

CERME 14: Thematic Working Group 14 University Mathematics Education

Leader: Irene Biza (United Kingdom); i.biza@uea.ac.uk

Co-leaders: Ignasi Florensa (Spain), Ghislaine Gueudet (France), Mathilde Hitier (Canada), Athina Thoma (UK), Olov Viirman (Sweden)

Scope and focus of the Working Group

The University Mathematics Education group (TWG14) deals with research on post-secondary and university mathematics education (UME hereafter). So far, we followed the development of a variety of theoretical and methodological approaches and the adaptation of existing ones. Also, we addressed a range of research topics, including the learning of more advanced mathematical topics; university teaching practices and teachers' training; the use of resources; transitional issues to, from and within university studies; and, mathematics for non-mathematics specialists. Inspired by the works of TWG14, several initiatives have been taken, such as special issues and book chapters as well as the four [INDRUM](#) ERME topic conferences (with the fifth to take place in June 2024). In CERME14, we wish to expand our knowledge of the areas above as well as of emerging areas related to UME such as inclusion, access, equity and the opportunities/challenges presented by the use of Artificial Intelligence (AI) technologies. We also invite studies on curriculum design, teaching implementations and research examining affordances and challenges in collaborations between communities (e.g., teachers/researchers, mathematics/non-mathematics specialists, etc.).

Call for papers and poster proposals

We welcome research-based papers and poster proposals that discuss UME issues, considering mathematics and non-mathematics degrees, on the topics below (and beyond):

- the teaching and learning of mathematical topics, including proof and modelling (also note call for papers of the other [TWGs](#), including the new TWG25 on “Calculus Teaching and Learning”);
- students' experiences of university mathematics;
- inclusion, access and equity in UME;
- transition issues at the entrance, across and beyond university mathematics;
- the role of resources, including digital, in the teaching and learning of university mathematics;
- opportunities and challenges presented by the use of AI in UME;
- challenges for, and novel approaches to, teaching mathematics at university level;
- teacher preparation, professional development and practices of university mathematics;
- collaborative research, for example, between university mathematics teachers and researchers in mathematics education; and,
- theoretical and methodological approaches in university mathematics education research.

Papers and poster proposals *must use the CERME template*, and conform to the guidelines at <https://www.cerme14.it/>. CERME 14 uses an electronic submission system <https://www.conftool.pro/cerme14/>. 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 author papers to this TWG. *All co-authors* can be asked to review up to two papers. The group leaders will decide about the acceptance of posters.

Important dates

- See <https://www.cerme14.it/> for important dates