As technology and digital resources have become ubiquitous in mathematics education research and practice, it is time to examine the particular ways that digital technology is affecting the different knowledge domains. It is clear that the discerning use of technology requires a deeper understanding of how the mathematics shapes and is shaped by the technology. This prompts a rethinking of curriculum hierarchies and closer examination of the relationship between technological and non-technological approaches. The development of the chapter for the ERME 20-year book has revealed how research on technology has evolved from its early focus on interactions between mathematics and students, to involve a broader dialectic with theories and, more recently, aspects relating to resource and task design alongside the concepts of teachers’ professional knowledge and practice. Inspired by the contributions to the Thematic Working Groups 15 and 16 in the last CERME 10 in Dublin, which highlighted the diversity of current research and its overlaps with other TWG themes, the ETC 5 MEDA ‘Mathematics Education in the Digital Age’ is an interdisciplinary, multifaceted collaboration that will bring together participants who would normally attend a range of CERME Thematic Working Groups and will provide the opportunity for further in-depth discussion and debate.

Call for papers and poster proposals:

The International Programme Committee particularly welcomes theoretical, methodological, empirical or developmental papers (8 pages maximum) and poster proposals (2 pages) in relation to the following conference themes:

**Theme 1 Mathematics teacher education and professional development in the digital age**

- The specific knowledge, skills and attributes required for efficient/effective mathematics teaching with digital resources, to include digital mathematics resources, which we define as resources that afford or embed mathematical representations that teachers and learners can interact with by acting on objects in mathematical ways.
- The design and evaluation of mathematics teacher education and professional development programmes that embed the knowledge, skills and attributes to teach mathematics with digital resources.

**Theme 2 Mathematics curriculum development and task design in the digital age**

- The design of resources and tasks (e.g. task features, design principles and typologies for e-textbooks);
- The evaluation and analysis of resources and tasks (e.g. determining quality criteria for curricular material, resources and methods of analysis);
- The interactions of teachers and students with digital curriculum materials (e.g. appropriation, amendment, re-design), both individually or collectively. This includes

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1 If, especially young researchers, would like to send us a first draft with less than 8 pages, this is okay. The paper could be – if accepted – extended after the conference.
the consideration of teacher learning/professional development in their work with
digital resources.

Theme 3: Theoretical perspectives and methodologies/approaches for researching
mathematics education in the digital age

- Theories for research on technology use in mathematics education (e.g. design
  theories, prescriptive theories, theories linking research and practice, theories
  addressing the transfer of learning arrangements to other learning conditions etc.)
- The linking of theoretical and methodological approaches and the identification of
  conditions for productive dialogue between theorists, within mathematics education
  and beyond (e.g. developing collaborative research with educationalists (including
  teachers) and educational technologists).

The conference particularly welcomes contributions linking some of these three themes at any
level of mathematics education: pre-school, primary, lower- and upper-secondary or tertiary.
Papers and poster proposals must use the MEDA2018 template.

Please, upload your paper or poster proposal on the Submission webpage, providing the
required information, in particular the intended MEDA Theme number.

Each paper will be peer-reviewed by two persons from among those who submit papers to the
conference. The ICP will review posters. Please expect to review up to two papers yourself.
The final decision about acceptance rests with the IPC.

**Deadlines:**

- Submissions of paper and poster proposals: 15 March 2018
- Submission of reviews: 1 May 2018
- Final acceptance decisions: 15 June 2018
- Papers available online on the conference website: 1 July 2018

**Members of the International Program Committee (IPC):**

Chair of the IPC: Hans-Georg Weigand (Germany)

Co-chairs: Alison Clark-Wilson (UK)
Ana Donevska-Todorova (Germany)
Eleonora Faggiano (Italy)
Niels Grønbæk (Denmark) – Chair of the LOC
Jana Trgalova (France)

Members: Paul Drijvers (Netherlands)
Andreas Eichler (Germany) – member of the ERME board
Ghislaine Gueudet (France) – member of the ERME board
Colette Laborde (France)
Mirko Maracci (Italy) – link with TWG 17 (CERME10)
Sebastian Rezat (Germany) – link with TWG 22 (CERME10)
Melih Turgut (Turkey)
Michal Tabach (Israel)
Stefan Zehetmeier (Austria) – link with TWG 18 (CERME10)
Members of the Local Organising Committee (LOC):

Niels Grønbæk – Chair of the LOC
Uffe Jankvist
Henrik Bang
Claus Larsen
Morten Misfeldt
Louise Meier Carlsen
Charlotte Krog Skott
Morten Blomhøj

Venue:

The opening at the conference will be at
Grand Lecture Theatre
Faculty of Science
University of Copenhagen
Bülowsvej 17
DK-1870 Frederiksberg C

Additional information:

Support of expected young researcher participants

- We aim for 20% participation by early career researchers by encouraging experienced researchers to attend with a less-experienced colleague.
- We will offer an award for the best paper by an early career researcher. The IPC will clarify the definition of ‘early career researcher’ and the criteria for the award.

Proceedings, Publication and Dissemination

- Peer reviewed digital proceedings on HAL Archive (https://hal.archives-ouvertes.fr/)
- The IPC will explore the following opportunities:
  o An edited volume in the ERME series published by Routledge or a title for Springer.
  o A special issue or selected contributions in ZDM or in the International Journal for Technology in Mathematics Education (IJTME).