

29 Aug 2013 • Thursday

# Young experts: see and be seen

The Youth Theme Day was held yesterday to underline the theme of this year's ISI WSC: **YOUTH**.

There are in total 18 Invited Paper Sessions on the Youth theme throughout the Congress, attracting a considerable number of young statisticians who are first-time comers of the Congress. Most of these sessions were held on the Youth Theme Day to address topics on special interests and needs of the youth from various statistical perspectives. The panel discussion of the Youth half-plenary, titled "Special invited panel on career development", was the highlight of the Theme Day, featuring prominent statisticians from academia and industry.

A great number of young experts attended the above sessions, grasping the opportunity to exchange ideas and share views on statistics profession. In return, experienced statisticians shedded light on how young people could contribute to the future needs and developments of business analytics, and what they could do to better prepare themselves for the upcoming challenges. Many young participants expressed highly positive feedback on the Youth Theme Day, as this allowed them to discuss statistics in diversified spectrums and discover the directions where they could thrive and contribute.



More photos of the Congress are available at the 59<sup>th</sup> ISI WSC website (www.isi2013.hk/en/daily.php)



http://www.isi2013.hk

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# **Daily announcements**

## Invitation to the Closing Ceremony and Gala Dinner

Invitation is hereby given to all delegates to join the Closing Ceremony tomorrow (30 August, 2013) at 16:30 at the Convention Hall of the HKCEC. Following that, the Gala Dinner of the 59<sup>th</sup> ISI WSC will be hosted at the Grand Hall of the HKCEC at 19:30.

Cocktail reception will start at 18:45. Be there to say farewell to old and new friends and exchange contacts.

# ISI & Associations' Awards Ceremony

The ISI & ISI Associations' 2012-2013 awards will be presented at the Awards Ceremony today at 15:30-16:30. To find out more about the awards and the awardees, check out the Awards Brochure at <u>bit.ly/14KGfzx</u>.

Today's events	Time & venue
Bernoulli Society General Assembly	11:15 - 13:00 Theatre 1
International Association for Statistical Education (IASE) General Assembly	11:15 - 13:00 Theatre 2
Lunchtime Networking Meeting with National Statistical Offices and International Organisations (by invitation only)	11:15 - 13:00 Convention Hall A
ISI & Associations' Awards Ceremony	15:30 - 16:30 Convention Hall B
ISI General Assembly	16:30 - 19:00 Convention Hall B
Events scheduled for 30 August 2013	
International Association of Survey Statisticians (IASS) General Assembly II	11:15 - 13:00 Theatre 1
Closing Ceremony	16:30 - 17:15 Convention Hall
Gala Dinner	From 19:30 Grand Hall

## Have your say!

All ISI WSC 2013 participants will receive an e-mail tonight, with a link to the online survey provided by ISI asking for your feedback to the Congress. The survey covers all aspects of ISI WSC 2013, with easy-to-answer closed questions and some open questions for respondents who wish to add comments.

ISI greatly appreciates all feedback and encourages all WSC 2013 participants to provide their valuable comments and feedback to help the planning of future WSCs.

Findings from the online survey of WSC 2011, conducted after it was held, had been carefully analysed and closely considered by the ISI Executive and WSC organisers in arranging this year's Congress. However, it was noted that the response rate was only 25%, possibly because the survey was sent out after the Congress was held.

This time, you can have your say earlier before the Congress is over! Please take this opportunity to send your valued feedback to the ISI on the WSC through this online survey, which will be open for submission until 30 September 2013.



## ISI membership

Become an ISI member before you leave Hong Kong! Just visit the ISI Office (Room S227) any time during the Congress and leave us your email address.

# Scientific Programme

The Scientific Programme column of this **Daily News** introduces a number of scientific papers in diverse disciplines. Nevertheless, the papers introduced here are merely a fraction of the whole Scientific Programme. A full list of the scientific sessions and the corresponding papers and abstracts are available at the 59<sup>th</sup> ISI WSC website (www.isi2013.hk/en/index.php).

### (Semi-)intrinsic statistical analysis on stratified spaces



Dr Stephan F. Huckemann is the Chair of Non-Euclidean Statistics at the University of Göettingen in Germany. At this morning's *Invited Paper Session* on "Recent developments in nonparametric statistics on manifolds with applications to biology, medical imaging and machine vision", Dr Huckemann is glad to speak to us on his paper named "(Semi-)intrinsic statistical analysis on stratified spaces" (IPS070, 09:00 at Theatre 1).

Dr Huckemann will present to us applications in biology and medical imaging, leading to data on manifolds and stratified spaces, on which the Euclidean concept of a mean forks into several canonical generalisations of non-Euclidean means. Under such a circumstance, more data descriptors are involved, for instance, complicated concepts of principal components. The (semi-)intrinsic statistical analysis allows the study of descriptors be represented as elements of another stratified space. Examples

will be provided for geodesic principal components on shape spaces and concentric small circles on spheres. Dr Huckemann will also show to the audiences curious statistical phenomena found in non-Euclidean geometry.

### International contrasts in statistics education

With the unprecedented demand for the wide application of statistics in diverse fields, it is of vital importance to plant the seeds for the future sustainable growth — to educate the next generation statistics. At today's *Invited Paper Session* on "International contrasts in educational frameworks for teaching statistics to non-specialists" (IPS072, 09:00 at Convention Hall A), two experienced professors from Mainland China and Italy will present their papers on statistics education.



Professor Wei Yuan is the Former Executive Vice President of Renmin University of China and the Chair of the Higher Education Committee, National Statistical Education Society of China. Today Professor Yuan will discuss his paper titled "Teaching statistics to non-specialists in Mainland China".

In the talk, Professor Yuan will first give a brief introduction on the changes of statistical education in China during the last 30 years and the current status of higher education in statistics. The statistics teachers, teaching materials and teaching methods in Mainland China will also be discussed.

Stefania Mignani is Full Professor in Statistics at the Department of Statistical Sciences, University of Bologna in Italy. She will introduce a paper named "The assessment of statistics learning by large-scale standardised tests: some evidences in the Italian primary and secondary education".

Since 2001, Italy has integrated the teaching of Statistics into her mathematics curriculum at all grades and types of schools. Professor Mignani will present the results of student performances in statistics in the national standardised tests. The main objective is to analyse if students' learning outcomes have significantly changed when compared with previous years, and if the structure and domain context of the teaching items have been improved to follow both the international standards and national curriculum.



### Managing the effect of a disaster on official statistics



At today's *Invited Paper Session* "Response to natural disasters", Gary Dunnet, Manager, Statistical Methods – Economic, Statistics New Zealand, will present his paper "Managing the effect of a disaster on official statistics" (IPS073, 09:00 at Room S421).

The recent series of earthquakes in Canterbury, New Zealand has been a major test of Statistics New Zealand's ability to produce timely and good quality official statistics. The earthquake affected respondents and posed challenge to Statistics New Zealand staff in Christchurch on monitoring and adapting to the rapidly changing social and economic environment in Canterbury. Maintaining the output of statistics was also a challenge that provides insights into what is most

important in producing statistical outputs to a suitable quality standard. Some of these insights will be of interest to those producing and using survey outputs that may be affected by natural and human disasters.

### Mixture experiments: From D- to I-optimality



Peter Goos is Full Professor from the Faculty of Applied Economics and President of the StatUa Center for Statistics at University of Antwerp in Belgium. He is also a part-time Full Professor in the Department of Marketing of the Erasmus School of Economics at Erasmus University of Rotterdam. At today's *Invited Paper Session* on "Experimental design in industry and business", Professor Goos will present a paper entitled "Mixture experiments: From D- to I-optimality" (IPS074, 09:00 at Theatre 2).

In recent years, prediction-based optimality criteria have gained substantial popularity for generating response surface designs. The best-known prediction-based optimality criterion are the G-optimality criterion, which seeks designs that minimise the maximum prediction variance over the experimental region, and the I-optimality criterion, which seeks designs that minimise the average prediction variance over the experimental region. In his presentation, Professor Goos will focus on mixture experiments commonly used in the chemical, food and pharmaceutical industries and

provide an overview of the published work on the optimal design of mixture experiments. In addition, he will go through the construction of continuous and exact I-optimal designs, comparing them to their well-known D-optimal counterparts.

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### Interval estimation procedures and information inequalities

Masafumi Akahira is Professor of Institute of Mathematics and past Vice President in University of Tsukuba. Today, he will introduce his paper named "Interval estimation procedures and information inequalities" at the *Special Topic Session* "Finite sample behavior of statistical procedures" (STS002, 13:00 at Room S423).

During the session, Professor Akahira will illustrate a case under which a parameter is assumed to be non-negative or positive-valued and a combined Bayesianfrequentist approach is adopted to construct confidence intervals. Results of this approach will be compared with the ordinary and Bayesian confidence intervals in normal cases. He will also consider a family of distributions for which the second order Bhattacharyya bound becomes sharp, and the necessary and sufficient condition for the second order one to be sharp for a family of linear combinations of distributions belonging to the exponential family.



## The role of geospatial data at the US Census Bureau

The US Census Bureau has been a leader in the collection, production, and dissemination of geospatial data, particularly since the development of the Topologically Integrated Geographic Encoding and Referencing (TIGER) database for the 1990 census. Today, Michael R. Ratcliffe, the Assistant Division Chief, Geography Division of the US Census Bureau, will present his paper entitled "Planning for the future, building on decades of success: The role of geospatial data at the Census Bureau" at the *Invited Paper Session* of "GIS and census" (IPS082, 13:00 at Theatre 1).

The use of Geographic Information System (GIS) and geospatial data for statistical and geographical purposes has been expanded substantially within the US Census Bureau, government, commercial and non-government sectors. These expanded uses and needs have raised challenges of greater positional accuracy, timely updates, and geospatial data products. In his paper, Michael will discuss the various activities at the Census Bureau to meet these challenges. The background information about the development of the TIGER database will be provided. Initiatives to collect and process geospatial data to ensure accuracy and updatedness of the TIGER database will be tabled. As a wrap-up, Michael will talk about the uses of geospatial data throughout the Census Bureau, and the decentralisation of development of mapping and data visualisation products.

# **Snapshots of Social Programme**

### Women's Networking Reception



Dinner hosted by the Local Organising Committee













# ISI Bulletin Board

### **ISI General Assembly**

29 August 2013, Thursday, 16:30 - 19:00, Convention Hall B, HKCEC

<u>Agenda</u>

1.	Welcome and Minute of Silence			
2.	President's Report: 2011-13 Presentation of the ISI's activities and accomplishments from September 2011 to August 2013			
3.	Report on ISI Finances 2012			
4.	Annual Report 2012 Presentation and approval of the 2012 Annual Report			
5.	Announcement of Members of the Executive Committee and Council for 2013-2015			
6.	Reports on Elected and Regular Membership			
7.	Report by the Chair of the WSC Scientific Programme Committee for Hong Kong			
8.	IASS Statutes The IASS, which was established under French law, is being relocated to the Netherlands and being re-established under Dutch law. This requires formal approval of the ISI General Assembly.			
9.	Reports by the Association Presidents			
	A.Bernoulli SocietyE.IASSB.IAOSF.ISBISC.IASCG.TIESD.IASEIASEIASE			
10.	Future World Statistics Congresses			
	<ul> <li>A. 2015 Rio de Janeiro: Formal invitation by the Brazilian Delegation</li> <li>B. 2017 Marrakesh: Approval by General Assembly Proposal by the Moroccan authorities to host the 2017 WSC in Marrakesh, Morocco</li> </ul>			
11.	Presentation of Service Certificates			
12.	Matters Arising and Discussion			
13.	Closing Remarks			

## ISI Officers' Elections Results: Executive Committee and Council 2013-2015/17

President-Elect (2013-2015):				
Pedro Silva, Brazil				
Vice-Presidents (2013-2015/17):	Council Members (2013-2017):			
John Bailer, USA (2013-2017)	Grace Bediako, Ghana	Byeong Uk Park, South Korea		
Irena Križman, Slovenia (2013-2017)	Alessandro Fassò, Italy	Fabrizio Ruggeri, Italy		
Helen MacGillivray, Australia (2013-2015)	Xuming He, Singapore/USA	Jan Robert Suesser, France		
Victor Pérez-Abreu, Mexico (2013-2015)	Delia North, South Africa	Fred Vogel, USA		
Present Council Members who will be continuing their service for a further two years (2013-2015):				
Daniela Cocchi, Italy	Lawrence H. Cox, USA	Stephen E. Fienberg, USA		
Enrico Giovannini, Italy	Shigeru Kawasaki, Japan	Claudia Klüppelberg, Germany		
Aad van der Vaart, The Netherlands	James V. Zidek, Canada			

The formal approval of the election results is due to occur by the General Assembly today. We are grateful to all candidates for their enthusiasm and willingness to support the ISI. The newly elected team, under the leadership of the incoming President Vijay N. Nair, will start its work upon the completion of the WSC on 30 August 2013.



### Procedures for ISI General Assembly

- 1. The Presiding Officer shall determine the time allotted for introduction of a business item or the presentation of a report. Written reports and other documents that have been circulated before the meeting should not be read from the platform except in unusual circumstances. The Presiding Officer shall clearly indicate when an agenda item is meant for the audience's consent, discussion or for information only.
- 2. Full participation in discussions and voting in the meetings of the General Assembly is reserved for elected, regular, Honorary, and ex officio members of the ISI.
- 3. Members of ISI Associations who are not members of ISI as well as others interested in the proceedings of the General Assembly are welcome to attend as observers. However, they cannot participate in the discussions or voting.
- 4. To speak at the meeting (present a motion, participate in the discussion, etc.), a member must seek to be recognised by the Presiding Officer. When multiple persons are seeking to participate in a discussion, a member who has not previously contributed to the discussion shall have priority over others who have already spoken.
- 5. Once recognised, the speaker should announce her/his name, speak slowly, and use the microphone. If it is necessary to conserve time, the Presiding Officer may set time limits for speakers.
- 6. As English is the working language of the ISI, speakers should use English.

- 7. Any member of the ISI may present a motion (i.e. a proposal for decision). The motion shall be considered only if it is seconded (i.e. supported) by another ISI member.
- 8. Any member of the ISI may move an amendment (i.e. a modification) to a motion or to a previously proposed amendment. To be considered, it must be seconded by another ISI member.
- 9. Voting on amendments shall take place in reverse-order of their presentations. When all the amendments to a motion have been voted upon, there will be a final discussion and a vote on the motion together with those amendments that have been carried.
- 10. If there is a motion to discontinue the discussion of a motion or a business item and it is seconded, that motion shall be voted upon immediately without any discussion.
- 11. If there is a motion to postpone a motion or business item for consideration (at a later stage of the meeting or at a specified subsequent meeting) and it is seconded, that motion shall be discussed and voted upon before any further discussion of the motion or business item.
- 12. Any member wishing to request that an item be included in the agenda should submit in writing to the ISI Director at least 48 hours before the opening time of the General Assembly.
- 13. In case of any ambiguities or differences in views, the Presiding Officer has full discretion in interpreting these guidelines and in the conduct of business.

## International Association for Statistical Education (IASE)



The IASE is the international umbrella organisation for statistics education. It fosters international cooperation, and disseminates ideas, research and materials using publications, conferences, and its new website, <u>iase-web.org</u>. The International Conferences on Teaching Statistics (ICOTS), held by IASE every 4 years since 1982, are the most important events on the international statistics education calendar with around 600 delegates from 50 countries attending. ICOTS9 (<u>icots.net/9</u>) in 2014 is in Flagstaff Arizona, the first time for ICOTS in the United States. The theme "Sustainability in statistics education" has many interpretations relevant to statistics

education at all levels and the usage of statistics across society.

In association with each ISI WSC, IASE holds themed satellite meetings. In 2013, the theme was "Statistics education for progress: Youth and official statistics" held jointly with IAOS in Macao, China.

IASE Round Table conferences are workshop conferences addressing themes and forming recommendations. The 2012 Roundtable was in Cebu, Philippines with theme "Technology in statistics education". Roundtables are held in close proximity to the 4-yearly ICME conference which in 2012 was in South Korea with one component being a topic study group, Teaching and Learning of Statistics, published in the *Proceedings of the 12<sup>th</sup> International Congress of Mathematical Education*.

For its conferences, IASE offers optional double-blinded peer reviewing with papers which meet the high-standard scholarly criteria being designated in the proceedings. All proceedings are published on the IASE website. In cooperation with the ISI, IASE publishes a peer-reviewed electronic journal, *Statistics Education Research Journal*, which appears twice per year.

IASE is also responsible for overseeing the International Statistical Literacy Project with the International Poster Competition and Best Cooperative Project Award in Statistical Literacy being finalised during ISI WSC. Details of the ISLP can be viewed at <u>iase-web.org/islp/</u>.

John Harraway IASE, Outgoing President

### The Bernoulli Society



**Bernoulli Society** for Mathematical Statistics and Probability The Bernoulli Society sponsors several scientific high level standards publications on its own or in strategic association with commercial publishers and other scientific societies. It publishes the *Bernoulli Journal* and the *Stochastic Processes and their Applications (SPA)*. Members have free of charge access to the online versions of these official publications (back to

Volume 1). On equal footing it sponsors five free-access electronic journals: *Probability Surveys, Statistics Surveys, Electronic Journal of Probability, Electronic Journal of Statistics* and *Electronic Communications in Probability*. Two special issues of *Bernoulli Journal* and *SPA*, respectively, will appear in 2013 in celebration of the 300<sup>th</sup> anniversary of the publication of Jacob Bernoulli's *Ars Conjectandi* and the 250<sup>th</sup> anniversary since the publication of Bayes Theorem, and culminating in 2013 as the International Year of Statistics (Statistics2013). A special article covering the historic to contemporary impact of Bernoulli's *Ars Conjectandi* was prepared by Professor Manfred Denker for the Bulletin of the American Mathematical Society in collaboration with the Bernoulli Society, and appeared in the July 2013 issue.

The Bernoulli Society also organises regular meetings. The Bernoulli World Congress is organised every four years and the next one will take place on July 9-14, 2016 in Toronto, Canada. There is also a yearly Conference on Stochastic Processes and their Applications (recently in Boulder, USA, 29 July-2 August, 2013, and planned for Buenos Aires, in 2014, and Oxford University, UK, in 2015). In addition, its regional committees organise their own meetings, most notably the CLAPEM meeting (the next in Cartagena, Colombia in 2014), the European Meeting of Statisticians (recently convened in Budapest, Hungary, 20-25 July, 2013). It also actively participates in the ISI WSC in Hong Kong by way of both sponsored and some special contributed sessions, as well as a special short course offering on heavy tail phenomena by Professor Thomas Mikosch. Other Statistics2013 events include public lectures at the Joint Statistical Meetings in Montreal, Canada by David Spiegelhalter, and the Mathematical Congress of the Americas in Guanajuato, Mexico, by Persi Diaconis.

Members of the Bernoulli Society profit from several other benefits. For example, they receive a print copy of the twice-yearly *Bernoulli Newsletter*, the bimonthly electronic bulletin *Bernoulli E-Briefs*, and reduced registration fees for meetings organised or sponsored by the Bernoulli Society.

The Bernoulli Society's new **Ethel Newbold Prize in Statistics** will be announced at the Bernoulli Society General Assembly today. Please attend to learn more about this and many other ongoing activities.

For further information we invite you to visit the ISI information booth and the Bernoulli Society website and its links at <u>www.bernoulli-society.org/</u>.

Edward Waymire Bernoulli Society, Outgoing President

