

## **CERME 11: Thematic Working Group 04 Geometry Teaching and Learning**

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

From pre-school up to University, the many fields of geometry – Euclidean or not, analytical... – involve various aspects, including: linking real-world experiments to abstract constructs, using drawings, proving, resources, curricula, etc. The Geometry teaching and learning group addressed these aspects with various theoretical or methodological tools such as levels of geometrical thinking, works from psychology, geometrical working spaces or geometrical competencies. At CERME-10, discussions focused on three main topics: the role of material activity; visualization and spatial skills; language, proof and argumentation. We paid special attention to mutual understanding as the participants' academic fields were very wide and this spread appeared to be very productive but also quite challenging.

At CERME-11, this TWG addresses classical issues about geometry teaching and learning, but we wish to encourage this mutual enrichment work by dedicating special time to the complementation of the different points of view about what is at stake in geometry teaching and learning.

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

This group addresses the following issues:

1. Curricula and specific context: the role of geometry in curricula, organization of teaching sequences, specific teaching contexts.
2. Constraints, obstacles in teaching and/or learning geometry linked to the topic itself.
3. What is involved in the geometrical activity: multiple points of view.
4. Teaching geometry: production, dissemination and assessment of resources, use of software or artifacts, teaching practices, pre-service and in-service teacher training.

We invite prospective participants to submit papers or posters related to one or more of these topics, based on research work, either philosophical or experimental. We suggest participants make explicit the main scope of their research problems: epistemological, cognitive, instrumental, semiotic, sociological, historical... To ensure the continuity of the group's work, it is helpful to consult the synthesis of the previous CERME Geometry TWGs.

Papers and poster proposals should use the CERME template, and conform to the guidelines at the [guidelines website](#). CERME 11 uses a [submission website](#). 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<sup>th</sup> July 2018:** Early bird submission (please refer to the [early bird website](#))
- **15<sup>th</sup> September 2018:** Initial submission by authors in the submission system.
- **3<sup>rd</sup> November 2018:** Initial decisions on papers and posters sent.
- **24<sup>th</sup> November 2018:** The authors submit a revised version if needed.
- **5<sup>th</sup> December 2018:** Final decisions sent.
- **12<sup>th</sup> December 2018:** Final version uploaded.
- **13<sup>th</sup> January 2019:** Papers available on CERME 11 website.