FORTHCOMING IASE CONFERENCES

2019 IASE SATELLITE CONFERENCE

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



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

- Inference from data;
- Making sense of big data;
- Evidence-based decision making under risk and uncertainty;
- Statistics Education in the 21st century.

More information: iase-web.org/conference/satellite19/.

62nd WORLD STATISTICS CONGRESS OF THE ISI

Kuala Lumpur, Malaysia, 18-23 August, 2019



As with the previous World Statistics Congresses, there will also be a representative coverage of Invited Papers Sessions with topics on Statistics Education:

- IPS109: Statistical Literacy and Citizen's Participation: A Call for Civic Statistics Joachim Engel, Ludwigsburg University of Education, Germany
- IPS115: Statistical and Data Literacy Education for Life Helen MacGillivray, Queensland University of Technology, Brisbane, Australia
- IPS147: Building Future Generations of Statisticians through Outreach Ayse Aysin Bombaci Bilgin, Macquarie University, Sidney, Australia
- IPS162: Ways to Improve Critical Statistical Literacy Reija Helenius, Statistics Finland, Finland
- IPS215: Recent Development on Methods in Teaching and Learning in Statistics Zamalia Mahmud, Universiti Teknologi Mar, Malaysia
- IPS249: The Status of Statistics Education from Different Countries and Perspectives Gail Burrill, Michigan State University, USA
- IPS287: Risk and Probability Literacy
 Manfred Borovcnik, University of Klagenfurt, Austria
- IPS290: The Educational Impact of Statistical Collaboration Laboratories on Students Eric Vance, Lisa and University of Colorado, Boulder, USA
- IPS372: The Session of the IASE Journal Statistics Education Research Journal (SERJ), Manfred Borovcnik, University of Klagenfurt, Austria
- STS: Work-Integrated Learning and Statistics Education Ayse Aysin Bombaci Bilgin, Macquarie University, Sidney, Australia

More information: www.isi2019.org/.

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ISLP INTERNATIONAL POSTER COMPETITION FOR 2018–19

International Statistical Literacy Project



This competition invites school students from around the world to design a statistical poster. At the moment, 32 countries organise a national competition. More can still come. The national winning teams will be nominated to the ISLP board until 30 March, 2019. The winners will be

announced at the 62nd World Statistics Congress in Kuala Lumpur; their posters will be available from the ISLP website.

Participating countries:

iase-web.org/islp/Poster_Competition_2018-2019.php?p=Participating_countries. Jury criteria: iase-web.org/islp/Poster_Competition_2018-2019.php?p=Judging_criteria. More information: iase-web.org/islp/Poster Competition 2018-2019.php.

Posters from earlier competitions may be viewed from the same platform.

ISLP BEST COOPERATIVE PROJECT AWARD 2019

International Statistical Literacy Project

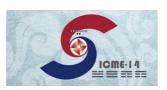


The award in recognition of outstanding, innovative, and influential statistical literacy projects is under way. Proposals should be sent to the ISLP Deputy Director, Steve MacFeely, by 30 April, 2019. The winning project will receive 1000 €!

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

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.

Again, there will be two groups that concern statistics education:

- Topic Study Group 11: Teaching and Learning of Probability.
 Team leader: E. J. Chernoff (Canada); Team members: E. Sánchez (Mexico), L. Zapata (Colombia), S. Kazak (USA), and K. Guo (China).
- Topic Study Group 12: Teaching and Learning of Statistics. Team leader: to be announced; Team members: to be announced.

The proceedings of the probability group from IASE at ICME for Hamburg are available from: iase-web.org/Conference_Proceedings.php?p=ICME_13_2016.

Proceedings of the statistics group: Ben-Zvi, D., and Makar, K. (Eds.) (2016), *The Teaching and Learning of Statistics – International Perspectives*. New York: Springer. More information on the Shanghai ICME will be available from: www.icme14.org/.

PAST IASE CONFERENCES

10th INTERNATIONAL CONFERENCE ON TEACHING STATISTICS (ICOTS 10)

Kyoto, Japan, 8–13 July, 2018



Topic 1: Statistics education: Looking back, looking forward. Aspects: Education software; What, how, and with whom? Practice of teaching; Assessment. Two strands dealt with the future: Data science and the Panel on MOOC, PBL, or AI.

Topic 2: Statistics education at the school level

Aspects covered: Reasoning with models and modelling; Various national perspectives; Linking research and practice; Probability and modelling; Active learning.

Topic 3: Statistics education at the post-secondary level

Undergraduate data science programmes; Randomisation and Bootstrap for inference; Data and visualisation; Pre-service education for teachers; Students' negative attitudes; Statistical computing and communication skills; Understanding statistical concepts.

Topic 4: Improving teaching and capacity in statistics education

More or less, the strands are related to learning from teachers to teach future teachers: Primary-level statistics; Teachers' knowledge; Teachers' questions and interpretations; Professional development of teachers; Different pedagogies; Japanese approaches.

Topic 5: Statistics education in the workplace, government, and across disciplines

The impact of official statistics; Statistics for public policies; Work-integrated learning; Education across discipline; Collaborative training; Pedagogy and assessment for statistical literacy; Needs of researchers in applied disciplines; SPC in Japan.

Topic 6: Innovations in teaching probability

Conditional probability; Understanding probability and linking it to statistical inference; The role of games; How to overcome obstacles in conceptual learning; Novel approaches; Challenges in teaching probability; Post-secondary conceptions of probability.

Topic 7: Statistical literacy in the wider society

Initiatives to promote a wider spread of statistical literacy: Civic Statistics; The International Statistical Literacy Project. Other aspects covered: Visualisation; Affects. Further strands were on: Statistical literacy of teachers; The challenge of Big Data and Data Science; Statistical literacy for widely used tools.

Topic 8: New approaches to research in statistics education

Inference in times of crisis; Reasoning; New methods for Big Data; Frameworks.

Topic 9: Technology and multimedia in statistics education

Data analysis by digital tools; Data Science; Using R; Technology for engaging students; Software and smartphone technology; Data visualisation; Learning in online courses and MOOCs; Gathering and modelling data.

Topic 10: Organisations and collaboration in statistics education

Collaboration with industries and schools at a larger level.

Keynotes of the conference were:

Education of the Grammar of Science for Sciences and Society (Hiroe Tsubaki); Cultivating Creativity in Data Work (Hilary Parker); See how the Rest of the World Lives, Sorted by Income (Anna Rosling Rönnlund); Through a Glass Darkly (Chris Wild); Combining 360 Degree Reflections For Looking Forward (Helen MacGillivray). The nearly 80 contributed papers added to the multivariate character of the conference. There has also been a lively discussion on the panel *Statistics Education Research Journal – A New Era*.

Proceedings are here: iase-web.org/Conference_Proceedings.php?p=ICOTS_10_2018.

OTHER FORTHCOMING CONFERENCES

ELECTRONIC UNDERGRADUATE STATISTICS RESEARCH CONFERENCE

Electronic Conference, 2 November, 2018

This electronic conference organises a project competition for undergraduate students. There will also be a keynote address by Hilary Parker, data scientist at StitchFix, a session about US graduate programs in statistics, and a panel about careers in statistics and data science. Registration is free. This conference is sponsored by Google, RStudio, DataCamp, Causeweb, and the American Statistical Association.

More information: www.causeweb.org/usproc/eusrc/2018.

ENCUENTRO DIDÁCTICA DE LA ESTADÍSTICA, LA PROBABILIDAD Y EL ANÁLISIS DE DATOS (VI EDEPA) STATISTICS EDUCATION AND DATA ANALYSIS CONFERENCE

Cartago, Costa Rica, 3–7 December, 2018



The aim of the seminar is to bring university and secondary teachers together and improve the teaching of statistics and probability at the primary and secondary levels. The aims are specified as:

- To demonstrate the progress of education in statistics, probability, and data analysis.
- To encourage the participants to perform quantitative investigations.
- To constitute a space of debate on the current state and recent developments of the investigations in the didactics of statistics, probability, and data analysis.
- To establish a group that works on the improvement of education in statistics and probability in primary and secondary levels.

More information: tecdigital.tec.ac.cr:8088/congresos/index.php/edepa/6_edepa.

2019 JOINT MATHEMATICS MEETINGS

Baltimore, MD, USA, 16–19 January, 2019



The conference focuses on all aspects of mathematics. Yet, it is interesting to see the mathematicians' perspective on statistics. Two of 29 invited speakers present on statistics: Sailing through Data: Discoveries and Mirages (Emmanuel Candes); Big Data, Inequality, and Democracy (Cathy

O'Neil). From the many special sessions, only a few cover statistical or stochastic topics; to name some: Modelling in mathematical biology; Applications to biomedical imaging; Stochastic analysis in quantum probability; Stochastic analysis in finance.

For more information: jointmathematicsmeetings.org/jmm.

11th CONGRESS OF EUROPEAN RESEARCH IN MATHEMATICS EDUCATION (CERME 11)

Utrecht University, Utrecht, The Netherlands, 5–10 February, 2019



ERME's strong working group on probability and statistics education is led by Caterina Primi. Themes for 2019 are:

- 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.

More information: cerme11.org/.

III INTERNATIONAL VIRTUAL CONGRESS ON STATISTICAL EDUCATION (CIVEEST)

University of Granada, Spain, Internet, 21–24 February, 2019



The Statistical Education Research Group at the University of Granada is organising this virtual congress to promote research and innovation in the field of statistics education in Iberoamérica. The congress is also a tribute to Dr Carmen Batanero on the occasion of her 70th birthday. Papers will be in *English* or *Spanish*.

The proceedings of the second virtual conference, which are mainly but not exclusively in Spanish, are available from: www.jvdiesproyco.es/index.php/actas-de-las-segundas-jornadas.

More information: civeest.com.

DAGSTAT CONFERENCE 2019 – THE FIFTH CONFERENCE OF THE DEUTSCHE ARBEITSGEMEINSCHAFT STATISTIK

Ludwig-Maximilians-Universität München, Munich, Germany, 18–22 March, 2019



The scientific program will consist of talks from different fields of application like medicine, economics, and engineering. Plenary speakers will be: Sara van de Geer, Andrew Gelman, Donald B. Rubin, and Michael Jordan. One of 31 invited paper sessions is on *Statistical Literacy and*

Statistical Education (organisers Joachim Engel, Katharina Schüller) with invited speaker Laura Martignon. The sessions on *Data Science* and on *Visualisation and Exploratory Data Analysis* might also be attractive for statistics education.

More information: www.dagstat2019.statistik.uni-muenchen.de/index.html.

US CONFERENCE ON TEACHING STATISTICS (USCOTS 2019)

The Penn Stater Conference Center, State College, PA, USA, 16–18 May, 2019



The conference theme is *Evaluating Evidence*. Proposals may be submitted in the areas of curriculum, pedagogy, resources, and educational research. There will be pre-conference workshops, breakout sessions with interactive engagement of participants, poster sessions, and lunch discussions among statistics educators. For the workshops and breakout sessions, the deadline is 30 November, 2018, other proposals are due in February or April, 2019.

More information: www.causeweb.org/cause/uscots/uscots19.

XXXIII REUNIÓN LATINOAMERICANA DE MATEMÁTICA EDUCATIVA (RELME 33)

Universidad de Ciencias Informáticas, Habana, Cuba, 7-12 July, 2019



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

More information will be available from: clame.org.mx/.

STATISTICAL REASONING, THINKING AND LITERACY RESEARCH FORUM (SRTL 11)

University of California Los Angeles (UCLA), CA, USA, 14–20 July, 2019



The conference theme is: *New ways of interacting with data, context, and chance in statistical modelling processes.*

Modelling is at the forefront of science and human activity. With the advent of data science, there are new opportunities for statistics education research to re-think what it means to

model. Technological innovations in simulations, visualisation, and handling of complex data have enabled students new access to addressing complex problems. By focusing on modelling processes (rather than the model itself), the modeller becomes the designer, drawing on a rich repertoire of experiences, mediated by technological tools, peers, and their own explanations. These developments provide new stimulus for growth in the rethinking and study of the role of statistical modelling in helping students develop statistical reasoning and to interact with data, context, and chance.

More information: blogs.uni-paderborn.de/srtl/srtl-11-2019/.

15th INTERNATIONAL CONFERENCE OF THE MATHEMATICS EDUCATION FOR THE FUTURE PROJECT

Maynooth University, Kildare, Ireland, 4–9 August, 2019

Theme of the conference is *Theory and Practice: An Interface or a Great Divide?* The Mathematics Education for the Future Project supports innovation in mathematics, statistics, science, and computer education. Researchers and teachers are invited "to participate in a programme specially designed to be useful and practical. [...], there will be workshops, small interactive working groups, and the creative open forum of ideas." The key notes are: Douglas Butler (www.tsm-resources.com/autograph), Bradford Hansen-Smith (www.wholemovement.com), and Luckson Muganyizi Kainois.

More information:

directorymathsed.net/public/Ireland/IrelandConferencePreliminaryAnnouncement.pdf.

2019 ANNUAL MEETING IN CALGARY

University of Calgary, Calgary, AL, 26-29 May, 2019



The Canadian Statistical Society has a strong committee on Statistics Education. After the impressive programme of 2018 with a presidential address on statistics education, various workshops, and sessions on education, we are looking forward to the meeting in 2019.

More information: ssc.ca/en/meetings/2019-annual-meeting.

TECHNOLOGY AND PSYCHOLOGY FOR MATHEMATICS EDUCATION PME & YANDEX

Moscow, Russia, 18-21 March, 2019

The first conference day is open to the general public and is dedicated to promoting mathematics education in general. The other three days focus on academic research and development in psychology and technology of teaching and learning mathematics. Plenary speakers will be:

- Dor Abrahamson (Berkeley): A New World of Educational Research on the Sensorimotor Roots of Mathematical Reasoning.
- Marie Arsalidou (Moscow): Brain and Mathematics: Implications for Education.
- Steve Lerman (London): Researching Vygotsky and researching with Vygotsky in Mathematics Education.
- Sergei Pozdniakov (St. Petersburg): Computers in Productive Learning of Mathematics.
- Norma Presmeg (Normal, IL): The Evolution of Mathematics Education Research: Russia's Place.

The conference aims at facilitating the dialogue between Russian mathematics education community and international researchers in mathematics education. The working language of the conference is English.

More information: education.yandex.ru/pme/en/.

ANNUAL CONFERENCE OF THE INTERNATIONAL GROUP FOR THE PSYCHOLOGY OF MATHEMATICS EDUCATION (PME 43)

Pretoria, South Africa, 7–12 July, 2019



The theme of the conference is *Improving Access to the Power of Mathematics*.

More information: www.pme43.up.ac.za.

2019 JOINT STATISTICAL MEETINGS

Colorado Convention Center, Denver, CO, USA, 27 July-1 August, 2019



The 2019 theme is *Statistics: Making an Impact*. Topics range from statistical applications to methodology and theory to the expanding boundaries of statistics, such as analytics and data science. As usual with the largest statistics conference in North America, there will be presentations on continuing

education and statistics education organised by the Section on Statistical Education of the American Statistical Association.

Contact: Stacey Hancock, Montana University: stacey.hancock@montana.edu. More information: ww2.amstat.org/meetings/jsm/2019.

RSS 2019 INTERNATIONAL CONFERENCE – FOR STATISTICIANS AND DATA SCIENTISTS

Belfast, Northern Ireland, 2–5 September, 2019



This conference is intended for all statisticians and users of data. The programme will be organised by 'streams' as well as broader presentations on new developments and thinking in statistics:

- Applications of statistics.
- Communicating and teaching statistics.
- Data science.
- Environmental/spatial statistics.
- Industry and finance.

- Medical statistics.
- Methods and theory.
- Official statistics and public policy.
- Professional development.
- Social statistics.

More information:

events.rss.org.uk/rss/frontend/reg/thome.csp?pageID=57555&eventID=194&traceRedir=2. https://events.rss.org.uk/rss/frontend/reg/thome.csp?pageID=83705&ef_sel_menu=1647 &eventID=270.

COLLOQUE FRANCOPHONE INTERNATIONAL SUR L'ENSEIGNEMENT DE LA STATISTIQUE (CFIES) – THE FRENCH INTERNATIONAL COLLOQUIUM ON STATISTICS EDUCATION

Strasbourg, 25-27 September, 2019



The aim of these colloquia is to bring together teachers and researchers in statistics but also in mathematics, education sciences, knowledge engineering, didactics of statistics, computer science, and all those in companies who have to deal with staff training in statistical techniques.

More information to be announced:

www.sfds.asso.fr/fr/enseignement_de_la_statistique/575-colloques_cfies/.

OTHER PAST CONFERENCES

AUTUMNAL MEETING 2018 OF THE STUDY GROUP "STOCHASTICS" HERBSTTAGUNG 2018 DES ARBEITSKREISES STOCHASTIK

Würzburg, 2-4 November, 2018



The theme was Challenges to the Teaching of Stochastics – With a Focus on Data Science. Statistics education has a growing awareness of the impact of Data Science. Rolf Biehler and Thomas Wassong reported on a project on Data Science and Big Data in School. One conclusion was that

such courses should seek synergies between statistics and informatics. A keynote from Gerd Bosbach was on *How Fears are Used in Media and Politics*. Two interesting dissertation projects were presented and discussed: *Measuring, Explaining and Treating Attitudes and Beliefs in Statistics Education at University* (Florian Berens), *A Learning Environment on Randomness in Mathematics and Theology* (Karin Kempfer).

 $More\ information:\ www.math.uni-frankfurt.de/ak-stochastik/files/programm-herbsttagung-2018.pdf.$

$6^{\rm th}$ INTERNATIONAL REALISTIC MATHEMATICS EDUCATION CONFERENCE – MAKING MATHEMATICS MEANINGFUL FOR STUDENTS

Grand Cayman, Cayman Islands, 20-22 September, 2018



This conference showcased research and practical workshops focused on Realistic Mathematics Education, an approach to the design of curriculum, assessment, and instruction developed by Hans Freudenthal. There was no explicit coverage of probability and statistics; yet, the approach of

problem solving, realistic contexts, and visualisation is also helpful for statistics education.

Online proceedings are available: www.icrme.net/rme-6-2018.html.

FIFTH ERME TOPIC CONFERENCE (ETC) MATHEMATICS EDUCATION IN THE DIGITAL AGE (MEDA)

Copenhagen, Denmark, 5–7 September, 2018



This conference served as an interdisciplinary collaboration that brought together diverse directions. Worthy of note is especially one paper on using digital resources in statistics teaching at grades 4-6 by Charlotte Krog Skott and Giorgos Psycharis. The proceedings might also inspire research in statistics education as we are facing similar challenges and we might benefit from their perspective.

Proceedings are available from:

 $www.math.ku.dk/english/research/conferences/2018/meda/proceedings/MEDA_2018_Proceedings.pdf.$

RSS 2018 INTERNATIONAL CONFERENCE

Cardiff, Wales, 3–6 September, 2018



Surprisingly, this large-scale conference on all areas of theoretical and applied statistics of the Royal Statistical Society hosted quite a few presentations that are of direct interest for statistics education (we name only the topics):

- Graphical principles for creating effective data visualisations.
- Teaching the concept of prior probability to medical students, doctors, and nonstatisticians.
- Revealed: What every statistician should know.
- Cooking up statistics: The science and the art.
- What do we learn about significance tests from the replication crisis?
- The use and abuse of significance testing and its role in statistical model variation.
- The Q-Step change in demand for quantitative social science.
- Benefits and risks of radiotherapy in early breast cancer.
- PSA testing in the UK, is its use justifiable?
- What can we learn about the teaching of statistics from the historical relationship between sociology and statistics in Britain?
- Language and images that support the conceptual understanding of statistical inference.
- Online, interactive data-skills modules making learning more accessible.
- Perceptions vs reality: Presenting statistics to bust myths.
- Fake statistics: mythmaking in the digital media age.
- Statistics behind the headlines.

More information:

events.rss.org.uk/rss/frontend/reg/thome.csp?pageID=83705&eventID=270.

PROCIVICSTAT CLOSING ROUNDTABLE "CIVIC STATISTICS AND CITIZEN ENGAGEMENT: A CALL FOR ACTION"

Max Planck Institute for Human Development, Berlin, 27–28 August, 2018



The recommendations of the project reflect the challenges to current practices and innovations in statistics education:

#1 Statistics education activities should promote engagement with social issues and develop learners' critical understanding of statistics about key civic phenomena.

#2 Use relevant data and texts and highlight the multivariate,

dynamic, and aggregated nature of social phenomena.

#3 Embrace technologies that enable rich visualisations and interactions with data about relevant social phenomena.

#4 Teaching methods should develop skills of critical interpretation of a wide variety of data and text sources.

#5 Assessments should examine the ability to investigate and critically understand data, statistics findings, and messages about key social phenomena.

#6 Promoting the understanding of civic statistics requires a systemic change and collaboration by relevant stakeholders.

The report of the project is available from: community.dur.ac.uk/procivic.stat/wp-content/uploads/2018/09/Call_for_Action_and_Recommendations.pdf.

2018 JOINT STATISTICAL MEETINGS

Vancouver Convention Centre, Vancouver, BC, Canada, 28 July-2 August, 2018



Topics range from statistical applications to methodology and theory to the expanding boundaries of statistics, such as analytics and data science. There were also presentations on statistics education, partly organised by the Section on Statistical Education of the American Statistical Association.

A quick overview on topics relevant for statistics education might convince the readers that they should search on the conference site for more:

- Undergraduate statistics education (8).
- Case studies, consulting, projects, applications (7).
- Specific didactic approaches: story-telling, problem solving, collaboration (7).
- Data Science approaches or curricula (6).
- Advanced topics (6).
- Interactive graphics and visualisation (4).
- Online teaching and MOOC (4).
- Multivariate thinking (2).
- Statistical literacy (3).
- R (3).
- Data projects (2).
- Research on attitudes (1).

More information: ww2.amstat.org/meetings/jsm/2018/onlineprogram/index.cfm.

ANNUAL CONFERENCE OF THE INTERNATIONAL GROUP FOR THE PSYCHOLOGY OF MATHEMATICS EDUCATION (PME 42)

Umeå, Sweden, 3–8 July, 2018



The theme of the conference was *Delight in Mathematics Education*. Topics of the plenary sessions were:

- Systems perspectives on mathematics teachers' beliefs.
- From anxiety to engagement.
- The multi-faceted nature of mathematics education research.
- An aesthetic turn in mathematics education.

Remarkable is also the plenary panel that united an international perspective from Brazil, Italy, Australia, Belgium, and Hong Kong. While there was no direct connection to statistics or

probability education, the following working groups may serve as lighthouse topics for statistics education, too:

- Integrating mathematics in stem education;
- Mathematics education research from and in Latin America;
- Measuring mathematics teachers' knowledge in the digital era;
- Considering the desired teacher of mathematics teacher education.

More information: www.pme42.se/.

XXXII REUNIÓN LATINOAMERICANA DE MATEMÁTICA EDUCATIVA (RELME 32)

Universidad de Medellín, Medellín, Colombia, 2–6 July, 2018



For statistics education, the connection to mathematics education is still essential. It is relevant how mathematics education values statistics education especially for the role statistics and probability can play in school as it is primarily taught as part of the mathematics class. Despite a focus on

mathematics education in general in RELME conferences, quite a few presentations have dealt with various approaches to probability, investigations on the concept of conditional probability, and with teacher education or training in probability and statistics, or with stochastic thinking. One of 15 discussion groups was on Sharing Experiences with Teaching Probability and Statistics.

Part of a plenary by Marcela Parraguez González was devoted to a project in Probability in the mathematics curricula. It is interesting to note that the Latin American view investigates probability in the tradition of mental objects and considers the concept of *reflective abstraction* of the approach of Piaget, which has been taken up more recently by Dubinsky; this provides a theoretical framework to the various steps of constructions that a learner has to undergo: construction of mental actions, construction of mental objects, and construction of mental schemes.

The proceedings will be available from: clame.org.mx/inicio/actas/.

2018 ANNUAL MEETING OF THE STATISTICAL SOCIETY OF CANADA

McGill University, Montreal, Québec, Canada, 3-6 June, 2018



The 2018 conference witnessed a presidential invited address from Nicholas J. Horton: *Big Ideas to Help Statistics Students Learn to Think with Data*. Horton discussed which issues of design and confounding are needed to disentangle complex relationships. He also presented ideas on how we can integrate data science and big data-related capacities into our

curricula without leaving out key statistical concepts and topics. A one-day workshop on *Teaching Modern Statistics and Data Science with R/RStudio* by Horton highlighted the necessity that data science has to take more care about flexible software. He used the RStudio environment, providing novices with a powerful but manageable set of tools, data wrangling, data visualisation, and basic statistical modelling using R.

There was also a session on *Statistics Education and Sociology* with topics such as Sociology of Statistics, The Scientific Process – Teaching How to Conduct Research, and Measuring the Impact – Metacognition and Performance in Exams. A showcase on Technology in the classroom presented an *Immediate Feedback Collaborative Assessment Tool* (IFCAT). A session on *Teaching Statistics to Graduate Students in the Health and Social Sciences* completed the focus on statistics education at the conference. Interestingly, a whole session was devoted to the impact of a change in scholarship strategy since 2000 that includes teaching and learning in statistics (Bethany J. G. White).

More information: ssc.ca/en/meetings/2018-annual-meeting.

2018 ELECTRONIC CONFERENCE ON TEACHING STATISTICS (eCOTS 2018)

Online, 21–25 May, 2018



The focus of this year's conference was *Data Science for All*. A variety of aspects was covered, such as: Teaching Data Science, Statistical thinking, Multivariable thinking, or Teambased learning. Keynotes were:

- The future of data science education is plain text Jeff Leek;
- Data Science for all. Sure. But when, where, how, why? Richard DeVeaux.

Many presentations are available from CAUSE.

More information: www.causeweb.org/cause/ecots/ecots18.