

## **CERME8: Working Group 16**

### **Different theoretical perspectives and approaches in research in mathematics education**

#### **Leaders**

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#### **Scope and Focus of WG16**

Theory is a crucial ingredient in any research study in mathematics education. The necessity of theoretical frameworks has led many researchers and research groups to develop theories that suit their purposes. This has not only led to a diversity of theories, but also to a diversity of ideas about what a theory is and the concomitant problem of how theories are built. Working Group 16 explores ways of handling the diversity of theories in order to better grasp the complexity of learning and teaching processes. The main effort is to understand how theories can be connected in a successful manner while respecting their underlying assumptions, which we call ‘networking theories’. We aim to encourage and develop work in this effort of networking theories. There are different profiles of networking: networking can be observed by starting from an empirical phenomenon or a practical question with the aim of developing or understanding it better by means of connecting different perspectives. It can also be observed by starting with different theories and focusing on the relationships of their principles, methodologies and paradigmatic questions. In such a case, there is a possible need for a theory and methodology for “networking theories”.

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

In Working Group 16 we welcome papers (10 pages maximum) and poster proposals (2 pages) on issues concerned with one or more of the bullet points below, though any paper/poster of relevance to the overall focus of the group will also be considered. In order to ensure a concrete basis to the discussion of more abstract issues, we call for papers presenting concrete case studies in which two or more approaches are involved.

- Specific benefits when connecting theories
- Empirical and theoretical difficulties in connecting theories
- Examples of strategies for connecting theories
- Limits of connecting theories: how are these limits determined by the aim of the connection and the specificity of the theories that are being connected?
- Conditions for a productive dialogue between theorists
- Difficulties and strategies when gathering results from different frameworks
- The role of the empirical material (research data) in the networking and design of theories
- The interaction between contexts and theoretical approaches: the diversity of approaches towards context in different didactic cultures

Papers should use the CERME8 WORD template, and conform to the guidelines at <http://www.cerme8.metu.edu.tr>. To submit it, you must email your paper as a WORD document to Ivy Kidron at [ivy@jct.ac.il](mailto:ivy@jct.ac.il) AND at the same time to the conference secretariat at [accerme8@metu.edu.tr](mailto:accerme8@metu.edu.tr). If possible please also send a pdf version *in addition* to the WORD document.

#### **Reviews and Decisions**

Each paper will be peer-reviewed by three persons from among those who submit papers to this Working Group. Please expect to be asked to review up to three papers yourself between 15<sup>th</sup> September and 22<sup>nd</sup> 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**

15<sup>th</sup> September 2012: Deadline for submission of papers.

1st October 2012: Deadline for submission of poster proposals

22<sup>nd</sup> October 2012: Deadline for reviewers to submit their reviews.

1st December 2012: Deadline for revisions of papers