# Call for papers for CERME8 Working Group 3: Algebraic Thinking

If you are interested in algebraic thinking, you may want to submit a paper to Working Group 3 (WG3) on Algebraic Thinking at The Eighth Congress of the European Society for Research in Mathematics Education (CERME8), which will take place in Antalya,(Turkey), from 6th to 10th February, 2013.

**Web:** http://www.cerme8.metu.edu.tr

**Group Leader** 

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**Co-leaders** 

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## Scope and Focus of WG3

Algebraic Thinking is a well-established working Group at CERME. WG3 will build on the work at previous conferences to provide a forum for international discussion and collaboration. We will consider papers that question or provide insights on existing assumptions on any aspect of algebraic thinking, teaching and learning. This working group welcomes papers from a variety of different theoretical approaches and methodological frameworks. We expect that papers will address issues at all levels from early algebra through to algebra at university and beyond.

### Call for papers and poster proposals

In WG3 we welcome theoretical, methodological, philosophical, empirical or developmental papers (10 pages maximum) and poster proposals (2 pages) on issues related to algebraic thinking. The scope of the working group is broad and topics may include the following, though any paper/poster of relevance to the overall focus of the group will also be welcomed:

- Purposes for the teaching and learning of algebra; History, philosophy, epistemology and/or logics; International comparisons; Beliefs and/or attitudes.
- Modelling and/or applications of algebraic thinking; Problem-solving; Generalization; Transition to symbolization; Proof and argumentation.
- Language, discourse, semiotics and/or the role of gesture; Learning processes;
   Concepts, difficulties and/or errors.
- Representations; Use of Computer Algebra Systems and/or other technologies or tools; Task design.
- Curriculum, assessment and/or relationship of algebra to other mathematical topics;
   Didactics and the teaching of algebra; The nature and/or importance of "early algebra"; Teacher education.

The focus of the research may vary from micro-level studies individual students and classrooms, teachers and student teachers to macro-level studies of educational systems.

We particularly welcome papers that develop themes explored in the Algebraic Thinking Working Group at previous CERME conferences.

We welcome both established researchers and newcomers. We expect that all papers will report systematic studies of algebraic thinking and will refer to the literature in the field.

Papers and poster proposals should use the CERME8 template, and conform to the guidelines at <a href="http://www.cerme8.metu.edu.tr/author\_guidelines.html">http://www.cerme8.metu.edu.tr/author\_guidelines.html</a>. To submit your paper or poster, you must email it as a WORD document to Jeremy Hodgen at jeremy.hodgen (at) kcl.ac.uk AND to the conference secretariat at <a href="macked-accerme8@metu.edu.tr">accerme8@metu.edu.tr</a> by 15th September 2012. Please send a PDF version IN ADDITION to the WORD document.

#### **Reviews and decisions**

Each paper will be peer-reviewed by three people from among those who submit papers to this working group. Please expect to be asked to review up to three papers yourself between 15th September and 22nd October 2012. It may be necessary for you to revise your paper before final acceptance. Please reserve some time to do this in the second half of November. The group leaders will decide about the acceptance of posters.

### **Important dates**

Date	Event deadline
15 September, 2012	Submission of papers
1 October, 2012	Submission of poster proposals
22 October, 2012	Reviewers to submit their reviews
15 November, 2012	Paper or poster acceptance
1 December, 2012	Revisions to papers
1 December, 2012	Reduced fee registration deadline
15 December, 2012	Papers for presentation at the congress available on the
	congress website
6 -10 February, 2013	Conference