

48th Conference of the International Group for the Psychology of Mathematics Education PME 48

July 28 to August 02, 2025 Santiago, Chile

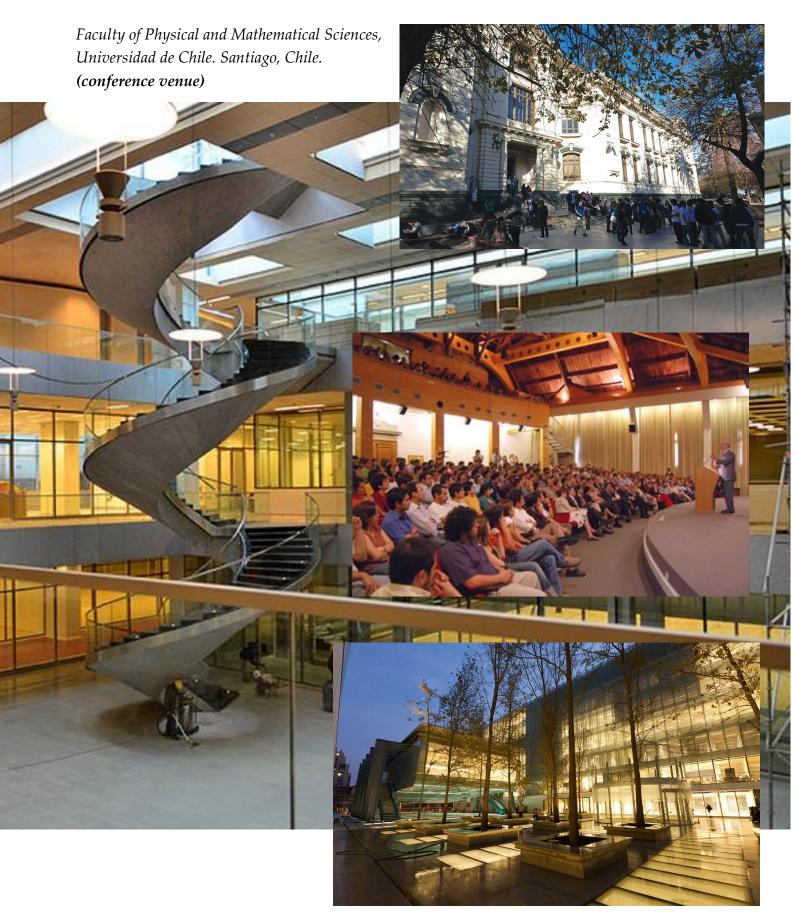
https://eventos.cmm.uchile.cl/pme48

Second Announcement

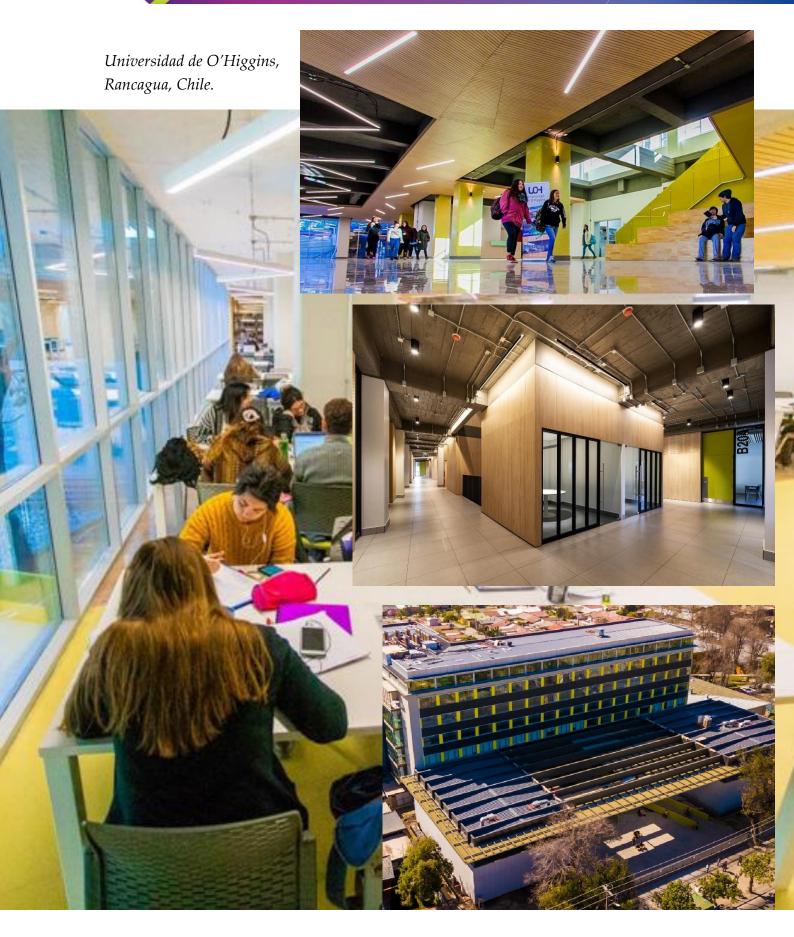












Contents

1.	We	elcome	8
-	1.1.	Your Hosts	8
	1.1.	1. Universidad de Chile	8
	1.1.	2. Universidad de O'Higgins	9
-	1.2.	About Santiago	10
	1.3.	About Chile	12
2.	Co	mmittees of PME 48	13
2	2.1.	The International Program Committee (IPC)	13
2	2.2.	The Local Organizing Committee (LOC)	14
4	2.3.	Ombudsboard during PME 48	14
3.	PM	IE Conference Secretariat	14
ź	3.1.	Secretariat Email Address	14
ź	3.2.	Conference Website	14
4.	Ab	out IGPME	15
4	1 .1.	The Constitution of IGPME	15
4	<i>1</i> .2.	Honorary Members of IGPME	16
4	<i>1.3.</i>	Current Board of Trustees of IGPME (International Committee)	16
4	<i>1.4.</i>	IGPME Administrative Managers	17
5.	Th	e Scientific Program	17
į	5.1.	Plenary Sessions	18
	5.1.	1. Plenary Lectures	18



5.1.2.	Plenary Panel	19
5.2. P	Personal Presentations	21
5.2.1.	Research Report (RR)	21
5.2.2.	Publication Report (PR)	22
5.2.3.	Colloquium (CO)	24
5.2.4.	Oral Communication (OC)	26
5.2.5.	Poster Presentation (PP)	27
5.3. G	Group Activities	28
5.3.1.	Research Forum (RF)	28
5.3.2.	Working Group (WG)	31
5.3.3.	Seminars (SE)	33
5.3.4.	Ad Hoc Meeting (AH)	34
5.3.5.	National Presentation (NP)	34
5.4. E	arly Researchers' Day (ERD)	34
6. PME	Pre-Submission Support	35
6.1. C	Coordinator	35
7. Regis	stration and Payment	36
7.1. C	Conference Pre-Registration	36
7.2. C	Conference Registration	36
7.3. IC	GPME Membership Only	36
7.4. R	legistration Fees	37
7.4.1.	Conference Deposit	37
7.4.2.	Total Registration Fee	38
7.4.3.	Accompanying Person Fee	38
7.4.4.	Late Registration Fee	39
7.5. P	ayment Options	39
7.6. L	Donations to Skemp Fund	39
7.7. R	cichard Skemp Memorial Support Fund	40
7.7.1.	Eligibility	40
7.7.2.	Administration of the Skemp fund	41



	7.7.3.	Criteria on which a grant may be awarded	41
	7.7.4.	Skemp Fund ambassadors	43
7	7.8. Ca	ncellation Policy	43
	7.8.1.	For Registered Participants	43
	7.8.2.	For Accompanying People	43
	7.8.3.	General Information	44
8.	Deadli	ines for PME 48 (2025)	44
9.	Deadli	ines for PME 49 (2026) in Helsinki, Finland	44
10.	Furthe	r information about the Conference	45
1	0.1. Fa	cilities and accessibility at the Conference Venue	45
1	0.2. Na	me badges	45
1	0.3. Wi	fi access at the conference venue	45
1	0.4. Eq	uipment for presentations	46
1	0.5. Fo	od during the Conference	46
1	0.6. Ex	cursions	46
11.	Travel	Information	47
1	1.1. Tr	aveling safely in Santiago, Chile	47
1	1.2. Ge	tting to Santiago	47
	11.2.1.	TurBus and CentroPuerto Buses from SCL to the city	48
	11.2.2.	Public Transportation Buses from SCL to the city	48
	11.2.3.	Taxi	49
	11.2.4.	Shared van	49
	11.2.5.	Car rental	50
1	1.3. Ge	tting to the Conference Venue	50
	11.3.1.	By metro	50
	11.3.2.	By bus	51
	11.3.3.	By taxi or rideshare	52
	11.3.4.	By car	52
1	1.4. Ab	out Chile	52
	11.4.1.	Language	52



11.4.2.	Passport and visa	53
11.4.3.	Letter of Invitation	53
11.4.4.	Currency	53
11.4.5.	Power Plugs	53
11.4.6.	Telephone Codes and Useful Numbers	54
11.4.7.	Weather	54
11.4.8.	Liability and Insurance	54
11.4.9.	Accommodation	54

1. Welcome

The Local Organizing Committee of the 48th Conference of the International Group for the Psychology of Mathematics Education is pleased to invite you to attend the conference to be held in Santiago, Chile, from July 28 to August 02, 2025.

The theme of the conference is "Making sure that Mathematics Education Research reaches the classroom". This theme has been chosen to emphasize the need to connect mathematics education research to the needs and reality of the classroom. The theme is particularly relevant in the Latin American region, which faces great challenges in providing mathematics education of quality for all students.

We wish to welcome you to the conference in July 2025 and hope that your visit and stay in Santiago, Chile, will be exciting, interesting, and inspiring. Our goal is to make the PME 48 conference inclusive, welcoming for all, and scientifically successful.

1.1. Your Hosts

PME 48 in 2025 will be co-hosted by Universidad de Chile and Universidad de O'Higgins. The venue for the conference will be the Faculty of Physical and Mathematical Sciences of Universidad de Chile.

1.1.1. Universidad de Chile

Universidad de Chile is a public research university in Santiago, Chile. In 1841 the Chilean minister of public education, Manuel Montt, conceived the idea of funding a corporation for the "advancement and development of sciences and humanities". Andrés Bello, a Venezuelan poet and humanist, formulated the project, which, with small modifications, became a law on November 19, 1842, creating the Universidad de Chile.

The foundation of the university came as an answer to the need to modernize the country which had become independent from Spain a little more than two decades before. It replaced the Real Universidad de San Felipe, established in 1738.



The university was formally opened on September 17, 1843. During this period, the university consisted of five faculties: Humanities & Philosophy, Physical & Mathematical Sciences, Law & Political Sciences, Medicine, and Theology. During its first years the university gave considerable support to education, institutional organization (such as the "Civil Code", a model for America), the building of the road network to join the territory, and the energy and production infrastructure.

The university seeks to solve national and regional issues and to contribute to the development of Chile. It is recognized as one of the best universities in Latin America for its leadership and innovation in science, technology, social sciences, and arts through the functions of creation, extension, teaching, and research. It is considered the most important and prestigious university in the country.

Its five campuses comprise more than 3.1 square kilometers (1.2 sq mi) of research buildings, healthcare centers, museums, theaters, observatories, and sports infrastructure. The institution has more than 40,000 undergraduate and graduate students, offering more than 60 different bachelor and professional degrees, 38 doctoral programs, and 116 master programs.

Notable alumni include Nobel laureates Pablo Neruda and Gabriela Mistral, twenty-one Chilean presidents, including the current president Gabriel Boric, and two presidents from other countries (Mexico and Ecuador).

Sources: https://en.wikipedia.org/wiki/University of Chile

https://www.uchile.cl/

1.1.2. Universidad de O'Higgins

Universidad de O'Higgins (UOH) is a Chilean public university, created by law in 2014 during the second government of President Michelle Bachelet. It is located in the Región del Libertador General Bernardo O'Higgins, where it develops its academic activities. The university opened its first 13 undergraduate programs in March 2017.

Together with Universidad de Aysén, they constitute the only two Chilean public universities created in more than two decades. The Regions of O'Higgins and Aysén had been the only ones without public higher education institutions so far.



Universidad de O'Higgins' academic organization considers two types of units: institutes and schools. As a consequence, UOH has neither faculties nor departments.

The UOH institutes are multidisciplinary academic units devoted to activities of scientific research, technological research, and R&D for capacity-building and solving relevant problems of the O'Higgins Region and problems of national and international importance. The university currently has five research institutes: Institute of Agro-Food, Animal and Environmental Sciences; Institute of Education Sciences; Institute of Engineering Sciences; Institute of Health Sciences; and Institute of Social Sciences. In addition, it has an Institute of Advanced Audiovisual Studies, focused on audiovisual creation.

The UOH schools are academic units that organize, administer, and offer study plans leading to academic degrees and professional licenses. The university currently has five undergraduate schools: School of Agro-Food, Animal and Environmental Sciences; School of Education; School of Engineering; School of Health; and School of Social Sciences.

Nowadays, Universidad de O'Higgins offers 27 undergraduate programs and has opened 2 doctoral programs, 5 master programs, and 2 medical specializations.

Sources: https://es.wikipedia.org/wiki/Universidad-de-0%27Higgins

https://www.uoh.cl

1.2. About Santiago

Santiago, also known as Santiago de Chile, is the capital and largest city of Chile and one of the largest cities in the Americas. It is located in the country's central valley and is the center of the Santiago Metropolitan Region, with a population of seven million, representing 40% of Chile's total population. Most of the city is between 500–650 m (1,640–2,133 ft) above sea level.

Founded in 1541 by the Spanish conquistador Pedro de Valdivia, Santiago has served as the capital city of Chile since colonial times. The city features a downtown core characterized by 19th-century neoclassical architecture and winding side streets with a mix of art deco, neo-gothic, and other styles.

Santiago's cityscape is defined by several stand-alone hills and the fast-flowing Mapocho River, which is lined by parks such as Parque Bicentenario, Parque Forestal, and Parque de la Familia. The Andes Mountains are visible from most parts of the city and contribute to a smog problem, particularly during winter due to the lack of rain. Vineyards surround the outskirts of the city, and Santiago is within an hour's drive of both the mountains and the Pacific Ocean.

Santiago is the political and financial center of Chile and hosts the regional headquarters of many multinational corporations and organizations. The Chilean government's executive and judiciary branches are based in Santiago, while the Congress mostly meets in nearby Valparaíso.

Only a few historical buildings from the Spanish colonial period remain in the city, because of earthquakes. Extant buildings include the Casa Colorada (1769), the San Francisco Church (1586), and Posada del Corregidor (1750). Within the metropolitan area of Santiago, there are 174 heritage sites in the custody of the National Monuments Council, among which are archeological, architectural, and historical monuments, neighborhoods, and typical areas. Of these, 93 are located within the commune of Santiago, considered the city's historic center. Although no santiaguino monument has been declared a World Heritage Site by Unesco, three have already been proposed by the Chilean government: the Incan sanctuary of El Plomo, the church and convent of San Francisco, and La Moneda Palace.

Surrounded by a privileged natural environment, the Santiago Metropolitan Region captivates its visitors with internationally renowned sky centers, large parks, and amazing nature reserves.

In this active, dynamic, diverse, and multicultural region, you can find the usual attractions of a large city, such as museums, cinemas, theaters, and interesting places to visit, such as vineyards, handcraft centers, and places to practice adventure sports.

Sources: https://en.wikipedia.org/wiki/Santiago

https://www.sernatur.cl/

1.3. About Chile

Chile, officially the Republic of Chile, is located in western South America. It is the southernmost country in the world and the closest to Antarctica, stretching along a narrow strip of land between the Andes Mountains and the Pacific Ocean. Chile had a population of 17.5 million as of the latest census in 2017 and has a territorial area of 756,102 square kilometers (291,933 sq mi), sharing borders with Peru to the north, Bolivia to the northeast, Argentina to the east, and the Drake Passage to the south. The country also controls several Pacific islands, including Juan Fernández, Isla Salas y Gómez, Desventuradas, and Easter Island. A long and narrow coastal Southern Cone country on the west side of the Andes Mountains, Chile stretches over 4,300 km (2,670 mi) north to south but only 350 km (217 mi) at its widest point east to west and 64 km (40 mi) at its narrowest point east to west, with an average width of 175 km (109 mi). This encompasses a large variety of climates and landscapes. It contains 756,950 square kilometers (292,260 sq mi) of land area. It is situated within the Pacific Ring of Fire. Excluding its Pacific islands and Antarctic claim, Chile lies between latitudes 17° and 56°S, and longitudes 66° and 75°W. The capital and largest city of Chile is Santiago, and the national language is Spanish.

Spain conquered and colonized the region in the mid-16th century, replacing the rule of the Inca empire, but failed to conquer the independent Mapuche people who inhabited what is now south-central Chile. Chile emerged as a relatively stable authoritarian republic in the 1830s after its 1818 declaration of independence from Spain. In the 20th century, up until the 1970s, Chile underwent a process of democratization and experienced rapid population growth and urbanization while relying increasingly on exports from copper mining to support its economy.

Chile is a developing country with a high-income economy and is one of the most economically and socially stable nations in South America. Chile also performs well in the region in terms of sustainability of the state and democratic development. Chile is a founding member of the United Nations, the Community of Latin American and Caribbean States (CELAC), and the Pacific Alliance, and joined the OECD in 2010.

Chile's cultural heritage consists, firstly, of its intangible heritage, which is composed of various cultural events and activities, such as visual arts, crafts, dances, holidays, cuisine, games, music, and traditions. Secondly, its tangible heritage consists of those buildings, objects, and sites of archaeological, architectural, traditional, artistic, ethnographic, folkloric, historical, religious, or technological significance scattered through Chilean territory. Among them, some are declared World Heritage Sites by UNESCO, under the provisions of the Convention concerning the Protection of World Cultural and Natural Heritage of 1972, ratified by Chile in 1980. These cultural sites are the Rapa Nui National Park (1995), the Churches of Chiloé (2000), the historical district of the port city of Valparaíso (2003), Humberstone and Santa Laura Saltpeter Works (2005), and the mining city Sewell (2006).

Sources: https://en.wikipedia.org/wiki/Chile

https://www.chile.travel/en/about-chile/

2. Committees of PME 48

2.1. The International Program Committee (IPC)

The International Program Committee of PME 48 in Santiago consists of:

The International Program Committee (IPC)			
Conference co-chair	David M. Gómez	Chile	Universidad de O'Higgins
Local members	Farzaneh Saadati	Chile	Universidad de Chile
	Pablo Dartnell	Chile	Universidad de Chile
	María Victoria Martínez	Chile	Universidad de O'Higgins
PME President	Wim Van Dooren	Belgium	KU Leuven
PME President-Elect	Oh Nam Kwon	Korea	Seoul National University
PME Trustees	Juan Manuel González- Forte	Spain	Universidad de Alicante
	Nicola Hodkowski	USA	Digital Promise

2.2. The Local Organizing Committee (LOC)

The Local Organizing Committee of PME 48 in Santiago consists of:

Local Organizing Committee (LOC)			
Conference	Patricio Felmer	Universidad de Chile	
Co-Chairs	David M. Gómez	Universidad de O'Higgins	
Pablo Dartnell,	Armando Peri,	Universidad de Chile	
Cristián Reyes, Farzaneh Saadati,			
Natalia Ruiz			
Claudia Cornejo, Eder Pinto, María		Universidad de O'Higgins	
Victoria Martínez, Valentina Giaconi			
Paola Ramírez		Universidad Católica del Maule	
Paulina Araya		Universidad Diego Portales	
Valeria Randolph		Pontificia Universidad Católica de Valparaíso	

2.3. Ombudsboard during PME 48

PME strives to ensure a productive, safe, and harassment-free environment for all participants at the official conference activities. A number of designated responders will be available during the conference to address and support matters related to the above.

3. PME Conference Secretariat

3.1. Secretariat Email Address

For any questions regarding PME 48, please contact us at: pme48@cmm.uchile.cl

3.2. Conference Website

The conference website is https://eventos.cmm.uchile.cl/pme48/, where you can find up-to-date information on matters contained within this Second Announcement.

General information about PME is also available on the website of the International Group for the Psychology of Mathematics Education (IGPME) at https://www.igpme.org/.

4. About IGPME

The International Group for the Psychology of Mathematics Education (IGPME) is an autonomous body governed as provided for in its constitution. It is an official subgroup of the International Commission for Mathematical Instruction (ICMI) and came into existence at the Third International Congress on Mathematics Education (ICME-3) held in Karlsruhe, Germany in 1976. The conference in 2025 is the 48th Annual Meeting of the International Group for the Psychology of Mathematics Education (PME 48).

4.1. The Constitution of IGPME

The constitution of PME was adopted by the Annual General Meeting (AGM) on August 17, 1980 and changed at the AGM on July 24, 1987, on August 10, 1992, on August 2, 1994, on July 18, 1997, on July 14, 2005, on July 21, 2012. PME decided to seek charitable organization status under UK law and the new constitution related to this change was accepted by the Annual General Meetings in 2018, 2019, and 2022. The name of the Charitable Incorporated Organisation ("the CIO") is the International Group for the Psychology of Mathematics Education.

The objectives of the CIO are to advance the field of mathematics education for the public benefit by:

- Promoting and stimulating research.
- Organising regular educational conferences around the world.
- Supporting regional workshops around the world in general, and in under-represented regions of the world in particular.
- Collaborating with organisations with similar aims.
- Facilitating cross-disciplinary discussion and the sharing of information and research with an international emphasis.

- Helping scholars from different parts of the world establish collaborative networks to further our collective understanding of how to improve mathematics education in their respective countries.
- Providing grants to help bring scholars from under-represented regions of the world to our annual meeting.
- Disseminating our research for the benefit of improving mathematics education at the classroom, school, district, and national levels.
- Disseminating our research for the benefit of improving students' experiences with mathematics education at the classroom, school, district, and national levels.
- Disseminating our research for the benefit of improving the preparation of mathematics teachers at the university level around the world.
- Providing access to our research publications to the public.

All information concerning PME and its constitution can be found at the PME website: https://www.igpme.org/.

4.2. Honorary Members of IGPME

Efraim Fischbein (deceased), Hans Freudenthal (deceased), and Joop Van Dormolen (deceased).

4.3. Current Board of Trustees of IGPME (International Committee)

Office	Person	Country/Region
President	Wim Van Dooren	Belgium
President-Elect	Oh Nam Kwon	Korea
Vice President Portfolio Group	Michal Ayalon	Israel
Group	Christina Krause	Austria
	Farzaneh Saadati	Chile
	Daniel Sommerhoff	Germany
	Ting-Ying Wang	Taiwan
Secretary Portfolio Group	Ban Heng Choy	Singapore

New Zealand

Germany

RESEARCH REACHES THE CLASSROOM

	Helena Johansson	Sweden
	Heather Lynn Johnson	USA
	Nicky Roberts	South Africa
	Wee Tiong Seah	Australia
Treasurer Portfolio Group	Juan Manuel González-Forte	Spain
	Jenni Ingram	United Kingdom
	Kotaro Komatsu	Japan
	Heidi Krzywacki	Finland
Policy Portfolio Group	Chiara Andrà	Italy
	Sean Chorney	Canada
	Nicola Hodkowski	USA

Ofer Marmur

Anselm Robert Strohmaier

4.4. IGPME Administrative Managers

Khemduth Singh Angateeah (outgoing) Peter Gonscherowski (incoming)

Email: info@igpme.org

5. The Scientific Program

The theme of the 48th PME conference is:

Making sure that Mathematics Education Research reaches the classroom

The Conference's language is English. Papers for the proceedings must be written and presented in English. However, colleagues, including the presenters, are welcome to contribute to discussions and questions in their first languages, following a Research Report, a Publication Report, or an Oral Communication, if someone in the session provides translation. The scientific program of PME conferences can include the following activities, which are explained in more detail below.

RESEARCH REACHES THE CLASSROOM

Plenary sessions (see Section 5.1)

- Plenary Lectures
- Plenary Panel

Personal presentations (see Section 5.2)

- Research Reports (RR)
- Publication Reports (PR)
- Colloquiums (CO)
- Oral Communications (OC)
- Poster Presentations (PP)

Group activities (see Section 5.3)

- Research Forums (RF)
- Working Groups (WG)
- Seminars (SE)
- Ad Hoc Meetings (AH)
- National Presentation (NP)

In addition to these activities, the conference will also offer an Early Researchers' Day (ERD), the day before the main conference (see Section 5.4).

- 5.1. Plenary Sessions
- 5.1.1. Plenary Lectures

There will be four Plenary Lectures from invited speakers. Each lecturer will have 50-60 minutes for their presentation. There will be time left for questions and comments from the audience after all plenary sessions.

The plenary speakers for PME 48 are:



Soledad Estrella Pontificia Universidad Católica de Valparaíso, Chile



Jinfa Cai
University of Delaware, United States of
America



Judy Anderson

The University of Sydney, Australia



Wim Van Dooren KU Leuven, Belgium

5.1.2. Plenary Panel

The Plenary Panel will be held according to the Oxford-Style debate protocol on the following topic:

"Mathematics education research must be useful for the classroom"

The panel for PME 48 consists of the following researchers:



Salomé Martínez Universidad de Chile, Chile



Anthony Essien
University of the Witwatersrand, South
Africa



Demetra Pitta-Pantazi *University of Cyprus, Cyprus*



Maitree Inprasitha
Khon Kaen University, Thailand



Panel Chair: Tanya Evans
The University of Auckland, New Zealand

The plenary panel will be held onsite at the venue.

5.2. Personal Presentations

5.2.1. Research Report (RR)

Research Reports should state what is new in the research, how the study builds on past research, and/or how it has developed new directions and pathways. Some level of critique must exist in all papers.

Contributions need not be limited to completed research. Ongoing studies may be submitted, provided that theoretical framework, preliminary results, and a discussion of these results appear in the text submitted. Proposals that are too similar to papers previously presented cannot be accepted. Proposals that represent new and significant contributions to research in the Psychology of Mathematics Education are especially encouraged.

Two types of papers are suitable for Research Reports:

1. Reports of empirical studies

Reports of empirical studies should cover, as a minimum, the following:

- a statement regarding the focus of the submitted paper;
- the study's theoretical framework;
- references to the related literature;
- a description of the research methods used; and
- a sample of the data and the results (additional data can be presented at the conference but some data ought to accompany the proposal).

2. Theoretical and philosophical essays

These should cover, as a minimum, the following:

- a statement regarding the focus of the submitted paper;
- a statement about the paper's theoretical or philosophical framework;
- references to related literature;
- a clearly articulated statement regarding the author's position on the paper's focus or theme; and
- implications for existing research in the respective area.

Publication and presentation

Accepted papers will be included in the proceedings only if the full conference registration fee has been paid in time. The deadline for this payment is May 17, 2025.

Each Research Report presentation will be allotted a total time of 40 minutes: 20 minutes for the oral presentation and 20 minutes for questions and comments.

A chairperson will be assigned to each Research Report session. They will introduce the presenters, make a comment regarding photographing, audio- and videotaping the session, monitor the timing of the session, and moderate the discussion.

For more information, please see the Guidelines for Preparing and Presenting Publication Report Contributions at https://www.igpme.org/wp-content/uploads/2024/09/PresentationGuidelinesRRandPR_2024.pdf and the Guidelines for Session Chairs at https://www.igpme.org/wp-content/uploads/2024/09/ChairingGuidelines_2024.pdf.

The publication and presentation should follow the PME formatting guidelines and must be in accordance with the PME publication ethics (https://www.igpme.org/publications/publication-ethics/).

5.2.2. Publication Report (PR)

Publication Reports are intended to present already submitted, accepted, or recently published empirical or theoretical research results on a topic that relates to the major goals of PME:

- to promote international contacts and exchange of scientific information in the field of mathematical education;
- to promote and stimulate interdisciplinary research in the aforesaid area;
 and
- to further a deeper and more correct understanding of the psychological and other aspects of teaching and learning mathematics and the implications thereof.

Publication Reports should state what is new in the research, how it builds on past research, and/or how it has developed new directions and pathways. Some

level of critique must exist in all submissions and authors are encouraged to also go beyond what is already published wherever possible – so that the presentation is also of interest to those that are already aware of the published work.

Contributions need not be limited to completed research. They are similar in nature to Research Reports (RRs), however i) relate only to research that was submitted, accepted, or published in scientific journals, books, or conferences with published proceedings after January 15th of the previous conference year (i.e. for a submission as PR to a PME conference in 2025 only after January 15th 2024), and ii) will only be published as an abstract within the proceedings of PME to avoid self-plagiarism.

Proposals which are too similar to papers previously presented cannot be accepted. Proposals that represent new and significant contributions to research in the Psychology of Mathematics Education are especially encouraged.

PME Publication Reports are reviewed in a double-blind peer-review process involving three reviewers.

Two types of submissions are suitable for Publication Reports:

1. Reports of empirical studies

Reports of empirical studies should cover, at minimum, the following:

- a statement regarding the focus of the submitted paper;
- the study's theoretical framework;
- references to the related literature;
- a description of the research methods used; and
- a sample of the data and the results (additional data can be presented at the conference but some data ought to accompany the proposal).

2. Theoretical and philosophical essays

These should cover, at a minimum, the following:

- a statement regarding the focus of the submitted paper;
- a statement about the paper's theoretical or philosophical framework;
- references to related literature;
- a clearly articulated statement regarding the author's position on the paper's focus or theme; and

• implications for existing research in the respective area.

Publication and presentation

The abstracts of accepted Publication Reports will be included in the proceedings only if the full conference registration fee has been paid in time. The deadline for this payment is May 17, 2025.

Each Publication Report presentation will be allotted a total time of 40 minutes: 20 minutes for the oral presentation and 20 minutes for questions and comments.

A chairperson will be assigned to each Publication Report session. He/she will introduce the presenter, make a comment regarding photographing, audio- and videotaping the session, monitor timing of the session, and moderate the discussion.

For more information, please see the Guidelines for Preparing and Presenting Publication Report Contributions at https://www.igpme.org/wp-content/uploads/2024/09/PresentationGuidelinesRRandPR_2024.pdf and the Guidelines for Session Chairs at https://www.igpme.org/wp-content/uploads/2024/09/ChairingGuidelines_2024.pdf.

The publication and presentation should follow the PME formatting guidelines and must be in accordance with the PME publication ethics (https://www.igpme.org/publications/publication-ethics/).

5.2.3. Colloquium (CO)

The goal of a Colloquium is to provide the opportunity to present a set of three Research Reports that are interrelated in a particular way (e.g. they are connected through related or contrasting theoretical stances, use identical instruments or methods, or focus on closely related research questions), and to initiate a discussion with the audience on the interrelated set.

A Colloquium proposal:

 consists of a set of exactly three research reports, to be presented by members from at least two different countries; RESEARCH REACHES THE CLASSROOM

- includes, in addition, a one-page summary by an organizer (one person), indicating a specific pre-determined focus that is common to each research report; and
- involves a presentation of the three research reports, and a discussion with
 the audience that is initiated by the contribution of a discussant (one
 person, indicated in the author line of the one-page summary) who is
 appointed at submission.

The three Research Reports should be formatted and submitted via ConfTool using the guidelines provided for that presentation format (see above, 5.2.2 Research Report (RR)). Here, further information is provided only for the one-page summary which accompanies the three Research Reports.

The additional one-page summary is created using the same template or formatting guidelines as for Poster Presentations and Oral Communications and is submitted by the Colloquium organizer via ConfTool. It provides the Colloquium title and the name of the organizer (preceded by "Organizer:") and discussant (preceded by: "Discussant:") in the author fields. Then, the text containing the focus and/or rationale for the Colloquium is provided. Note that no abstract is necessary for the Colloquium summary. Proposals that do not follow the formatting guidelines will not be included in the peer review process.

In the comments field in ConfTool, the authors and titles of the three research reports that comprise the Colloquium must be indicated.

Submissions to ConfTool are only allowed if the presenting author is registered in the ConfTool system and has paid the non-refundable conference deposit. Every pre-registered person may submit up to one Colloquium as organizer.

A Research Report in a Colloquium is counted identically to an individual Research Report for the existing restrictions on the number of contributions for a participant. Therefore, each conference participant may present at most one Oral Communication or one Publication Report or one Research Report, including the Research Reports that are part of Colloquia (please see also section 5.2.1 for Restrictions on number of contributions). Note that acting as a discussant of a Colloquium will not count as a contribution for the existing restrictions on conference contributions. Nevertheless, each participant can take the role of organizer or discussant in a Colloquium no more than once during one

conference. Also, the organizer cannot be involved as (co-)author in more than one of the research reports in the Colloquium.

Presentation

A 90-minute timeslot will be devoted to each Colloquium. The organizer takes care of the chairing. The organizer first briefly introduces the Colloquium topic and then each Research Report is presented in turn. The presentation time for each report can be agreed with the organizer beforehand but will be between 15 and 20 minutes (depending on how much the papers have in common; some presentations can be shorter). Afterwards, the discussant initiates the discussion for approximately 10 minutes, which is followed by discussion with the audience.

5.2.4. Oral Communication (OC)

An Oral Communication proposal should describe which past research the study is built on; give a concise overview of the new results attained, and what the main implications of these results are.

Contributions need not be limited to completed research. Ongoing studies may be submitted, provided that theoretical framework, preliminary results, and a discussion of these results appear in the text submitted. Proposals which are too similar to papers previously presented cannot be accepted. Proposals that represent new and significant contributions to research in the Psychology of Mathematics Education are especially encouraged.

Publication and presentation

Accepted papers will be included in the proceedings only if the full conference registration fee has been paid in time. The deadline for this payment is May 17, 2025.

The IPC will group three Oral Communications according to the distinctive themes in order to provide the opportunity for a common discussion period at the end of each OC session.

For OC sessions, the IC recommends one of two timing options. Some sessions may contain presentations that are closely related, while for other sessions, this may be less the case. Based on the chair's reading of the OC summaries, and after

consultation of the three presenters before the start of the session, he/she can select the appropriate option.

Option 1: Joint discussion at the end for presentations with related themes. After each presentation, there is the opportunity to clarify immediate questions for at most 5 minutes. 15 additional minutes of discussion are at the end of the session.

Option 2: Separate discussions for presentations with separate themes. The chairperson starts 10 minutes of questions and discussion directly after each 10-minute presentation.

A chairperson will be assigned to each Oral Communication session. They will introduce the presenters, make a comment regarding photographing, audio- and videotaping the session, monitor timing of the session, and moderate the discussion according to one of the previously mentioned options.

The publication and presentation should follow the PME formatting guidelines and must be in accordance with the PME publication ethics (https://www.igpme.org/publications/publication-ethics/).

5.2.5. Poster Presentation (PP)

Poster Presentations are intended for research that is best communicated in a visual form rather than an oral presentation. There is no formal oral presentation associated with Poster Presentations, although there is time allotted during which presenters will be available by their posters for discussion with conference participants.

Reports should describe the research context of the study presented, the study itself, and its implications, with a particular focus on the visual aspects of the presentation.

Contributions need not be limited to completed research. Ongoing studies may be submitted, provided that theoretical framework, preliminary results, and a discussion of these results appear in the text submitted. Proposals which are too similar to papers previously presented cannot be accepted. Proposals that represent new and significant contributions to research in the Psychology of Mathematics Education are especially encouraged.

Publication and presentation

Accepted proposals will be included in the proceedings only if the full conference registration fee has been paid in time. The deadline for this payment is May 17, 2025.

60 minutes will be allocated to Poster Presentation sessions during the conference. Authors should be available at their poster in this session for discussion with conference participants. The authors should bring their posters printed in the following format: **A0 size**, **portrait orientation**.

Posters will be presented fully onsite. Materials for attaching the posters in the display area will be provided, but each presenter is responsible for attaching them before the poster session and removing them afterward.

5.3. Group Activities

Group activities are intended to provide attendees with the opportunity to exchange information and ideas related to the PME. Conference participants will need to select which sessions they would prefer to attend and indicate this in their registration. Group activities will take place during parallel time allotments and will have limited space.

5.3.1. Research Forum (RF)

Two Research Forums have been accepted for presentation in PME48:

- "New directions in the discourse on mathematics teacher professional development," led by Gabriele Kaiser and Xinrong Yang with the participation of Yeping Li, Yuling Zhuang, Farzaneh Saadati, Mireia Viguer, Marta Civil, Sandra Crespo, Núria Planas, Jenni Ingram, Timo Kosiol, Stefan Ufer, and Oh Nam Kwon.
- "Curiosity in mathematics: Theoretical, methodological and practical lenses," led by Roza Leikin and Demetra Pitta-Pantazi with the participation of Jinfa Cai, Hui-Yu Hsu, Patricio Felmer, Pia Gödeke, Alexander Karp, Boris Koichu, Janina Krawitz, Victoria Robison, Stanislaw Schukajlow, and Rina Zazkis.

Format description

A Research Forum is a format of group presentation undertaken by a group of at least five researchers. The goal of a Research Forum is to provide PME members a comprehensive overview on the state of the art on a topic where substantial research has been undertaken in the last 5-10 years and that is of ongoing interest for the PME members. The researchers are expected to be experts with respect to the research topic and offer coherently structured activities during 2 slots of 90 minutes each, as well as a comprehensive contribution (30 pages) to the conference proceedings. See also http://www.igpme.org/index.php/annual-conference/session-types/research-forum.

A Research Forum is not supposed to be a collection of individual research presentations (see Colloquium format), but instead is meant to convey an overview of research, highlighting contemporary academic debates and perspectives in the field. In contrast to the Working Group format for evolving research topics, Research Forums are considered to mark significant advances with respect to established research topics.

A Research Forum:

- focuses on a topic which is of substantial interest within the work of PME;
- has a coherent structure that enables to attain a comprehensive overview of the topic;
- contrasts and integrates different research approaches through the consideration of multiple perspectives;
- includes structural opportunities for academic debate in interaction with the audience;
- provides the participants with the opportunity to prepare for the participation through the provision of reading materials prior to the activity;
- is developed by at least five researchers who are experts with respect to the research topic;
- covers 2 slots of 90 minutes each; and
- is represented in a comprehensive and coherent 30-page contribution in the conference proceedings.

Presentation and Proceedings

Two 90-minute slots will be devoted to each Research Forum. The conference chairs are asked to schedule the slots subsequent whenever possible, although this cannot be guaranteed.

Please note the following requirements related to the presentation format at the conference:

- The coordinator(s) as well as all the persons listed as presenting authors
 of a Research Forum need to be registered conference participants and
 need to participate to the research forum in person.
- If a coordinator or a presenting author of a Research Forum has to cancel last minute for whatever reasons their presentation needs to either be presented locally by (i) co-authors of the Research Forum, (ii) co-authors of the presented research that are registered participants of the conference, or (iii) cancelled. That is, for coordinators and presenting authors of a Research Forum there is no option for digital participation.
- If the coordinators of the Research Forum plan to include additional persons digitally in the Research Forum, which are not listed as co-authors of Research Forum, this can be done either in a hybrid mode or via a prerecorded video under the following conditions:
 - The digital participation is less than five minutes per person (i.e., a person giving a short reaction or input).
 - The digital participation is announced up front in the submission of the research forum together with an indication why physical attendance is not possible and why no other (physically present) person could take this part.
 - o If a hybrid participation is planned, a prerecorded video is necessary as a backup in case of technical issues.

The decision regarding digital participation will be made by the IPC.

The proposal and conference proceeding contribution should follow the PME formatting guidelines. The final contribution for the conference proceedings should not exceed 30 pages, including references. For accepted papers to be included in the proceedings, all coordinators and presenting authors to the Research Forum have to make a full registration by May 17, 2025, at the latest.

5.3.2. Working Group (WG)

Ten Working Groups have been accepted for presentation in PME48:

- "Mathematics teacher noticing: New contexts and concerns in programs design," presented by Horacio Solar, Eder Pinto, Ceneida Fernández, and Julie Amador.
- "Strengthening mentorship in mathematics education publishing," presented by Janet Dawn Walkoe, Thorsten Scheiner, Karin Brodie, Lisa Darragh, Anjum Halai, Núria Planas, Despina Potari, and Manuel Santos Trigo.
- "Failure to teach/learn mathematics: Conceptual, diagnostic, and technological perspectives," presented by Einat Heyd-Metzuyanim, Anna Baccaglini-Frank, Brent Davis, Mellony Graven, Esther Levenson, and Michal Tabach.
- "Replication studies in mathematics education," presented by Jinfa Cai,
 Wim Van Dooren, Demetra Pitta-Pantazi, and Farzaneh Saadati.
- "Values for mathematics education: Next steps," presented by Ralf Erens, Camilla Spagnolo, and Wee Tiong Seah.
- "(Re)imagining mathematics teacher education and research as a future-making project," presented by Tracy Helliwell and Gil Schwarts.
- "What does an integrated STEM curriculum approach offer the teaching and learning of mathematics?," presented by Judy Anderson and Ban Heng Choy.
- "Extending embodied learning to mathematics teacher professional development through multimodal learning analytics," presented by Alik Palatnik and Jason Cooper.
- "Mathematics in the service of humanity: Data, dignity, democracy and social change," presented by Yasmine Abtahi, Richard Barwell, Matijas Kanavin Loeb, Candice Hansen, Trine Mette Foyn, Kjellrun Hiis Hauge, Suela Kacerja, Beth Herbel-Eisenmann, and Lisa Steffensen.
- "Global perspectives of equity in mathematics education: Definitions, challenges, paths forward," presented by Nicola Hodkowski, Mary Beisiegel, Jodie Hunter, Christina Krause, Ofer Marmur, Vilma Mesa, and Irene Duranczyk.

Format description

A Working Group is a format of group presentation undertaken by a group of at least two researchers. The aim of a Working Group is that PME participants are offered the opportunity to engage in exchange or to collaborate in respect to a common research topic (e.g., start a joint research activity, share research experiences, continue or engage in academic discourse). See also http://www.igpme.org/index.php/annual-conference/session-types/working-group.

A Working Group may deal with emerging topics (in the sense of newly developing) as well as topics that are not new but possibly subject to changes.

A Working Group needs a clear goal (outcome) and a strategy to reach this goal in collaboration with the participants. It must provide opportunities for contributions of the participants that are aligned with the goal (e.g. share materials, work collaboratively on texts, discuss well-specified questions).

A Working Group is not supposed to be a collection of individual research presentations (see Colloquium format), but instead is meant to build a coherent opportunity to work on a common research topic. In contrast to the Research Forum format that is meant to present the state of the art of established research topics, Working Groups are considered to involve fields where research topics are evolving.

A Working Group:

- focuses on a research topic of substantial interest within the PME community;
- has a clear goal and a strategy to reach this goal in collaboration with the participants;
- includes structural opportunities for contributions by the participants to reach the goal;
- involves only a minimum of planned presentations to stimulate the specific collaboration or exchange;
- is provided by at least two researchers who are actively working within the research topic;
- covers 2 slots of 90 minutes each;
- is represented via the 2-page proposal in the conference proceedings; and

• will be portrayed in respect to its outcomes, after the conference, in a report to be included in the following PME newsletter.

Presentation and Proceedings

Two 90-minute slots will be devoted to each Working Group. The conference chairs are asked to schedule the slots subsequent whenever possible, although this cannot be guaranteed. All Working Groups will take place on site during the conference.

The proposals should follow the PME formatting guidelines. The total length of the proposal is 2 pages, including references. If accepted, this proposal will be included in the conference proceedings. For accepted papers to be included in the proceedings, all researchers contributing to the Working Group have to make a full registration May 17, 2025, at the latest.

After presentation, each Working Group is required to send a report of its activities and the goals reached to the PME Administrative Manager (info@igpme.org) by September 2025. This report may be included in the following PME Newsletter.

5.3.3. Seminars (SE)

No Seminars have been accepted for presentation in PME48.

Format description

The goal of a Seminar is the professional development of PME participants, especially new researchers and/or first comers, in different topics related to scientific PME activities. This encompasses, for example, aspects like research methods, academic writing or reviewing. A Seminar is not intended to be only a presentation but should involve the participants actively. PME can give a certificate of attendance to participants of the Seminar. Facilitating a seminar will not count as a contribution for the existing restrictions on conference contributions.

Presentation and Proceedings

The two-page proposals of accepted Seminars will be included in the Conference Proceedings. Two 90-minute sessions will be allocated to Seminars. After

presentation, the coordinators of each SE are required to send a report of its activities to the PME Administrative Manager (e-mail address: info@igpme.org). This report may be included in the PME newsletter. This report is due by the end of September 2025.

5.3.4. Ad Hoc Meeting (AH)

Ad Hoc Meetings are a form of conference activity approved in 2010. During the conference, PME provides time slots and rooms for meetings of 'ad hoc' groups. The idea is that researchers can meet and discuss research topics that spontaneously came up during discussions of previous presentations at the conference. The Ad Hoc Meetings are reserved only for discussions; presentations or a continuation of a Research Report or Publication Report or Oral Communication are not allowed. To organize an Ad Hoc Meeting, at least two people should prepare an announcement with a short and precise description of the topic, the names of the organizers, and the preferred time slot, and deliver it to the PME Administrative Manager (info@igpme.org). The Administrative Manager will then assign times and rooms. Since there are only a few time slots and rooms, proposals will be accepted on a first-come, first-served basis.

5.3.5. National Presentation (NP)

The country hosting a PME conference can include a National Presentation in the scientific program of the PME conference. The goal of a National Presentation is to present to PME members of other countries the specific history, traditions, and perspectives, as well as the most important results, of a national mathematics education community. Accordingly, the National Presentation has to be organized as a combination of giving information about the national situation and relating/contrasting this information with international mathematics educational research.

There will be no National Presentation in PME48.

5.4. Early Researchers' Day (ERD)

PME is pleased to offer a special day (early researchers' day, ERD) for early career researchers who are also attending the PME conference. The Early Researchers'

Day will directly precede the main PME conference and will consist of presentations, working groups and other kinds of sessions planned to be of value to those new to research in mathematics education.

The aim of the ERD is to provide early career researchers with opportunities to develop their research skills in various fields, establish new contacts, build networks among themselves and with respect to future PME conferences, and meet and work with international experts in the field.

The 2025 ERD will be held on the afternoon of Sunday July 27 and the morning of Monday July 28 at the Faculty of Physical and Mathematical Sciences of Universidad de Chile (on site). The ERD is organized by Paola Ramírez (LOC member, Chile) and Arindam Bose (PME representative, India). Registration fees for ERD and coffee breaks are complimentary (no cost) and pre-registered researchers can apply online. The number of participants will be limited. Priority will be given to current PhD students and post-doctoral students, and special consideration will be given to applicants from underrepresented countries. Updated and more detailed information will be posted on the conference website: https://eventos.cmm.uchile.cl/pme48/.

6. PME Pre-Submission Support

The PME pre-submission support for Research Reports and Oral Communications is intended for novice or inexperienced researchers who have limited access to expert advice and who would like to receive guidance from more experienced PME researchers. Applicants should submit their paper to the coordinator who is appointed by the International Committee. The coordinator will then assign the paper to an appropriate mentor and ensure that the communication between the mentor and novice researcher proceeds smoothly.

6.1. Coordinator

The PME pre-submission support coordinator is Alf Coles (United Kingdom), Alf.Coles@bristol.ac.uk

7. Registration and Payment

7.1. Conference Pre-Registration

Pre-registration for PME 48 began in December 2024. It was carried out online using the ConfTool conference registration system.

7.2. Conference Registration

Pre-registration for PME 48 will begin in April 2025. It is carried out online using the ConfTool conference registration system. In order to register for the conference or paying the membership fee, you need to register in the PME ConfTool system.

- 1. If you already have been a user of the PME ConfTool system, for example if you attended one of the last conferences:
 - Please enter your username and password to log in and select the option "Pre-Register for this Event or Join PME as a member." If you have forgotten your password, ConfTool will help you to retrieve it.

If you are a new user for the PME ConfTool system:

- Please create a new account and register in the system.
- You will need to provide your personal information and account information in order to build your own data base in the system.
- After filling in these details and submitting all information needed, you
 will be able to continue with your conference pre-registration.
- 2. Select your status as PME participant by clicking on the appropriate option. Step by step, the system will take you to the payment form for the conference deposit (see section 7.4).

If you have any problems with your conference pre-registration, please contact us at: pme48@cmm.uchile.cl

7.3. IGPME Membership Only

If you have been an IGPME member in the past, but will not be attending PME 48, or you want to become a new IGPME member who will not attend PME 48,

pay the annual membership fee for PME through ConfTool. This is necessary for maintaining or getting membership.

1. As a member of IGPME who wants to renew membership:

RESEARCH REACHES THE CLASSROOM

• Please log in by entering your username and password and select the option "Pre- Register for this Event or Join PME as a member."

As a new member of IGPME:

- Please create a new account and register in the system.
- You will need to provide your personal information and account information in order to build your own data base in the system.
- After filling in these details and submitting all information needed, you
 are able to select the option "Pre-Register for this Event or Join PME as a
 member."
- 2. After checking your personal details and choosing "Pay PME membership fee ONLY" in the following step, the system will automatically take you to the payment form for the membership fee (see section 7.4).

If you have any problems with the payment of the membership fee, please contact us at: pme48@cmm.uchile.cl

7.4. Registration Fees

7.4.1. Conference Deposit

The non-refundable conference deposit is 115,000 Chilean pesos (approximately EUR 110) if you choose to contribute EUR 30 to the Skemp Fund (see section 7.5) or 95,000 Chilean pesos (approximately EUR 90) if you choose to contribute EUR 10, the minimum donation amount. For those who attend the conference, the equivalent of EUR 90 will be deducted from the total conference registration fee.

The conference deposit covers:

- PME memberships for the year 2025 of EUR 50;
- a compulsory Skemp Fund donation of at least EUR 10;
- access to an electronic version of the proceedings; and
- administrative costs related to the handling of the proposals.

7.4.2. Total Registration Fee

The total registration fee for PME48 is CLP 470,000. If you have previously paid the pre-registration fee, CLP 95,000 will reduced at the final registration stage so that you only must pay the remaining CLP 375,000.

The total registration fee covers:

- PME membership for the year 2025 of EUR 50;
- a compulsory Skemp Fund donation of at least EUR 10;
- access to an electronic version of the proceedings and to the conference app;
- 4 lunches and 8 coffee breaks;
- opening reception;
- participation in one of the conference excursions;
- conference dinner; and
- the costs of venue, administrative work, and facilities needed for the organization of the conference.

Regarding the conference proceedings, you will receive access to the electronic version. You have the option to choose if, in addition, you want to receive a printed copy. Be aware that this option implies an extra payment. You can request to receive printed proceedings during the final registration process via the ConfTool system.

The extra amount to be paid for printed proceedings is CLP 37,500.

7.4.3. Accompanying Person Fee

We welcome accompanying people. Accompanying people participate in the social program but not in the scientific program of the conference. The fee for accompanying people is CLP 170,000.

The fee covers:

- opening reception;
- participation in one of the conference excursions;
- conference dinner; and

• some of the administrative work involved outside of the scientific program.

If you have any questions, please contact at: pme48@cmm.uchile.cl

7.4.4. Late Registration Fee

An additional charge of CLP 55,000 will be applied for registrations made after May 17, 2025.

7.5. Payment Options

All participants should make their payment by credit card. After confirming your pre-registration and/or final registration option, you will find the guidelines to make the credit card payment.

7.6. Donations to Skemp Fund

The Richard Skemp Memorial Support Fund is a fund that was established to support academics from under-represented or economically weak countries in attending the annual conference (see section 7.6). The spirit of the fund is to help academics who normally would not have access to the PME conference. As such, where applicants are from, where they are living, where they are working, where they are currently studying, as well as the conditions of their employment and studies are important factors when adjudicating the applications.

The Skemp Fund plays an increasingly important role in making the PME annual conference more accessible to mathematics educators who would not otherwise be able to attend the conference. The extent to which we can give this financial assistance depends to a large degree on the generosity of the PME community. For this reason, a recommended donation of EUR 30 is set as the default donation in ConfTool at pre-registration to support the average cost of the grants awarded each year. The compulsory minimum donation of EUR 10 remains for those members for whom a donation of EUR 30 could be difficult and is included in the pre-registration fee. In addition, the PME International Committee calls on members to make an additional donation, however small, to the Skemp Fund when paying membership fees or registering for annual conferences.

7.7. Richard Skemp Memorial Support Fund

The Richard Skemp Memorial Support Fund was established to provide financial support for prospective PME participants from under-represented countries or countries in which insufficient financial support is available and who do not have personal means for self-financing in order to allow them to attend the conference.

The spirit of the fund is to make participation possible for those who might not be able to attend for financial reasons. Where applicants are from, where they are living, where they are working, where they are currently studying, as well as the conditions of their employment and studies are important factors when making decisions on the applications.

The funding amount spent each year should consist of the donations from the same year and some of the Skemp reserve fund. The PME International Committee aims to maintain the Skemp fund in order to ensure support in years where fewer or smaller donations are received. Donations to the Skemp Fund other than those from conference participants are much welcome.

7.7.1. Eligibility

Applicants for a grant from the Fund will be considered from those who are (or who become) members of PME and who submit a proposal to be the presenting author of one of the following:

- an Oral Communication (OC),
- a Poster Presentation (PP),
- a Research Report (RR), including those in a Colloquium,
- a Publication Report (PR),
- a presentation at a Research Forum (RF) on invitation of its coordinators, or
- coordination of a Working Group (WG) or a RF.

In general,

 only one of the presenting authors of a particular proposal will be eligible to apply for a grant; and • those who have already received a grant on a prior occasion will not normally receive an additional grant.

For more information, please consult the application form (see below).

7.7.2. Administration of the Skemp fund

The Richard Skemp Memorial Support Fund Committee met during the second meeting of the International Programme Committee (March 2025) and has finalized its recommendations. No more applications can be considered for PME48.

The PME Administrative Manager will contact applicants to inform them about the decision on their grant application and the maximum grant amount awarded. Please note that grants cannot be carried over to future conferences. A new application will have to be made for the new conference.

7.7.3. Criteria on which a grant may be awarded

A. Conditions for support to be given

- 1. Applicants need to reside in a country where financial support is difficult to obtain. Some explanation or justification is required. If the applicant is studying in a more affluent country, which could be normally expected to provide support, this will also be taken into account.
- 2. The applicant's institution is unable to provide sufficient funding for the conference.
- 3. The applicant is unable to provide funding using personal means and declares that it is not possible to cover the costs from other sources.
- 4. The applicant has pre-registered and paid the conference deposit.
- 5. The applicant has submitted a proposal for a contribution of one of the kinds listed above.
- 6. If the proposal has more than one author, only the presenting author can apply for funding.
- 7. The proposal is accepted.

B. Priorities

- 1. Applicants coming from a country which has had few PME participants from that country recently would be prioritized, provided all other conditions in A are met.
- 2. Newcomers and early-career researchers/lecturers are prioritized over members who have participated in prior conferences or who are established researchers/lecturers.
- 3. Applicants who have an RR accepted are prioritized over other applicants.
- 4. Contributions that are considered outstanding by the reviewers, the IPC and/or the Skemp Fund selection committee are prioritized.
- 5. Under normal circumstances, an applicant will be eligible for a grant from the Skemp Fund only for one PME conference; in rare cases funding might be given twice – for example, if the applicant can demonstrate that an outcome of the first grant was a substantial development of the work presented at the first participation.

C. Funding amount

- 1. The number and sizes of grants made in any year will depend on the amount of money available to the Skemp Fund in that particular year as well as the number and size of applications the same year.
- 2. Grants will normally only cover conference fees (excluding membership) but may also contribute to accommodation and/or visa and travel expenses in exceptional circumstances, depending on the decision of the Skemp Fund Committee. The maximum possible amount will be the conference fee (excluding the conference deposit), travel, visa and accommodation in student accommodation or hostel or similar low-cost accommodation.
- 3. The funding must be used for the conference for which it is given. Applicants need to justify the expenses by providing relevant documents, such as travel and accommodation receipts. Only the amounts on these documents will be reimbursed up to the grant amount awarded.
- 4. The applicant will need to raise all funding temporarily as the grant from the Skemp fund will be paid at the location of the conference. In justified cases, the conference deposit can be reimbursed to help pay for travel expenses before travel.

7.7.4. Skemp Fund ambassadors

PME wishes to attract more participants from under-represented countries, especially those where funding is difficult to obtain. We ask our Skemp Fund recipients to become 'ambassadors' for PME: to make PME, including the possibility of Skemp Fund support, better known in such countries. If you are requesting a grant, please tell us briefly how you might use your personal knowledge of possible new members in underrepresented countries and non-affluent areas if you are a successful recipient.

7.8. Cancellation Policy

7.8.1. For Registered Participants

Participation in the conference is conditional upon registration and payment of all fees. All cancellations and changes regarding the conference registration must be made in written form to the Conference Secretariat by sending an email to pme48@cmm.uchile.cl. In all cases, the conference deposit will not be refunded; however, the deposit will cover one year of membership as well as access to the electronic conference proceedings (see section 7.3.1 Conference Deposit).

If a cancellation for conference participation is made after the full registration fee has been paid: Before June 14, 2025, the refund will be the amount of the full registration fee minus the conference deposit and the fees that the bank charges for transferring the refund.

Refund = (registration fee – conference deposit) – bank fees.

Cancellations after June 14, 2025 will be subject to the discretion of the Conference co-chairs on an individual basis.

7.8.2. For Accompanying People

If a cancellation for an Accompanying Person is made after the full registration fee has been paid: Before June 14, 2025, the refund will be the amount paid minus the fees that the bank charges for transferring the refund will be refunded.

Refund = accompanying person fee – bank fees.

7.8.3. General Information

Participation is not guaranteed until full payment of the registration fee is received.

The conference program may be subject to changes (based on decisions by the International Program Committee).

In the case of unforeseeable events, it is up to the International Program Committee and the International Committee of PME to decide on changes or even the cancellation of the conference and the amount of refund of payments. If the Conference is cancelled, the remaining funds will be paid back to participants and no further liability of the local organizers or PME will be accepted towards the client.

8. Deadlines for PME 48 (2025)

For all accepted proposals, the deadline for final registration is May 17, 2025. Contributions will not be included into the proceedings, if final registration (including the payment of the total registration fee) is not completed by that date.

Pre-registration	Necessary to submit proposals and for proposals to be reviewed	See above
Full registration	Necessary for inclusion of all types of papers in the PME proceedings	May 17, 2025
Late registration	Additional charge of CLP 55,000	After May 17, 2025

9. Deadlines for PME 49 (2026) in Helsinki, Finland

Research Forums for PME 49 to be held in Helsinki, Finland should be submitted before January 15, 2026. Please refer to www.igpme.org/ for further information and deadlines.

PME Pre-Submission Support for contributions to PME 49 in Helsinki, Finland will be available. Please refer to www.igpme.org/index.php/annual-conference/pre-submission-support/ for further information and deadlines.

10. Further information about the Conference

10.1. Facilities and accessibility at the Conference Venue

The Faculty of Physical and Mathematical Sciences (FCFM) of Universidad de Chile is well equipped. Bathrooms and resting areas are easily accessible.

The first day of the conference will NOT take place in FCFM but in Salón Casablanca at Club Hípico, some 1.3 Km away. Salón Casablanca might show some accessibility issues. If you have any special accessibility requests, please indicate them in the registration process.

Tap water in Santiago is generally considered safe to drink according to international standards. However, foreigners are recommended to drink bottled water because of the high mineral content of tap water. The university is also well-equipped with elevators for every staircase and wide doors to most rooms.

Close to FCFM you can find several restaurants.

10.2. Name badges

All participants and accompanying persons will receive a name badge. Everyone must wear this badge during the conference to access all conference activities. The badge will work as an entrance pass to lunches, coffee breaks, the welcome reception, the excursions and the conference dinner, and to all sessions in the scientific program. In particular, name badges will be required to move through security checkpoints at the entrance of the different FCFM buildings where sessions will occur.

10.3. Wifi access at the conference venue

Wireless internet access will be available at the conference venue but not at Club Hípico (where the first day of the conference will take place). The easiest way to connect to the internet is to use eduroam (www.eduroam.org), which is available at FCFM. So, if you work at a university where eduroam is available, it is

advisable to make sure that you have an account at your home institution before the conference. This will ensure that you can use your own account during the conference.

The Local Organizing Committee will provide Wifi access to participants who do not have an eduroam account or do not manage to make it work. More information will be sent to all participants two weeks prior to the Conference.

10.4. Equipment for presentations

All lecture rooms will be equipped with a computer, a projector with VGA and HDMI connection, and a blackboard or whiteboard. Please bring an adapter if you want to use a laptop lacking such connectors (e.g., Mac, HDMI mini). You may also bring a presentation on a USB stick. If you have entered any other requests during the submission process, you will be contacted by the Local Organizing Committee. If you have any questions concerning equipment, please contact pme48@cmm.uchile.cl.

10.5. Food during the Conference

Coffee, tea, juice, water, and light snacks will be provided at the conference venue during the coffee breaks. Lunches will also be provided. To avoid excessive crowding, coffee breaks and lunches will occur in two locations within FCFM.

You will be able to specify your dietary needs in the registration process.

The Conference welcome reception will be on Salón Casablanca at Club Hípico on Monday, July 28, after the first Plenary Lecture. The conference dinner on Thursday night, July 31, will be in Salón Mármol at Club Hípico.

10.6. Excursions

In addition to the scientific program, there will be an excursion afternoon with several options for participants. The cost of excursions is included in the conference registration fee.

You can see the options on the list below. Note that there are a maximum number of participants on several of the activities. In the registration system you will be asked to choose your preferred choice.

Accompanying people will get the same excursion as the participant they come with unless you contact the Conference Secretariat at pme48@cmm.uchile.cl and inform us otherwise.

More information about the excursions will be available on the conference website: https://eventos.cmm.uchile.cl/pme48/social.

- Excursion 1: Museum of Memory and Human Rights
- Excursion 2: Santiago Central District
- Excursion 3: Santiago Metropolitan Park
- Excursion 4: Santiago Bahá'í Temple
- Excursion 5: Maipo Canyon
- Excursion 6: Santa Rita Vineyard
- Excursion 7: Pablo Neruda's La Chascona house

11. Travel Information

11.1. Traveling safely in Santiago, Chile

Please be aware that PME48 will occur in the Southern Hemisphere, meaning that it will be winter season, and sunset will be about 18:00. This means that the Conference activities will typically finish when it is dark. To avoid any risks, we strongly recommend walking around in groups.

Some tourists have reported being scammed by taxi drivers due to their lack of knowledge of the local currency. As a reference, a taxi ride from Pedro de Valdivia metro station to FCFM (about 10 Km) may cost around CLP 10,000 - CLP 12,000. Do not use unofficial taxi/shuttle vehicle services when traveling from Santiago airport to the city, as you may risk excessive charges.

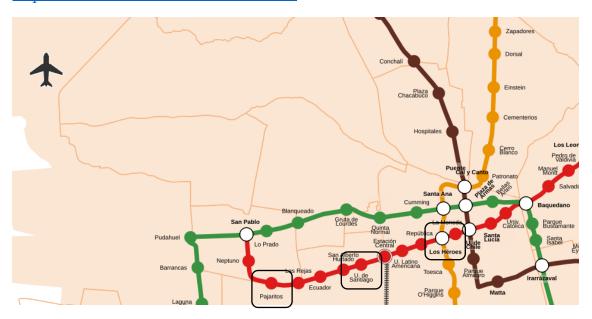
Finally, please be aware of the risk of pickpocketing in Santiago and other Chilean cities, especially in crowded areas, including buses and metro in peak time.

11.2. *Getting to Santiago*

You can reach Santiago via plane or by bus from neighboring countries.

Santiago Airport (SCL), officially known as Arturo Merino Benitez International Airport, receives direct flights from 63 different airports in 19 countries, including 17 domestic flights. It is the largest airport in Chile, with at least one flight arriving at Santiago Airport every 8 minutes.

To check flights to SCL, go to the section "How to get to Chile?" at https://www.chile.travel/en/about-chile/.



From the Airport to Santiago Metro Network

11.2.1. TurBus and CentroPuerto Buses from SCL to the city

Two companies, TurBus (https://www.turbus.cl/traslados) and CentroPuerto (https://www.centropuerto.cl/), offer reliable and affordable express and direct shuttle service between Santiago Airport and the Santiago Metro Network.

TurBus takes you to Pajaritos Metro Station or to Universidad de Santiago Metro Station (both in Line 1, the red one). CentroPuerto takes you to Pajaritos Metro Station or to Los Héroes Metro Station (both in Line 1).

General Public Fare: Approximately CLP 2,000 One Way

11.2.2. Public Transportation Buses from SCL to the city

Bus 555 is part of the Santiago public transportation network and runs from Santiago Airport to Pajaritos Metro Station (Line 1, the red one). To use public

buses, you must purchase a Bip! card. You can buy this card in the baggage claim area of the international terminal. No cash or debit/credit card payments are accepted on the buses.

Approximately CLP 800 per person. The cost of a Bip! card is about CLP 1500.

11.2.3. Taxi



Approximately CLP 20,000 to CLP 30,000 - about 30 minutes.

Taxi and shuttle service counters are located **after the baggage pick up and before the exit to the Airport's open areas**. You may pay on the counters by cash or debit/credit card. No payments are made in the vehicle. The journey between the airport and the central city can take considerably longer during peak traffic periods.

If you're traveling to the Airport by taxi, make sure you allow plenty of time.

Please do not use unofficial taxi/shuttle vehicle services, as you may risk excessive charges.

https://www.nuevopudahuel.cl/servicios/taxi-turismo-oficial

11.2.4. Shared van



Approximately CLP 12,000 - about 50 minutes.

The company TransVip offers shared van rides to and from Santiago Airport. You can book and pay your trip online. No payments are made in the vehicle. The journey between the airport and the central city can take considerably longer during peak traffic periods.

If you're traveling to the Airport by taxi, make sure you allow plenty of time.

https://www.transvip.cl/

11.2.5. Car rental

Major rental car companies operate from the Airport. Bookings are strongly recommended.

11.3. Getting to the Conference Venue

Once you are in the Santiago central area, there are several ways to arrive at the Faculty of Physical and Mathematical Sciences (FCFM), located in the Beaucheff Campus of Universidad de Chile, where the conference will take place. The Santiago public transportation network includes metro and buses. To use public buses and metro, you must purchase a Bip! card. You can buy this card in the baggage claim area of the international terminal or in any metro station. No cash or debit/credit card payments are accepted on the buses.

Campus address: Beaucheff 850, Santiago.

Location in Google Maps: https://maps.app.goo.gl/c4D1pmyDqpt9BSbK8

Please note that the conference activities on the afternoon and evening of Monday, July 28 (registration, opening ceremony, first plenary, and conference reception) will NOT take place at the Beaucheff campus but at a nearby place: Salón Casablanca in Club Hípico.

The indications to reach Salón Casablanca in the most convenient way will be emailed to all registered participants two weeks prior to the conference.

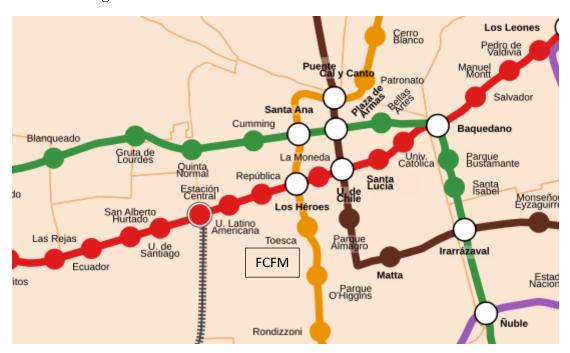
11.3.1. By metro



You can reach FCFM with a 15-minute walk from Toesca Metro Station, located in L2 (yellow line), or a 20-minute walk from República Metro Station (L1, red line). You can also reach FCFM from Parque O'Higgins Metro Station by taking

buses 506, 506e, 506v, 507, and 509 at the bus stop across the street from the metro station (bus stop code PA450).

The Santiago Metro network runs from 6:00 to 23:00 on working days, from 6:30 to 23:00 on Saturdays, and from 8:00 to 23:00 on Sundays. Be aware that Metro station gates may close at 22:30. Metro fares range from CLP 700 to CLP 900, depending on the time of the day. You need a Bip! card to use the metro. You can buy this card in the baggage claim area of the international terminal or in metro stations using Chilean cash.



In peak times of working days (6:00-9:00 and 18:00-21:00), lines L2 (yellow) and L5 (green) use a differentiated route system, in which trains stop only at some stations. Red-route trains stop only at red-route and mixed-route stations, and similarly for green-route trains. The most relevant ones regarding arrival and departure from FCFM are the L2 stations Parque O'Higgins (red route), Toesca (green route), and Los Héroes (mixed route).

11.3.2. By bus

Santiago buses run to FCFM from several locations. You can plan your trip and track the locations of buses arriving to a given stop by using Google Maps or the app *Red Metropolitana de Movilidad*, available for Android, iPhone, and Huawei phones. Links to download the app can be found at https://www.red.cl/acerca-phones.



<u>de-red/app-red/</u>. Internet connection is not needed to use the basic features of the app.



From Parque O'Higgins Metro Station, you can get to FCFM by taking buses 506, 506e, 506v, 507, and 509 at the bus stop across the street from the metro station (bus stop code PA450).

Bus stop codes near FCFM: PA452, PA322

Bus stop codes near Club Hípico: PA453, PA277

11.3.3. By taxi or rideshare

You can get to FCFM using taxis or rideshare services such as Uber and Cabify. You can ask to be taken to the exact address (Beaucheff 850, Santiago) or to the nearest intersection (Blanco Encalada & Beaucheff).

As an reference, a taxi ride from Pedro de Valdivia metro station to FCFM (about 10 Km) may cost around CLP 10,000 - CLP 12,000. Please note that taxis do not receive payment with debit/credit cards.

11.3.4. By car

There are limited (paid) car parks outside the campus - these are on a first come, first serve basis.

11.4. About Chile

11.4.1. Language

Spoken by 99,3% of the population, Chile has Spanish as its *de facto* official language. Only a small proportion (about 10%) of the population speaks English.

11.4.2. Passport and visa

Nationals from 96 countries need not have a visa to enter Chile for up to 90 days (check the PDF downloadable at https://www.consulado.gob.cl/cuadro-de-visas-y-aranceles-de-chile). Please check with your local authorities for official information about this topic. Nationals from Australia need an e-visa (https://www.consulado.gob.cl/servicios/e-visa-para-australia).

Those who need an official invitation letter in order to obtain a visa to enter Chile, please read Section 10.4.3. Letter of Invitation.

PME 48 cannot be held responsible for any matters related to obtaining visas.

11.4.3. Letter of Invitation

Delegates requiring a letter of invitation in order to attend the conference may write to the local organizing committee at pme48@cmm.uchile.cl specifying the necessary details. Please note that this procedure aims explicitly at assisting delegates who need to obtain a visa or permission to attend the conference. It is not an official invitation covering fees or other expenses and does not imply any financial support from the conference organizers.

11.4.4. Currency

The currency in Chile is the Chilean Peso (CLP/\$).

Be aware that:

- The sign \$ is the same one used for dollars.
- Currency writing may differ. For instance, ten thousand Chilean pesos may be written as \$10.000, \$10,000 or \$10000.

11.4.5. Power Plugs

Chilean power plug types are C and L (https://www.power-plugs-sockets.com/chile/), which are those that have two or three round pins arranged in a line. Chile operates on a 220V supply voltage and 50Hz. If your appliance's plug does not match the shape of these sockets, you will need a travel adapter in order to plug it in.

11.4.6. Telephone Codes and Useful Numbers

The Chilean country code +56 will allow you to call Chile from another country. The code 56 is followed by an area code. The Santiago area code is 2 (+56 2xxxxxxx), whereas the area code for mobile phones is 9 (+56 9xxxxxxx).

Where to call in case of emergency? Ambulance: 131. Firemen: 132. Police: 133.

11.4.7. Weather

July is winter in Chile; the temperature settles at its coolest point, an average of 10°C (50°F). The average high temperature for the month is 16°C (61°F) and the average low temperature for the month is 4°C (39°F), with the overnight temperatures often being brisk and requiring a jacket. July is one of the months receiving more precipitation of the year, although it varies strongly from year to year depending on El Niño and La Niña events.

11.4.8. Liability and Insurance

Please check the validity of your insurance before traveling to the conference. The Local Organizing Committee does not accept any liability for personal injury, loss or damage of personal belongings, or additional expenses incurred to congress participants (or their accompanying people) either during the conference or as a result of any other causes.

11.4.9. Accommodation

There are different accommodation options available for your visit to Santiago during the conference.

We suggest you stay close to the city center mainly in the Providencia municipality, close to Metro Line 1 (red line), and enjoy your time visiting the city.

Information about accommodation is available on the conference webpage: https://eventos.cmm.uchile.cl/pme48.