

## **CERME 12: Thematic Working Group 5 Probability and Statistics Education**

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### **Scope and focus of the Working Group**

Statistical and probabilistic thinking and reasoning are key skills for citizens who need to interpret information presented through the media or workplace, to contribute to the knowledge society and to interpret scholarly papers. The emergency caused by COVID-19 disease has revealed the impact of how we teach and the tools we use to communicate meaning in statistics and probability. Moreover, it has led to a surge in interest in trustworthy statistics and a greater number of people accessing statistical information about their own communities. Consequently, an important challenge is to develop statistically literate citizens and promote the meaningful use of statistical tools. The professional development of teachers is crucial to respond to such developments. TWG 5 positions itself within research that is fundamentally important at a time when new developments and trends like data science education and collaboration with other disciplines provide new stimulus for growth in the landscape of research on probability and statistics education.

### **Call for papers and poster proposals**

We are particularly interested in theoretical, empirical or design-based research papers (8 pages maximum) and poster proposals (2 pages) that address one or more of the following themes:

- The nature and development of probabilistic and statistical thinking and its relationship to other types of mathematical thinking, including the interface between probabilistic and statistical thinking, such as in modelling and informal statistical inference.
- Dispositions, attitudes and beliefs of students and adults towards probability and statistics.
- The role of context in statistics, how changes in context influence how we approach the teaching and learning of probability and statistics and inform new priorities and agendas.
- The professional development of teachers to teach statistics and probability.
- The role of computer-based tools on the learning and teaching of probability and statistics, in particular the use of new tools to support distance learning.
- The elaboration of theoretical frameworks that may provide insightful models for interpreting evidence from research on probability and statistics education.
- Data science education, practices of using big data in school and at the tertiary level.
- Assessment in probability and statistics education.

Papers and poster proposals should use the CERME template, and conform to the guidelines at [www.cerme12.it](http://www.cerme12.it) CERME 12 uses an electronic submission system [www.conftool.pro/cerme12](http://www.conftool.pro/cerme12) The authors submit the initial version of their paper on the website (uploading it both as a .doc and a .pdf file, and providing the required information, in particular the TWG number).

### **Reviews and decisions**

Each paper will be peer-reviewed by two persons from among those who submit papers to this TWG. Please expect to be asked to review up to two papers. The group leaders will decide about the acceptance of posters.

### **Important dates**

- **15<sup>th</sup> July 2021:** Deadline for [Early Bird Procedure](#)
- **15<sup>th</sup> September 2021:** Deadline for submission of papers and posters.
- **4<sup>th</sup> November 2021:** Preliminary decisions on papers.
- **12<sup>th</sup> November 2021:** Preliminary decisions on posters.
- **2<sup>nd</sup> - 6<sup>th</sup> February 2022:** CERME 12 takes place.
- See [www.cerme12.it/deadlines/](http://www.cerme12.it/deadlines/) for other important dates