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European Student Conference in Mathematics EUROMATH-2011

Organizers



Cyprus Mathematical Society



Collaborators



European Mathematical Society



Hellenic Mathematical Society



Department of Mathematics
University of Athens

Sponsors



*Under the auspices of the Ministry of Education,
Lifelong Learning and Religious Affairs of Greece*

30 March - 3 April, 2011, Athens, Greece

EUROMATH-2011
European Student Conference in Mathematics
30 March - 3 April, 2011, Athens, Greece

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president of the THALES Foundation*

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European Mathematical Society

OPENING CEREMONY

ATHENS IMPERIAL HOTEL

2-6 M. Alexandrou str., Karaïskaki Square

New York Room (Level -1)

9.30 – 10.30, Thursday 31 March 2011

WELCOMING TO THE CONFERENCE

Dr Gregory Makrides

Chair of the Conference

President, Cyprus Mathematical Society

President, THALES Foundation

GREETINGS

Professor Charalambos Papageorgiou

Dean of the Faculty of Sciences

University of Athens

Professor Grigorios H. Kalogeropoulos

Head of the Mathematics Department, University of Athens

President of the Hellenic Mathematical Society

Professor Doru Stefanescu

President, Mathematical Society of South Eastern Europe

Greetings by

Ministry of Education, Lifelong Learning and Religious Affairs of Greece

OPENING GREETINGS OF THE CONFERENCE

Prof. Marta Sanz-Solé

President, European Mathematical Society

Chair of the Programme Committee

*(represented by **prof. Guenter Toerner, Chair of Education Committee of EMS**)*

CONFERENCE PROGRAMME

	Wednesday, 30 March 2011
All day	Arrivals
16:00-23:00	Registration Foyer, Level -1, Imperial Hotel Athens
	Thursday, 31 March 2011
8:00-9:30	Registration Foyer, Level -1, Imperial Hotel Athens
9:30-10:30	EUROMATH 2011 Opening Ceremony New York (Level -1)
10:30-11:00	Coffee break, (Foyer, Level -1)

CONFERENCE PROGRAMME

Thursday, 31 March 2011

Place	New York Room (Floor -1)	Los Angeles 5 (Floor 2)	Los Angeles 3 (Floor 1)
Coordinators	Andreas Skotinos	Panagiotis Vlamos	Savvas Timotheou
11:00-11:20	Trilogy of algebra Duisenov Yelnur, Zholmaganbet Bauyrzhan Kazakhstan	An open problem: Tracing the angle bisector Kosyva Aimilia, Kosyvas Dimitrios Greece	Magic squares: History, Types, Construction, and application Pavel Kounov, Vanya Danova-scientific supervisor Bulgaria
11:20 – 11:40	Pick's formula Anton Georgiev Georgiev, Vanya Hristova Danova Bulgaria	Linear Functions and their applications (interests are in mathematics and ilfe, mathemtics and statistics) Dragan Bozinovic, Aleksandar Brzakovic (mentor) Serbia	Matrix: The musical square Natalie Hadjipanayi, Danae Christodoulou, Eleni Antoniou, Theodosia Hadjithekli, Teachers: Petros Ioannou, Athena Antoniou, Georgia Papageorgiou Cyprus
11:40 – 12:00	Reciprocal Relationships in a triangle Dzhansua Myumyun Ali, Valcho Milchev- scientific advisor Bulgaria	The Golden ratio Michal Somekh Italy	Mathematics and life-representing a real world Yael Juárez Martínez Mexico

CONFERENCE PROGRAMME

Thursday, 31 March 2011

Place	New York Room (Floor -1)	Los Angeles 5 (Floor 2)	Los Angeles 3 (Floor 1)
Coordinators	Andreas Skotinos	Panagiotis Vlamos	Savvas Timotheou
12:00-12:20	Mathematics in our live- Math tricks and shortcuts <i>Elena Himona, Marilena Sophocleous</i> Cyprus	Counting on a triangular lattice <i>Ivan Dinkov Gerganov, Valcho Milcen- scientific advisor</i> Bulgaria	The Black Hole Function <i>Antonescu Mihai, Paul-Trifu Lucian</i> Romania
12:20 – 12:40	The turning <i>Omirbay Arystanbek, Makhmut Amangaliyev</i> Kazakhstan	Brocard points in triangle <i>Gyulbeyaz Fahri Ahmed, Marinela Deyanova Petkova,</i> <i>Valcho Milchev-scientific advisor</i> Bulgaria	Fuzzy system and the Inverted Pendulum <i>Brúnó Zoltán Kóródi</i> Hungary
12:40 – 13:00	Leonardo Fibonacci: A man who started a revolution <i>Golfis Konstantinos, Manaras Michael,Mokou Despoina,Paraskevopoulos George,Mokos Evaggelos</i> Greece	Diophantine Equations <i>Konstantin Vasilov Konstantinov, Boyan Angelov Budinov,</i> <i>Vanya Hristova Danova-tutor</i> Bulgaria	The introduction to the game theory and the monty hall problem <i>Jonasz Staszek</i> Poland
13:00 – 15:00	LUNCH at hotel Rooms Miami 1 & 2 (Floor 1), Ticket required at entrance		

CONFERENCE PROGRAMME

Thursday, 31 March 2011

15:00 – 15:40	Mathematics Poster exhibition [Room Los Angeles 4 (Floor 1)]		
Place	New York Room (Floor -1)	Los Angeles 5 (Floor 2)	Los Angeles 3 (Floor 1)
Coordinators	Andreas Philippou	Constantinos Papagiannis	Andreas Skotinos
15:40 – 17:00	<u>Workshop I</u> <i>Non – Constructive Theorems In Problem Solving</i> Sava Grozdev	<u>Workshop II</u> <i>Introduction Into Elementary Coding Theory</i> Törner, Günter; Törner, Anne	
17:00 – 17:20	<i>New Moments In The Isogonal Conjugation. Isogonal Triangles</i> Anton Belev, Kaloyan Bucovsky Bulgaria	<i>Cryptography</i> Pataki Bálint Ármin Hungary	<i>Golen ratio & Fibonacci sequence in art and architecture</i> Arian Asghari Fard Iran
17:20 – 17:40	<i>Wonderful points and other elements of the triangle</i> Nassyrbek Aktore, Zhambay Abylay Kazakhstan	<i>Mathematics and computer science: Collaboration and rivalry</i> Aleksandar Pavlov Hrusanov Bulgaria	<i>The inversion</i> Kristóf Németh Hungary
17:40 – 18:00	<i>Maltese cross and the tasks for the comparison of area</i> Sagatov Nurmuhamed Kazakhstan	<i>Drawing a picture in one move (Euler`s graphs)</i> Ljubica Vujovic, Vukan Levajac Serbia	<i>Number theory foundations</i> Popa Andreea Maria, Botea Viorel Romania
	FREE EVENING (Check with registration desk for any suggested events)		

CONFERENCE PROGRAMME

Friday, 01 April 2011

Place	New York Room (Floor -1)	Los Angeles 5 (Floor 2)	Los Angeles 3 (Floor 1)
Coordinators	Constantinos Papagianis	Panagiotis Vlamos	
9:00 – 10:20	Workshop III <i>The Role of Counter-Examples in Overcoming the Errors in Mathematics</i> Athanasios Gagatsis, Andreas Philippou and Savvas Timotheou	Workshop IV <i>Flexagons</i> Péter Körtesi	
10.20 – 10.40	COFFEE BREAK (Foyer, Level -1)		

CONFERENCE PROGRAMME

Friday, 01 April 2011

Place	New York Room (Floor -1)	Los Angeles 5 (Floor 2)	Los Angeles 3 (Floor 1)
Coordinators	Constantinos Papagianis	Andreas Skotinos	Andreas Philippou
10:40-11:00	<i>At Infinity</i> Ali Imad Raad Sweden	<i>Generalization of a problem from chernorizec hrabar tournament</i> Prolet Lazarova Bulgaria	<i>Passage of particles of radiation through matter</i> Sharapov Zhanbolat, Shayandin Ilyas Kazakhstan
11:00 – 11:20	<i>Fibonacci and financial markets analysis</i> Wojciech Galas Poland	<i>Real world in maths words (Interactive geometry by Geogebra)</i> Anna Alfieri, Andrea Palasciano Italy	<i>Infinite sums</i> Sadykov Zhandos, Aytkozhin Azamat Kazakhstan
11:20 – 11:40	<i>The connection of mathematics and music</i> Andriani Charalambous, Yvonne Tsitsiou, Iliana Georgiou Cyprus	<i>Prime Numbers</i> Micol Tedeschi, Rebecca Hallac Italy	<i>Matching</i> Christoffer Pichler, Lars Åström Sweden
11:40 -12:00	<i>Naive Decision making</i> Dimitar Vuldzhev Bulgaria	<i>Geometrical Inequalities</i> Duta Andreea, Sabou Cristina Romania	<i>Geometrical analysis of the acoustic effects in the vastrolav lisinski main concert hall</i> Augustin Orešković , Luka Pevec , Mislav Požek Croatia

CONFERENCE PROGRAMME

Friday, 01 April 2011

Place	New York Room (Floor -1)	Los Angeles 5 (Floor 2)	Los Angeles 3 (Floor 1)
Coordinators	Constantinos Papagianis	Andreas Skotinos	Andreas Philippou
12:00-12:20	<i>Games Theory</i> Ginevra Grun, Nicole Leder Italy	<i>Rubik's cube</i> Demetris Marangos, Arsenios Hadjikyriacou Cyprus	<i>Problems of combinatorial geometry</i> Berdalin Aldiyar, Zhalmuhanov Kaydar Kazakhstan
12:20 – 12:40	<i>Fibonacci & the fractal</i> Gloria Nneoma Onwuneme Sweden	<i>Unusual Mathematical facts and optical illusions</i> Maria Neocleous, Georgie Antoniou Cyprus	<i>Mathematics in architecture of Zagreb</i> Helena Trputac, Katarina Štambuk, Taja Kuzmić Croatia
12:40 – 14:00	LUNCH at hotel Rooms Miami 1 & 2 (Floor 1)	Ticket required at entrance	

CONFERENCE PROGRAMME

Friday, 01 April 2011

Place	New York Room (Floor -1)	Los Angeles 5 (Floor 2)	Los Angeles 3 (Floor 1)
Coordinators	Constantinos Papagianis	Andreas Skotinos	Savva Grozdev
14:00-14:20	<i>History of Mathematics</i> Zoubouloglou Pavlos, Kokini Christine, Morfis Konstandino Greece	<i>Mathematics of robot's arm</i> Bekkulov Malik , Bimaliyev Bekbol Kazakhstan	<i>On some sequences obtained from the property of direct similarity for plane geometric figures</i> Andrei Bancos Romania
14:20 – 14:40	<i>Mathematics and two of the biggest mysteries of science</i> Yiannis Menikou, Rafaella Christodoulidou, Chrysanthi Stephanou Cyprus	<i>Design of optimal algorithms for solving hard problems</i> Eugene Baryshok , Maxim Khvan Kazakhstan	<i>Discrete Logarithm and Cayley graphs</i> Ivan Dinev Mechkov, Ivan Vihrenov Genchev Bulgaria
14:40 – 15:00	<i>Mathematics in cryptography - the keeper of secrets</i> Ivan Jurin , Lavinia Mehinović, Ivana Novković Croatia	<i>The pigeonhole principle</i> Orlea Martina Romania	<i>The mathematical genius of nature</i> Konstantin Mitsev, Desislava Dimova, Natalia Nenova, Viktor Chemelekov Bulgaria
15:00 – 15:20	<i>Geometric constructions using mechanical instruments</i> Nasioulas Antonis Greece	<i>Game theory</i> Mary Louca, Sofia Mavronikola, Constantinos Nicolaou Cyprus	<i>On the applications of generating functions</i> Lili Georgieva, Marin Georgiev Bulgaria

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Coordinators	Constantinos Papagianis	Andreas Skotinos	Savva Grozdev
15:20 – 15:40	<i>Binomial Equations</i> Petca Alexandra Romania	<i>Murder in the name of maths</i> Theodore Gazis, Maria Metochianaki, Emmanouil Tsoukakis Greece	<i>Convex sets among points in the plane and analysis of the hypothesis of erdos- Szekeres</i> Rumen Rumenov Dangovski Bulgaria
15:40 – 16:00	<i>Statistics in everyday life</i> Neophytos Matsas, Constantinos Araouzos, Petros Avgousti, Astero Constantinou, Karamallis Alexandros, Katerina Nicolaou, Andreas Sazo Cyprus	<i>Mathematics in three ancient civilizations</i> Theodoulos Makris, Antonis Michail, Nicolas Nicolaou, Panajiotis Anastasiou, Stylianos Andreas Cyprus	<i>The plane figures of an arbelos and an Archimedean circle</i> Bozhidara Ivanova Vuteva Bulgaria
16:00 – 16:20	<i>The inequalities - Solving methods</i> Petrus Andrei Romania	<i>MAG Musiacl Algoritmic Generator-Generating music with Markov Chains</i> Anguel Vassilev Nikolov Bulgaria	<i>3D Geometrical Inequalities</i> Aleksandar Kolev, Ivelina Lyubenova Bulgaria
16:20 – 16:40	<i>The history of irrational numbers</i> Giannis Stavrianakis Greece	<i>Uses of Java applets in mathematics education</i> Marina Savic Serbia	<i>Mathematics and music</i> Alejandra Martinez Mexico
20:30 -01:00	DINNER DANCE ROOM NEW YORK (Level -1), Ticket required at entrance		

CONFERENCE PROGRAMME

Saturday, 02 April 2011

Place	New York Room (Floor -1)	Los Angeles 5 (Floor 2)	Los Angeles 3 (Floor 1)
Coordinators	Athanasios Gagatsis	Andreas Skotinos	
09:00 – 09:20	<p><u>Workshop V</u></p> <p><i>The Passage From Recreational Mathematics To Pure Mathematics</i></p> <p>Michael Lambrou</p>		
09:20 – 09:40			
09:40 – 10:00		<p><i>Maths On Musical Notes</i></p> <p>Dragos Constantinescu</p>	
10:00 – 10:20		<p><i>How To Get Around Setbacks In Learning Mathematics?</i></p> <p>Törner, Günter</p>	

CONFERENCE PROGRAMME

Saturday, 02 April 2011

Place	New York Room (Floor -1)	Los Angeles 5 (Floor 2)	Los Angeles 3 (Floor 1)
Coordinators	Constantinos Papagiannis	Andreas Skotinos	Savvas Timotheou
10:20 – 10:40	<i>Theorems of Menelaus and Chevas</i> Maria Rosenova Eftimova, Iva Ivanova Milusheva Vanya Danova-scientific advisor Bulgaria	<i>Cryptography</i> Beldinov Alibek, Zhirenbaytegi Nursultan Kazakhstan	<i>Mathmatics and space</i> Alexandros Spanos Greece
10:40 – 11:00	<i>It's a math world</i> Charidemou Evelina, Protopapa Kyriaki, Tsolaki Elena Cyprus	<i>A new look on th appolonius problem - A new solution in higj - dimensional spaces and a circum triangle solution</i> Radko Oleg Kotev Bulgaria	<i>Fibonacci numbers around us</i> Stogia Mirto Greece
11:00 – 11:20	<i>Coloring problems</i> Tyekar Dan Romania	<i>Algorithms and their history</i> Konstantinos Polizois Greece	<i>Mobius transformations</i> Halwest Mohammad Sweden
11:20 – 11:40	<i>The langford sequence</i> Umbetov Islambek, Matayev Chingiz Kazakhstan	<i>Mathematical Code Variations</i> Eleana Antoniou, Andreas Achilleos, Charilaos Charilaou, Alexandrow Achilleos, Georgia Nicolaou, Marios Nicolaou, Andreas Stylianou, Nicolas Modestou, Andreas Metaxas, Elena Hatsimichael Cyprus	<i>Some remarkable aplications of the second degree of a function</i> Paula Alice Bretan Romania
11:40 – 12:00	<i>Methods evaluating appromixately the perimeter and area of an ellipse</i> Charalambos Louca Cyprus	<i>Mathematics... Behind the scenes!</i> Elina Avraamidou, Rafaella Groutidou, Panayiotis Michaelides, Katerina Ioannou Cyprus	<i>About the "bouquet" from the garden of the geometry</i> Abylai Zhakashov Kazakhstan

CONFERENCE PROGRAMME

Saturday, 02 April 2011

Place	New York Room (Floor -1)	Los Angeles 5 (Floor 2)	Los Angeles 3 (Floor 1)
Coordinators	Constantinos Papagiannis	Andreas Skotinos	Savvas Timotheou
12:00 – 12:20	<i>Algorithms of the generalized financial calculations</i> Askarbek Gabdullin Kazakhstan	<i>The essence of complex integrals in scientific research</i> Einav Nachman USA	<i>Particle accelerators: How particles are accelerated in cyclotrons and synchrotrons</i> Andia Stylianou, George Ghalanos Cyprus

15:00-17:00	<p>Visit to Acropolis Museum (arrive at entrance of the Museum by 15.00. Every 10 minutes a group of 50 will be entering the Museum for a free tour of about 60 minutes. Read the next page for instructions on how to get there.</p>
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Sunday, 03 April 2011

	Independent Departures

The ACROPOLIS MUSEUM

The Acropolis Museum is located in the historical area of Makryianni, southeast of the Rock of the Acropolis, on Dionysiou Areopagitou Street, Athens. It is only 300 meters from the Acropolis and approximately 2 kilometers from Syntagma, Athens main city square. The Museum entrance is located at the beginning of the pedestrian walkway of Dionysiou Areopagitou Street, which constitutes the central route for the unified network of the city's archaeological sites. The Acropolis station of the Metro is on the east side of the Museum site.

Getting there:

- By bus:

Lines 24, 40, 57, 103, 106, 108, 111, 126, 134, 135, 136, 137, 155, 206, 208, 227, 230, 237, 790, 856, A2, A3, A4, B2, B3, B4, E2, E22 (Stop: Makryianni)

- By trolley:

Lines 1, 5, 15 (Stop: Makryianni)

- By metro:

Line 2 (Aghios Antonios-Aghios Dimitrios), Disembarking Station: Acropolis

- By car:

The Museum encourages visitors to use one of the several means of public transportation that serve the Museum (see above) and to avoid using their cars in the historic quarter of Athens.

The Museum provides no public parking facilities. Limited street parking is available at the following streets near the Museum: Hatzichristou, Dimitrakopoulou, Veikou, Mitseon, Parthenonos, Karyatidon. Paid parking facilities are available at Rovertou Gali Street and Falirou Street.

Tour Buses

A bus drop off point for groups is available at Hatzichristou Street and entrance for groups is at Mitseon Street.

HOW TO GET TO THE MUSEUM FORM ATHENS IMPERIAL HOTEL:

From the METAXOURGEIO METRO STATION opposite the hotel take the red line (LINE 2) with direction Ayios Demetrios and disembark at ACROPOLIS METRO STATION. The Acropolis metro station is on the east side of the Museum site.

