

FORTHCOMING IASE CONFERENCES

2020 IASE ROUNDTABLE “NEW SKILLS IN THE CHANGING WORLD OF STATISTICS EDUCATION” Nanjing, China, 6–10 July, 2020



This Roundtable will be in Nanjing, close to the site of ICME 14. Chair of the International Programme Committee is Sibel Kazak.

The theme of the conference comprises the following strands:

- The use of meaningful data in teaching and learning statistics.
- The role of multivariate thinking in inferential reasoning.
- The influence of data science on the curriculum and introductory statistics courses.
- Increasing power of technology for doing statistics and for enhancing learning and understanding of key statistical concepts.
- The changing nature of data visualization and implications for the curriculum.
- Collaboration with other disciplines to enhance students' statistical understanding.

More information: iase-web.org/conference/roundtable20/?home.

14th INTERNATIONAL CONGRESS ON MATHEMATICAL EDUCATION (ICME 14) Shanghai, China, 12–19 July, 2020



After Hamburg 2016, the series of the Topic Study Groups under the flagship *IASE at ICME* will be continued in Shanghai, China.

Two groups concern statistics education:

Topic Study Group 11: Teaching and learning of probability

Chair: Egan Chernoff (Canada), Ernesto Sánchez (Mexico)

Team: Ali Rejali (Iran), Sibel Kazak (Turkey), Kan Guo (China)

Topic Study Group 12: Teaching and learning of statistics

Chair: Enriqueta Reston (Philippines), Andreas Eichler (Germany)

Team: Leandro de Oliveira Souza (Brazil), Gail Burrill (USA), Qian Chen (China)

A description of the goals may be seen from our conference calendar in *SERJ 18*(1).

More information: www.icme14.org/static/en/news/37.html?v=1557467247882.

11th INTERNATIONAL CONFERENCE ON TEACHING STATISTICS (ICOTS-11)

Universidad de Rosario, Rosario, Argentina, 2022

The series of ICOTS will be continued in Rosario, Argentina, in 2022. Exact dates will be fixed soon. If you are interested in an active role in shaping the programme, you may contact the chair of the IPC, Bruno de Sousa (bruno.desousa@fpce.uc.pt); organiser is Teresita Téran (teresitateran@hotmail.com).

More information: iase-web.org/Conferences.php?p=Upcoming.

ISLP INTERNATIONAL POSTER COMPETITION FOR 2020–21

International Statistical Literacy Project



This competition invites school students from around the world to design a statistical poster. Every two years, it attracts many schools and promotes the case of statistics and statistics education. The winners of the 2018-19 competition may be seen on the ISLP website, where the interested reader can also find the winner posters. The next competition will be announced by February 2020 on this website.

More information: iase-web.org/islp/.

ISLP BEST COOPERATIVE PROJECT AWARD 2021

International Statistical Literacy Project



The winners of the 2019 award may be found on the ISLP website. For those who plan to enter the next competition, the old guidelines on the website can provide an orientation. The call will be announced on the website in the Fall of 2020.

More information: iase-web.org/islp/Competitions.php?p=Best_Cooperative_Project_2019.

OTHER FORTHCOMING CONFERENCES

ELECTRONIC CONFERENCE ON TEACHING STATISTICS (eCOTS 2020)

Internet, 18–22 May, 2020



This virtual conference strives to drive the conversation about methods of engaging today's student in understanding what data can tell us. Two keynote addresses are planned: Roxy Peck, California Polytechnic, and Hillary Parker, Stitch Fix. There will also be thirty-minute breakout sessions, online workshops, and virtual poster sessions. The theme of this conference is "*Engage everyone*":

- Group learning such as small-group learning or team-based learning.
- Problem-Based Learning or Process Oriented Guided Learning.
- Ways to engage distance learners.
- In class activities or labs.
- Student response systems.
- Using software to engage conceptual understanding.
- Use of simulation based inference.
- Use of real data in case studies or service learning.
- Online interactive tutoring systems.
- Projects.

In addition to the online content, there will also be regional face-to-face meetings to encourage discussion in local statistics and data science education communities.

More information: www.causeweb.org/cause/ecots/ecots20/.

10TH AUSTRALIAN CONFERENCE ON TEACHING STATISTICS (OZCOTS 2020)

Gold Coast Convention and Exhibition Centre, Queensland, Australia, 9–10 July, 2020



OZCOTS are meetings on statistics education, which overlap with an Australian Statistical Conference and are run by an informal group. The next conference will consider the challenges of teaching statistics for future statisticians, statistical users, and consumers under the theme of “*Statistics education in today’s world.*” The roles of statistical understanding and thinking are essential in all disciplines, increasingly driven by big data, evidence-based agendas, and technological advances which generate data as well as enable complex problem-solving, data visualisation, and analysis.

The organisers plan to include keynote and contributed papers, and forum discussions on issues across the statistical education spectrum of interest to the whole statistical profession. The programme aims to address challenges of the intersection of data science and statistics across different disciplines and learning strategies. It will include topics ranging across the curricula and technology for teaching introductory and undergraduate statistics; resources and online learning; statistics learning for postgraduates, researchers and workers; and research in the teaching of statistics.

More information: anzsc2020.com.au/ozcots-conference/.

2020 ANNUAL MEETING IN OTTAWA

Carleton University, Ottawa, ON, 31 May – 3 June, 2020



The Canadian Statistical Society has a strong committee on Statistics Education. A prominent sign of the Canadian meetings is that they consistently use English and French throughout their plenaries, sessions, and workshops, which reflects the country’s official languages and which also shows that multi-language use is something that can be lived with. The programme is still in statu nascendi. It will be available from the website.

More information: ssc.ca/en/meetings/annual/2020.

XXXIV REUNIÓN LATINOAMERICANA DE MATEMÁTICA EDUCATIVA (RELME 34)

Universidad San Carlos de Guatemala, Centro Universitario de Occidente CUNOC, Quezaltenango, Guatemala, 5–10 July, 2020



These conferences organised by the Comité Latinoamericano de Matemática Educativa host quite a few sessions that might interest researchers in statistics education.

More information: clame-relme.org/relme34.

STATISTICAL REASONING, THINKING AND LITERACY RESEARCH FORUM (SRTL-12)

University of Utrecht, The Netherlands, July, 2021



The conference theme is not yet announced. SRTL-12 will be hosted by the University of Utrecht. The local committee will include Arthur Bakker, Marianne van Dijke-Droogers, and Lonneke Boels. Details will be published on the SRTL website.

More information: blogs.uni-paderborn.de/srtl/srtl-12/.

ANNUAL CONFERENCE OF THE INTERNATIONAL GROUP FOR THE PSYCHOLOGY OF MATHEMATICS EDUCATION (PME 44)

Mathematics Education in the 4th Industrial Revolution: Thinking Skills for the Future

Institute for Research and Development in Teaching Profession for ASEAN,
Khon Khaen University, 21–25 July, 2020



Plenary speakers are Roberto Araya (Chile), David Wagner (Canada), Michal Tabach (Israel), Berinderjeet Kaur (Singapore). The Panel discussion will be held on the topic “*The 4th Industrial Revolution will transform/disrupt the Teaching and Learning of Mathematics.*” The panel members will be Hamsa Venkatakrishnan (South Africa), Lew Hee-Chan (South Korea), David Keith Jones (United Kingdom), Anna Baccaglini Frank (Italy), and Oi-Lam Ng (Hong Kong).

More information: pme44.kku.ac.th.

2020 JOINT STATISTICAL MEETINGS

Pennsylvania Convention Center, Philadelphia, PA, 1–6 August, 2020



The details are work in progress. The interested reader may consult the conference website. The program will include a discussion on how to improve the quality of research papers in journals on statistics education.

More information: ww2.amstat.org/meetings/jsm/2020/.

RSS 2020 INTERNATIONAL CONFERENCE – FOR STATISTICIANS AND DATA SCIENTISTS

Bournemouth, England, 7–10 September, 2020



This conference welcomes all statisticians and data scientists. The programme will be organised by ‘streams’ as well as broader presentations on new developments and thinking in statistics. Further details will be announced on the website.

More information:

events.rss.org.uk/rss/frontend/reg/thome.csp?pageID=126329&eventID=406&CSPCHD=001001000000GMQy8Mufkhs4p_S0BP6MLca8gZkzWVyljySCOZ.

**AUTUMNAL MEETING 2020 OF THE STUDY GROUP “STOCHASTICS”
HERBSTTAGUNG 2020 DES ARBEITSKREISES STOCHASTIK**

Gelsenkirchen, 13–15 November, 2020



The theme of the next meeting will be determined at the Yearly Meeting of the German Association for Didactics of Mathematics (GDM) in early March 2020. Possibly, the date and venue will change. Again, there will be time for presenting current dissertation projects in the field of stochastics education research.

More information: www.math.uni-frankfurt.de/ak-stochastik/naechste-herbsttagung.html.

**12th CONGRESS OF
EUROPEAN RESEARCH IN MATHEMATICS EDUCATION (CERME-12)**

Bolzano, Italy, 3–7 February, 2021



CERME-12 will be held in Bolzano, Italy. Local Chair: Giorgio Bolondi (Co-Chair: Federica Ferretti); Programme Chair: Jeremy Hodgen (Co-Chair: Eirini Geraniou).

Again, there will be a group on *probability and statistics*. For those interested in contributing, it is advised to visit the ERME website where the details will soon be announced. Or you may contact Caterina Primi who has organised the group for the last CERME in Utrecht.

The new members of the team of the group might bring in their own interests but the topics should not differ so much from the past. For CERME 11, the group appreciated the following themes:

- Probabilistic and statistical thinking and its relationship to mathematical thinking.
- Dispositions, attitudes, and beliefs towards probabilistic and statistical thinking.
- The role of context in statistics.
- The professional development of teachers to teach statistics and probability.
- Computer-based tools on the learning and teaching of probability and statistics.
- Theoretical frameworks that may provide insightful models for interpreting evidence.
- Big data and analytics in K-12 education.
- Assessment in statistics education.

The proceedings of the last CERME will be published soon and will be available from the ERME website.

More information: www.mathematik.uni-dortmund.de/~erme/.

PAST IASE CONFERENCES

62nd WORLD STATISTICS CONGRESS OF THE ISI

Kuala Lumpur, Malaysia, 18–23 August, 2019



As with the previous World Statistics Congresses, there has been representative coverage of invited-paper sessions with topics on statistics education. For details, see the conference website www.isi2019.org/.

Two special Invited Papers Sessions were organised by IASE

- IASE President's Invited Session: Data Science and Statistical Education (Gail Burrill) with the following presentation:
Richard Deveaux, *The seven deadly sins of data science*.
- Statistics Education Research Journal Session (Manfred Borovcnik) with a presentation and a panel discussion.
Fabrizio Ruggeri, *My experience as editor-in-chief of a journal*.
Panel discussion *The Future of Statistics Research Education Journal* with panelists: Theodosia Prodromou and Manfred Borovcnik

Invited Paper Sessions that have been organised from members of the IASE community:

- The Status of Statistics Education from Different Countries and Perspectives (Gail Burrill)
- Building Future Generations of Statisticians through Outreach (Ayse Aysin Bombaci Bilgin)
- Statistical Literacy and Citizen's Participation: A Call for Civic Statistics (Joachim Engel)
- Statistical and Data Literacy Education for Life (Helen MacGillivray)
- Risk and Probability Literacy (Manfred Borovcnik)

Further Invited Papers Sessions that were of interest for statistics education:

- The Educational Impact of Statistical Collaboration Laboratories on Students (Eric Vance)
- Recent Development on Methods in Teaching and Learning in Statistics (Zamalia Mahmud)

Two of the Special Topics Sessions have been organised from researchers from the IASE community:

- Training Data Scientists at University for Rewarding Careers (John Harraway)
- Improving Statistical Literacy in a Digital Age: Challenges for Developing (Steven MacFeely).

Among the contributed papers, several presenters had education in various fields in their focus. For statistics education, the following were of special interest:

- Fighting innumeracy with TV (Jo Roislien).
- A theoretical framework for analysing instructors' beliefs, attitudes, and practices in the context of quantitative reasoning (Gerald Iacullo).
- A critical image of statistical analyses in medicine 2006–2018 (Michal Ordak).

2019 IASE SATELLITE CONFERENCE

Sasana Kijang, Kuala Lumpur, Malaysia, 13–16 August, 2019



The conference theme was *Decision Making Based on Data*. The satellite conference was committed to different models of decision making and to the interface between the agent making decisions and the data required.

The topics in the call had found varying attraction by presenters; remarkably, only four are in the category of *Inference from data*, even fewer (2) in *Making sense of big data*. Many more presentations were held in the category *Evidence-based decision making under risk and uncertainty* (9), while the vast majority of contributions was devoted to *Statistics education in the 21st century* (21!). We may even think of a Pareto distribution to describe the imbalance of the number of contributions or the concentration to the single themes that the conference organisers had mentioned in the call.

The keynotes held at the conference may be attributed to *Big Data* (1) and *21st century education* (2):

- Richard De Veaux: *Data Science for all. Sure, but who, where, what, how and why?*
- Azami Zaharim: *Wind energy distribution recent development.*
- Gail Burrill: *Quantitative literacy should not be optional.*

Criteria for good posters, the usage of R for understanding statistics, and the role of simulation for conceptual understanding were the themes of the three workshops. They completed the programme and found vital interest by the participants.

Proceedings:

iase-web.org/Conference_Proceedings.php?p=2019_Decision_Making_Based_on_Data.

OTHER PAST CONFERENCES

AUTUMNAL MEETING 2019 OF THE STUDY GROUP “STOCHASTICS” HERBSTTAGUNG 2019 DES ARBEITSKREISES STOCHASTIK

Bad Herrenalb / Karlsruhe, 27–29 September, 2019



The theme of the meeting was *Teacher pre- and in-service education in stochastics oriented towards understanding—Bridges between research and teaching*. There was a wide variety of the presentations with respect to school level with remarkably many contributions that related to teacher education at *primary level*. The diversity was also visible from the topics that have been in the focus of the speakers: from exploratory data analysis, simple descriptive statistics, to simple games and the development of the probability concept to approaches towards hypothesis testing in teacher in-service courses. The small scale of the Arbeitskreis allowed for intensive discussion.

More information: www.math.uni-frankfurt.de/ak-stochastik/.