHNSTONE AND ZONGMING MA 1962

Bootstrap percolation on the random graph $G_{n,p}$ SVANTE JANSON, TOMASZ ŁUCZAK, TATYANA TUROVA AND THOMAS VALLIER 1989

Nonuniform random geometric graphs with location-dependent radii SRIKANTH K. IYER AND DEBLEENA THACKER 2048 Simple arbitrage CHRISTIAN BENDER 2067 The asymptotic distribution of the length of Beta-coalescent trees......Götz KERSTING 2086

Muller's ratchet with compensatory mutations P. PFAFFELHUBER, P. R. STAAB AND A. WAKOLBINGER 2108 Stochastic approximation, cooperative dynamics and supermodular games MICHEL BENAÏM AND MATHIEU FAURE 2133