

CERME 9: Thematic Working Group 5

Probability and Statistics Education

Leaders: Corinne Hahn (France), hahn@escpeurope.eu

Andreas Eichler (Germany), Sibel Kazak (UK), Caterina Primi (Italy), Aisling Leavy (Ireland)

Scope and focus of the Thematic Working Group

Statistical and probabilistic thinking and reasoning are key skills for the citizen who needs to interpret information presented through the media or the workplace, to contribute to the knowledge society and to interpret scholarly papers. An important challenge is to develop statistically literate citizens and meaningful use of statistical tools. An essential step forwards would be to consider bridges between data analysis, probability and inference. Towards this goal, recent developments in technology can provide various opportunities to support dynamic exploration of data and experimentation with probabilistic models as generators of data as well as in exploratory data analysis or informal statistical inference. However, professional development of teachers is crucial to keep up with such developments. WG 5 positions itself within research that is fundamentally important at a time when new developments provide new stimulus for growth in the body of research on probability and statistics education. Presentations will be short, only to refresh participants' reading of the papers and to feed collaborative group work.

Call for papers and poster proposals

We will be particularly interested in theoretical, empirical or design-based research papers (10 pages maximum) and poster proposals (2 pages) that address one or more of the following themes (though any papers of relevance to the group focus will also be considered):

- 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, informal statistical inference or data exploration.
- The professional development of mathematics teachers to teach statistics and probability: Frameworks of teachers' knowledge (components and competences); evaluation of teachers' knowledge and ability to use computer tools, and their influence on students' or adults' statistical and probabilistic thinking.
- The role of computer-based tools on the learning and teaching of probability and statistics.
- The elaboration of theoretical frameworks that may provide insightful models for interpreting evidence from research on probability and statistics education.

There are no restrictions to the area of education or learning: papers on vocational education and training or adult learning are as welcome as papers on primary, secondary or tertiary education.

Papers and poster proposals should use the CERME word template, and conform to the guidelines at <http://www.cerme9.org/guidelines/guidelines-for-authors/>. To submit it, you need to email your paper as a WORD document to **Corinne Hahn, Hahn@escpeurope.eu**, AND at the same time to the conference secretariat at **submission@cerme9.org**. If possible please also send a pdf version in addition to the WORD document.

Reviews and decisions

Each paper will be peer-reviewed by two persons from among those who submit papers to this Thematic Working Group. Please expect to be asked to review up to three papers yourself. It may be necessary for you to revise your paper before final acceptance. The group leaders will decide about the acceptance of posters.

Important dates

September 15, 2014: Deadline for submission of papers

October 1, 2014: Deadline for submission of poster proposals

November 25, 2014: Deadline for reviewers to submit their reviews

December 5, 2014: Decisions about paper or poster acceptance

December 20, 2014: Reduced fee registration deadline

January 10, 2015: Deadline for revisions of papers

January 20, 2015: Papers for presentation at the congress available on the CERME website