CERME 13: Thematic Working Group 26 Mathematics in the Context of STEM Education

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Scope and focus of the Working Group

Working group 26 first assembled at CERME 11 as a forum for STEM education from a mathematical perspective. STEM education includes a variety of subjects in the fields of science, technology, engineering and mathematics. Since the discrete subjects of science, technology, engineering, and mathematics were conjoined into the ubiquitous STEM acronym teachers, researchers, policy makers, and funders have worked to integrate these discrete subjects. The process of integration begins with the introduction of new instructional materials and practices, typically through curriculum development, publication of supporting materials, and professional development. The challenge of integrating STEM also lies at the nexus of teacher preparation and in-service teacher professional development.

Call for papers and poster proposals

With this TWG, we invite participants to debate a variety of perspectives on STEM integration, the challenges associated with this and even whether integration should be a goal for STEM. We also continue the conversation about the role of Mathematics in the context of STEM research, teaching and preparation. We will build on the papers presented at CERME 11 and CERME 12 as well as on scholarly research published in journals and books. We welcome theoretical, empirical, developmental and position papers that address one or more of the following topics:

- How M in STEM/STEAM should be conceived?
- Designing for students' learning.
- Processes in STEM/STEAM (e.g., engineering design process).
- Approaches to introducing STEM/STEAM (e.g. methodological approaches).
- Issues of equity and inclusion in STEM/STEAM.
- STEM/STEAM professional development.

Papers and poster proposals should use the CERME template, and conform to the guidelines at <u>https://cerme13.renyi.hu/</u>. CERME 13 uses an electronic submission system <u>https://www.conftool.pro/cerme13/</u>. 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 yourself. The group leaders will decide about the acceptance of posters.

Important dates

- 15 February 2023: Deadline for submission of papers and posters.
- 5 April 2023: Preliminary decisions on papers and posters.
- **10-14 July 2023:** CERME 13 takes place.
- See https://cerme13.renyi.hu/deadlines for other important dates