

Full list of the activities during the ESU 5

All activities during the ESU 5 are related to one of its main themes:

MAIN THEMES

1. History and Epistemology as tools for an interdisciplinary approach in the teaching and learning of Mathematics and the Sciences
2. Introducing a historical dimension in the teaching and learning of Mathematics
3. History and Epistemology in Mathematics teachers' education
4. Cultures and Mathematics
5. History of Mathematics Education in Europe
6. Mathematics in Central Europe

The full list is shown below.

Plenary Lectures

Name	Title	Theme	Language	Country
Corry Leo	Axiomatics between Hilbert and R.L. Moore: Two Views on Mathematical Research and their Consequences on Education	1	English	Israel
Gispert Hélène, Schubring Gert	The History of Mathematics Education and its contexts in 20th century France and Germany	5	English	France, Germany
Hyksova Magdalena	Contribution of Czech Mathematicians to Probability Theory	6	English	Czech Republic
Puig Luis	Researching the history of algebraic ideas from an educational point of view	2	English	Spain
Rebstock Ulrich	Mathematics in the service of the Islamic community	4	English	Germany
Schweiger Fritz	The implicit grammar of mathematical symbolism	3	English	Austria

Panels

Name	Title	Theme	Language	Country
Arcavi Abraham, Barbin Evelyne (coordinator), Radford Luis, Schweiger Fritz	Mathematics of yesterday and teaching of today	2	English	Israel , France, Canada, Austria
Giacardi Livia, Gispert Hélène Kastanis Nikos, Schubring Gert (coordinator)	The emergence of mathematics as a major teaching subject in secondary schools	5	English	Italy, France, Greece, Germany

3-hours Workshops (based on historical and epistemological material)

Name	Title	Theme	Language	Country
Bagni Giorgio, Vicentini Caterina	History and Epistemology of Calculus and Algebra, 300 years since Leonhard Euler's birth: cooperative learning and effectiveness of perspective teacher training	3	English	Italy
Bastos Rita, Veloso Eduardo	Episodes of the History of Geometry: their interpretation through models in dynamic geometry	2	English/ French	Portugal
Becvar Jindrich, Dlab Vlastimil, Hruby Dag, Kurina Frantisek	Education of Mathematics Teachers (in Algebra and Geometry, in particular)	3	English, Czech	Canada, Czech Republic
Bessot Didier	Calculus by Augustin Fresnel (1788-1827) to improve the efficiency of parabolic reflectors	1	English	France
Bkouche Rudolf	Les aspects expérimentation des mathématiques et leur intervention dans l'enseignement	3	French	France
Boyé Anne	When they taught high school students the Chasles' "superior geometry" (Lorsque l'on enseignait la géométrie supérieure de Chasles dès la fin du cursus secondaire).	3	English	France
Burn Robert	Towards a definition of limit	2	English	UK
Chorlay Renaud & Brin Philippe	Using historical texts in the classroom : examples in statistics and probability	2	English	France
Correia de Sá (Carlos)	Cinq Courbes avec Histoire: la Quadratrice, la Spirale, la Conchoïde, la Cissoïde et la Cycloïde	2	French	Portugal
Delire Jean-Michel	Kerala mathematics and astronomy; prelude to European developments.	4	English/ French	Belgium
El Idrissi Abdellah	La trigonométrie dans l'œuvre d'Al Biruni	3	French	Morocco
Estrada Maria Fernanda, Ralha Maria Elfrida	Reflexions upon a "Method for Studying Maths", by José Monteiro da Rocha (1734-1819)	5	English	Portugal
Fried Michael, Bernard Alain	Reading and Doing Mathematics: Ancient and Modern Issues.	3	English	Israel, France
González-Martín Alejandro Santiago	Historical-epistemological dimension of the improper integral as a guide for new teaching practices	2	English & French	Spain
Guichart Jean-Paul	Viète et l'avènement du calcul littéral	3	French	France
Kurina Frantisek, Siebeneicher Christian	Algebra and Geometry in Elementary and Secondary School	1&3	English	Czech Republic, Germany
Kouteynikoff Odile	About Leonardo of Pisa's book of squares: How elementary tools can solve quite elaborate problems.	2	English	France
Lakoma Ewa	From Vitellonis' geometry to unravelling the secret of Enigma – on millennium of the Polish mathematical thought	6	English	Poland
Matos Jose Manuel	Variations in mathematical knowledge occurring in the Modern Mathematics reform movement	5	English	Portugal
Menghini Marta	The "Éléments de Géométrie" of A. M. Legendre: an analysis of some proofs from yesterday's and today's point of view	5	English	Italy
Métin Frédéric	Adam Freitag's New Fortification	1	English	France
Michel-Pajus Anne	About Different Kinds Of Proofs Encountered Specifically In Arithmetic	3	English	France

Negreponitis Stelios, Lambrinidis Dionysios	The anthyphairetic interpretation of the mathematical method of analysis and synthesis	3	English	Greece
Pengelley David	Learning mathematical induction (raisonnement par recurrence) and combinatorics directly from Pascal's Traite du Triangle Arithmetique: A multi-week student project	2	English & French	USA
Polo-Blanco Irene	Alicia Boole and regular polytopes	3	English	Netherlands
Proust Christine	Histories of zeros (Histoires de zéros)	4	English	France
Racine Marie-Noelle	histoires de mathématiciennes / women mathematicians' history	4	French/English	France
Radford Luis	Generality and Mathematical Indeterminacy: Variables, Unknowns and Parameters, and their Symbolisation in History and in the Classroom	3	English	Canada
Thomaidis Yannis, Tzanakis Constantinos	Ancient Greek Mathematics in the Classroom	1	English	Greece

2-hours Workshops (based on didactical and pedagogical material)

Name	Title	Theme	Language	Country
Ballieu Michel, Guissard Marie-France	Pour une culture mathématique accessible à tous	2	English & French?	Belgium
Caianiello Eva	Le problème d'oiseaux : procédés de résolution dans l'histoire des mathématiques	2	French	Italy
Dematté Adriano	Historical documents in everyday classroom work	2	English	Italy
Dias Isabel	From the original texts of Pedro Nunes to the mathematics classroom activities	2	English	Portugal
Dlab Vlastimil	Knowing, Teaching and Learning Algebra	1	English	Canada
FitzSimons Gail	Mathematics and the Personal Cultures of Students	4	English	Australia
Hejny Milan, Stehlikova Nada	Didactic simulation of historical discoveries in mathematics	3	English	Czech Republic
Katz Victor	Historical Modules for the Teaching and Learning of Mathematics	2	English	USA
Kourkoulos Michael, Tzanakis Constantinos	A didactical approach to the introduction of Statistics, inspired by epistemological and historical considerations	2	English/ French	Greece
Maschietto Michela, Martignone Francesca	Activités avec les <i>machines mathématiques</i>	2	French	Italy
Movshovitz-Hadar Nitsa	Incorporating mathematical news in teaching high school math and in teacher preparation	3	English	Israel
Paschos Theodoros, Farmaki Vasiliki	The integration of genetic moments in the History of Mathematics and Physics in the designing of didactic activities to introduce first-year University students to concepts of Calculus	2	English	Greece
Roelens Michel	Le volume d'une pyramide à travers les siècles: des tranches ou pas de tranches, voilà la question!	1	French/Eng lish	Belgium

Rogers Leo	Early Methods for Solving Real Problems	3	English	UK
Smestad Bjørn	Various material for primary school teacher training	3	English	Norway
Smid H.J.	Heuristic math education in the 19 th century: a dead end or preparing the ground?	5	English	Netherlands
van Maanen Jan	The work of Euler and the current discussion about skills	6	English	Netherlands
Weeks Chris	Condorcet's paradox: a little history and some school activities	2	English	UK
Wilson Robin	Solving Dotty Problems	2	English	UK
Winicki Landman Greicy	Playing with fractions a la Leibnitz	2	English	USA
Yamalidou Maria	Mathematics as a way of "reading" the world: Thoughts about the underpinnings of interdisciplinary teaching	1	English/ French	Greece

Oral presentations

Name	Title	Theme	Language	Country
Barbazo Eric	Le rôle de l'Association des Professeurs de Mathématiques de l'Enseignement Public (APMEP) et en son sein de Gilbert WALUSINSKI, dans la création des Instituts de Recherche sur l'Enseignement des Mathématiques (IREM). 1955-1975 : 20 années de transformation de l'enseignement des mathématiques en France	5	French	France
Bečvářová Martina	History of Mathematics as a Part of Mathematical Education	3	English	Czech Republic
Bernard Alain	History of science and technology in the French system for teacher training: about a recent initiative.	3	English	France
Blanco Abellán Mónica	The Teaching of Differential Calculus at Military and Engineering Schools in 18th Europe	5	English	Spain
Boettcher Frauke	The "Apollonius' Problem"- the History of its Solutions as Tool for Instruction of Geometrical Methods	1	English	Germany
Cesar de Mattos Marafon Adriana	Process of recognition in the History of Mathematics	4	English	Portugal
Chocholová Michaela	Wilhelm Matzka (1798 – 1891) and his algebraical works	6	English	Czech Republic
Clark Kathleen	Reflection and revision: A first experience with a "Using History in the Teaching of Mathematics" course	2	English	USA
Crilly Tony	Teaching or Research? Cambridge University in the nineteenth century	5	English	UK
De Klerk Johan	History and epistemology as tools in teaching Mathematics	2	English	South Africa
Demetriadou Helen	Didactical and epistemological issues related to the concept of proof. Some mathematics teachers' ideas about the role of proof in Greek secondary curriculum	2	English	Greece
D'Enfert Renaud	Du calcul aux mathématiques? L'enseignement mathématique à l'école primaire en France, 1960-1985	5	French	France
Docampo Rey Javier	Manuscripts and teachers of commercial arithmetic in Catalonia (1400-1521)	5	English	Spain
Durand Viviane	La théorie du syllogisme formel d'Aristote : une première rencontre avec les concepts fondamentaux de la sémantique logique.	2	French	France

Gerini Christian	Les Annales de Mathématiques de Gergonne : un journal du 19 ^{ème} siècle numérisé et médiatisé au bénéfice d'une interdisciplinarité entre mathématiques, histoire, didactique et philosophie.	1	French	France
Giacardi Livia	The Italian School of Algebraic Geometry and the Formative Role of Mathematics in secondary teaching	5	English	Italy
Glaubitz Michael R.	The use of original sources in the classroom. Reading Al-Chwarizmi's 'al-jabr' with 9th-graders. An empirical study.	2	English	Germany
Godard Roger	La programmation linéaire et ses racines	1	French	Canada
Gropp Harald	The relations between mathematics and music in different regions and periods of world history.	4	English	Germany
Hornig Wann-Sheng	Studying Indicators of Professional Development: An HPM dimension	3	English	Taiwan
Jancarik Antonin	The Influence of IT on the Development of Mathematics and on the Education of Future Teachers	3	English	Czech Republic
Jahnke Niels	Students working on their own ideas. Bernoulli's lectures on the differential calculus (1692) in grade 11	1	English	Germany
Kastanis Andreas	The Teaching of Descriptive Geometry in the Greek Military Academy during 19th Century	5	English	Greece
Kastanis Nikos, Verykaki Katerina	The Conceptual Change Theory as a New Didactical Trend for the History of Mathematics	1	English	Greece
Kiernan James F.	How much history of mathematics must an Early Childhood math teacher know?	3	English	USA
Kvasz Ladislav	Historical and epistemological aspects of teaching algebra	1	English	Slovakia
Lawrence Snezana	Alternatives to Descriptive Geometry – Search for a Perfect Technique of Visualising, Communicating and Teaching Space	5	English	UK
Lepka Karel	C. and. K. Mathematicians Olympics	6	English	Czech Republic
Liu Po-Hung	Investigation Of Student Perceptions Of The Infinity—A Historical Dimension	2	English	Taiwan
March Robert, Sakarovitch Joël	L'enseignement de la géométrie descriptive dans les Ecoles d'ingénieurs en Europe au XIX ^e siècle	5	French	France
Métin Frédéric, Guyot Patrick	Erasmus Habermel's geometrical square	6	English	France
Morey Bernadete Barbosa	Instruments of navigation and teacher training	3	English	Brazil
Nikolantonakis Constantin	Did we have "Revolutions" in Mathematics? Examples from the History of Mathematics on the light of T. S Kuhn's historical philosophy of science	1	English	Greece
Petrakis Sifis	The Role of the Fifth Postulate in the Euclidean Construction of Parallels	3	English	Greece
Poulos Andreas	A multidimensional approach of "de L' Hospital's rule"	2	English	Greece
Provost Sylvie	Pourquoi " faire Histoire " dans l'Industrie, la Recherche et l'Enseignement ?	1	French	France
Rogers Leo	Leonard and Thomas Digges, Sixteenth Century Mathematical Practitioners	4	English	UK
Rowbottom Darrell	Gambling Scenarios and the Foundations of Probability	1	English	UK
Russ Steve	Bernard Bolzano and the Making of Meaning in Mathematics	6	English	UK
Sebastiani Ferreira Eduardo	Ethnomathematic's use in Indian teacher's formation	4	English	Brazil

Siegmund-Schultze Reinhard	Nazi Rule and Teaching of Mathematics in the Third Reich	6	English	Norway
Silva Maria do Céu	Bento Fernandes' <i>Tratado da arte de arismetica</i> (Porto, 1555)	2	English	Portugal
Sisma Pavel	Teaching at the technical universities in retrospect	5	English	Czech Republic
Siu Man-Keung	Harmonies in Nature : A Dialogue Between Mathematics and Physics	1	English	China
Strantzalos Athanassios	Geometric Transformations as a means for the introduction of interdisciplinarity and of educational elements in High School	1	English	Greece
Swetz Frank	Historical Problems: A Valuable Resource for Mathematics Classroom Instruction	2	English	USA
Tisseron Claude	Enseignements d'histoire, épistémologie et didactique des mathématiques orientés sur l'étude des phénomènes de construction des connaissances	3	French	France
Trkovská Dana	Algebra and Geometry in our countries after the Erlangen and the Merano Programme	6&5	English	Czech Republic
Venegas Leonardo	Prague et l'infini	6	French	Colombia
Volkert Klaus	The Problem of Space in Geometry	3	English	Germany
Wilson Robin	Lewis Carroll In Numberland	4	English	UK
Windsor Will	Analysing the Historical Development of Division May Provide Insights for Improved Teaching of the Concept and Algorithm	2	English	Australia
Yevdokimov Oleksiy	Investigation of high order curves: the way, when history and mathematics come together	3	English	Australia
Zorbala Konstantina	Prospective mathematics teachers' research work on historical records as part of their initial training: A case study in Greece	3	English	Greece

Short Presentations

Name	Title	Theme	Language	Country
Abdounur Oscar João	An exhibition as a tool to approach didactical and historical aspects of the relationship between mathematics and music	2	English	Brazil
Auvinet Jérôme	C. A. Laisant viewed through his book "La mathématique, Philosophie, Enseignement"	5	English	France
Bertato Fábio Maia	A Classroom Experience: Using a Computer Role-Playing Game to teach Mathematics	2	English	Brazil
Bjarnadóttir Kristín	The Number Concept and the Role of Zero in European Arithmetic Textbooks from the Twelfth to the Nineteenth Century	5	English	Iceland
Cihlar Jiri, Eisenmann, Petr, Kratka Magdalena, Vopenka Petr	A coherence of ontogeny and phylogeny within the context of a problem of a point distribution on a segment	1	English	Czech Republic
Čmejrková Kamila	Solving logical problems and Commutative skills for the groups of pupils	3	English	Czech Republic
Costa Cecília	Introducing a historical dimension into teaching: A Portuguese example – J. Vicente Gonçalves	5	English	Portugal
Costa Cecília, Catarino Paula, da Silva Nascimento Maria Manuel	Could mathematics transform my land in the capital of universe?	4	English	Portugal

da Graça Alves Maria	The first Portuguese Mathematical Journal: _The “Jornal das Sciencias Mathematicas e Astronomicas” de Francisco Gomes Teixeira	4	English	Portugal
Gomes Alexandra, Ralha Elfrida	Mathematical training and primary school teachers: where are we coming from and where are we going to, in Portugal?	5	English	Portugal
Gonulates Funda	Mathematics theater - Mathematicians on stage	2	English	Turkey
Hamon Gérard, Le Corre Looc	Evidence and culture, rigor and pedagogy: Euclid and Arnauld	5	English	France
Hitchcock Gavin A.	Analysis with the Help of its History	2	English	Zimbabwe
Isaias Miranda	Linear movement of objects: Differences between Aristotle’s and high school students’ analysis	1	English	Mexico
Jankvist Uffe Thomas	A teaching module on the early history of error correcting codes	2	English	Denmark
Marikyan Gohar	Anania Shirakatsi’s 6 th Century Methodology of Teaching Arithmetics Across the Centuries and Divers Cultures	4	English	USA
Mercurio Anna Maria, Palladino Nicla	On the resolution of algebraic equations	1	English	Italy
Ozkan E. Mehmet, Unal Hasan	Influence of mathematicians in history on pre-service mathematics teachers’ beliefs about the nature of mathematics	3	English	Turkey
Ralha Elfrida, Lopes Ângela	On the Portuguese mathematical readings about the Gregorian Calendar reform	4	English	Portugal
Ramírez Díaz Mario H.	The evolution in the introduction of learning style in the teaching of calculus in Mexico	5	English	Mexico
Pisano Raffaele, Palladino Nicla	Évariste Galois’ algebraic theory, epistemological reflections and educational elements	1	English	Italy
Sabena Cristina, Radford Luis	Texts, Textuality and Mathematical Symbols	1	English	Italy, Canada
Saidkarimov Utkur	Exhibition of didactical material, relevant to the ESU-5 main themes	1&4	English	Uzbekistan
Sevgi Sevim	Harmonograph application into our lessons	1	English	Turkey
Spyrou Panayotis, Lappas Dionyssios, Keisoglou Stefanos	Embodied Mathematics in a Historical Perspectives	1	English	Greece
Stein David	Some questions regarding the historical role of constructivism in mathematics education reform	3	English	Czech Republic
Tattersall Jim	Ramanujan Revisited	2	English	USA
Tournès Dominique	Geometrical approach of differential equations: from history to mathematics education	1	English	France
Vilar Carlos	Sur l’étude des crépuscules pour Pedro Nunes	4	French	Portugal
Zuccheri Luciana, Gallopin Paola	A teaching experience with a high-level group of students about the history of mathematical methods in approaching the concepts of area and volume	2	English	Italy
Zuccheri Luciana, Zudini Verena	The question of changing mathematics secondary school curricula in Venezia Giulia after the First World War (1918-1923)	3	English	Italy