Closing Ceremony

June 10th – 14th 2024

Barcelona (Spain)
LOC Chair
Ignasi Florensa
Let us know how it was for you and how we can do better!

https://forms.office.com/e/NYwMyvAP0t
Chairs of INDRUM2024

Alejandro S. González-Martín and Ghislaine Gueudet
Big THANK YOU to all

- The members of the **INDRUM2024 IPC**
- Special thanks to the chair and co-chair of INDRUM2022:
  - María Trigueros and Berta Barquero, and to all previous co-chairs
- Coordinators of the **INDRUM early career researchers’ workshop**
  - Elena Nardi and Megan Wawro to make it possible
- The **INDRUM2024 keynote speaker and reactor**, 
  - Marianna Bosch and Yves Chevallard
- The **INDRUM2024 panel chair and panellists**, 
  - Laura Branchetti, Frank Feudel, Felix Ho, Ricardo Karam, Noemí Ruíz Munzón
- The members of the **INDRUM INSC** and all the reviewers
- All the presenters and participants
The **INDRUM2024 TWG co-leaders of the 5 thematic working groups**

- **TWG1**: Teaching and learning of analysis and calculus  
  Chairs: Erik Hanke (Germany), Rafael Martínez-Planell (Puerto Rico)

- **TWG2**: Teaching and learning of linear and abstract algebra  
  Chairs: Yael Fleischmann (Norway), Megan Wawro (USA)

- **TWG3**: Mathematics and other disciplines  
  Chairs: Matija Bašić (Croatia), Ida Landgärds-Tarvoll (Norway)

- **TWG4**: Teacher education and knowledge  
  Chairs: Imène Ghedamsi (France), Pedro Nicolás (Spain)

- **TWG5**: Teachers’ and students’ practices and experience  
  Chairs: Athina Thoma (UK), Olov Viirman (Sweden)

Big THANK YOU to the TWGs
Big THANK YOU to the TWGs

**TWG1**: Teaching and learning of analysis and calculus

**TWG2**: Teaching and learning of linear and abstract algebra

**TWG3**: Mathematics and other disciplines

**TWG4**: Teacher education and knowledge

**TWG5**: Teachers’ and students’ practices and experience
Conference proceedings: content

- A short editorial by the IPC chair and co-chair
- Plenary lecture (up to 20 pages, ref. included)
- Plenary panel (up to 30 pages, ref. included), coauthored by the panel chair and panelists
- Final manuscripts of the presented papers and posters
- TWG reports (up to 5 pages per group, ref. included), co-authored by the co-leaders of each group
For all the texts: Follow the INDRUM Template (include an abstract up to 10 lines, no page numbers, APA7 norms for the references including DOIs ...)

For the papers (10 p.) and poster presentations (2 p.): Deadline August 20th
The online submission system will open again on June 17th for those of you wishing to upload a final version of your paper (as a replacement of the previous pdf file). Please upload ONLY PDF FILES. If you intend to conduct revisions involving anything more substantial than typographical changes or minor rephrasing for the purpose of clarification, please contact us with a brief outline of these intended revisions (a.gonzalez-martin@umontreal.ca, ghislaine.gueudet@universite-paris-saclay.fr)

For the other texts (Plenary, Panel, TWG reports): Deadline September 30th. Please send us a Word file by e-mail.
The final proceedings should be ready by December 2024 and should soon after be available on HAL (https://hal.science/INDRUM/page/indrum-proceedings).

International Network for Didactic Research in University Mathematics

- INDRUM2016 (31 March - 2 April 2016, Montpellier, France)
- INDRUM2018 (5-7 April 2018, Kristiansand, Norway)
- INDRUM2020 (12-19 September 2020, virtually from Bizerte, Tunisia)
- INDRUM2022 (17-22 October 2022, Hannover, Germany)
Consider transforming your paper or poster proposal into a journal paper!

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elise.Lockwood@oregonstate.edu

Elena Nardi  
E.Nardi@uea.ac.uk

Alejandro S. González-Martín  
a.gonzalez-Martin@umontreal.ca

Ghislaine Gueudet  
ghislaine.gueudet@universite-paris-saclay.fr
Theme

University teachers’ practices, knowledge, and training

In the planning phase

More information during the Fall
INDRUM2024 In search of reviewers

We are looking to expand our list of reviewers!

Do let us know if you are interested. Contact us for more information.

Elise Lockwood
elise.Lockwood@oregonstate.edu

Elena Nardi
E.Nardi@uea.ac.uk

Alejandro S. González-Martín
a.gonzalez-Martin@umontreal.ca

Check out our guidelines to reviewers!
INDRUM Joint Co-ordinators

Elena Nardi and Thomas Hausberger
Thank you!

LOC
LOC Chair
IPC Chairs

What a team!
Common ground may start from... frivolous things 😄
Common ground may start from... frivolous things 😊

9) Evolución de las ventas semanales de las camisetas one-print desde el 15 de febrero de 2010 en la tienda de las Ramblas 136 (Barcelona):

<table>
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10) Evolución de las ventas semanales de las camisetas one-print desde el 1 de marzo de 2010 en la tienda de la Rambla de Catalunya 140 (Barcelona):

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<td>140</td>
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<td>210</td>
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Qₙ: How to forecast the sales of the company, given some time-series real data?
INDRUM 2024. Closing ceremony

ETC in 2024

ETC 18: GAME. Game-based and Playful Approaches to Mathematics Education

ETC 17: MEDA 4. Mathematics Education in the Digital Age

ETC 16: Language and Social Interaction in Heterogeneous Mathematics Classrooms
20 – 22 August 2024. Hallo, Germany. Further information available at [https://didaktik.mathematik.uni-halle.de/etic16/](https://didaktik.mathematik.uni-halle.de/etic16/)

ETC 15: INDRUM 2014. International Network for Didactic Research in University Mathematics

ETC 14: FAME 2024. Feedback and Assessment in Mathematics Education

INDRUM: an ERME Topic Conference (ETC)

ERME site

European Society for Research in Mathematics Education

Recent Posts
- Del 4000 for CERME 14 – Feb 4 to 8, 2023
- Preservice support, ERME in
- In memoriam Guy Bommeke (1923-2024)
- Proceedings from CERME13 wards (including HAL)
- ERME Topic Conferences 2014
- YES15 – second announcement & Pre YES15 awar

ETC in 2024

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ETC 15: INDRUM 2014. International Network for Didactic Research in University Mathematics

ETC 14: FAME 2024. Feedback and Assessment in Mathematics Education
What comes next...

→ The **INDRUM network mailing list**: indrum@umontpellier.fr for communication of information through the INDRUM network about its activities or other events that may be of interest to its members

→ **To subscribe**: send an empty message to sympa@umontpellier.fr with objet: subscribe indrum Surname Name

→ The list is moderated by the members of the INDRUM network coordination group (INCG)

→ To contact the INCG: indrum-incg@umontpellier.fr
INDRUM: a vibrant event amongst other vibrant events

15th International Congress on Mathematical Education
7-14 July 2024 • ICC Sydney, Australia
Come and be counted

Special Interest Group of the MAA on Research in Undergraduate Mathematics Education
RUME, since 2002
Not forgetting, national events, e.g.

HERENGA DELTA 2021
The 13th Southern Hemisphere Conference on the Teaching and Learning of Undergraduate Mathematics and Statistics
22 - 25 November
Tamaki Makaurau | Auckland NZ

Delta, since 1997

e.g. TSG3.2
MATHEMATICS EDUCATION AT TERTIARY LEVEL

network for excellence in mathematics and statistics support

CETL-MSOR Conference 29-30 Aug 2024
RUME Conference: February 7 – March 1, 2025

RUME 2025 in Alexandria, VA
Hosted by the Virginia Tech Department of Mathematics
February 27 - March 1, 2025

Conference Website: rumeconference.com

Paper submissions due: September 10, 2024

Poster submissions due: November 15, 2024

Conference email: rumevirginia@gmail.com

Join the RUME listserv!
https://groups.google.com/u/0/g/rume_list

INDRUM 2024. Closing ceremony
INDRUM: a vibrant event amongst other vibrant events

And, of course.....
4th – 8th February 2025 in Bozen-Bolzano (Italy)

Deadlines

<table>
<thead>
<tr>
<th>Date</th>
<th>Deadline for “early bird” submission</th>
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<table>
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Chairs of the Committees

Local Organizing Committee
- Chair Giorgio Bolondi
- Co-Chair Michael Gadoschik
- Co-Chair Camilla Spagnolo

International Program Committee
- IPC-Chair Mariana Bosch
- IPC Co-Chair Susana Carreño

INDRUM 2024. Closing ceremony
→ 29 Thematic Working Groups TWG
→ Plenary sessions:

**General Topic:** The problem of the evolution of the mathematical curriculum given the new society’s demands

**Plenary 1:** *Curriculum changes.* Ferdinando Arzarello (Italy).

**Plenary 2:** *Sustainability and Mathematics Education.* Dialogue between Kjellrun Hiis Hauge (Norway) and Alf Coles (UK).

**Plenary 3:** *Data science and statistics education.* Dialogue between Michelle Wilkerson (USA) and Rolf Biehler (Germany).

https://www.cerme14.it/
Novelties:

- Participants submit to one TWG and choose a second-option TWG
- Limited number of accepted contributions (papers & posters) to 600
- A rejection rate higher than in previous conferences might be expected
- Same review template for theoretical and empirical studies
- Accepting a paper as a poster will be exceptional (not an option for reviewers)

Groups closely related to University Mathematics Education:

- TWG14: University Mathematics Education → Irene Biza as leader
- TWG25: Teaching and Learning of Calculus (New) → Laura Branchetti as leader
TWG14: University Mathematics Education
Leader: Irene Biza Co-leaders: Ignasi Florensa, Ghislaine Gueudet, Mathilde Hitier, Athina Thoma, Olov Viirman

Indicative topics:
• the teaching and learning of mathematical topics, including proof and modelling (also note call for papers of the other TWGs, including the new TWG25 on “Calculus Teaching and Learning”);
• students’ experiences of university mathematics;
• inclusion, access and equity in UME;
• transition issues at the entrance, across and beyond university mathematics;
• the role of resources, including digital, in the teaching and learning of university mathematics;
• opportunities and challenges presented by the use of AI in UME;
• challenges for, and novel approaches to, teaching mathematics at university level;
• teacher preparation, professional development and practices of university mathematics;
• collaborative research, for example, between university mathematics teachers and researchers in mathematics education; and,
• theoretical and methodological approaches in university mathematics education research.

15 September 2024 - Deadline for submission of papers and posters
TWG25: Teaching and Learning of Calculus
Leader: Laura Branchetti Co-leaders: Vahid Borji; Anatoli Kouropatov; Jana Peters; Farzad Radmehr

Indicative topics:
- Calculus related concepts from Grade 7 to college.
- Students’ preparation for learning calculus, including topics such as variable, covariation, graphs, graphical thinking, functional thinking, rates of change, and accumulation.
- The fundamental notions of calculus, including derivative as rate of change, integral as accumulation, differentials, continuous, derivable integrable functions and the fundamental theorem of calculus (also multi-variable calculus)
- Extra-mathematical contexts for learning calculus as well as the notions of calculus as they are being used outside of mathematics proper, for example in-service courses addressed to non-mathematicians at tertiary level, teaching in other disciplines at secondary school, or modelling.
- Calculus as preparation for further mathematical development such as the idea of differential equation.
- Calculus as a discipline that is different from analysis.

We welcome different viewpoints:
- Historical, philosophical, epistemological, disciplinary, and interdisciplinary (including computer science and AI)
- Cognitive, affective, embodied, multimodal, social, and cultural, intervention design, argumentation and proving

15 September 2024 - Deadline for submission of papers and posters
CalcConf2

The Learning and Teaching of Calculus Across Disciplines

Bergen (Norway; June 2023)
3rd Calculus Conference

CalcConf3

The Learning and Teaching of Calculus Across Disciplines. Vol 2.

16-20 June 2025
3rd Calculus Conference

Laura Branchetti (Milan, IT)
Alejandro González-Martín (Montreal, Canada)
Olivia Levrini (Bologna, IT)
Sibel Erduran (Oxford, UK)
Frank Feudel (Berlin, DE)

Scientific Committee
INDRUM 2026 is on the way already!
With thanks to Matija Bašić and Željka Milin Šipuš, and their team

DUBROVNIK, 15 – 19 JUNE 2026
...and so is INDRUM 2028!
Check the website for the INDRUM Hosting Application Form and Process if you are thinking about 2030 and beyond 😊
We now declare INDRUM2024 closed!
Thank you all for your work!

Meet you again very soon and in

**INDRUM2026**

**INDRUM2024**. June 10\textsuperscript{th} – 14\textsuperscript{th} 2024

Barcelona (Spain)