	CONFERENCE PROGRAMME				
	Wednesday, 10 April 2013				
All day	Arrivals				
	Registration				
15:00-18:00	Floor 1, Foyer, Burgardens Konferenslokaler, Burgårdens utbildningscentrum, Skånegatan 20,402 29 Gothenburg, Sweden				
	Thursday, 11 April 2013				
	Registration				
8:00-9:30	Burgardens Konferenslokaler, Burgårdens utbildningscentrum, Skånegatan 20,402 29 Gothenburg, Sweden				
	EUROMATH 2013 : Opening Ceremony				
	ANIARA, Auditorium				
9:30-10:30	Floor 1, Foyer, Burgardens Konferenslokaler,				
10:30-11:00	Coffee –Tea - Juice break, (Foyer)				

CONFERENCE PROGRAMME					
	Thursday, 11 April 2013				
Place	ANIARA Auditorium	ВОНЕМЕ	CARMEN	DON JUAN	
Coordinators	Sava Grozdev	Thomas Wernstål	Michael Lambrou	Eva Fülöp	
11:00-11:20	To make a treeIt takes an L-System Fractals, Jessica Rubino, Italy	Application of area and the origin of the name Parapola, Maria Ntrinia, Greece	<b>Inspired by Escher,</b> Teodora Stajsic and Sasa Vuckovic, Serbia	Methods of the solution of Inequalities, Ayagoz Smagulova, Kazakhstan	
11:20 – 11:40	The Brunnian Rings - A remarkable way of linking!, Nikola Hajdin, Serbia	Herons triangles, Azamat Bralin and Gaziz Akhmetkali, Kazakhstan	7 Bridges, 6 Grades, 3 Theories, 2 Topological Objects, 4 the magic of Shapes!, Micol Di Segni and Naomi Galante, Italy	Investigation of the Polynomial Theory, Gaukhar Talgatkyzy and Meiramgul Tuzelbayeva, Kazakhstan	
11:40 – 12:00	Mathematical and Computer modelling of Populations of Species, Almas Tussipov and Zhandos Tursynov, Kazakhstan	Working out of Algorithm of calculating square of Polygon with the help of Combinatorics, Uldana Talgatovna Mussabekova, Kazakhstan	Game "Archimedes", Rinat Bekkozha and Kaiyrbolat Nazymbek, Kazakhstan	Some Classes of the Algebraic Equations of the highest degree solvable in Radicals, Timur Aitkazin and Eldar Mamratov, Kazakhstan	
12:00 – 12:20	About Classification of the Material Balance problems and some workarounds, Adil Mukazhanov and Adilkhan Akishev, Kazakhstan	Solution of Applied Problems and Methods of Computer Algebra, Timur Ospanov, Kazakhstan	Fibonacci Numbers and it's properties, Almas Serikkali and Vugar Alekperov, Kazakhstan	Solution to the problem of dividing the angle to three by using trisector, Arman Oralov and Ayazhan Oralbekova, Kazakhstan	

CONFERENCE PROGRAMME					
	Thursday, 11 April 2013				
Place	ANIARA Auditorium	ВОНЕМЕ	CARMEN	DON JUAN	
Coordinators	Sava Grozdev	Thomas Wernstål	Michael Lambrou	Andreas Skotinos	
12:20 – 12:40	Mathematical and Computerized Model of Financial Pyramid, Yernat Atanbayev and Aizada Kuanysheva, Kazakhstan	WORKSHOP 1 (Germany) Magical tricks with a mathematical background, Prof. Dr. Ehrhard Behrends, Department of Mathematics and Computer Science, Freie Universitat Berlin, Germany	Music is the sound of Mathematics, Salvatore Giampa, Claudio Veraldi and Daniele Zirilli, Italy	Euler Numbers and Turquoise Number, Rinat Kuchitarov, Kazakhstan	
12:40 – 13:00	Mathematical and computer modelling of biological populations of species, Azhar Bolatkaziyeva and Yelaman Zhumash, Kazakhstan	WORKSHOP 1 (Germany)	Math Magic, Samuel Lihotsky, Matus Zeman and Tomas Sura, Slovakia	Formulas of Permutation to find out number Length with Inversion, Yernur Seydegaliyev and Kanat Kalinov, Kazakhstan	
13:00 – 13:20	Mathematical Model of Analyzing Eclipses and their influence to humanity factors on the Earth, Aidana Urynbassarova and Alshyn Uzakbay, Kazakhstan	WORKSHOP 1 (Germany)	Mathematics and Chess, Beniamino Brociner, Italy	<b>Combinatorics in our Life,</b> Adil Erbolatov, Kazakhstan	
13:30 - 14:45	LUNCH Restaurant, Ground Floor (fo	<b>bllow signs)</b> , Ticket required at e	ntrance		

	CONFERENCE PROGRAMME Thursday, 11 April 2013					
15:00 open	Mathematics Poster Design	Exhibition [FOYER – outside	e Aniara Auditorium]			
Place	e ANIARA Auditorium BOHEME CARMEN DON JUA					
Coordinators	Constantinos Papagiannis	Michael Lambrou	Andreas Savvides	Eva Fülöp		
15:00 - 15:20 15:20 - 15:40	How to determine the weight of a Parapola, Max Karel and Zdenko Hive, Slovakia Mathematical Turn, Alfarabi Ibrahim and Tamerlan Erlanov, Kazakhstan	WORKSHOP 2 (Greece) Mathematical Magic Tricks, Prof. Michael Lambrou, University of Crete, Greece WORKSHOP 2 (Greece)	Pythagorean Triangles,Nursultan Abdilek, KazakhstanStatistics in Class,Madina Zharasbayeva andAigerim Mushkalova,Kazakhstan	Colouring Problems in Combinatorial Structures, Zhasulan Askarbek, Ulan Utebayev and Temirlan Kurmambayev, Kazakhstan Total Distance Function, Akzhan Zholdymuratova and Askar Kasymov, Kazakhstan		
15:40 -16:00	The Least Internal between two Prime Numbers, Daulet Orynbassa and Tortbay Kerimzhan, Kazakhstan	WORKSHOP 2 (Greece)	The Perfect Number, Abdelnassyr Shokimov and Arman Narkulov,Kazakhstan	Triangles defined by their elements, Nurlan Yessenaman and Vladimir Kim, Kazakhstan		

	CONFERENCE PROGRAMME				
	Thursday, 11 April 2013				
15:00 open	Mathematics Poster Design	Exhibition [FOYER – outside	Aniara Auditorium]		
Place	ANIARA Auditorium	ВОНЕМЕ	CARMEN	DON JUAN	
Coordinators	Constantinos Papagiannis	Sava Grozdev	Andreas Savvides	Andreas Skoteinos	
16:00 - 16:20 16:20 - 16:40	High Spots of Parabola, Yerlan Boskeyev anf Yernar Temirgali, Kazakhstan Amazing Equations, Nazerke Sovetkaliyeva and Dana Zhakupova, Kazakhstan	WORKSHOP 3 (Bulgaria) Proofs without words, Prof. Sava Grozdev, VUZF University, Sofia, Bulgaria WORKSHOP 3 (Bulgaria)	Mathematical Symbols and Terminology, Dunja Cukovic, Serbia Magic Squares, Almas Tursunbay and Binur Erkinbek, Kazakhstan	The Volume of the Pyramid and Heron's Formula, Yerbol Klimov and Aizada Muratova, Kazakhstan Methods of Othogonal Transformations of Images, Asem Yeleusinova, Yerkin Shyrakzhan and Aibek Ashirbay, Kazakhstan	
16:40 - 17:00	Women in History of Mathematics, Maja Bodvai, Serbia	WORKSHOP 3 (Bulgaria)	Golden Ratio and Fibonacci Sequence in Art and Architecture, Markella Georgaroudaki, Evgenia Giakoumaki and Ioannis Palmos, Greece	The Geometry of Ancient Japan, Erik Kasym and Kuanysh Bakirov, Kazakhstan	

CONFERENCE PROGRAMME					
	Thursday, 11 April 2013				
Place	ANIARA Auditorium	BOHEME	CARMEN	DON JUAN	
Coordinators	Samuel Bengmark	Sotos Voskarides	Peter Kortesi	Andreas Skotinos	
17:00 – 17:20	WORKSHOP 7 (Sweden)	WORKSHOP 4 (Cyprus) Making Mathematics Fun	Mathematics and Architecture,	Proof of Theorem related with Divisibility of Numbers,	
	Andersson, Samuel Bengmark, Torbjörn Lundh and Anders Karlsson, Charlmers University of Technology, Sweden	Cartoons and Funny Stories, Sotos Voskarides, Cyprus University of Techn. and President of Cy Cartoonists Association, Cyprus	Adil Abzhami and Nurlan Zamiyev, Kazakhstan	Temirlan Amirkulov and Nurtore Bakir, Kazakhstan	
17:20 – 17:40	WORKSHOP 7 (Sweden)	WORKSHOP 4 (Cyprus)	Hexagon and Inequalities, Rustem Bulatov and Alimzhan Asiltaev, Kazakhstan	Study of Motion of Cubic Equation Roots Theorems and their Application, Alisher Kuandykov and Manas Zholdybay, Kazakhstan	
17:40 – 18:00	WORKSHOP 7 (Sweden)	WORKSHOP 4 (Cyprus)	Le-MATH Project Learning Mathematics through new communication factors Gr.Makrides, H. Loidl, S. Grozdev, G. Economides, E. Christou, P. Kortesi	The Mathematical Ways of Developing the Peasant Agriculture, Aidana Bagdat and Rustina Kurmankulova, Kazakhstan	
18:00 – 19:15	Reception offered by the City of Gothenburg (Foyer, Conference Place)				
19:30 -21:00	Math <i>FACTOR</i> Preliminaries (ANIARA Auditorium), CMS, THALES Foundation, Le-MATH				

	CONFERENCE PROGRAMME				
		Friday, 12 April 2	2013		
Place	ANIARA Auditorium	ВОНЕМЕ	CARMEN	DON JUAN	
Coordinators	Laura Fainsilber	Peter Kortesi	Sava Grozdev	Eva Fülöp	
9:00 – 9:20	Chinese Remainder, Yerasyl Amanbek, Adlet Nurpeisson and Kemran Gassanov, Kazakhstan	WORKSHOP 5 (Hungary) Isogonal Transformation – Revisited with GeoGebra, Peter Kortesi, University of Miskolc, Miskolc, Hungary	WORKSHOP 6 (Croatia) Mathematics in the service of Cryptography and Cryptanalysis, Marija Bosnjak, Technicka Skola Pozega, Croatia	Music-The art immerging from Math, Rebecca Constantinidou, Angeliki Iacovou, Maria Kalli, Panos Pittakas, Cyprus	
9:20 – 9:40	Couette's flow in different temperatures, Timur Nurmagambetov and Aibek Mansarin, Kazakhstan	WORKSHOP 5 (Hungary)	WORKSHOP 6 (Croatia)	The Dependence of the Level of Anxiety a Person on the Amount of Time Spent on Computer Games, Arshyn Sultangazy and Vladislav Marsyukov, Kazakhstan	
9:40 – 10:00	Motion of Trajectory of Pursuit Points, Aidana Zhumasheva and Aidana Sagyndykova, Kazakhstan	WORKSHOP 8 (Sweden) Random trees as models of evolution, Serik Sagitov, Department of Mathematical Sciences, Chalmers and University of Gothenburg, Sweden	WORKSHOP 9 (Sweden) Hyperbolic Geometry, Ulf Persson, Department of Mathematical Sciences, Chalmers and University of Gothenburg, Sweden	The Mathematics behind our everyday experiences, Athanasios Makrides, Constantinos Pavlides, Christoforos Christofi, Cyprus	

CONFERENCE PROGRAMME				
		Friday, 12 April 2	2013	
Place	ANIARA Auditorium	BOHEME	CARMEN	DON JUAN
Coordinators	Laura Fainsilber	Peter Kortesi	Sava Grozdev	Eva Fülöp
10:00 – 10:20	The application of the eigen values and eigenvectors of the Simulation of Random Processes, Sahzhar Umraliev, Kazakhstan	WORKSHOP 8 (Sweden)	WORKSHOP 9 (Sweden)	Beauty is in the Eye of the Mathematics, Aizhan Yerimbetova, Kazakhstan
10:20 – 10:40	Mathematical Model of the Global Risks' Landscape and Classification of Environmental Objects (based on the materials of the world economic forum), Inzhu Baktybai, Kazakhstan	WORKSHOP 8 (Sweden)	WORKSHOP 9 (Sweden)	Beauty and Truth, Nastasja Solaja, Serbia
10:40 – 11:00	BREAK			

		Friday, 12 April 2	2013	
Place	ANIARA Auditorium	ВОНЕМЕ	CARMEN	DON JUAN
Coordinators	Constantinos Papagiannis	Peter Kortesi	Sava Grozdev	Andreas Savvides
11.00 – 11:20	Infinite Hotel, Maximilian Palko and Marek Rostar, Slovakia	Three Geometric Problems of Antiquity, Vladimir Lermajer, Serbia	Math and Sport: Influence to each other, Alikhan Esmagambetov and Alzhanov Bakhtiyar, Kazakhstan	Whether Arithmetic and Geometric Progressions are Important in Everyday Life, Abylaikhan Kairkulov and Nurzhan Nauryzbayev, Kazahkstan
11:20 – 11:40	Introduction to Queuing Theory, Krasimira Trifonova, Bulgaria	<b>SPIRALS</b> , Alexia Martínez Sanchéz, Spain	<b>The World of Fractals,</b> Niya Nikolaeva Georgieva, Bulgaria	The Sampling and Shannon's Theorem, Petar Antolovic, Croatia
11:40 – 12:00	Algorithm – Mathematical Basis, Violetta Ivanova, Kazakhstan	Variety of Multiplication, Simona Sandrova and Rebecca Andryskova, Slovakia	Criterion of internal and external of Concentric Balls, Nazira Kurenbayeva, Kazakhstan	Repetitive Numbers, Shamilkhan Domayev and Muratzhan Kopbayev, Kazakhstan
12:00 -12:20	<b>π-The end is simply a myth,</b> Irene Demetriou, Christos Kattos and Gregory Neophytou, Cyprus	Some Properties of Binomial Coefficients, Askhat Bobei and Bahtiyar Aliyev, Kazakhstan	The roots of polynomials with real coefficients, Rustam Tleuli, Inayt Tursunov and Bektoe Kertai, Kazakhstan	Cryptography and Magic Numbers, Adil Sarsenov and Iliyas Yelzhan, Kazakhstan

CONFERENCE PROGRAMME				
		Friday, 12 April 2	2013	_
Place	ANIARA Auditorium	ВОНЕМЕ	CARMEN	DON JUAN
Coordinators	Constantinos Papagiannis	Peter Kortesi	Sava Grozdev	Andreas Savvides
12:20-12:40	The Maths of Dynamics, Constantine Polyzoes, Greece	Applications and Derivation of the differentiation rules, Hanna Gawlitza, Sweden	Relationship between Music and Mathematics: Fantasy or Reality, Zhibek Moldagaliyeva, Kazakhstan	Mathematics in Music, Tomiris Urstembaeva, Kazakhstan
12:40 – 13:00	Dynamical Systems, Chaos and some examples, Sofia Pempou and Chrysoula Ragkousi, Greece	Division of numbers into numbers ending to 9 and 3, Temirlan Bazylgaliyev and Arzhan Mazhitov, Kazakhstan	<b>Game Theory and Bargaining,</b> Zahra Habibollahi Najafabadi, Iran	Mathematics and Bees, Marios Eleftheriou, Sofia Ioannou, Marios Nicolaou, Andrea Achilleos, Charilaos Charilaou, Savvas Kazepis, Phivos Philitas, Ksenia Pieridi and Stavrina Pieridi, Cyprus
13:00 – 13:20	Study of Economic Processes with through Mathematic Models, Madina Nurmagambetova and Anel Sotsialova, Kazakhstan	Construction of Equations of Motion of Mechanisms with Account of Friction, Temirlan Kuanyshbekov and Arlen Moldabekov, Kazakhstan	Card Tricks based on Mathematics, Demetris Marangos, Alexandros Lakkotrypis and Demetris Markoullis, Cyprus	The Great Mathematicians of Central Asia, Zere Kairbekova, Kazakhstan
13:30 – 14:45	LUNCH Restaurant, Ground Floor (follow the signs), Ticket required at entrance			

CONFERENCE PROGRAMME				
		Friday, 12 April 2	2013	
Place	ANIARA Auditorium	ВОНЕМЕ	CARMEN	DON JUAN
Coordinators	Peter Kortesi	Sotos Voskarides	Helmut Loidl	Sava Grozdev
15:00 - 15:20	Probability in Gambling Games, Yvonne Tsitsiou, Vasilis Nicolaou and Iliana Georgiou, Cyprus	Mathematics of a Robot Arm, Ibragim Tashim and Alimbek Akhmetkaliev, Kazakhstan	The Problem of finding the Roots of Polynomias, Askar Zhambyl and Damir Akbasov, Kazakhstan	The Use of Complex Numbers in Solving Problems in Number of Theory, Sholpan Gizatova and Amangali Kadyrgaliev, Kazakhstan
15:20 – 15:40	Using the New Arithmetical Triangle to combinatorial problem and her (its) some characteristic, Anel Moldagereyeva, Kazakhstan	The Polygons in Nature, Art and Science, Filippos Mavridis, Alexander Sourbi, Hlectra Remoundaki and Christiana Papanikolaou, Greece	<b>SpeedCubing</b> , Sanzhar Zhantemirov, Kazakhstan	Research and Modelling: The formation of second- order curves, Sabina Zhaksylykova and Aizhan Kossantayeva, Kazakhstan
15:40 – 16:00	<b>Geometrical Complexity,</b> Ioanna-Maria Ligatsika, Greece	Playing with Equations, Carmen Calvo, Mikel Landín, Beatriz Abarca, Álvaro López, Santiago Agüí, Marta Herrero, Jorge Villacorta and Manuela Manzano, Spain	New Results of Farey, Temirlan Zharylkasyn, Umar Mamezov and Ibraimzhan Tursunov, Kazakhstan	Yakov Isidorovich Perelman – The Great Popularized of Mathematics, Ulangasen Tolege, Kazakhstan
16:00 – 16:20	Mathematical Methods for Treating Cancer, Fereshte Alichapi, Iran	Word Problems of Chemical and Biological Content as Mathematical Models of Real Situations, Galymzhan Kenesbekov, Kazakhstan	Generalization of Cardano's Formula, Abdusaitov Ilham, Kamalov Nurdaulet and Asadli Turan, Kazakhstan	Tetrahedrons with a Series- Integer Sides, Danabek Raimbek, Asembek Tleuberdiev and Symbat Kurmangaliyeva, Kazakhstan

CONFERENCE PROGRAMME				
		Friday, 12 April 2	2013	
Place	ANIARA Auditorium	ВОНЕМЕ	CARMEN	DON JUAN
Coordinators		Sotos Voskarides	Helmut Loidl	Andreas Savvides
		The 3n + 1 Conjecture,	Pushkin and Mathematics,	Application of the Concept
16:20 – 16:40		Elpida Stratopoulou, Greece	Kamilla Temirkhan and Aidina Tleugabyl, Kazakhstan	of center of mass to the Solution of Exercises, Aida Sabralimova and Dmitriy Tomilov, Kazakhstan
		Amazing Properties of Combinatorics	Can we predict sports results?	Revelation of the Pyramids,
16:40 – 17:00		Arlen Maikynov, Denis Kochiyev, Turarbek Anuarbek and Elkhan Issayev, Kazakhstan	Luka Mioković, Grigor Špalj, Ivan Zrinščak and Marko Šobak, Croatia	Kazakhstan
17:00 – 17:20	BREAK			
17.30 - 19.00	MathFACTOR EUROPE 2	2013 Finals		
17.50 - 15.00	(ANIARA Auditorium)			
20:30 -01:00	EUROMATH 2013 DINNE AWARDS for MathPoster Desig GOTHIA Towers Banquet, Ticke	R DANCE n Competition and MathFACTO t required at entrance	R Competition 2013	

CONFERENCE PROGRAMME Saturday, 13 April 2013						
Coordinators		Costas Papagiannis	Marija Cvijovic	Robin Persson Söderholm		
09:20 - 09:40		Mathematics and Chess, Assiya Utzhanova, Kazakhstan	An Attempt to Improve Passability of Hallways in our School, Sara Hrg, Ema Sepić, Dora Anic, Lana Racic and Marijan Steko, Croatia	Let's play Music with Mathematics, Berjis Mahshad and Choopannejad Mahsa, Iran		
09:40 - 10:00		Mathematics and Photovoltaics, Peter Ľuba, Slovakia	Sets, Functions and Hilbert's Hotel, Lara Rajković, Croatia	<b>Music and Mathematics,</b> Narkes Baigabylova, Kazakhstan		
10:00 - 10:20		A Geo-Combinatorial approach to the Birthday Problem, Andrea Marino, Italy	<b>Möbius Strip,</b> Dora Hipsa, Grigor Spalj and Veronika Vrhovec, Croatia	Identify the Scope of Fractals, Meirlan Karasartov, Kazakhstan		
10:20 - 10:40		Proportionality in the human body, Ermek Dostayev, Kazakhstan	Mathematics in Ancient Weapon Technologies, Amir Pshenov, Kazakhstan	<b>Calculations of our Luck!,</b> Gergana Marin Georgieva and Magdalena Marin Georgieva, Bulgaria		

CONFERENCE PROGRAMME							
Saturday, 13 April 2013							
Place	ANIARA Auditorium	BOHEME	CARMEN	DON JUAN			
Coordinators		Costas Papagiannis	Marija Cvijovic	Fredrik Hermansson			
		Theory of using graphs,	Role of Math in the Society,	Billiards and Surface,			
10:40 – 11:00		Christina Poplavskaya, Kazakhstan	Akzhan Suranshy, Kazakhstan	Aziz Abylhasim and Aliyar Assylbek, Kazakhstan			
11:00 – 11:20		Special Properties of Evolution Algebras in space, Assel Baikadamova, Kazakhstan	Optimizing Routes in a Modern World, Aliosha Bielenberg Pittaka, United Arab Emirates	Ancient Philosophy of Mathematics – The Application of Number Symbolism, Nargiz Khalmet, Kazakhstan			
11:20 – 11:40		The Application of Computer Technology to Optimize the Volume of the Solids, Zylkiya Akhmetzhanova, Kazakhstan	Mathematical Model of the Global Risks' Economic Objects Classification (based on the materials of the World Economic Forum), Mamet Anel Suleimenovna, Kazakhstan	The Geometry of Beauty, Alina Kukarskikh, Kazakhstan			
11:40 – 12:00		Development of Expert System of Estimation of Biochemical and Physical Indicators of Baked Goods Production, Daniyar Beksoltanov, Kazakhstan		Origami and Mathematics, Madina Tuyak, Kazakhstan			

CONFERENCE PROGRAMME								
Saturday, 13 April 2013								
14:00-16:00	SCIENCE FESTIVAL Activity CHALMERS University of Technology Campus Johanneberg. Experimentverkstaden is situated in the area of Civil and Environmental Engineering, entrance from Betonggården 5. See information below Transfer by tram, departure from conference place at 12:30 Transfers can take place from your hotels also as a tram ticket will be provided for the day to all registered participants. (light lunch offered at entrance of Experimentverkstaden at 13.00-14.00)	Guides to support transfer: Robin Persson Söderholm, Fredrik Hermansson, Jens Carlsson, Annie Almgren, Kajsa Ragnhage, Fanny Kokkonen, Agnes Richardsson, Leaving from Conference Centre						
Sunday, 14 April 2013								
	Independent Departures							

#### **SCIENCE FESTIVAL Activity**

#### The CHALMERS University of Technology

From the Conference place How to get there by tram: Get on the tram outside the conference place, take tram no 8, towards Frölunda

From other places: Tram no 6, towards Länsmansgården

In both cases, get off at stop "Chalmers"

#### **The International Science Festival Gothenburg**

The International Science Festival Gothenburg is the largest festival of knowledge in Sweden and one of the leading popular science events in Europe. It is a meeting place where scientists are given the opportunity to present their research in an easily digestible form to schoolchildren and the general public. Each year the festival attracts around 70,000 visits, with a programme of almost 300 unique lectures, workshops, debates and activities spread across 30 or so locations in Gothenburg.

The aim is to encourage visitors to choose further education and to generate a positive attitude towards science and research.

The festival is a cross-disciplinary event held every year in Gothenburg and is part of the European Science Events Association (EUSEA) – a network of popular science events that aim to increase awareness of research and education. The event is environmentally certified.