# FORTHCOMING IASE CONFERENCES

## 61th WORLD STATISTICS CONGRESS OF THE ISI

Marrakech, Marocco, 16-21 July, 2017

Many invited paper sessions are related to statistics education:

- What undergraduates should know about visualising data.
- Statistics education for social engagement.
- Opportunities & challenges for teaching introductory statistics.
- Challenges of promoting statistical literacy in Africa.
- Data user in focus statistics in use.
- New challenges to disseminate statistical literacy and problem-

solving skills by statistics bureaus in "Open and Big Data" era.

- The symbolic approach in the data science era.
- Developing digital instructional materials in probability and statistics for elementary/middle school prospective teachers: what have we learned?
- How statistical collaboration laboratories enhance statistical education.
- Teaching of economic statistics: past, present, future.
- Learning & teaching statistics online: a revolution that requires innovation.
- A comparative study of statistical inference from an educational point of view.
- Telling statistical stories and teaching good data sense to the public.
- How to improve statistical knowledge in university students? The effects of noncognitive factors in different educational and cultural contexts.
- Big data and visualisation: challenges and opportunities.
- Models and visualisation for exploratory analysis of big data.
- Session of the Statistics Journal of IASE; IASE presidential lecture.

The IASE satellite conference will precede the World Statistics Congress. More information: www.isi2017.org/.

#### 2017 IASE SATELLITE CONFERENCE "TEACHING STATISTICS IN A DATA-RICH WORLD" Rabat, Morocco; 11–14 July, 2017

The IASE Satellite Conference will be held just before the 61<sup>th</sup> World Statistics Congress (WSC). Many delegates continue to the larger WSC, which also has numerous sessions relevant to statistics education. In-line with the theme of *teaching statistics in a data-rich world*, the following topics will be in the focus of the programme:

Topic 1. Big data era, what does it mean for us statistics educators?

Topic 2: Creating socially responsible societies with statistics.

Topic 3: Statistics for social scientists, researchers and workers.

Topic 4: Employability skills for statistics graduates.

Topic 5: Special session on statistics education in Africa.

Submission of abstracts: 14 January, 2017.

More information: http://iase-web.org/conference/satellite17/.



# TENTH INTERNATIONAL CONFERENCE ON TEACHING STATISTICS (ICOTS 10)

Kyoto, Japan, 9-13 July, 2018

Preparations for the programme are still in progress. More information will be announced when available: iase-web.org/Conferences.php.

## **PAST IASE CONFERENCES**

2016 IASE ROUNDTABLE "PROMOTING UNDERSTANDING OF STATISTICS ABOUT SOCIETY" Berlin, Germany, 19–22 July, 2016

The conference proceedings with the revised and extended papers will be put online by the end of the year on the IASE website iase-web.org.

## **OTHER FORTHCOMING CONFERENCES**

2017 JOINT MATHEMATICS MEETINGS Atlanta, GA, USA, 4–7 January, 2016



The largest mathematics meeting in the world will take place in Atlanta. The programme is best illustrated by the list of plenary talks:

jointmathematicsmeetings.org/meetings/national/jmm2017/2180\_invspeakers. For more information: jointmathematicsmeetings.org/jmm.

## TEACHING STATISTICS THROUGH DATA INVESTIGATIONS

Online course, Friday Institute for Educational Innovation, NC State Univ., USA, 23 January, 2017, 5 units

This online professional development course is held by Hollylynne Lee; it is designed for teachers of statistics (grades 6–12 and post-secondary).

- How to engage students in a statistical investigation process;
- Explore a framework for guiding your teaching of statistical investigations;
- Use data sources and dynamic graphing tools to support investigations of questions;
- Examine the ways students reason with data to make evidence-based claims;
- Personalise applications of statistical investigations to your students;
- Collaborate with colleagues, gain perspectives, build a library of teaching resources.

Teaching Statistics through Inferential Reasoning will start on 13 June, 2017. More information: place.fi.ncsu.edu/.

## 10<sup>th</sup> CONGRESS OF EUROPEAN RESEARCH IN MATHEMATICS EDUCATION (CERME 10)

Dublin City University, Dublin, Ireland, 1-5 February, 2017



ERME has a strong working group on probability and statistics education. Goals of this group are: To develop statistically literate citizens and meaningful use of statistical tools. An essential step forward are bridges between data analysis, probability and inference. Developments in technology provide opportunities for dynamic exploration of data and experimentation with

probabilistic models as generators of data as well as in exploratory data analysis or informal statistical inference.

- The nature and development of probabilistic and statistical thinking and its relationship to other types of mathematical thinking.
- Attitudes and beliefs of students towards probabilistic and statistical thinking.
- The role of context in statistics.
- The professional development of teachers to teach statistics and probability.
- The role of computer tools on the learning and teaching of probability and statistics.
- Frameworks that provide models for interpreting evidence from education research.
- Continuing professional development.

More information: cerme10.org/scientific-activities/twg-teams/.

## 2017 U.S. CONFERENCE ON TEACHING STATISTICS (USCOTS 7) State College, PA, USA, 18–20 May, 2017



The conference will address how to make connections in curriculum, pedagogy, resources, and educational research. The theme "*Show me the data*" encompasses many aspects of teaching, including:

- Data beat anecdotes and are essential for evidence-based decision-making;
- Emphasising data visualisation in statistics courses;
- Embracing ideas of data science in teaching statistics;
- Using data as educators to make informed decisions related to effective teaching and learning.

Deadline for submissions: 1 February, 2017 More information: www.causeweb.org/cause/uscots/uscots17/proposals.

#### 2017 ANNUAL MEETING OF THE STATISTICAL SOCIETY OF CANADA

University of Manitoba, Winnipeg, Canada, 11-14 June 14, 2017



The SSC conference will include special seminars and presentations from the Statistical Education Section.

More information: ssc.ca/en/meetings/2017-annual-meeting.

*The Canadian Statistics Student Conference* (CSSC) takes place the day before the Annual Meeting (10 June); CSSC brings together students and recent graduates from departments of statistics across Canada to network, learn about career and academic opportunities, and share their ideas and research with each other. In addition to providing the opportunity for students to present their work with their peers,

the CSSC features an impressive slate of invited speakers sharing their experiences in both industry and academia.

More information: ssc.ca/en/meeting/fifth-annual-canadian-statistics-student-conference.

## STATISTICAL REASONING, THINKING AND LITERACY RESEARCH FORUM (SRTL 10)

Rotorua, New Zealand, 2-8 July, 2017



The conference theme is: *Innovations in statistical modelling to connect data, chance and content.* 

More information: blogs.uni-paderborn.de/srtl/srtl-10-2/.

MATHEMATICS EDUCATION BEYOND 16: PATHWAYS AND TRANSITIONS University of Birmingham, Birmingham, U.K., 10–12 July, 2017



This conference is for all who are involved in mathematics teaching and education from years 11 through to college, in university and in mathematics/statistics support units. It provides a forum for sharing, discussing and developing ideas, research

and practice in this rapidly changing landscape. Some questions in the description of the themes that raise concern relevant also for statistics education are:

- How can students make strong connections between areas of mathematics through applications and problem solving?
- How can mathematics support develop students as independent learners rather than remaining reliant on support throughout their university career?
- What role can technology play in providing, and enhancing mathematics and statistics support?
- Are there effective ways of evaluating the effectiveness of mathematics and statistics support?

More information: www.ima.org.uk/conferences/conferences\_calendar/mathematics-education-beyond-16-pathways-transitions.html.

## VIII CONGRESO IBEROAMERICANO DE EDUCACIÓN MATEMÁTICA

Universidad Complutense de Madrid, Espana, 10-14 July, 2017



This is the largest congress on mathematics education in the Latin world and has several activities also in statistics education.

Deadline for submissions: 31 January, 2017.

More information: www.cibem.org/index.php/es/.

#### ANNUAL CONFERENCE OF THE INTERNATIONAL GROUP FOR THE PSYCHOLOGY OF MATHEMATICS EDUCATION (PME 41) Singapore, 17–22 July, 2017



PME (Psychology of Mathematics Education) is an international group of mathematics educators and researchers who gather once a year to share its work and interests at its Annual Conference. The topic of the 2017 conference is *Mathematics Education Research – Learning, Instruction, Outcomes & Nexus.* 

Information will be available at: www.igpme.org/index.php/annual-conference.

#### 2017 JOINT STATISTICAL MEETINGS

Baltimore Convention Center, Baltimore, Maryland, USA, 29 July-3 August, 2017



JSM (the Joint Statistical Meetings) is the largest gathering of statisticians held in North America. The main theme of this year's conference is *Statistics: It's Essential*. There will be presentations on statistics education organised by the Section on Statistical Education of the American Statistical Society.

More Information: ww2.amstat.org/meetings/jsm/2017/.

## XXXI REUNIÓN LATINOAMERICANA DE MATEMÁTICA EDUCATIVA (RELME 31)

Universidad de Lima, Peru, 31 July-4 August, 2017



- Collaborative learning.
- Mathematical modelling.
- Mental models .
- Visualisation.
- These conferences on mathematics education host several activities in statistics education. Researchers, teachers, and teacher educators are invited to share their ideas. The following topics have a stronger relation to statistics education or might be interesting for that:
- Thinking related to probability and statistics.
- Pre-service education of teachers.
- Advanced technology.
- Mathematical language.

Deadline for submissions: 31 March, 2017.

More information will be available at: relme31.ulima.edu.pe.

#### **RSS 2017 ANNUAL CONFERENCE**

University of Strathclyde, Glasgow, Scotland 4-7 September, 2017



The RSS conference provides a unique opportunity for anyone interested in data analysis and statistics to come together to share information and network. A growing group of people who have an interest in statistics but who don't work in the field is attracted by the varied programme not found in any other U.K. based statistical conference. More:

www.rss.org.uk/RSS/Events/RSS\_Conference/2017\_Conference/RSS/Events/Conference /2017\_conference.aspx?hkey=2a432b6b-6baf-4bc3-baa4-063221c13ab8.

## COLLOQUE FRANCOPHONE INTERNATIONAL SUR L'ENSEIGNEMENT DE LA STATISTIQUE (CFIES)

Grenoble, France, 6–8 September, 2017



The ever-growing importance of statistics and data science in activities in all sectors of our society challenges the education of statistics for pupils and students and causes the need of professional development of the teachers and a need for educating the public. The following topics have been chosen:

- Didactics, new support and new methods for the education of statistics;
- Evaluation of the reform of statistics education at the secondary level (with IREM);
- Continuing professional development;
- Statistics, history, public space;
- Education of statistics in the era of data science.
- Deadline for submissions: 15 April, 2017.

More information: cfies2017.sfds.asso.fr/.

#### CHALLENGES AND INNOVATIONS IN STATISTICS EDUCATION

Multiplier conference of ProCivicStat Szeged, Hungary, 7–9 September, 2017



ProCivicStat is developing new methods for statistics instruction for high schools and universities that will contribute to understand quantitative evidence about key social phenomena that permeate civic life. The goal of the conference is to share ideas and current practices. Statistics educators, math teachers, teacher educators, and all educators who use statistics are invited to attend. Topics:

- Using real data in classes.
- IT & statistics: software, and databases.
- Information visualisation: issues, trends, resources.
- Exploring social and economic phenomena in classes also for non-statisticians.
- Developing critical thinking and reasoning; exploring misuses of statistics.
- Innovative teaching & learning methods.
- Deadline for submissions: 7 February, 2017.

More information: www.eco.u-szeged.hu/procivic.

#### 14<sup>th</sup> INTERNATIONAL CONFERENCE OF THE MATHEMATICS EDUCATION FOR THE FUTURE PROJECT Balatonfüred, Lake Balaton, Hungary, 10–15 September, 2017

The theme is *Mathematics Education for the Next Decade: Heuristics and Challenges of Pólya and Lakatos.* We welcome contributions that deal with aspects of innovation, especially those helping to make these subjects more alive, more realistic and more accessible to students. We have an open policy to accept not only peer-refereed papers, but also workshops and contributions from teachers discussing innovative work in their classrooms. We assume most participants will present their current work, for example:

- Problem solving and modelling;
- Use of technology;
- Assessment;
- Dealing with cultural differences;
- Overcoming racial, gender and social barriers;
- Improving the curriculum;
- Teacher preparation and on-going in-service work;
- School organisation and classroom practices;
- Using statistics in everyday life;
- Effectively utilising new paradigms in teaching and learning;
- The use of mathematics in the sciences, informatics and in the real world.
- Deadline for submissions: 28 February, 2017

More: ecmiindmath.org/2016/06/12/mathematics-education-for-the-future-conference/.

## **OTHER PAST CONFERENCES**

#### AUTUMNAL MEETING OF THE STUDY GROUP "STOCHASTICS" HERBSTTAGUNG 2016 DES ARBEITSKREISES STOCHASTIK Postock 30 September 2 October 2016

Rostock, 30 September – 2 October, 2016



Under the topic "Modelling and authentic applications in the teaching of stochastics in grades 1-13", the following presentations haven been given:

- Formulation of the null hypothesis for significance testing in an authentic context;
- Data and chance in football;
- Elementary pupils investigate an asymmetric random device;
- An empirical investigation for planning of statistical data collections for years 9 and 10 (PhD project);
- Modelling of the development of the population with official data;
- Estimation of life tables.

#### More information:

www.math.uni-frankfurt.de/ak-stochastik/vergangene-herbsttagungen.html#2016.

#### 2016 JOINT STATISTICAL MEETINGS

Chicago, IL, USA, 30 July-4 August, 2016



There have been several presentations on statistics education organised by the Section on Statistical Education of the American Statistical Society. The slides are available from: community.amstat.org/statisticaleducationsection/home.

# INTERNATIONAL CONGRESS ON MATHEMATICAL EDUCATION (ICME 13)

Hamburg, Germany, 24-31 July, 2016

CME13 There will be elaborated papers from the two Topic Study Groups related to IASE matters published by Springer. The status of the multitude of contributions to the conference is available online.

*Teaching and learning of probability*; for the proceedings of the probability group, see: iase-web.org/Conference\_Proceedings.php?p=ICME\_13\_2016.

*Teaching and learning of statistics*; for the proceedings of the statistics group, see: dbz.edtech.haifa.ac.il/publications/books.

#### NATIONAL COLLOQUIUM – STEMS: PUTTING STATISTICS INTO STEM IN THE DATA AGE University of Technology, Sydney, 2–3 June, 2016



The Statistical Society of Australia is developing a platform for the transformation of statistics education. *Key points from the school working group*: a) Students with strong interest in applications could learn a substantial amount of statistics without strong mathematics backgrounds. b) It is of interest

to attract more mathematically-inclined students. ... from the university undergraduate working group: Amongst others, establishing mechanisms for supporting teachers of first courses is suggested. ... from the university postgraduate working group: Amongst others, questions of school teaching and the importance of continuing education for teachers with non-statistics background were raised.

Report: www.statsoc.org.au/wp-content/uploads/2016/04/STEMS2016-Report.pdf; Videos: stems2016.com/presentations-videos/; stems2016.com/panel-discussion-video/.

CHANGING WITH TECHNOLOGY – 2016 ELECTRONIC CONFERENCE ON TEACHING STATISTICS (eCOTS 2016) Online, 16–20 May, 2016



Key notes Andrew Gelman (Changing everything [...] create a completely new introductory statistics course) and Michael Jordan (Computational thinking and inferential thinking [...]). More: www.causeweb.org/cause/ecots/ecots16/program.