



**8th CADGME Conference on
Digital Tools in Mathematics Education
Jerusalem College of Technology
Jerusalem, Israel, 21-25 June 2020**

First Announcement

Welcome

After successful conferences held at [Pécs](#), Hungary (2007), [Hagenberg](#), Austria (2009), [Hluboká nad Vltavou](#), Czech Republic (2010), [Novi Sad](#), Serbia (2012), [Halle](#), Germany (2014), [Targu Mures](#), Romania (2016) and [Coimbra](#), Portugal (2018), we are delighted to announce that the CADGME conference continues. The team of the Jerusalem College of Technology and of the Center for Educational Technology (Tel Aviv) has volunteered to host the conference in 2020 in the beautiful city of Jerusalem. **We will be happy to host you for a wonderful CADGME conference in Jerusalem, the 8th in the series.**

Originally, the conference featured mostly Computer Algebra and Dynamic Geometry Systems, as they were the main tools in mathematics education, whence the name CADGME (Computer Algebra and Dynamic Geometry in Mathematics Education). However, in the recent years, the development of technology accelerated and we started to broaden our focus on all Digital Tools in Mathematics Education. We made horizons broader and address now related topics, initially STEM (Science, Technology, Engineering and Mathematics). Nowadays, creativity and creation draw more attention in education, thus we initiated some special groups on STEAM Education including the Arts in our topics.

Keynote speakers

Miriam Amit and **Shlomi Dolev**, Ben Gurion University, IL

Gershon Elber, Technion, Haifa, IL

Ilias Kotsireas, Wilfrid Laurier University, ON, CA

Zoltán Kovács, the Private University College of Education of the Diocese of Linz, Linz, AT

Attila Szabo, Stockholm University, SE

Call for papers

The aim of the conference is to offer a forum for academics from all over the globe to share their experiences and practices with technology-assisted mathematics teaching. Hence, we kindly invite colleagues, everyone from everywhere, to participate and contribute to the conference. The conference language is English.

How to contribute

Contributed talks

The talks will be given in parallel sessions; the length is 20 minutes plus 10 minutes for discussion.

Website: <http://cadgme2020.jct.ac.il>

Contacts:

Csaba Sárvári, University of Pécs sarvari.cs@gmail.com

Zsolt Lavicza Johannes Kepler University lavicza@gmail.com

Thierry Dana-Picard, Jerusalem Coll. of Tech. cadgme2020@jct.ac.il



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Posters

Research results can be presented on posters. There will be time allocated to present and discuss posters.

Working groups

Talks will be organised around topics (proposed list is below). We welcome proposals of working groups by the 15th of January, 2020 in which participants can contribute talks/papers. In working group sessions, plenty of time will be allocated for in-depth discussion of talks/papers.

Workshops

We encourage participants and software developers to organize workshops. Proposals (max 500 words) should be submitted by 15 January, 2020. Please let us know about the technical facilities needed for the workshop. The time limit is 90 minutes per workshop.

Electronic submission of proposals and abstracts

Submission of proposals for workshops/working groups and abstracts of contributed talks and posters will be made electronically through a dedicated EasyChair Web page, announced later.

A **template** for proposals will be available on the [conference website](#).

Publication, proceedings

Abstracts

The abstracts of contributed talks and posters will be available on the conference Web page. A book of abstracts (in pdf format) will be downloadable from the website close to the conference.

Post Conference Publication

If you wish to publish a paper in a journal about your talk at the CADGME 2020 conference you will be able to submit it to special issues of the following peer-reviewed journals:

- The International Journal for Technology in Mathematics Education ([IJTME](#))
- The Electronic Journal of Mathematics & Technology ([eJMT](#))
- Journal of Mathematics in Computer Science ([MCS](#))
- Acta Didactica Napocensia ([ADN](#))

And possibly other journals depending on the number of submissions.

Important dates and deadlines

Working group proposals	15 January 2020
Workshop proposals	15 January 2020
Acceptance notifications (WG/WS)	1 February 2020

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Abstract of contributed talks and posters 28 February 2020
Acceptance notifications 31 March 2020
Final Papers 30 September 2020

Topics for contribution

The conference will be arranged around four important themes — Teaching, Learning, Curriculum and Assessment — using any Digital Tools. In the past years, we paid particular attention to Computer Algebra Systems (CAS), Dynamic Geometry Software (DGS), Theorem Proving Systems (TPS) and combinations of these technologies. We would like now to broaden the conference scope to new horizons in technology-related areas, together with mathematics also science, engineering, technology and arts education (so called STEAM disciplines). This includes, but is not restricted to, contributions to the following fields.

Teaching

- The impact of technology uses on mathematics and STEAM education
- The changing role of the teacher
- Teacher training
- Distance learning and digital tools
- Connections between arts, design and technology in mathematics education

Learning

- The impact of digital tools on students' learning
- Students' attitudes and beliefs towards digital tools
- Understanding and acquisition of new knowledge with respect to digital tools
- Algebraic skills and digital tools
- Instrumentation and instrumental genesis
- Creativity and digital tools

Curriculum

- Design of learning environments and curricula
- Implementation of curricula and classroom practices
- Innovative practices
- Promises of digital tools for curriculum development and administration

Assessment

- Assessment with digital tools
- Web-based assessment systems
- Problem solving and stepwise use of digital tools
- Intelligent Assessment

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Proposed Programme

The program will feature keynotes, parallel sessions, workshops and exhibitions.

Registration and further information

Registration for the conference will be made via the [conference website](#).

Conference fees:

Regular (early bird, before 20 April) 250.00 €

Regular (late) 300.00 €

Students (early bird) 150.00 €

Students (late) 170.00 €

The conference fee covers coffee breaks, lunch every day, and also the excursion and the conference dinner. Accompanying persons can join the excursion and the dinner, for an ad hoc fee, which will be published on the webpage.

Venue

The conference will take place on the Lev Campus of the Jerusalem College of Technology (JCT), in the Giv'at Mordechai area. It is close to numerous important places in Jerusalem and easy to reach with public transportation. Information about travel and accommodation is available on [conference website](#).

Travel and Accommodation

Numerous airlines land in Ben Gurion Airport (TLV), Israel's most important international airport.

Public transportation (train, taxis, collective taxis) are available 24 hours a day.

Information about hotels will be available on the [conference website](#).

We suggest that you check with your travel agent the need for a visa.

Conference Co-chairs

Zsolt Lavicza, Johannes Kepler University, Linz, Austria (Founder)

Csaba Sárvári, Pécs University, Hungary (Founder)

Thierry Dana-Picard, Jerusalem College of Technology, Jerusalem (Conference Co-chair)

Sara Hershkovitz, Center for Educational Technology, Tel Aviv, Israel (Conference Co-chair)

Program Committee

Zsolt Lavicza, Johannes Kepler University, Linz, Austria

Csaba Sárvári, Pécs University, Hungary

Miriam Amit, Ben Gurion University, Beer Sheva, Israel

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Kristof Fenyvesi, University of Jyväskylä, Finland
Sara Hershkovitz, Center for Educational Technology, Tel Aviv, Israel
Ilias Kotsireas, Wilfrid Laurier University, ON, Canada

Scientific Committee

Miri Amit (Ben Gurion University, Beer Sheva, Israel)
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John Monaghan (University of Leeds, UK)
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Julien Narboux (University of Strasbourg, France)
Walther Neuper (Graz University of Technology, Austria)
Ildikó Perjési-Hámori (University of Pécs, Hungary)
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Valentyna Pikalova (Kharkiv National Pedagogical University, Ukraine)
Theodosia Prodromou (University of New England, Australia)
Pedro Quaresma (University of Coimbra, Portugal)
Tomas Recio (Universidad de Cantabria, Spain)
Phillipe R. Richard (University of Montréal, Canada)
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