



Invitation to Participate in Topic Study Group 2 on Mathematics Education at Tertiary Level

ICME Conference at Hamburg, Germany, 24-31 July, 2016

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Research in mathematics education at the tertiary level has experienced tremendous growth over the last decades, integrating theoretical and methodological frameworks from cognitive psychology, sociology, anthropology, epistemology and history of science. While many mathematics lecture halls are still dominated by instructor's "chalk and talk" and the traditional "axiom-definition-theorem" model for University Mathematics teaching, others engage in creative explorations, the use of technology, and problem solving.

The aim of this Topic Study Group will be to discuss and to exchange recent trends and perspectives from around the world. The topic is broad, not only because of the geographical and cultural diversity, but also because of the variety of students that take Mathematics at tertiary level: future research mathematicians; students pursuing a degree in science, technology, engineering, or mathematics; liberal arts students; prospective teachers shaping a view of school Mathematics from a new standpoint – just to mention a few target groups and levels. Within their specific contexts, each of these groups is entering a new learning and social environment and may experience difficulties in the transition to more advanced mathematical activities. More recently, the emergence of digital technologies has led to changes in syllabi and to new paradigms of teaching and learning.

These technologies have also changed the topology of the classroom, in the sense that they establish new ways of relating and communicating among instructors and students. Thus, in this Topic Study Group, we will give special focus on the following:

- The extent to which research advances from different theoretical perspectives have an actual impact on university classroom teaching and learning.
- Transition to university mathematics teaching and learning.
- Design of learning environment and uses of technology in tertiary mathematics education.
- Advanced mathematical topics in pre-service teacher education and their relationships with content knowledge for teaching.

Invited presentations

- Elena Nardi, University of East Anglia, UK
- Sean Larsen, Portland State University, USA

For refereed paper presentations: A four page paper proposal is required using the template on http://icme13.org/proposals_and_paper_submission. Proposals for presentations will be refereed by the TSG Organizers. Selected presentations will be presented within the regular sessions of the TSG and the other papers will be presented in oral communication sessions.

Deadlines for the Submission of Proposals

1st Sept. –1st Oct. 2015	Submission of papers
1st Sept. –1st Oct. 2015	Submission of posters by those intending to apply for the solidarity fund
10th – 20th December 2015	Decisions on acceptance of papers or posters sent out
1st Oct. – 22nd Dec. 2015	Application to solidarity fund from researchers of less-affluent countries
12th – 20nd January 2016	Decisions on funding sent out
1st – 31st January 2016	Submission of posters (by those not applying for the solidarity fund)
22nd – 28th February 2016	Decisions on acceptance of posters sent out

Further information about the ICME conference is available on <http://icme13.org/>