



Please note the followings are only presentations listed by foreign participants, there will be another 100 English presentations from local participants. Due to time constraints, the combined conference program will be distributed later at the conference. We expect to have over 350 participants.

Date: Thursday, October 16, 2014

Program of ATCM 2014

November 26, 2014 (Wednesday)

17:00-18:00 **Registration:**

18:30-20:30 **Welcome Reception**

November 27, 2014 (Thursday)

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

9:00-10:00 **Opening ceremony**

10:00-10:30 **Tea Break**

10:30-11:20 **Plenary Speech 1: Auditorium Room , Chair:**

20577 Technological tools have enhanced our teaching, learning and doing mathematics, what is next? Wei-Chi Yang

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 :)

11:30-12:20 30001 A model for the educational role of calculators- Barry Kissane, (50 minutes) and Marian Kemp

Room 2: (Chair :)

11:30-12:20 20639 Dynamic Lesson Design using Technology Thomas Yeo (50 minutes)

Room 3: (Chair:)

11:30-12:20 20561 Examples and Techniques of Morphing within CAS and DGS (50minutes) Environments (Cabri and TI-Nspire). A Way of Enriching our Teaching at all Levels-Jean-Jacques Dahan

Room 4: (Chair:)

11:30-12:20
(50 minutes)

12:30-13:30 **Lunch Break**

13:30-14:30 **Invited Speaker 1: Room 1: (Chair:)** 20495 "Managing all the change and keeping teachers motivated Douglas Butler

	Invited Speaker 2: Room 2: (Chair:) 20498 Mathematics: Digital Discovery using Maple	Teaching Experimental Bill Blyth
	Invited Speaker 3: Room 3: (Chair:) 20573 Movable? Jen-chung Chuan	Can Tightly Packed Circles be
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:)	
14:30-15:20	20493 Visualization of special orthogonal group $SO(3)$ with dynamic (50 minutes) geometry software-Yoichi Maeda	
	Room 2: (Chair:)	
14:30-14:55	20492 Using the iPad and Calculator-Based Ranger to Introduce Fundamental Concepts of Slope to Younger Students	William Speer
15:00-15:25	20610 Consideration on the Effect of the Lesson in Problem Solving by Few Children	Tsutomu Ishii
	Room 3: (Chair:)	
14:30-4:55	20627 Math Input Interface by MathDox Formula Editor for Math e-Learning System STACK	Yasuyuki Nakamura, Takahiro Nakahara, Yusuke Inagak
15:00-15:25		

14:30 - 15:30	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)	
	(GC Room 5) 20640	Mathematical Modelling using TI-Nspire Thomas Yeo
	(GC Room 6) 20653	Unveiling CASIO fx 991es+ : Maximizing its Application in Mathematics Classes Maria Ailynn Diansuy, Romeo Tolentino
	(CW1 Computer Room 1) 20499	Introduction to e-Teaching of Secondary School / Undergraduate Mathematics using Maple Bill Blyth, Asim Ghous
	(CW2 Computer Room 2) 20496	Hands-on workshop: Autograph in old clothes and in new (for ages 11-16) Douglas Butler

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

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:)	
16:00-16:25	20473 An Algorithm for Solving Traveling Salesman Problem	Samrat Hore, Anup Dewanji, Aditya Chatterjee
16:30-16:55		

Room 2: (Chair:)	
16:00-16:25	20504 Revisiting Geometric Construction using Geogebra-Glenn Laigo, Abdul Hadi Bhatti, Lakshmi Kameswari Pulipaka, et al.
16:30-16:55	20660 MODELING THE MOHR'S CIRCLE FOR TWO DIMENSIONAL STATE OF STRESS USING THE SCIENTIFIC CALCULATOR- Romeo Q. Tolentino
Room 3: (Chair:)	
16:00-16:50	A Presentation by teachers from China. (50 minutes)
16:00 - 17:00	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
(GC Room 4)	20599 Learning about calculus with an advanced scientific calculator-Barry Kissane
(GC Room 5)	20601 Mathematical Problem Solving with a Graphing Calculator-Wee Leng Ng
(CW1 Computer Room 1)	
(CW2 Computer Room 2)	20575 Chrystal Growing with Rhombic Polyhedrons, a Cabri 3D Workshop-Jen-chung Chuan
09:00-17:00	Exhibitions
18:30-21:00	Conference Dinner and Culture Night

November 28, 2014 (Friday)

8:00-8:50 Registration: SSRU

9:00-9:50	Plenary Speech 2: Auditorium Room: Chair:
	20625 <i>Interactivity and flexibility exemplified with Cabri Laborde</i> Colette

10:00-10:30 Tea Break

10:00-11:20	Plenary Speech 3: Auditorium Room: Chair:
	20578 <i>Professional Development for Teachers in Mathematical Modelling</i> Keng Cheng Ang

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)
11:30-11:55	20570 Effects of spreadsheet towards learners' usage of mathematical language Kok Fui Chin, Sharifah Norul Akmar bt Syed Zamri
12:00-12:25	
	Room 2: (Chair:)
11:30-11:55	30002 A Practical Case for e-Mathematical Experiment with "Geometry Apps" from HP Prime- Yang Jianyi and Liu Chengyang
12:00-12:25	
	Room 3: (Chair:)
11:30-11:55	20588 Effects of using Casio FX991 ES Plus on achievement and anxiety level in Mathematics-Maria Isabel Lucas, Erlinda Cayao
12:00-12:25	20590 Integration of Products using Differentials--Rebecca Tolentino, Janette Lagos

11:30 - 12:30	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
(GC Room 4) 20598	Learning about functions and equations with an advanced scientific calculator Barry Kissane
(CW Computer Room 1) 20501	Introduction to computer Aided Assessment of Secondary School / Undergraduate Mathematics using MapleTA- Bill Blyth and Asim Ghous
(CW Computer Room 2) 20509	Hands-on workshop: Autograph in old clothes and in new (for ages 16-19) Douglas Butler

12:30-13:30 Lunch Break

13:30-14:20	Invited Speaker 4: Room 1: (Chair:): 20579 Reflections on Teaching Applied Mathematics with Technology-Paul Abbott
	Invited Speaker 5: Room 2: (Chair:): 20608 Bar Model and GSP: The Effective Strategy in Solving Word Problems-Krongthong Khairiree
	Invited Speaker 6: Room 3: (Chair :): 20613 Modern Geometry via Dynamic Tools-Ma. Louise Antonette De Las Penas
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:)
14:30-15:20 (50 minutes)	20478 The Minimal Travel Time for Light Passing Through a Nonhomogeneous Medium Felino Pascual
	Room 2: (Chair:)
14:30-14:55	20591 Use of Lecture Capture in the Teaching and Learning of Statistics-Chee-Keong Chong, Marzita Puteh, Swee-Choo Goh
15:00-15:25	20597 THE MODEL OF PGSD-UT'S STUDENTS WORKSHEET BASED ON DISPLAY COMPONENT BASED THEORY AS A LEARNING STRATEGY IN FACE TO FACE TUTORIAL Suroyo n, Ngadi Marsinah, R. Sudarwo
	Room 3: (Chair:)
14:30-14:55	20605 DISCOVERING THE CONCEPT OF LIMIT FUNCTION AT TENTH GRADE SENIOR HIGH SCHOOL WITH SCIENTIFIC APPROACH ACCORDING TO 2013 CURRICULUM USING CALCULATOR CASIO fx-991ID PLUS-WIWORO WIWORO
15:00-15:25	20606 GEOMETRICAL PATTERNS OF YOGYAKARTA BATIK ORNAMENTS-WIWORO WIWORO, NABILA RAHMA KHAIRUNNISA

14:30-15:30	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room 5) 20600 Learning mathematics with a modern graphics calculator-Barry Kissane
	(GC Room 6) 20494 Enhancing the Teaching and Learning of Mathematics Through Handheld Technology-Wee Leng Ng
	(CW1 Computer Room 1) 20603 An overview of Mathematica for Education Paul Abbott, Farid Pasha
	(CW2 Computer Room 2)) 20496 Hands-on workshop: Autograph in old clothes and in new (for ages 11-16) Douglas Butler
15:30-16:00	Tea Break and Poster Sessions
	20618 Let's Explore the Functions of Complex value. Chieko Fukuda, Kyoko KAKIHANA
	20619 Problem Solving with Certification Shin Watanabe
	20635 An Application of CAS for Defining Equations of Singularities with Indeterminate Exponents Tadashi Takahashi, Fumiya Iwama

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:)			
16:00-16:25	20611	Non-visual Expression Method for Mathematical Documents in Elementary Geometry	Ryoji Fukuda, Masato Kojo
16:30-16:55	20612	Applicability of Gaze Points for Analyzing Priorities of Explanatory Elements in Mathematical Documents	Ryoji Fukuda, Junki Iwagami, Takeshi Saitoh
Room 2: (Chair:)			
16:20-16:25	20481	Using Spreadsheet to create rug patterns and designs	Maryanne Bagore
16:30-16:55	20641	On the Application of Technology to Solutions of Limits Involving Indeterminate Forms	Maria Ailynn Diansuy
Room 3: (Chair:)			
16:00-16:25	20502	USING GRAPHING CALCULATOR IN PROBLEM SOLVING TASKS	Kwan Eu Leong, Mary Ann Serdina Parrot
16:30-16:55	30003	Applications of Information Technology to the "Five Points" Conjecture	Ren-shou Huang & Yuan-jing Xia

16:00-17:00	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)		
	(GC1 Room 4): 30005 DISCOVERING CONCEPT OF LIMIT FUNCTION IN TENTH GRADE SENIOR HIGH SCHOOL WITH SCIENTIFIC APPROACH ACCORDING TO 2013 CURRICULUM USING CALCULATOR CASIO fx-991 ID PLUS- Wiworo PPPPTK Matematika Yogyakarta, Indonesia		
	(CW1 Computer Room 1) 20604 Make your course interactive and engaging Farid Pasha, Paul Abbott		
	(CW2 Computer Room 2) 20562 Modelling the floating indonesian flag : two techniques with Cabri 3D Jean-Jacques Dahan, Jean-Marie Laborde		

09:00-17:00	Exhibitions
18:30-20:30	IPC meeting

November 29, 2014 (Saturday)

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

9:00-9:50

Plenary Speech 4: Auditorium Room: Chair:

TBA Masami Isoda

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:)

10:30-10:55 20465 Optimal statistical designs via directional derivatives in the presence of a nuisance parameter Rahul Mukherjee

11:00-11:25 20470 Application of Frechet derivatives for optimal statistical planning of experiments with asymmetrically distributed measurement errors Mausumi Bose

Room 2: (Chair:)

10:30-10:55 20582 Developing the technology integration competency in a pre-service teacher training Stefan Oeyen

11:00-11:25 20574 The impact of a technology-rich intervention on grade 7 students' skills in initial algebra-Al Jupri, Paul Drijvers, Marja van den Heuvel-Panhuizen

Room 3: (Chair:)

10:30-10:55 20587 Locating Points in 3D Graphic Space As More Direct Interface to the Learning Contents of Vector Equations Wataru Ohno, Kotaro Shimada, Hitoshi Nishizawa, et al.

11:00-11:25 20589 Teaching materials incorporating interactive graphics for college-level mathematics education- Shunji Ouchi, Yoshifumi Maeda, Naoki Hamaguchi, et al.

Room 4: (Chair:)

10:30-10:55 20595 How to construct a question of linear algebra by Mathematics e-Learning System STACK Tetsuya Taniguchi, Yasuyuki Nakamura, Takahiro Nakahara

11:00-11:25 20624 On the Separator of Subsets of Regular Semigroups Janeth Canama, Gaudencio Jr. Petalcorin

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

(CW1 Computer Room 1) 20501 Introduction to computer Aided Assessment of Secondary School / Undergraduate Mathematics using MapleTA- Bill Blyth and Asim Ghous

(CW2 Computer Room 2) 20563 Become a bricklayer, a carpenter and more in building a house and the double stair of the Chambord castle with Cabri 3D Jean-Jacques Dahan, Jean-Marie Laborde

11:30-12:30 Invited Speeches

11:30-12:20	Invited Speaker 7: Room 1: (Chair:): 20614 A Capstone Course to Improve the Preparation of Mathematics Teachers on the Integration of Technology- Antonio Quesada
	Invited Speaker 8: Room 2: (Chair:): 20628 Integrating Technology in Teaching and Learning (Mathematics)-Paulina Pannen
	Invited Speaker 9: Room 3: (Chair:): 20637 Educating the Educators: Technology-Enhanced Mathematics Teaching and Learning-Leong Chee Kin
12:30-13:30	Lunch Break
13:30-	<i>Free Conference Tour for Paid Foreign Participants</i>

09:00-13:30 Exhibitions

November 30, 2014 (Sunday)

9:00-9:50	Plenary Speech 5: Auditorium Room: Chair:	
	<i>Widodo (Professor rer nat on Mathematics, PPPPTK Matematika Yogyakarta, Indonesia)</i>	
10:00-10:50	Invited Speaker 10: Room 1: (Chair:) 20638	Mathematics Intelligent Learning Environment Hongguang Fu, Xiuqin Zhong
	Invited Speaker 11: Room 2: (Chair:) 20629	Re-conceptualizing Good Practice of Mathematics Teaching Through Lesson Study in Indonesia Marsigit -
	Invited Speaker 12: Room 3: (Chair) 20506	Comparing Mathematical Modeling Methods via Excel Deane Arganbright
11:00-11:30	Tea Break	
11:30-12:30	Closing Ceremony	
12:30-13:30	Lunch and Farewell	