



Date: Thursday, November 29, 2012

Tentative Program of ATCM 2012

December 16, 2012 (Sunday)

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| 10:30-12:30 | Pre-Conference Workshops at SSRU
Cabri 3D by Jen-Chung Chuan, Taiwan
GInMA by Vladimir Shelomovskii, Svetlana Nosulya, Russia
Maple by Bill Blyth and Asim Ghous, Australia |
| 17:00-18:00 | Registration: Centara Grand Hotels and Resorts for foreign participants only
(*16.00 : Shuttle Bus will leave Suan Dusit Place to Centara Grand Hotels and Resorts) |
| 18:30-21:00 | Welcome Reception at Centara Grand Hotels and Resorts (for committee members and foreign participants only) |

December 17, 2012 (Monday)

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| 8:00-8:50 | Registration at SSRU |
| 9:00-10:00 | Opening ceremony at Su Nandha Nusorn Hall |
| 10:00-10:30 | Tea Break |

10:30-11:20 Keynote Speech: Room 1, Chair: Wei-Chi Yang

19966 Can Mathematical Invention be Automated? Bruno Buchberger

11:30-12:30 Parallel Session I: Presentations (Each contributed paper presentation slot is 20 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)

Room 1: (Chair: Jean-Jacques Dahan)

11:30-12:20 19705 From Ancient 'Moving Geometry' to Dynamic Geometry and (50 minutes) Modern Technology- Mirosław Majewski, Jen-Chung Chuan

Room 2: (Chair: Vladimir Nodelman)

11:30-12:20 19744 Visualization of the Cross Ratio and its Geometric Application (50 min.) Yoichi Maeda

Room 3: (Chair: Keng Cheng Ang)

11:30-12:20 19994 e-Teaching and e-Assessment of Minimum-Maximum Problems (50minutes) using Maple-Bill Blyth

Room 4: (Chair: Maria Isabel Lucas)

11:30-11:55 19950 Developing Primary School Students' Spatial Abilities Through Transformational Geometry: a comparison of the effects of two interactive dynamic software, Xenia Xistouri, Demetra Pitta-Pantazi

11:55-12:20 19955 Performance Patterns in Calculus Based on the Interactive Factors of Learning for Curricular Framework Development - Maria Isabel Lucas

11:30 - 12:30	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room 5) 19932 The Application of Graphing Calculator in High School Function Teaching (CASIO)- Jie Shen
	(CW 1 Computer Room 1) 20112 How to develop mathematical thinking in the classroom with DbookPro in Thai-Masami Isoda and Dr. Maitree Inprasitha
	(CW2 Computer Room 2) 19948 Workshop for Introducing MathDisk- Ajit Kumar, Mohamed Jaffarali
	(CW3 Computer Room 3) 19943 Construction of Maximal Twistable Tetrahedral Torus- Jen-chung Chuan
12:30-13:30 Lunch Break	
13:30-14:30	Invited Speaker 1: Room 1: (Chair: Mirek Majewski) 19735 Maximal Twistable Tetrahedral Torus- Jen-chung Chuan
	Invited Speaker 2: Room 2: (Chair: Antonio Quesada) 19928 Mathematical Modeling as a Learning Experience in the Classroom- Keng Cheng Ang
	Invited Speaker 3: Room 3: (Chair: Vladimir NODELMAN) 19913 Color Models as Tools in Teaching Mathematics- Ma. Louise Antonette De Las Penas
14:30-15:30	Parallel Session II: Presentations (Each contributed paper presentation slot is 20 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)
	Room 1: (Chair: Ma. Louise De Las Penas)
	14:30-15:20 19790 Calculators and the mathematics curriculum- Barry Kissane, (50 minutes) Marian Kemp
	Room 2: (Chair: Han Hyuk Cho)
	14:30-14:55 19789 The MCY-Activities:Constructing and Sharing Three Types of Pattern- Han Hyuk Cho, Ji Yoon Lee, Chul Ho Kim, et al.
	15:00-15:25 19911 Cognizable, Learnable, Expressible, Accessible, and Reasonable Model in Mathematical Thinking, Reasoning and Problem Solving- Hsiu Ju Chang
	Room 3: (Chair: Wai Kwong Cheang)
	14:30-4:55 19795 Applications of CAS to analyze the step response of a system with parameters- Takuya Kitamoto
	15:00-15:25 19885 Bias of ML Estimator for Multivariate Regression Model with Vector AR(1) Noise- Wai Kwong Cheang
	Room 4: (Chair: Rao Zhenping)
	14:30-14:55 20102 Discuss the Eccentricity of the Conic Section With HP39GS- Rao Zhenping
	15:00-15:25 20105 HP39gs graphing calculator in mathematics teaching effect- Li Jianhua

14:30 - 15:30	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room 5) 19731 RESISTED MOTION: A CRTICAL ANALYSIS USING CLASSPAD MANAGER-Wei Ching Quek
	(GC Room 6) 19780 TI 84 Plus Workshop- Craig Refugio, Patrick Galletto
	(CW1 Computer Room 1) 19997 Introduction to Computer Aided Assessment of Secondary School / Undergraduate Mathematics using MapleTA- Bill Blyth and Asim Ghous
	(CW2 Computer Room 2) 19752 Using Grapher to Help Students Visualize Concepts- Drew Ishi
	(CW3 Computer Room 3) 19960 The Geometer's Sketchpad: Beyond Geometry- Nicholas Jackiw

15:30-16:00 Tea Break and Poster Sessions

19760 Virtual Game in Classroom for Introducing 3D Vector Operations-Hitoshi Nishizawa, Kohtaro Shimada, Takayoshi Yoshioka
19924 A classification and extension of the linkage -from the view to constitute- Chieko Fukuda, Kyoko Kakihana
19956 Learning to Solve Least Squares Curve/Line Method by Using Spreadsheets Sammy Khayat, Craig Refugio
19971 Matrix Operations Through Spreadsheets-Craig Refugio, Sami Khaya
19907 Ten years of GeoGebra-Balazs Koren, Markus Hohenwarter, Zsolt Lavicza

16:00-17:00	Parallel Session III Presentations (Each contributed paper presentation slot is 20 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)
	Room 1: (Chair: Mita Darbari)
16:00-16:25	19805 Exploring Pattern Generalization in the Logo-based Microworld Han Hyuk Cho, Chul Ho Kim, Dong Jo Shin, et al.
16:30-16:55	19808 Special Pythagorean Triangles and Pentagonal Numbers- Mita Darbari
	Room 2: (Chair: Craig Refugio)
16:00-16:25	19778 GRAPHING INEQUALITIES AND SYSTEM OF INEQUALITIES THROUGH TI 84- Craig Refugio, Ma Elsa Ilona Bulado, Evelyn Lazalita
16:30-16:55	19798 Exploring Flipped Classroom Pedagogy in Teaching and Learning of Sec 2 Mathematics in 1-to-1 Computing Environment- Luis Tirtasanjaya Lioe, Chik Leng Tan, Chin Wen Teo, et al.
	Room 3: (Chair: Bakhodirzhon Siddikov)
16:00-16:25	19874 Teaching Calculus with WebCT Vista and Maple Software- Bakhodirzhon Siddikov
16:30-16:55	19829 Fostering creativity in science amongst kinaesthetically-inclined students through a simple mathematics-based toy in Design & Technology (D&T) lessons- Nazir Amir, Subramaniam Ramanathan
	Room 4: (Chair: Jamal Hussain)
16:00-16:25	19905 Contributing to mathematics education by enabling community engagement with the GeoGebra software-Zsolt Lavicza, Balazs Koren, Markus Hohenwarter
16:30-16:55	19963 Improving Performance of Intrusion Detection Systems using Artificial Neural Networks -Jamal Hussain

16:00 - 17:00	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room 5) 19791 Learning with an advanced scientific calculator- Barry Kissane, Marian Kemp
	(GC Room 6) 19923 Teaching calculus using a visual and discovery approach- Christopher Longhurst
	(CW1 Computer Room 1) 19942 Guidobaldo's theorem: central perspective understood with Cabri 3D- Jean-Jacques Dahan, Jean-Marie Laborde
	(CW2 Computer Room 2) 19948 Workshop for Introducing MathDisk- Ajit Kumar, Mohamed Jaffarali
	(CW3 Computer Room 3) 19944 Drawing Conchoid of de Sluze with the Peaucellier Cell, a workshop with Cabri II Plus- Jen-chung Chuan
09:00-17:00	Exhibitions
18:30-21:00	Conference Dinner and Culture Night

December 18, 2012 (Tuesday)

8:00-8:50 Registration: SSRU

9:00-9:50	Plenary Speech 1: Room 1: Chair: Nick Jackiw
	<i>19962 Perspective drawing... How can Cabri 3D help deeper understanding of perspective? Jean-Marie Laborde</i>

10:00-10:30 Tea Break

10:00-11:20	Plenary Speech 2: Room 1: Chair: Jen-chung Chuan
	<i>19697 Students Will Excel If They Are Inspired- Wei-Chi Yang</i>

11:30-12:30	Parallel Session IV: Presentations (Each contributed paper presentation slot is 20 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)
	Room 1: (Chair: Alasdair McAndrew)
11:30-11:55	19892 Teaching finite fields with open-source CAS-Alasdair McAndrew
12:00-12:25	19702 UNION DISTINCT FAMILIES OF SETS, WITH AN APPLICATION TO CRYPTOGRAPHY-Mausumi Bose, Rahul Mukherjee
	Room 2: (Chair: Theodosia Prodromou)
11:30-11:55	19893 Interactive Worksheets for Learning the Connection Between Graphic and Symbolic Object Representations- Hitoshi Nishizawa, Takayoshi Yoshioka, Martti E. Pesonen, et al.
12:00-12:25	19908 Connecting Probability to Statistics-Using Simulated Phenomena-Theodosia Prodromou
	Room 3: (Chair: Wee Leng Ng)
11:30-11:55	19898 The Effects of a Portable Computer Algebra System (CAS) on Pre-university Students' Attitudes towards CAS- Wee Leng Ng, Yee Dat Sun
12:00-12:25	19901 STUDENTS' SKILLS IN MATHEMATICAL COMPUTATION- Patrick Galletto, Craig Refugio
	Room 4: (Chair: Liu Chengyang)
11:30-11:55	20101 Some Analogous Forms For Locus -convenient way for students to deepen their understandings on locus- Liu Chengyang and Yang Jianyi
12:00-12:25	20100 To Fulfil Track Simulation With HP39GS-Liu Chengyang

11:30 - 12:30	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room 5) 20111 TI-Nspire CX: a new experience in teaching and learning of Mathematics- Tee Su Yin
	(CW2 Computer Room 2) 20113 Mathematical Modeling for High School Mathematics on Earthquake and Tsunami with the freeware 'dbookPro'-Masami Isoda
	(CW3 Computer Room 3) 19996 Introduction to e-Teaching and e-Assessment of Secondary School / Undergraduate Mathematics using Maple- Bill Blyth and Asim Ghous

12:30-13:30 Lunch Break

13:30-14:20	Invited Speaker 4: Room 1: (Chair: Yoichi Maeda): 19933 Why should We Use Visualization within Math Science and Math Education? Vladimir Shelomovskii Invited Speaker 5: Room 2: (Chair: Keng Cheng Ang): 19940 A FORGOTTEN IMPORTANT TOOL IN THE NEW MATH CURRICULUM: RECURSION- Antonio R. Quesada Invited Speaker 6: Room 3: (Chair: Krongthong Khairiree): 19868 Integrating Certain Products without Using Integration by Parts- Tilak dealwis Invited Speaker 7: Room 4: (Chair: Jen-chung Chuan): 19958 Angles as turn: A dynamic geometry conceptualization for the primary grades Nathalie Sinclair	
14:30-15:30	Parallel Session V: Presentations (Each contributed paper presentation slot is 20 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)	
	Room 1: (Chair: Jean-Marie Laborde)	
	14:30-15:20 (50 minutes)	19914 A Didactical Transposition of the Perspective Theorem of Guidobaldo Del Monte with Cabri 3D- Jean-Jacques Dahan
	Room 2: (Chair: Pradip Dey)	
	14:30-14:55	19909 Visualization of a Mathematical Model of Computation -Pradip Dey, Gordon Romney, Mohammad Amin, et al.
	15:00-15:25	19917 Multiple Suggestions for Interactive SDE Estimation- Ryoji Fukuda, Hiromi Yokoyama
	Room 3: (Chair: Wei Ching Quek)	
	14:30-14:55	19704 Impact of Using Scientific Calculator In Examination Of Engineering Mathematics-Wei Ching Quek, Chew Peng Kok-Mak
	15:00-15:25	19743 SPICE UP MATHEMATICS LESSONS WITH KODU- ROHAIZA RAMLI
	Room 4: (Chair: Hideshi Yamane)	
	14:30-14:55	19706 Sequences of Integrals in Experimental Mathematics - Hideshi Yamane
	15:00-15:25	19728 Determination Stability Ray of a Decision Making Unit in Definition of the Right and Left Returns to Scale- REZA Shahverdi

14:30-15:30	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room 5) 19793 Learning with a graphics calculator- Marian Kemp, Barry Kissane
	(GC Room 6) 19899 Problem Solving with the TI-84 Plus Graphing Calculator- Wee Leng Ng
	(CW1 Computer Room 1) 19710 A Hands-On Experience with Virtual Calculus Tutor- Jonathan Lewin
	(CW2 Computer Room 2) 19937 Visualization with GInMA in algebra teaching- Vladimir Shelomovskii, Svetlana Nosulya
15:30-16:00	Tea Break and Poster Sessions

	19760 Virtual Game in Classroom for Introducing 3D Vector Operations-Hitoshi Nishizawa, Kohtaro Shimada, Takayoshi Yoshioka 19924 A classification and extension of the linkage -from the view to constitute- Chieko Fukuda, Kyoko Kakihana 19956 Learning to Solve Least Squares Curve/Line Method by Using Spreadsheets Sammy Khayat, Craig Refugio 19971 Matrix Operations Through Spreadsheets-Craig Refugio, Sami Khaya 19907 Ten years of GeoGebra-Balazs Koren, Markus Hohenwarter, Zsolt Lavicza
16:00-17:00	Parallel Session VI Presentations (Each contributed paper presentation slot is 20 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)
	Room 1: (Chair: Vipul Shah)
16:00-16:25	19925 Blending of Traditional Approach and Internet Technology to Teach Engineering Mathematics-Vipul Shah, Rajesh Sanghvi
16:30-16:55	19777 Teaching Graduate Statistics Through SPSS- Craig Refugio, Ma. Elsa Ilona Bulado, Evelyn Lazalita
	Room 2: (Chair: Chan Roath)
16:20-16:25	19896 Free vibration of symmetric angle-ply laminated annular circular plate of variable thickness under shear deformation theory- Viswanathan Kodakkal Kannan, Saira Javed, Zainal Abdul Aziz
16:30-16:55	19910 2015 Mathematics Curriculum reform with using technology in Cambodia- Chan Roath
	Room 3: (Chair: Ryoji Fukuda)
16:00-16:25	19725 Monounary algebras and functional graphs in upper secondary school mathematics- Helena Binterová, Eduard Fuchs, Marek Šulista
16:30-16:55	19918 Improvements and Evaluations of Tactile Graphical Viewer for the Visually Impaired- Ryoji Fukuda, Akihiro Miura
	Room 4: (Chair: Wahyudi)
16:00-16:25	19941 Technology-based Instruction in Statistics for Graduate Students - Rebecca Tolentino, Cayao Erlinda
16:30-16:55	20110 Promoting the use of Information and Communication Technology (ICT) in the Teaching and Learning of mathematics: SEAMEO QITEP in Mathematics' Experiences - Wahyudi and Pujiati
16:00-17:00	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room 5) 19900 Developing Deeper Understanding of Mathematical Concepts Through TI-Nspire Learning Handheld- Wee Leng Ng
	(GC Room 6) 19922 Technology, mathematics and hands on experiments- Christopher Longhurst
	(CW1 Computer Room 1) 19938 Visualization with GInMA in geometry teaching- Vladimir Shelomovskii, Svetlana Nosulya
	(CW2 Computer Room 2) 19945 Turning between Rhombic Triacanthedron and Dodecahedron Back and Forth, a workshop with Cabri 3D- Jen-chung Chuan
09:00-17:00	Exhibitions
18:30-20:30	IPC meeting

December 19, 2012 (Wednesday)

8:00-8:50 **Registration:**

9:00-9:50

Plenary Speech 3: Room 1: Chair: Mirek Majewski

19954 The Elements: A Dynamic Perspective on Euclid's Geometry & Geometry's Euclid: Nicholas Jackiw

10:00-10:30 Tea Break

10:30-11:30 Parallel Session VII: Presentations (Each contributed paper presentation slot is 20 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)

Room 1: (Chair: Li Haiying)

10:30-10:55 20106 Graphing calculator expand the students' learning space About "SSA" further exploration- Li Haiying

11:00-11:25 20107 Explore graphing calculator and discover mathematics-Li Yu

Room 2: (Chair: Ngeth Youdarith)

10:30-10:55 19915 Using Scientific Calculator in Supplementary text book and in Mathematics Classroom Grade 11 in High School in Cambodia- Ngeth Youdarith

11:00-11:25 19897 Effects of Technological Gadgets Utilization in Teaching College Algebra Thelma Abajar, Patrick Galleto, Craig Refugio

Room 3: (Chair: Shigeki Ogose)

10:30-10:55 19952 Visualization of linear transformation with animation- Shigeki Ogose

11:00-11:25 19936 Analysis of kinds and roles of technology presented in Korean secondary mathematics textbooks- Hee-Chan Lew, Min-Shik Cho, Young Ran Choi, et al.

Room 4: (Chair: Chaweewan Kaewsaiha)

10:30-10:55 19912 Expanding Plane Geometry Using The Geometer's Sketchpad- Chaweewan Kaewsaiha

11:00-11:25 19872 Effectiveness of the Smart Board Technology on Growth of Mathematics Achievement and Critical Thinking Skills among Fifth Grade Students-Mamdouh Soliman

10:30-11:30 Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)

(GC Room 5) 19794 Using a scientific calculator for learning mathematics- Marian Kemp, Barry Kissane

(CW1 Computer Room 1) 19946 How to Enclose a Rhombic Dodecahedron with 12 Sticks Having Equilateral-Triangular Cross-Section Jen-Chung Chuan

(CW2 Computer Room 2) 19959 The Geometer's Sketchpad Introductory Workshop: Tessellations and Tilings- Nicholas Jackiw

11:30-12:30 Parallel Session V: Presentations (Each contributed paper presentation slot is 20 minutes, unless otherwise specified. Please allow 3 minutes for Q&A, and 2 minutes for changeover)	
Room 1: (Chair: Ajit Kumar)	
11:30-12:20	19947 Interactive Learning and Teaching using MathDisk- Ajit Kumar, (50 minutes) Mohamed Jaffarali
Room 2: (Chair: Liu Ping)	
11:30-11:55	20108 The HP graph calculator brought us exploration and innovation opportunities-Liu Ping and Wang Bin
12:00-12:25	20109 My Perspective On The Effect Of The Graphic Calculator In Training Junior High School Students' Autonomous Learning Ability- Guo Shuangshuang
Room 3: (Chair: Shin Watanabe)	
11:30-11:55	19978 Seeing the beautiful mathematics with technology Shin Watanabe
12:00-12:25	19991 Creative Learning of Analytic Geometry through NC Programming with a Virtual Lab Application- Pongrapee Kaewsaiha
Room 4: (Chair: Mirek Majewski)	
11:30-11:55	19993 Elementary proof of Seifriedian properties, Michael Seifried, Vladimir V. Shelomovskii
12:00-12:25	19730 CLASSIFICATION OF WALLPAPER IN ISLAMIC ARTS FOUND IN SINGAPORE AND MALAYSIA, Wei Ching Quek, Jiewen Kam
Room 5 : (Chair: William Speer)	
11:30-11:55	19927 Identification of Potential Instructional Hazards & Design-based Countermeasures in Virtual Manipulatives-William Speer
11:55-12:25	19797 Teaching ANOVA Through MINITAB-Craig Refugio, Ma Elsa Ilona Bulado, Evelyn Lazalita

11:30-12:30	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room 6) 19926 Using Scientific Calculator in Mathematics Classroom and Supplementary text Book grade 12- Koy keolong
	(GC Room 7) 19931 Colourful Activities using TI-Nspire CAS- Raymond Rozen
	(CW1 Computer Room 1) 19994 Introduction to e-Teaching and e-Assessment of Secondary School / Undergraduate Mathematics using Maple- Bill Blyth and Asim Ghous
	(CW2 Computer Room 3) 19906 New features of GeoGebra for teaching mathematics (3D, HTML5 version, tablet optimized version, etc.)-Balazs Koren, Zsolt Lavicza, Markus Hohenwarter
12:30-13:30 Lunch Break	
13:30-17:30 Local Tour	

December 20, 2012 (Thursday)

9:00-9:50	Plenary Speech 4: Room 1: Chair: Jen-Chung Chuan
	<i>19700 GEOMETRIC ORNAMENT IN ART AND ARCHITECTURE OF WESTERN CULTURES</i> - Mirosław Majewski
10:00-10:50	Invited Speaker 9: Room 1: (Chair: Alasdair McAndrew) 19796 How Integration of DGS and CAS helps to solve problems in geometry - Pavel Pech
	Invited Speaker 10: Room 2: (Chair: Ma. Louise De Las Penas) 19709 The Other Role of Technology: Communication Between People - Jonathan Lewin
	Invited Speaker 11: Room 3: (Chair: Inder Rana) 19816 INTERCONNECTIVITY of Mathematics & the Educational Software INTERFACE- Vladimir Nodelman
	Invited Speaker 12: Room 4: (Chair: Cao Yiming) 19965 GRAPHING CALCULATOR USAGE IN MATHEMATICS ASSESSMENT IN STPM AND MATRICULATION LEVEL IN MALAYSIA - Noraini Idris
11:00-11:30	Tea Break
11:30-12:30	Closing Ceremony at Su Nandha Nusorn Hall
12:30-13:30	Lunch and Farewell