



Updated: Saturday, November 08, 2014

Program for Joint Conference on Innovation and Technology for Mathematics and Mathematics Education: 19th ATCM, 1st ISIMMED, 3rd ISMEI 2014, and 2nd SeNdiMat November 26-30, 2014, Yogyakarta State University, Indonesia

November 26, 2014 (Wednesday)

17:00-18:00	Registration
18:30-21:00	Welcome Reception For Foreign Participants

November 27, 2014 (Thursday)

07:00-08:50	Registration
09:00-10:00	Opening ceremony
10:00 -10:30	Tea Break
10:30-11:20	Plenary Speech 1: Auditorium Room , Chair: Colette Laborde <i>20577 Technological Tools Have Enhanced Our Teaching, Learning and Doing Mathematics, What is Next? Wei-Chi Yang</i>
11:20-12:10	Plenary Speech 1: Auditorium Room , Chair: <i>30007 Three Training Strategies for Improving Mathematics Teacher Competences in Indonesia 2015-2019 based on Teacher Competency Test (TCT) 2012-2014</i> <i>Widodo & M Tamimudin</i>

12:10 -13:40 Lunch Break

13:40-14:30	Invited Speaker 1: Room 1(R. 207+208), Chair: Krongthong Khairiree <i>20495 Managing all the Change and Keeping Teachers Motivated - Douglas Butler</i>	
	Invited Speaker 2: Room 2(R. 209+210), Chair: Paul Abbott <i>20498 Teaching Experimental Mathematics: Digital Discovery Using Maple - Bill Blyth</i>	
	Invited Speaker 3: Room 3 (R. Astronomi), Chair: Jean-Jacques Dahan <i>20573 Can Tightly Packed Circles be Movable? Jen-Chung Chuan</i>	
13:40-14:40	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)	
	GC 1 (R. 310)	<i>20599 Learning About Calculus with an Advanced Scientific Calculator- Barry Kissane</i>
	GC 2 (R. PPG2)	<i>20640 Mathematical Modelling using TI - Nspire-Thomas Yeo</i>

14:40 -15:20 Tea Break

15:20-17:00	Parallel Session I. Presentations (Each contributed paper presentation slot is 25 minutes, unless otherwise specified. Please allow 3 minutes for Q & A, and 2 minutes for changeover)	
	Room 1 (R.), Chair: Romeo Q. Tolentino	
	15:20-15:45	<i>20473 An Algorithm for Solving Traveling Salesman Problem</i> Samrat Hore, Anup Dewanji, Aditya Chatterjee
	15:45-16:10	<i>20660 Modeling the Mohr's Circle for Two Dimensional State of Stress Using The Scientific Calculator - Romeo Q. Tolentino</i>
	16:10-16:35	
	16:35-17:00	
	Room 2 (R.), Chair: Thomas Yeo	
	15:20-16:10 (50 minutes)	<i>20493 Visualization of Special Orthogonal Group SO(3) with Dynamic Geometry Software - Yoichi Maeda</i>
	16:10-17:00 (50 minutes)	<i>20639 Dynamic Lesson Design Using Technology - Thomas Yeo</i>
	Room 3(R.), Chair:	
	15:20-15:45	
	15:45-16:10	
	16:10-17:00 (50 minutes)	<i>A Presentation by teachers from China.</i>
	Room 4(R.), Chair: Barry Kissane	
	15:20-16:10 (50 minutes)	<i>30001 A Model for the Educational Role of Calculators</i> Barry Kissane, and Marian Kemp

	16:10-17:00 (50 minutes)	20561 Examples and Techniques of Morphing within CAS and DGS Environments (Cabri and TI-Nspire). A Way of Enriching our Teaching at all Levels Jean-Jacques Dahan
	Room 5: (R.), Chair: William Speer	
	15:20-15:45	20492 Using the iPad and Calculator-Based Ranger to Introduce Fundamental Concepts of Slope to Younger Students - William Speer
	15:45-16:10	20610 Consideration on the Effect of the Lesson in Problem Solving by Few Children Tsutomu Ishii
	16:10-16:35	20627 Math Input Interface by MathDox Formula Editor for Math e-Learning System STACK - Yasuyuki Nakamura, Takahiro Nakahara, Yusuke Inagak
	16:35-17:00	
	Room 6: (R.), Chair:	
	15:20-15:45	
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	Room 7: (R.), Chair:	
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	Room 8: (R.), Chair:	
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	16:10-16:35	
	16:35-17:00	
15:20 - 17:00	Hands-on Workshops (<i>GC stands for calculator workshops; CW stands for computer workshops</i>)	
	GC 3 (R. PPG1)	20601 Mathematical Problem Solving with a Graphing Calculator - Wee Leng Ng
	GC 4 (R. PPG2)	20653 Unveiling CASIO Fx 991ES+ : Maximizing Its Application in Mathematics Classes Maria Ailynn Diansuy, Romeo Tolentino
	CW1 (CR 1)	20499 Introduction to e-Teaching of Secondary School/Undergraduate Mathematics Using Maple - Bill Blyth, Asim Ghous
	CW2 (CR 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	

CR1 = Computer Room 1 (3rd Floor) CR2 = Computer Room 2 (2nd Floor)

November 28, 2014 (Friday)		
07:00-08:00	Registration	
08:00-08:50	Plenary Speech 3: Rectorate Conference Room , Chair: Jen-Chung Chuan 20625 Interactivity and Flexibility Exemplified with Cabri - Colette Laborde	
08:50-09:40	Plenary Speech 4: Rectorate Conference Room , Chair: Wei-Chi Yang 20578 Professional Development for Teachers in Mathematical Modelling - Keng Cheng Ang	
09:40 -10:10	Tea Break	
10:10-11:10	Invited Speaker 4: Room 1(R. 207+208), Chair: Bill Blyth 20579 Reflections on Teaching Applied Mathematics with Technology - Paul Abbott	
	Invited Speaker 5: Room 2(R. 209+210), Chair: Keng Cheng Ang 20608 Bar Model and GSP: The Effective Strategy in Solving Word Problems - Krongthong Khairiree	
	Invited Speaker 6: Room 3 (R. Astronomi), Chair: Masami Isoda 20613 Modern Geometry via Dynamic Tools - Ma. Louise Antonette De Las Penas	
10:10-11:10	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)	
	GC 5 (R. PPG1)	20598 Learning About Functions and Equations with an Advanced Scientific Calculator - Barry Kissane
	CW3 (CR 1)	20501 Introduction to Computer Aided Assessment of Secondary School/ Undergraduate Mathematics Using MapleTA - Bill Blyth and Asim Ghous
	CW4 (CR 2)	20509 Hands-on Workshop: Autograph in Old Clothes and in New (for Ages 16-19) Douglas Butler
11:10 -13:10	Muslim Friday Prayer, Exhibition, Lunch Break	
13:10-14:50	Parallel Session II. Presentations (Each contributed paper presentation slot is 25 minutes, unless otherwise specified. Please allow 3 minutes for Q & A, and 2 minutes for changeover)	
	Room 1 (R.), Chair: Felino Pascual	
	13:10-14:00 (50 minutes)	20478 The Minimal Travel Time for Light Passing Through a Nonhomogeneous Medium - Felino Pascual
	14:00-14:25	20570 Effects of spreadsheet towards learners' usage of mathematical language Kok Fui Chin, Sharifah Norul Akmar bt Syed Zamri
	14:25-14:50	
	Room 2 (R.), Chair: Chee-Keong Chong	
	13:10-13:35	20591 Use of Lecture Capture in the Teaching and Learning of Statistics Chee-Keong Chong, Marzita Puteh, Swee-Choo Goh
	13:35-14:00	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
	14:00-14:25	30002 A Practical Case for e-Mathematical Experiment with "Geometry Apps" from HP Prime - Yang Jianyi and Liu Chengyang
	14:25-14:50	
	Room 3(R.), Chair: Maria Isabel Lucas	
	13:10-13:35	20605 Discovering the Concept of Limit Function at Tenth Grade Senior High School With Scientific Approach According to 2013 Curriculum Using Calculator Casio Fx-991 ID Plus - Wiworo Wiworo
	13:35-14:00	20606 Geometrical Patterns of Yogyakarta Batik Ornaments Wiworo Wiworo, Nabila Rahma Khairunnisa
	14:00-14:25	20588 Effects of using Casio FX991 ES Plus on achievement and anxiety level in Mathematics - Maria Isabel Lucas, Erlinda Cayao
	14:25-14:50	
	Room 4(R.), Chair:	
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	Room 7: (R.), Chair:	
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	Room 8: (R.), Chair:	
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	14:00-14:25	
	14:25-14:50	
13:10-14:50	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)	
	GC 6 (R. PPG 1)	20600 Learning Mathematics with a Modern Graphics Calculator - Barry Kissane
	GC 7 (R. PPG 2)	20494 Enhancing the Teaching and Learning of Mathematics Through Handheld Technology - Wee Leng Ng
	CW5 (CR 1)	20603 An overview of Mathematica for Education - Paul Abbott, Farid Pasha
	CW6 (CR 2)	20496 Hands-on Workshop: Autograph in Old Clothes and in New (for Ages 11-16)- Douglas Butler
14:50-15:20 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		
15:20-17:00	Parallel Session III. Presentations (Each contributed paper presentation slot is 25 minutes, unless otherwise specified. Please allow 3 minutes for Q & A, and 2 minutes for changeover)	
	Room 1 (R.), Chair: Al Jupril	
	15:20-15:45	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
	15:45-16:10	20611 Non-visual Expression Method for Mathematical Documents in Elementary Geometry - Ryoji Fukuda, Masato Kojo
	16:10-16:35	20612 Applicability of Gaze Points for Analyzing Priorities of Explanatory Elements in Mathematical Documents - Ryoji Fukuda, Junki Iwagami, Takeshi Saitoh
	16:35-17:00	20504 Revisiting Geometric Construction using Geogebra-Glenn Laigo, Abdul Hadi Bhatti, Lakshmi Kameswari Pulipaka, et al.
	Room 2 (R.), Chair: Maria Ailynn Diansuy	
	15:20-15:45	20481 Using Spreadsheet to create rug patterns and designs - Maryanne Bagore
	15:45-16:10	20641 On the Application of Technology to Solutions of Limits Involving Indeterminate Forms - Maria Ailynn Diansuy
	16:10-16:35	20590 Integration of Products using Differentials - Rebecca Tolentino, Janette Lagos
	16:35-17:00	

	Room 3(R.), Chair: Rahul Mukherjee	
	15:20-15:45	20465 Optimal statistical designs via directional derivatives in the presence of a nuisance parameter - Rahul Mukherjee
	15:45-16:10	20470 Application of Frechet derivatives for optimal statistical planning of experiments with asymmetrically distributed measurement errors - Mausumi Bose
	16:10-16:35	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.
	16:35-17:00	
	Room 4(R.), Chair: Stefan Oeyen	
	15:20-15:45	20582 Developing the technology integration competency in a pre-service teacher training - Stefan Oeyen
	15:45-16:10	20502 Using Graphing Calculator in Problem Solving Tasks Kwan Eu Leong, Mary Ann Serdina Parrot
	16:10-16:35	30003 Applications of Information Technology to the "Five Points" Conjecture Ren-shou Huang & Yuan-jing Xia
	16:35-17:00	
	Room 5: (R.), Chair:	
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	Room 6: (R.), Chair:	
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	Room 7: (R.), Chair:	
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	Room 8: (R.), Chair:	
	15:20-15:45	
	15:45-16:10	
	16:10-16:35	
	16:35-17:00	
15:20-17:00	Hands-on Workshops (<i>GC stands for calculator workshops; CW stands for computer workshops</i>)	
	GC 8 (R. PPG 1)	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
	GC 9 (R. PPG 2)	30009 Creative Mathematics Activities in a Classroom-Janchai Yingprayoon
	CW7 (CR 1)	20604 Make Your Course Interactive and Engaging - Farid Pasha, Paul Abbott
	CW8 (CR 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	
CR1 = Computer Room 1 (3rd Floor) CR2 = Computer Room 2 (2nd Floor)		

November 29, 2014 (Saturday)		
07:00-08:00	Registration	
08:00-08:50	Plenary Speech 5: Rectorate Conference Room , Chair: Deane Arganbright 30006 WHY TECHNOLOGIES ARE NECESSARY FOR THE CURRENT CURRICULUM REFORM?-Masami Isoda	
08:50-09:40	Plenary Speech 6: Rectorate Conference Room , Chair: 20628 Integrating Technology in Teaching and Learning (Mathematics) - Paulina Pannen	
09:40 -10:10 Tea Break		
10:10-11:10	Invited Speaker 7: Room 1(R. 207+208), Chair: Ma. Louise Anotnette De Las Penas 20614 A Capstone Course to Improve the Preparation of Mathematics Teachers on the Integration of Technology - Antonio Quesada	
	Invited Speaker 8: Room 2(R. 209+210), Chair: Wahyudi Wahyudi 20637 Educating the Educators: Technology-Enhanced Mathematics Teaching and Learning Leong Chee Kin	
11:10-12:00	Parallel Session IV. Presentations (Each contributed paper presentation slot is 25 minutes, unless otherwise specified. Please allow 3 minutes for Q & A, and 2 minutes for changeover)	
	Room 1 (R.), Chair: Yasuyuki Nakamura	
	11:10-11:35	20589 Teaching Materials Incorporating Interactive Graphics for College-level Mathematics Education Shunji Ouchi, Yoshifumi Maeda, Naoki Hamaguchi, et al.
	11:35-12:00	20595 How to Construct a Question of Lnear Algebra by Mathematics e-Learning System STACK - Tetsuya Taniguchi, Yasuyuki Nakamura, Takahiro Nakahara
	Room 2 (R.), Chair: Janeth Canama	
	11:10-11:35	20624 On the Separator of Subsets of Regular Semigroups Janeth Canama, Gaudencio Jr. Petalcorin
	11:35-12:00	
	Room 3 (R.), Chair:	
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	11:35-12:00	
	Room 4 (R.), Chair:	
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	11:35-12:00	
	Room 5 (R.), Chair:	
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	Room 6 (R.), Chair:	
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	Room 7 (R.), Chair:	
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	11:35-12:00	
	Room 8 (R.), Chair:	
	11:10-11:35	
	11:35-12:00	
11:10-12:00	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)	

	CW 9 (CR 1)	20501 Introduction to Computer Aided Assessment of Secondary School/ Undergraduate Mathematics using MapleTA - Bill Blyth and Asim Ghous
	CW 10 (CR 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
12:00 -13:10 Lunch Break		
13:10 – 17:00 Free Conference Tour for Paid Foreign Participants		
13:10-14:50	Parallel Session V. Presentations (Each contributed paper presentation slot is 25 minutes, unless otherwise specified. Please allow 3 minutes for Q & A, and 2 minutes for changeover)	
	Room 1 (R.), Chair:	
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	Room 2 (R.), Chair:	
	13:10-13:35	
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	Room 3(R.), Chair:	
	13:10-13:35	
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	Room 4(R.), Chair:	
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	Room 5: (R.), Chair:	
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	Room 6: (R.), Chair:	
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	Room 7: (R.), Chair:	
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	Room 8: (R.), Chair:	
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	13:35-14:00	
	14:00-14:25	
	14:25-14:50	
14:50-15:20	Tea Break and Poster Sessions	
15:20-17:00	Parallel Session V. Presentations (Each contributed paper presentation slot is 25 minutes, unless otherwise specified. Please allow 3 minutes for Q & A, and 2 minutes for changeover)	
	Room 1 (R.), Chair:	
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	Room 2 (R.), Chair:	
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	Room 3(R.), Chair:	
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	Room 4(R.), Chair:	
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	Room 5: (R.), Chair:	
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	Room 6: (R.), Chair:	
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	Room 7: (R.), Chair:	
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	Room 8: (R.), Chair:	
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	16:35-17:00	
09:00-17:00	Exhibitions	
18:30-21:00	Social and Free Time	

November 30, 2014 (Sunday)	
07:00-08:00	Registration
08:00-08:50	Plenary Speech 5: R. 207-210 (combined) , Chair: <i>20629 Re-conceptualizing Good Practice of Mathematics Teaching Through Lesson Study in Indonesia- Marsigit</i>
09:00-09:50	Invited Speaker 7: Room 1(R. 207+208), Chair: Wei-Chi Yang 20638 Mathematics Intelligent Learning Environment - Hongguang Fu, Xiuqin Zhong
	Invited Speaker 8: Room 2(R. 209+210), Chair: Quesada Antonio 0506 Comparing Mathematical Modeling Methods via Excel-Deane Arganbright
10:00-10:30	Tea Break
10:30-12:00	Closing Ceremony
12:00-13:30	Lunch and Farewell