CADGME-2012 Preliminary Programme

22 June 2012

7:30-9:45	**Registration / Coffee**
9:45-10:15	**Opening** (Room Amfiteatar Mihajlo Pupin, A1)
10:15-11:00	**Adrian Oldknow** Software and activities to motivate and support learners in mathematics, science and technology
11:05-12:35	**Parallel session I**

C1	Nobel	Tesla	C10	A1
Walther Neuper	**Csaba Sárvári**	**Đorđe Herceg**	**Masataka Kaneko**	**Arpad Takači**
Milena Marić and Filip Marić Stereos:A Language for Describing Stereometric Constructions (28)	**Ana Donevska Todorova** Dynamic Geometry Environment Designed for Developing Concepts in Linear Algebra and Analytic Geometry (1)	**Radka Stepankova** Using computers in solving problems from probability (11)	**Making Materials Based on TeX and CAS/DGS** **Setsuo Takato** **The necessary components of materials and textbooks used in math classes** **Satoshi Yamashita** On making printed math class materials with figures based on symbolic thinking	**Miodrag Mateljevic** On the visualizations in applied mathematics (83)
Rein Prank Towards automatic evaluation of expediency of steps in algebraic (16)	**Gábor Ancsin, Markus Hohenwarter and Zoltán Kovács** GeoGebraWeb - the	**Olga Komínková and Helena Binterová** Learning climate in relation to CLIL	**Yoshifumi Maeda and Hisashi Usui** **The methodology of high-quality 3D-drawing compatible to LaTeX graphics capabilities**	**Đura Paunić** Dynamical Asymmetric Propeller (92)

	next generation dynamic mathematics software (4)	and dynamic geometry (12)	**Kiyoshi Kitahara and Setsuo Takato** A teaching material for double integral including three dimensional figures drawn with KETpic **Masataka Kaneko** The graphics use for introducing eigenvalues and eigenvectors in linear algebra class	
Vanda Santos and Pedro Quaresma Collaborative Aspects of the WGL projekt (23)	**Zsolt Lavicza** Development directions of GeoGebra and its community (63)	**Lilla Koreňová** ICT in teaching mathematics as a content for didactic education of future teachers as well as for additional education of teachers on Comenius Uni. in Bratislava (67)		**Aleksandar Lipkovski** Hilbert and multivariate polynomial rings (87)

12:35-13:50	**Welcome reception**
13:50-14:35	**Jean-baptiste Lagrange** Functions, Dynamic Geometry and CAS: offering possibilities for learners and teachers
14:40-16:10	**Parallel session II**

C1	C10	Tesla	Nobel	A1
Filip Maric	**Homero Flores**	**Alan Robertson**	**Lilla Koreňová**	**Branislav Popović**
Francisco Botana, Zoltán Kovács, Tomás Recio and Simon Weitzhofer Implementing theorem proving in GeoGebra by using various methods (5)	**Natalija Budinski** Modeling real life situations with functions and GeoGebra in mathematical education (8)	**Ružica Vukobratović and Đurđica Takači** On the Visualization of Function throught programmed instruction in a computer classroom (62)	**Zoltan Gingl, Robert Mingesz and Katalin Kopasz** Sensor-to-computer interfaces support experimental education (54)	**Slađana Dimitrijević, Branislav Popović and Marija Stanić** Analysis of the usage of computers in mathematics teaching - overview of the situation in Serbia (10)
Ivan Petrović, Zoltán Kovács, Simon Weitzhofer, Markus Hohenwarter and Predrag Janičić	**Libuše Samková** Deepening the content knowledge with GeoGebra (9)	**Mirjana Stojanović and Đurđica Takači** On the visualization of solutions of fractional equations (69)	**Zoltan Gingl, Robert Mingesz and Katalin Kopasz** Real experiments with sensor-to-USB interfaces (55)	**János Karsai and Árpád Takácsi** Teaching mathematics and statistics in sciences (conclusions of an EU project from

Extending GeoGebra with Automated Theorem Proving by using OpenGeoProver (6)				nonstandard point of view) (78)
Walther Neuper Announcement for an upcoming generation of TP-based educational (28)	**Đorđe Herceg and Vera Herceg-Mandić** GeoGebra in geography classes (30)	**Georgi Dimkov and Dessislava Dimkova** The Geometric Transformations in the Plane from a Common Point of View (47)	**Robert Vajda** Exploration of Hermite Interpolation Polynomials with Mathematica (32)	**Đurđica Takači and Doru Paunescu** The Influence of Visualization on Mathematical Thinking (66)

16:10-16:40	**Coffee with snack**
16:40-18:10	**Workshops**

A1	C10	C1
Péter Körtesi **GeoGebra in studying functions**	**Gert Treurniet and Jürgen Schepers** **Interactive math and science education in the Benelux, using TI-Nspire and TINavigator in secondary education**	**Mihály Klincsik** **Workshop about symbolic manipulations with random variables using Maple CAS**

18:15-18-55	**Students' talks**

Aleksandra Arsić Interactive course of higher mathematics using GeoGebra (79)	**Aleksandar Bukva** Application of differential equations in physics (59)
Aleksandra Stevanović Analytic geometry made by GeoGebra software (80)	**Danka Lučić, Mario Varga** Using GeoGebra in mathematical modeling (70)

Marija Radojičić Interactive presentation of derivation of function using the software package GeoGebra (81)	**Tijana Stojančević** **On the mathematical modeling of interest by using GeoGebra (88)**	
Milena Isajlović Study about elementary functions teaching materials created using the software package GeoGebra (82)	**Slaviša Radović and Miroslav Marić** Surface area of geometric figures using GeoGebra software (86)	

19:00-19:30	**Meeting of the Fibonacci group**
19:30-22:00	**Welcome dinner**

23 June 2012

8:30-10:00	**Parallel session III**

C10	C1	Nobel	A1	Tesla
Roman Hašek	**Đurđica Takači**	**Aleksandar Takači**	**János Karsai**	**Doru Paunescu**
Irena Štrausová and Roman Hašek Visualization of proofs using dynamic software (19)	**Jelena Tatar** On the convergence of the geometric series (65)	**Darko Drakulić** Development of e-textbooks in mathematics: Experience from Slovenia and Bosnia and Herzegovina (58)	**Matthias Ehmann, Michael Gerhäuser, Heiko Vogel and Alfred Wassermann** Sketchometry and JSXGraph: Dynamic Mathematics for Tablets (27)	**Francesca Ferrara and Ornella Robutti** The use of DGS to face optimization problems at secondary school (53)
Milena Marić and Predrag Janičić	**Gordana Stankov and Valerija**	**Carsten Miller** Dynamic Mathematics	**Tanja Sekulić** The role of active learning and	**Zorica Stanimirović** Knowledge

Using GCLC System and its Theorem Provers for Teaching Geometry (31)	**Jaćimović** Teaching quadratic function by using GeoGebra (64)	Software and Interactive E-Books (25)	mathematical modelling in modern mathematics education (85)	building: Introducing a Collaborative e-learning Environment in an Interdisciplinary Project (90)
Zlatan Magajna Automated observation of properties of dynamic constructions (26)	**Ripco Sipos Elvira and Elvira R. Sipos** Teaching Geometry Using a Computer (75)	**Igor Pesek, Blaž Zmazek, Vesna Zmazek, Alenka Lipovec, Samo Repolusk and Jože Senekovič** E-textbooks: time to breakthrough (72)	**Iordanka Gortcheva** Solving Extremum Problems in Elementary Mathematics through Dynamic Software (50)	**Csaba Sárvári** On semiotic analysis of the potential of computer algebra systems (61)

10:00-10:30	**Coffee break**
10:30-11:15	**Hans-Georg Weigand** Theses about the use of computer algebra systems in the next decade
11:20-12:20	**Parallel session IV**

C1	**Tesla**	**Nobel**	**C10**	**A1**
Matthias Ehmann	**Zoltan Gingl**	**Libuše Samková**	**Zoltan Kovács**	**Carsten Miller**
Oliver Labs Towards a Closer Integration of Algebra and Geometry in Teaching (41)	**Anna Takács Klingné** The solution of economic tasks with GeoGebra (48)	**Cindy Kovalik** Tips, Techniques, and Instructional Strategies for Online Learning (44)	**Toni Chehlarova and Koya Chehlarova** Photo-pictures and dynamic software or about the motivation of the art-oriented students (45)	**Daniela Ferrarello, Maria Flavia Mammana and Mario Pennisi** Teaching/learning geometric transformations in high school with DGS (43)
Kaja Maričić and Sima Pastor Correlation of GeoGebra and CAD software in the analysis of cycloid meshing (42)	**Duška Pešić** Cobwebbing in GeoGebra (52)	**Tatjana Hrubik-Vulanović** Comparing College Math Courses with and without ALEKS (51)	**Homero Flores** **Classroom assessment and dynamic geometry**	**Ulrich Kortenkamp, Christian Dohrmann and Paul Libbrecht** Open Discovery Space: Sustaining the Intergeo Project for DGS

				content and teachers' CPD in Europe (36)	

12:20-13:50	**Lunch**
13:50-14:35	**Olga Hadžić** The Role of Computers in Changing Students Attitudes Towards Mathematics
14:40-16:10	**Workshops**

A1	**C10**	**C1**
Lajos Szilassi **The possibilities of and limits to the application of the GeoGebra dynamic geometry programme in elementary and secondary education**	**János Karsai** **How to prepare interactive Mathematica documents for classroom**	**Jean-baptiste Lagrange** **Casyopée an open environment for learning about functions at upper secondary level**

17:00-21:30	**Excursion**

24 June 2012

8:30-10:00	**Parallel session V**

C10	**C1**	**A1**	**Nobel**	**Tesla**
Pavel Pech	**Jelena Tatar**	**Miroslav Maric**	**Toni Chehlarova**	**Duška Pešić**

Jakub Jares and Pavel Pech Exploring loci of points by DGS and CAS (38)	**Davorka Radaković and Đorđe Herceg** Mathematical games on Silverlight (40)	**Branko Kaučič, Igor Pesek, Blaž Zmazek and Maja Ramšak** Evolutionary changes affecting personal learning environments (74)	**Jelena Hadži-Purić, Nevenka Spalević and Jasminka Mihaljinac** Application of dynamic mathematics software in initial math teaching (preschool education and primary school (37)	**Mirjana Jovanović** Directed line segments as free vectors (56)
Jan Rocnik and Walther Neuper Interactive Course Material by TP-based Programming. A Case Study (38)	**Dessislava Dimkova** Inquiry-based Model of the Inversion in the Plane (46)	**Branka Radulović and Ivana Rančić** Linking Experiments and Use of Multimedia in Teaching Physics (68)	**Vladimir Baltić** Using Maple in Elementary and High School Mathematics (73)	**Ljibiša Dinić** On the volume of Pyramid (77)
Gabriella Daroczy and Walther Neuper Cognitive Science meets Computer Mathematics. A Case Study (33)	**Milanović Ivana and Raičević Vidak** APPLICATION OF THE GEOGEBRA EDUCATIONAL SOFTWARE IN DETERMINING THE GEOMETRIC LOCUS (91)	**Aleksandar Takači** Using Fuzzy Systems to predict student test scores (76)	**Ljubomir Jerinic** Pedagogical Patterns For Learning Programming By Mistakes (57)	**Ralf Wagner** Cooperative learning contexts in upper secondary analytic geometrie lessons using DGS (35)

10:00-10:30	**Coffee break**
10:30-11:15	**Alan Rogerson** Fundamentals, the Future and the Power of the Force
11:20-12:50	**Workshops**

C1	**C10**

	Libuše Samkova **Volume and area ratios with GeoGebra**	**Ulrich Kortenkamp** **Beyond DGS - Simulations and Scripting with Cinderella**	
12:50-13:20	**Closing**		
13:20-	**Lunch**		