

**CIEAEM 77**

**20-24 July 2026**

**Barcelona, Spain**

# **Connecting being, doing, and knowing in Mathematics Education**

A mathematics education conference for researchers, teacher educators, pre-service teachers, and teachers.

Official languages: English and French

Conference venue: University of Barcelona

For further information: <http://www.cieaem.org>

The Commission for the Study and Improvement of Mathematics Teaching - CIEAEM invites the mathematics education community to reflect on the intertwined dimensions of identity, activity, and cognition that shape mathematical learning and teaching. A rich body of research has shown how learners' ways of *being* in mathematics arise through opportunities for meaningful *doing*—engagement in practices that foster reasoning, problem solving, modelling, and collaboration—while their mathematical *knowing* develops through sustained participation in these practices and the discourse communities around them. The theme *Connecting being, doing, and knowing in Mathematics Education* resonates deeply with the values articulated in the CIEAEM Manifesto ([link](#)), which emphasizes mathematics education grounded in classroom practice, social responsibility, and critical reflection. By foregrounding these connections, the conference aims to spark dialogue and inspire contributions that consider learning and teaching as holistic processes, where who learners are, what they do, and what they come to know continually inform one another.

We welcome work that examines how these dimensions intersect across diverse contexts—whether through inquiries into mathematics and society, the evolving role of digital technologies, the dynamics of teacher learning and professional practice, or the foundational processes that shape students' mathematical development and assessment. The following subthemes illustrate key areas of interest for this year's meeting.

- (1) Mathematics, citizenship, ethics, and sustainability. This subtheme invites contributions exploring the role of mathematics in fostering social responsibility, ethical reasoning, and sustainable practices. Key issues include mathematics for social justice, environmental awareness, and civic engagement, as well as ethical and philosophical approaches to teaching and learning mathematics. Questions of interest may include: How can mathematics classrooms promote critical thinking about societal challenges? In what ways can curricula integrate sustainability and social justice while supporting deep mathematical understanding? How do ethical considerations shape the design of tasks, assessments, and instructional decisions?
- (2) Technologies and mathematics teaching and learning. This subtheme focuses on the innovative use of digital tools, artificial intelligence, and online environments to support mathematical thinking across algebra, arithmetic, geometry, and data management. Topics include ICT-mediated instruction, generative AI, dynamic and interactive e-task design, and critical teacher reflection on technology use. Open questions include: How can technologies enhance conceptual understanding rather than procedural knowledge alone? What are effective strategies for integrating AI tools while fostering critical digital literacy? How can technology-mediated tasks support collaboration, reasoning, and modeling in diverse classroom contexts?
- (3) Teacher education, practice, collaboration, and professional learning. This subtheme addresses research on teacher preparation, ongoing professional development, and collaborative practices in mathematics education. It encompasses lesson study, co-design of learning sequences, professional learning communities, teacher noticing, and the analysis of students' mathematical thinking, as well as criteria for didactic suitability of tasks. Key questions include: What are effective models for sustaining teacher collaboration and professional growth? How can teacher education programs balance content knowledge, pedagogical knowledge, and reflective practice? How do

teachers interpret and respond to students' mathematical thinking in ways that promote equity and inclusion?

- (4) Foundations of learning and assessment in mathematics. This subtheme explores research on the cognitive, social, and cultural foundations of learning, as well as innovative approaches to assessment. Topics include the use of manipulatives, embedded design, reasoning, proof, mathematical communication, and evaluation of competencies such as modeling, problem-solving, and data interpretation. Central questions include: How can assessment practices capture the full range of students' mathematical thinking? What strategies foster reasoning and proof skills across diverse learners? How can task design and evaluation promote deep understanding while supporting formative learning and self-regulation?

## **Aims of CIEAEM**

CIEAEM, the International Commission for the Study and Improvement of Mathematics Teaching, was established in 1950 by Caleb Gattegno, Gustave Choquet, and Jean Piaget. CIEAEM explores current conditions and potential for developing mathematics education to enhance the quality of mathematics teaching. At annual meetings, research on educational developments in mathematics is presented and discussed.

## **The Conferences of CIEAEM**

CIEAEM conferences serve as a unique meeting point where teachers and researchers collaborate and exchange their experiences and perspectives in a friendly and stimulating environment – encompassing practice and theory, as well as research and its critique or application to educational development. They offer an open space for researchers, teacher educators, teachers, and future teachers. The conference features a mix of plenary lectures, working groups, and workshops. Pre-service teachers have the opportunity to participate in the Quality Class – an extended programme that starts four days before the conference and involves participants from different countries, linking the conference activities to students' future teaching practice. Ongoing developments in mathematics education as a scientific discipline and reflections within CIEAEM foster flexibility and resilience, shaping the topics and themes of the conference, the research fields involved, and the debates. Originally focused on content reformulation or selection and methodological questions in mathematics education during its early decades, CIEAEM now broadens conversations to include epistemological, psychological, sociological, and technological issues.

## **Submissions to CIEAEM 77**

For CIEAEM 77, it will be possible to submit proposals for:

- Oral presentations
- Posters
- Workshops

For all submissions, three types of presentations can be proposed:

1. Studies of mathematics education practices or pedagogic innovation.
2. Research on current issues in the teaching/learning of mathematics.
3. Theoretical papers or literature reviews.

## **Important dates (preliminary)**

Deadline for submissions -----	15 March 2026
Response from CIEAEM -----	15 April 2026
Early bird registration -----	30 April 2026
Final submission -----	15 May 2026

## **Second announcement**

We will send a 2<sup>nd</sup> Announcement and Call for Papers in January 2026.

## **International Program Committee (IPC)**

Javier Díez-Palomar (chair)  
Marcelo Almeida Bairral  
Giulia Giovana Bini  
Gilles Aldon  
Audrey Cooke  
Corinne Hahn  
Susanne Gerofsky  
Michaela Kaslová  
Andreas Moutsios-Rentzos  
Ana Serrado Bayes  
Sixto Romero Sánchez  
Cristina Sabena

## **Local organisation committee (LOC)**

Adriana Breda  
Alejandro Verón  
Alexandre Cortés  
Alicia Sánchez Brualla  
Ana Serrado Bayes  
Carlos Ledezma  
Diana Hidalgo  
Elvira García Mora  
Gemma Sala  
Javier Díez-Palomar (chair)  
María José Seckel  
Nathalia Valderrama  
Neus Inglada  
Pere Falcó  
Pol Martínez Marín  
Sixto Romero Sánchez  
Yesenia Uicab  
Yuly Vanegas

## **The University of Barcelona**

The University of Barcelona, formally established in 1450 but rooted in earlier ambitions, arose during a period of civic and economic crisis as the Consell de Cent aimed to revitalise the city through a new centre of learning. With the support of King Alfonso V and later Pope Nicholas V, the Estudi General was founded, becoming a significant force for cultural and intellectual development.

Today—575 years later—the University of Barcelona presents itself as a leading, diverse, collaborative, open, and health-promoting institution. Comprising 17 faculties across seven campuses, it offers 74 undergraduate degrees and more than a thousand master's and postgraduate programmes. It is the only university in the Spanish State ranked among the world's top 200, and it remains the largest in Catalonia in terms of academic offerings and student capacity.

## **Barcelona**

Barcelona is a highly connected European city. The airport is about half an hour from the city centre by public transport. Through its metropolitan network—including underground, tram, and bus services—Barcelona offers extensive mobility options that enable access to almost any part of the urban area. Additionally, the city is located within a region rich in opportunities to visit coastal and mountain towns, each characterised by unique traditions and cultural appeal, which are likely to be of great interest to conference participants.

## Conference Venue

The conference will be held at the Mundet campus of the University of Barcelona.

Campus Mundet  
Passeig de la Vall d'Hebron, 171, 08035 Barcelona (Spain)

### The Mundet Campus

The Mundet Campus started its activities in the late 1990s with the goal of offering the university community optimal study conditions, along with a wide range of cultural, leisure, and recreational activities. All teaching, research, and service facilities were specially designed to include the communication systems needed for a fully satisfying university experience.

Located within the wider Mundet campus area, the site covers 14.21 hectares—6 of which are forest—and includes 60,868 m<sup>2</sup> of built space. Its proximity to the Collserola mountain range, along with its extensive internal gardens, creates a particularly privileged setting. Around 10,000 users, including students, academic staff, and administrative and service personnel, share and energise this campus daily.



### El Palau de les Heures

The Palau de les Heures ("Palace of the Ivy" in Catalan), also known as Casa Gallart, is a palace located in the Horta-Guinardó district of Barcelona. It was built between 1894 and 1898 by the architect Augusto Font Carreras. It currently houses the Bosch i Gimpera Foundation for postgraduate university studies and is part of the University of Barcelona's Mundet Campus.



## How to get there?

The Mundet Campus is located at the foot of Collserola. It can be reached by metro, bus, taxi.

### ***Metro***

Line L3 (green), stop at "Mundet". Once there, exit the metro and take the escalator on the right. Walk to the roundabout, where you can catch a free bus. Please take it to the last stop. Once there, the Palau de les Hores is to the left (facing the mountain), a one-minute walk.

### ***Bus***

There are stops for lines N4, 27, 60 (Ronda bus), 73, 76 and V21 in front of or near the main entrance of the venue.

More information: <https://www.ub.edu/portal/web/educacion/como-se-llega>

Map of the campus:



## Accommodation

Barcelona offers a great selection of accommodation. In the second announcement, more details about accommodation options will be provided.