PROGRAMME

28 JANUARY 2005	FRIDAY

FRIDAY	28 JANUARY 2005

9.00 - 10.00	Registration
	PRESENTATIONS
??? ?	**HALL 1**
10.00 - 10.30	**Opening Ceremony**
Plenary Coordinator	**A. Gagatsis**
10.30 - 11.10 **Plenary Speech 1**	The anthyphairetic nature of the platonic principles of infinite and finite. **Stylianos Negrepontis**
11.10 – 11.20	BREAK
Coordinators	**M. Becheanu**
11.20 – 11.40	Proofs of theorems in plane geometry by exit into space. **Michael Lambrou**
11.40 – 12.00	Reduction and understanding: the case of quantisation of classical functions. **Demetris Portides**
12.00 – 12.20	How many core systems for number? **Athanassios Raftopoulos**
12.20 - 12.40	Mathematics in a foreign language learning strategies. **Marie Hofmannová, Jarmila Novotná**
12.40 – 13.00	Maths education and training for autonomy in the mentally retarded pupil **A. Montone – Michele Pertichino**
13.00 – 14.20	LUNCH

Registration	
PRESENTATIONS	
HALL 2	**HALL 3**
BREAK	BREAK
J. Novotna	**A. Philippou**
Should erroneous solutions be presented in schools? Teachers´ views. **Dina Tirosh, Pessia Tsamir**	A review of the effects of different modes of representation in mathematical problem solving. **Iliada Elia, Athanasios Gagatsis, Eleni Deliyianni**
Using the intuitive rules theory to analyze Cypriot prospective teachers´ areas – perimeter solutions. **Demetra Pitta-Pantazi, Pessia Tsamir**	The role of pictures in solving verbal division problems and the translation ability of second grade students. **Agathi Theodoulou, Athanasios Gagatsis, Riana Theodoulou**
Emotional Issues in the Learning of Mathematics and Science **Michalinos Zembylas**	On the visualness in mathematics education. **Sava Grozdev**
How do greek primary and secondary school teachers perceive and evaluate statistics? A comparative study. **Sofia Anastasiadou**	The use of the geometrical model of number line for the representation of equivalence and addition of fractions: A study with fifth grade students. **Eleni Michaelidou, Athanasios Gagatsis**
A mathematics course for elementary school pre-service teachers. **George Gadanidis**	The number line as a geometrical model for teaching whole number addition and subtraction. **Myria Shiakalli, Athanasios Gagatsis**
LUNCH	LUNCH

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	PRESENTATIONS	
??? ?	**HALL 1**	
Plenary Coordinator	**F. Spagnolo**	
14.20 - 15.00 **Plenary Speech 2**	History for Mathematics Education **Aldo Brigaglia**	
15.00 – 15.10	BREAK	
Coordinators	**M. Lambrou**	
15.10 - 15.30	*MATHEU*: Identification, Motivation and Support of Mathematical Talents in European Schools. **Gregory Makrides and partners**	
15.30 - 15.50	How can we identify and motivate mathematical talents? Case of word problems. **Jarmila Novatná**	
15.50 – 16.10	Preparation of problems for mathematical examinations and competitions. **Jaroslav Zhouf**	
16.10 – 16.30	BREAK	

PRESENTATIONS	
HALL 2	**HALL 3**
BREAK	BREAK
E. Solomou	**H. Loidl**
Young children's aptitude to transform geometric figures: the role of geometrical models. **Iliada Elia, Athanasios Gagatsis, Modestina Modestou**	Equations or transformations in primary school mathematics? **Zdravko Voutov Lalchev, Margarita Genova Varbanova, Irina Zdravkova Voutova**
The nature of external representation in geometry and the solution of mathematical problems. **Xenia Xistouri, Aristoklis Nicolaou, Andreas Koukkoufis, Athanasios Gagatsis**	A structural model of inductive reasoning in mathematics problems. **Eleni Papageorgiou, Constantinos Christou**
The interaction between conceptual and figural components of geometrical figures. **Eleni Deliyianni, Athanasios Gagatsis, George Dimakos**	Counterexamples: is one as good as many? **Paola Iannone, Elena Nardi**
BREAK	BREAK

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	PRESENTATIONS
??? ?	HALL 1
Coordinators	M. Zembylas
16.30 – 16.50	The inductive reasoning of top students in mathematics. **Constantinos Christou, Marios Antoniades, Andreas Philippou**
16.50 – 17.10	About some basic principles of the extracullar work with talented students. **Svetoslav Jor Bilchev, Emiliya Ang. Velikova**
17.20 – 17.40	Multicultural classrooms in Italy: A challenge for Maths teachers **Favilli Franco, Tintori Stefania**
17.40 – 18.00	Understanding of the ordering of numbers and the use of absolute value on the axis of real numbers. **Christos Pantsidis, Fotini Zoulinaki, Panayiotis Spyrou, Athanasios Gagatsis, Iliada Elia**
18.00 – 18.20	Mathematics Competitions and the Development of Mathematics and Mathematics Education **Petar Kenderov**

PRESENTATIONS	
HALL 2	HALL 3
S. Grozdev	
The illusion of proportionality in solving verbal geometrical problems by sixth grade students and the role of diagrams. **Agathi Theodoulou, Athanasios Gagatsis, Riana Theodoulou**	
The role of angle in understanding the vectors. **George Pavlakos, Panayiotis Spyrou, Athanasios Gagatsis**	
The notion of variable: some meaningful aspects of algebraic language. **Elsa Malisani**	
Introduction of algebraic thinking: connecting the concepts of linear function and linear equation. **Vassiliki Farmaki, Nicolaos Klaoudatos, Petros Verikios**	

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	PRESENTATIONS
??? ?	**HALL 1**
Plenary Coordinator	**A. Gagatsis**
10.00 -10.40 **Plenary speech 3**	Research in Mathematics Education: The Theory of Didactical Situation in Mathematics **Guy Brousseu**
10.40 – 10.50	BREAK
Coordinators	**P. Kenderov**
10.50 - 11.10	Mathematical research experience of talented high school students in SciTech. **Abraham Berman, Felix Goldberg**
11.10 – 10.30	Gnomons and their use in teaching. **Evangelos Ntziachristos, Dimitris Kontogiannis**
11.30 - 11.50	Self-efficacy and burnout in mathematics teaching. **Chryso Athanasiou, Demetra Telemachou, George Philippou**
11.50 – 12.10	Metacognitive abilities in mathematics in relation to cognitive abilities. **Areti Panaoura, George Philippou**
12.10 – 12.20	BREAK

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PRESENTATIONS	
HALL 2	**HALL 3**
BREAK	BREAK
V. Berinde	**E. Velikova**
The role of teaching in the development of basic concepts in geometry: the concept of similarity and intuitive knowledge. **Kallia Mattheou, Panayiotis Spyrou**	The shift for intuition to formal mathematics: A case study. **Vassiliki Farmaki, Theodorus Paschos**
Certain elements of geometry in Greece and Cyprus in 19th century. **Costas Demetriades, Christos Karydas, Savvas Timotheou, Chrystalla Syrimi-Skitsa, Athanasios Gagatsis**	What can we gain from a conceptual change approach to the learning and teaching of mathematics? **Stella Vosniadou, Xenia Vamvakoussi, Konstantinos P.Christou**
The construction of the concept of similarity – Proportions and the educational experience. **George Kospentaris, Panayiotis Spyrou**	Mathematics and architecture: the curves and the baroque. **Nicoletta Sala**
On development of students´ abilities in problem posing: A case of plane geometry. **Oleksiy Yevdokimov**	Calculus for engineers: An application motivated approach. **Shuki Aroshas, Igor Verner, Abraham Berman**
BREAK	BREAK

PROGRAMME

PRESENTATIONS

??? ?	HALL 1	HALL 2	HALL 3
Coordinators	**J. Zhouf**	**M. Hofmannová**	**S. Anastasiadou**
12.20 – 12.40	Research on mathematical creativity. **Emiliya Angelova Velikova**	The key element for good teaching: teachers' listening **Erkki Pehkonen, Maija Ahtee**	"Procedural" is not enough. **Buma Abramovitz, Miryam Berezina, Abraham Berman, Ludmila Shvartsman**
12.40 – 13.00	Motivating students towards math through math clubs. **Elena Papanastasiou, Laurie Bottiger**	Some difficulties with the dear old Pythagorean theorem. A prospect for an educational research. **Aldo Scimone, Filippo Spagnolo**	Mathematics and Constructions. **Michael Voskoglou**
13.00 – 14.30	LUNCH	LUNCH	LUNCH
Plenary Coordinator	**F. Spagnolo**		
14.30 – 15.10 **Plenary speech 4**	The knowledge quartet: A tool for developing mathematics teaching. **Tim Rowland**		
15.10 – 15.20	BREAK	BREAK	BREAK
Coordinators	**M. Antoniades**	**T. Gardiner**	**S. Bilchev**
15.20 – 15.40	Motivation and development of mathematical thinking, using optimization problems. **Uldarico Malaspina Jurado**	The tactics of mathematics in the capital of Norway. **Astrid Stamenov**	Didactical aspects of the geometrical transformations study - J.S.Bach's Music Offering. **Daniela Galante**
15.40 - 16.00	Attitudes towards mathematics, self-efficacy and achievement in problem solving. **Maria Nicolaidou, George Philippou**	Teachers specialization – An Intermediate Report. **Abraham Berman, Aliza Malek, Karni Shir, Jacob Thimor**	"Teacher as researcher". Greek Project in action. The case of the perimeter and the area of parallelograms. A research in evaluation. **Maria Chionidou-Moskofoglou, Nicolaos Kosmanos, Anastasios Vasiliadis, Sotiris Vogiatzoglou**
16.00 - 16.20	Using game theory to increase students´ motivation to learn mathematics. **Gura Ein-Ya**	The Mediterranean mathematics competition – A presentation. **Francisco Bellot Rosado**	Towards a yin-yang balance in mathematics education **MA Li**
16.20 – 17.00	**CONFERENCE SYNOPSIS**		