



Conference program

June 3, 2024

9:55 - 10:00	Opening
10:00 - 11:00	<p>Lecture 1</p> <p style="text-align: center;">Sabourou Saitoh <i>Emeritus Professor of Gunma University, Japan</i></p> <p style="text-align: center;">Division by Zero $1/0 = 0/0 = 0$ and Division by Zero Calculus; Their Basic Properties and Impacts</p>
12:00 - 13:30	<p>Session 1</p> <p>Katalin Munkacsy <i>Eötvös Loránd University, Hungary</i></p> <p>Kelecsényi Klára <i>University Neumann János, Hungary</i></p> <p style="text-align: center;">Teaching analysis in secondary schools and in non-mathematical higher education</p> <p>Mónica Arnal-Palacián <i>University of Zaragoza, Spain</i></p> <p style="text-align: center;">Identification of the mathematical elements involved in the answer on the infinite limit of a sequence by prospective teachers</p>



Transgressions

Barbara Barańska

University of the National Education Commission, Poland

The equation of a tangent line

15:30 - 17:00

Session 2

Mateusz Tofilski

Szkoła w Chmurze, University of Silesia in Katowice

**Development of Mathematical Skills
in Self-Directed Learning and Homeschooling
- Analysis of Educational Tools in Szkoła w Chmurze**

Deepika Bansal, Venkateswaran Thathamangalam Viswanathan

Indian Institute of Science Education and Research Mohali, India

**Points of intersections
in middle school science and mathematics in Indian curriculum
- identifying opportunities for integrated teaching learning**

Jessica Lins de Souza Fernandes

Federal University of Santa Catarina, Brazil

**Lives in the Philosophy:
Samba Schools' parades as an Ethno-Mathema-Tics**



Transgressions

18:00 - 19:00	Lecture 2 Norman Wildberger <i>University of New South Wales, Sydney, Australia</i> Towards a logical rational arithmetic as a foundation for maths education and research
19:00 - 19:30	Session 3 Łucja Farnik <i>University of the National Education Commission, Poland</i> Selected manifestations of Lakatos' quasi-empiricism in contemporary algebraic geometry



June 4, 2024

10:00 – 12:00	Session 4
	<p>Eva Ulbrich¹, Mathias Tejera¹, Angelika Schmid², Zsolt Lavicza¹ ¹ <i>School of Education, Johannes Kepler University, Linz, Austria</i> ² <i>University of Ostrava, Czech Republic</i></p> <p style="text-align: center;">From STEM to STEAM: mathematics teachers creating 3DMP projects for their lessons</p> <p>Cecilia Russo, Zsolt Lavicza <i>Johannes Kepler University, Austria</i></p> <p style="text-align: center;">Fostering Motivation and Transparent Assessment: Integrating Game Elements in Education</p> <p>Guillermo Bautista, Jr., Abigail Gonzales, Theodosia Prodromou, Zsolt Lavicza, Markus Hohenwarter <i>Johannes Kepler University, Austria</i></p> <p style="text-align: center;">Student Strategies in Function Art: Exploring Interdisciplinary Approaches</p> <p>Filiz Mumcu, David Hornsby, Zsolt Lavicza, Chronis Kynigos <i>Johannes Kepler University, Austria</i></p> <p style="text-align: center;">Enhancing STEM Education through the Fusion of Computational Thinking and Computer Science Education</p>



Transgressions

15:00 – 16:00	Lecture 3
	<p>Zsolt Lavicza <i>Johannes Kepler University, Austria</i></p> <p>Inspiring teachers' classroom innovations through the integration of Augmented/Virtual Reality and 3D printing into their practices</p>
16:00 – 17:00	Lecture 4
	<p>James Tanton <i>Mathematical Association of America in Washington D.C.</i></p> <p>The astounding visual story of place value: from base 10 to base x</p>
18:00 – 20:00	Session 5
	<p>Tamara Díaz-Chang <i>Universidad Austral de Chile, Chile</i></p> <p>Metacognitive strategies as cognitive transgressions in the learning process of certain mathematical concepts at the university level</p>



	<p>Ángel Homero Flores Samaniego <i>Universidad Nacional Autónoma de México</i></p> <p>Neuroscience and didactics: a dialogue in construction?</p> <p>Jean-François Maheux <i>Université du Québec à Montréal, Canada</i></p> <p>Exploring the Transgressive Organics of Mathematical Traces</p> <p>Jean-François Maheux <i>Université du Québec à Montréal, Canada</i></p> <p>Simon Théberge <i>Université du Québec en Abitibi-Témiscamingue, Canada</i></p> <p>Exploring Connections Between Philosophy for Children and Relationships to Mathematical Knowledges in Educational Practice</p>
20:00 – 20:10	Closing

Important notes:

- Speech times are given in Polish time (CEST).
- Each session presentation is given 30 minutes at the speakers' disposal (including time for questions).
- All lectures and presentations will be delivered online.
- A link that allows participation in the conference will be sent to all registered participants at the end of May.
- Since the conference is attended by people living in different time zones, **each talk will be recorded**, and participants will receive one-week access to all recordings.