

PROGRAMME

Thursday 17/4/2008

11.30-14.00 REGISTRATION
14.00-14.30 OPENING

AFTERNOON SESSION

PLENARY LECTURES: AUDITORIUM Δ7

Chairs P. Kalogiannaki, Ch. Kourouniotis
14.30-15.30 **Abraham Arcavi**, Department of Science Teaching, Weizmann Institute of Science, Rehovot, Israel
Towards thinking and sense-making classroom practices: The case of Japanese mathematics lessons

15.30-16.30 **Alain Kuzniak**, Equipe Didirem Université Paris 7, IUFM d'Orléans Tours, France
Diversity of geometrical paradigms and trouble in the teaching and learning of geometry

16.30-17.00

COFFEE BREAK

PARALLEL SESSIONS

	Auditorium Δ7	Auditorium Δ6	Auditorium Γ2
Chair	I. Spantidakis	H. Vasilaki	U. Th. Jankvist
17.00-17.30	G. Perikleidakis: <i>Exploring the performance of 9 - year - old elementary school students in doing arithmetical operations and problem solving during the initial implementation of the new textbooks and reformed curricula</i> (in Greek)	<u>N. Hadas</u> , <u>R. Hershkowitz</u> , G. Ron <i>Instructional design and research design principles in probability</i>	D. Iannece, <u>P. Romano</u> <i>What does it mean for a teacher to have a "scientific approach"? A reflection</i>
17.30-18.00	Y. Michalis <i>The didactics of statistics in compulsory education</i> (in Greek)	<u>N. Prusak</u> , <u>R. Hershkowitz</u> , N. Hadas <i>From visual to logical argumentation within intentional designed activity</i>	<u>A. Cusi</u> , N. A. Malara <i>Future teachers facing proof problems: Games of interpretation, anticipating thought and coordination between verbal and algebraic register</i>
18.00-18.30	N. Kountourakis, G. Polizois <i>Teaching linear dynamic systems in elementary school, using simulations: Sensitive dependency on the initial conditions</i> (in Greek)	<u>S. Patsiomitou</u> , E. Koleza <i>The development of students' geometrical thinking through linking visual active representations</i>	J. Kos <i>Trick</i>

18.30-19.00

COFFEE BREAK

	Auditorium Δ7	Auditorium Δ6	Auditorium Γ2
Chair	C. Bonotto	G. Dimakos	M-K. Siu
19.00-19.30	M.Hejný <i>Scheme and its generic models</i>	M. Kourkoulos <i>Didactical investigation of a simple physical model of moving particles for improving the understanding of variance in statistics</i> (in Greek)	P. Svrckova <i>Teaching mathematics through pupils' projects</i>
19.30-20.00	<u>M. S. Britt</u> , K. C. Irwin <i>A pathway for algebraic thinking</i>	<u>M. Marmara</u> , C. Hatzikyriakou <i>The use of algebra tiles in the teaching and learning of algebraic concepts</i> (in Greek)	Y. Martin <i>Dynamic implementation of Moulton's plan (non-Desarguesian geometry)</i>

Friday 18/4/2008

MORNING SESSION

PLENARY LECTURES: AUDITORIUM Δ7

Chairs: P. Michailidis, N. Andreadakis

- 9.00-10.00** **Bill Barton**, Department of Mathematics, University of Auckland, New Zealand, Vice-President of ICMI
Revisiting Felix Klein's "Elementary Mathematics From An Advanced Standpoint"
- 10.00-11.00** **Man Keung Siu**, Department of Mathematics, University of Hong Kong, Hong Kong SAR, China
The world of geometry in the classroom: virtual or real?

11.00-11.30

COFFEE BREAK

PARALLEL SESSIONS

	Auditorium Δ7	Auditorium Δ6	Auditorium Γ2
Chair	D. Chassapis	Y. Thomaidis	P. Kalogiannaki
11.30-12:00	H. Michail, P. Sofokleous, Ch. Lemonidis <i>The multicultural dimension of multiplication: attitudes and perceptions of Cypriot educators about its use in teaching mathematics</i> (in Greek)	V. Battie <i>Le théorème fondamental de l'arithmétique: Une approche historique et didactique</i>	Ch. Fili Cyparissos <i>Stephanos and the Erlanger Programme</i> (in Greek)
12:00-12.30	I. Spantidakis, H. Vasilaki <i>Writing as a problem solving process and anxiety levels of students with writing difficulties</i> (in Greek)	S. Götz <i>Fundamental Ideas and Basic Beliefs in Stochastics</i>	J. M. Delire <i>Les découvertes Keralaises sur les séries trigonométriques et leurs justifications dans le tantrasangraha (1500 d.n.e.) et ses commentaires</i>
12.30-13.00	Ch. Lemonidis, F. Karannikis <i>The notion of proportion in vocational activity and its relation to school experience: a case study with Cypriot bakers from Lemessos province</i> (in Greek)	E. Castagnola, R. Tortora <i>Can any definition of a triangle be considered the best one?</i>	K. Dalakoura <i>The mathematical education of women in Greece (19th-early 20th century)</i> (in Greek)
Chair	G. Perikleidakis	Ch. Kourouniotis	N. Stehlikova
13.00-13.30	M. Meletiou-Mavrotheris, E. Mavrotheris, E. Paparistodemou <i>EarlyStatistics: an online professional development program for European teachers of statistics</i>	E. Demetriadou, C. Tzanakis <i>Reinstatement of vectors in lower secondary education: some didactical suggestions and comments</i> (in Greek)	J. Zhouf <i>Problem posing through correspondence seminars</i>
13.30-14.00	E. Paparistodemou, M. Meletiou-Mavrotheris <i>Developing statistical reasoning in the early grades: a new role of technology</i>	S. Anastasiadou <i>A survey of research on the role of representations in the learning of statistical and probabilistic concepts at all levels of education</i> (in Greek)	M. Bako, L. Aszalos <i>Play and learn with GCompris</i>

14.00-16.30

LUNCH

AFTERNOON SESSION

PARALLEL SESSIONS

	Auditorium Δ7	Auditorium Δ6	Auditorium Γ2
Chair	G. Perikleidakis	C. Hatzikyriakou	E. Demetriadou
16.30-17.00	G. Halepaki: <i>Characteristics of 11-year-old students in connection with the estimation and control criteria of the outcome of arithmetic operations</i> (in Greek)	L. Bowie <i>Definitions in geometry in a South African textbook</i>	I. Kanellos <i>Findings from a diagnostic test given to students in the 1st year of the Greek Lyceum in 2006-07</i> (in Greek)
17.00-17.30	H. Kasoumi, C. Zaharos, M. Poulou <i>Reception of the reformed mathematics curriculum by the nursery teachers of public education in Greece</i> (in Greek)	M. Rugelj <i>How to “domesticate” logarithms in school? Giving sense to the logarithmic function</i>	E. Mokos, S. Kafousi, F. Kalavasis <i>The research on metacognition and the learning of mathematics: facts and perspectives</i> (in Greek)
17.30-18.00	C. Bonotto <i>About the role of real-world knowledge and experiences in mathematical modelling</i>	A. Poulos <i>Classroom activities based on the concept of a Pythagorean triplet</i> (in Greek)	B. M. Kinach <i>Modelling tasks for developing geometry teachers’ spatial, epistemological, and pedagogical knowledge</i>

18.00-18.30

COFFEE BREAK

	Auditorium Δ7	Auditorium Δ6	Auditorium Γ2
Chair	C. Zaharos	A. Poulos	K. Nikolantonakis
18.30-19.00	E. Nikoloudakis, S. Ferentinos, E. Choustoulakis <i>Overcoming obstacles in geometry by deploying representations of ICT</i> (in Greek)	Y. Thomaidis (Workshop) <i>Snapshots and pictures from integrating the history of mathematics in the new textbooks of secondary school in Greece</i> (in Greek)	Th. Barrier <i>Quantification et variation en mathématiques: Perspectives didactiques issue de la lecture d'un texte de Bolzano</i>
19.00-19.30	N. Stehlíkova <i>Using video cases to promote good practice in the teaching of mathematics</i>		U. Th. Jankvist <i>Evaluating a teaching module on the early history of error correcting codes</i>
19.30-20.00	D. Chassapis <i>The influence of a cultural tool on approaching a problem from the history: solving a geometry problem on graph paper</i>	N. Sgreccia, M. Massa <i>Relations between “saying” and “practice” of mathematics teachers when they teach geometry to students aged 12-15</i>	J-J. Dahan <i>Les paramètres didactiques cruciaux pour comprendre l'intégration de l'expérimental dans la pratique et l'enseignement de la géométrie: Exemplification grâce à Cabri 2 Plus et Cabri 3d</i>

21.30

CONFERENCE DINNER FOR THE CONTRIBUTORS

Saturday 19/4/2008

MORNING SESSION

PLENARY LECTURE: AUDITORIUM Δ7

Chair: M. Kourkoulos

9.30-10.30 **Michèle Artigue**, IREM Université Paris VII, France, President of ICMI:
Digital technology in mathematics education: an instrumental approach

PARALLEL SESSIONS

	Auditorium Δ7	Auditorium Δ6	Auditorium Γ2
Chair	E. Mandadakis	S. Anastasiadou	Ch. Fili
10.30-11.00	<u>B. Georgiadou-Kambouridou</u> <u>I. Antoniou</u> : <i>Students with low performance and the multiplication operation</i> (in Greek)	<u>M. Andresen</u> , S. Froelund <i>Philosophical reflections made explicit as a tool for mathematical reasoning</i>	İ. Yavuz <i>Effets d'un changement de programme sur la prise en compte de nouveaux objets dans l'enseignement des fonctions</i>
11.00-11.30	K. Nikolantonakis <i>One, zero and infinity: three cases of historical constructions in the context of teachers' training</i> (in Greek)	B. Koichu <i>On composing multiple-choice tasks, thought experimentation and algebra teachers' knowledge base</i>	S. Baştürk <i>Concours d'entrée à l'université en Turquie et ses effets négatifs sur les apprentissages des élèves de seconde</i>

11.30-12.00

COFFEE BREAK

	Auditorium Δ7	Auditorium Δ6	Auditorium Γ2
Chair	I. Spantidakis	G. Perikleidakis	K. Dalakoura
12.00-12.30	J. Slezakova <i>Stepping and ladder methods in the process of building up an additive triad schema and other mathematical schemas</i>	G. Dimakos, E. Nikoloudakis <i>Teaching geometry in secondary school using van Hiele's theory and ICT in the context of cooperative learning</i> (in Greek)	A. Tsigoni <i>Trade world's contribution to the spreading of mathematics education in Ioannina throughout the Ottoman period</i> (in Greek)
12.30-13.00	<u>H. Vasilaki</u> , E. Giahnakis <i>Investigation of the relationship between working memory, anxiety and performance during the completion of an arithmetic mnemonic task</i> (in Greek)	W. Dörfler <i>Learning mathematics: a naturalistic view</i>	
13.00-13.30	A. Constantinides, <u>N. Georgiou</u> , M. Miltiadou <i>The use of manipulatives in the teaching of mathematics as expressed in teachers' beliefs</i> (in Greek)	<u>C. Voica</u> , F.M. Singer <i>From real life to probability laws: Integrating problem solving in teaching statistics and probabilities</i>	

13.30-14.00

CLOSING