

PROGRAM OF ATCM+TIME 2013

December 7, 2013 (Saturday)

17:00-18:00	Registration
18:30-20:30	Welcome Reception

December 8, 2013 (Sunday)

8:00-8:50	Registration
9:00-10:00	Opening ceremony
10:00-10:30	Tea Break

10:30-11:20 Plenary Speech 1: Room 1, Chair: Inder K. Rana
20348 Discovering More Mathematics and Applications by Integrating CAS with 3D DGS-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: Wei-Chi Yang)

11:30-12:20 (50 minutes) 20324 On the development of an uber-modern techno-blended teaching and learning model for mathematics in South Africa Werner Olivier

Room 2: (Chair: Ma. Louise Antonette DE LAS PENAS)

11:30-12:20 (50 min.) 20299 Conceptual development and the modern scientific calculator: Using a forgotten technology Barry Kissane, Marian Kemp

Room 3: (Chair: : Tanya Saxena)

11:30-11:55 20325 MathDisk: An Interactive Learning Environment-Mohamed Jaffarali, Ajit Kumar

11:55-12:20 20611 Use of Geogebra software by Prospective Teachers in in Developing Lessons for teaching Mathematics: Shanti Amol Pise

Room4:(Chair: Manjusha P. Gandhi)

11:30-11:55 20609 Changing Dimensions Mathematics Education 21st Century : Neenu Gupta

11:55-12:20 20607 A Module explaining Definition of Limits and Continuity of Real Valued functions using GeoGebra: Mandar N. Khasnis

12:30-13:30 Lunch Break

13:30-14:20 Invited Speaker 1: Room 1: (Chair: Jean-Jacques Dahan) 20314 Construction of a Doubly Ruled Surface Jen-chung Chuan

Invited Speaker 2: Room 2: (Chair: Inder K. Rana) 20372 Case Studies in Experimental Mathematics-Shailesh Shirali

Invited Speaker 3: Room 3: (Chair: Sangeeta Gulati) 20382 Developing Students' Mathematical Thinking Through Technology Jonaki Ghosh

Invited Speaker 4: Room 4: (Chair: Dr.A.RAMAKRISHNA PRASAD) 20503 Technology as motivation for Learning: Abhiram Ranade

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: Jen-chung Chuan)

14:30-15:20 (50 minutes) 20212 Klein model of the three-dimensional sphere and dynamic construction of common perpendicular- Yoichi Maeda

Room 2: (Chair: Kiyoshi Shirayanagi)

14:30-14:55 20279 Interval-symbol method with correct zero rewriting: Reducing exact computations to obtain exact results Kiyoshi Shirayanagi, Hiroshi Sekigawa.

15:00-15:25 Computing a Perturbation Bound for Preserving the Number of Common Zeros of a Polynomial System- Hiroshi Sekigawa, Kiyoshi Shirayanagi

Room 3: (Chair: Yasuyuki Nakamura)

14:30-14:55 20213 Mathematics Teaching, Learning and Assessment using Latest ICT tend Social Media- ENAGANDULA PRASAD, Dr.A.RAMAKRISHNA PRASAD

15:00-15:25 Development of an Item Bank System for the Mathematics e-Learning System STACK- Yasuyuki Nakamura, Tetsuya Taniguchi, Takahiro Nakahara

Room 4: (Chair: Stefan Oeyen)	
14:30-14:55	20208 A benchmarking approach of quality assessment for e- and blended learning- Stefan Oeyen
15:00-15:25	20602 Innovative Practices in Teaching Mathematics: Ashis Kumar Mittal
14:30 - 15:30	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room 5) 20214 Learning functions and equations with an advanced scientific calculator Barry Kissane, Marian Kemp
	(GC Room 6) 20330 Hands on workshop : TI Nspire CX Handheld PIYUSH MARU
	(CW1 Computer Room 1) 20229 AUTOGRAPH – DYNAMIC SOFTWARE FOR 2D and 3D GRAPHING-Douglas Butler
	(CW2 Computer Room 2) 20335 Dynamic Resources for International Baccalaureate Mathematics-Kate Mackrell
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: Wei Ching Quek)	
16:00-16:25	20199 A Comparison of Polytechnic Students' Attitudes toward Advanced Scientific Calculators- Wei Ching Quek, Chew Pheng Kok-Mak
16:30-16:55	20306 On the Effects of Visualizing Activities of Quadratic Curve Problems using GeoGebra-Minshik Cho, Sang-Je Cho, Kwang-Sang Lee
Room 2: (Chair: Werner Olivier)	
16:00-16:50 (50 minutes)	20230 WHAT'S NEW AND EXCITING ON THE WEB FOR MATHEMATICS TEACHERS- Douglas Butler
Room 3: (Chair: Bikas Jain)	
16:00-16:25	20603 Technology Enhances Classroom Control and Improves Students' performance: Bikas Jain
16:30-16:55	20605 Teaching Mathematical Modelling in Schools and Students' Responses: Jamal Hussain and Lalduhawma, L.P.
Room 4: (Chair: Shanti Amol Pise)	
16:00-16:25	20612 A Unit of Measurement and Learning-Tanya Saxena
16:30-16:55	20613 Misconceptions in Mathematical Concepts Leading to fear Among Students: Possible Solutions-Manjusha P. Gandhi
16:00 - 17:00	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room 5) Creativity Development in Mathematics and Technology Education-Janchai YINGPRAYOON
	(GC Room 6) 20706 VISUALIZING AND EXPLORING MATHEMATICS USING CASIO TEACHING TOOLS- A HANDS- ON SESSION ON FX-9860 GII /FX- CG20: Jitendra Pathak/Manoj Singh
	(CW1 Computer Room 1) 20701 Latex Workshop: Amitava Saraswati and Girish Belkar
	(CW2 Computer Room 2) 20702 Teaching Pre-calculus and Calculus with Geogebra: Sangeeta Gulati
09:00-17:00	Exhibitions
18:30-21:00	Conference Dinner and Culture Night

December 9, 2013 (Monday)**8:00-8:50 Registration****9:00-9:50 Plenary Speech 2: Room 1: Chair: Jen-Chung Chuan**
*20307 HOW TO MANAGE ALL THIS CHANGE- Douglas Butler***10:00-10:30 Tea Break****10:00-11:20 Plenary Speech 3: Room 1: Chair: Ma. Louise Antonette DE LAS PENAS**
*20333 Exploring Metric Spaces Visually with Excel-Deane Arganbright***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: Yoichi Maeda)**

11:30-12:50 (50 minutes) 20274 The story of a research about the nets of platonic solids with Cabri 3D: Conjectures related to a special Net Factor - A window for new researches Jean-Jacques Dahan

Room 2: (Chair: Tadashi Takahashi)

11:30-11:55 20235 Computer Algebra Systems as Cognitive Tools- Tadashi Takahashi, Takeshi Sakai

12:00-12:25 20236 TRANSFORM TECHNIQUES FOR CRYPTOGRAPHY- Anil Hiwarekar

Room 3: (Chair: Leslie Chandrakantha)

11:30-11:55 20254 Understanding Confidence Intervals and Hypothesis Testing Using Excel Data Table Simulation- Leslie Chandrakantha

12:00-12:25 20278 Integration of Spreadsheet into the Teaching and Learning of Financial Mathematics- Chee-Keong Chong, Marzita Puteh, Swee-Choo Goh

Room 4: (Chair: Barry Kissane)

11:30-12:20 (50 minutes) 20309 The use of dynamic tools to develop students' understanding of the fundamental ideas of calculus Debbie Verzosa, Angela Fatima Guzon, Ma. Louise Antonette De las Penas

11:30 - 12:30 Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)

(GC Room 5) 20705 VISUALIZING AND EXPLORING LINEAR EQUATIONS, QUADRATIC AND LINEAR INEQUALITIES USING CASIO GRAPHIC CALCULATOR: Adnan Lokhandwala

(CW Computer Room 1) 20316 AUTOGRAPH - DYNAMIC SOFTWARE FOR PROBABILITY and STATISTICS Douglas Butler

(CW3 Computer Room 2)

12:30-13:30 Lunch Break13:30-14:20 **Invited Speaker 5: Room 1: (Chair: Jonaki Ghosh):** 20336 Incorporating Culture in the Teaching of Mathematics- Ma. Louise Antonette N. De las Penas**Invited Speaker 6: Room 2: (Chair: Abhiram Ranade)** 20140 Let's TWIST Again- VLADIMIR NODELMAN**Invited Speaker 7: Room 3: (Chair: Thomas Yeo)** 20128 Exact Real Calculator for Everyone- Weng Kin Ho**Invited Speaker 8: Room 4: (Chair:Shailesh Shirali)** 20359 EXPLORING SPACE FILLING ORIGAMI-Wenwu Chang**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: Theodosia Prodromou)**

14:30-14:55 20285 GeoGebra in Teaching and Learning Introductory Statistics- Theodosia Prodromou

15:00-15:25 20286 MATHEMATICS TEACHING, LEARNING AND ASSESSMENT USING TECHNOLOGY- NAGANJANEYULU V

Room 2: (Chair: Santanu Manna)

14:30-14:55 20276 Propagation of Love type wave in piezoelectric layer overlying non-homogeneous half-space- Santanu Manna, Santimoy Kundu, Shishir Gupta

15:00-15:25 20210 DIFFUSIVE MASS TRANSFER IN AN ECCENTRIC ANNULAR FLOW Uma Devi, Bathalapalli Uma Devi, Dinesh P A, et al.

Room 3: (Chair: Ryoji Fukuda)	
14:30-14:55	20288 Evaluating Importance of Information Elements in Graphical Content Using Gaze Points- Ryoji Fukuda, Junki Iwagami, Takeshi Saitoh
15:00-15:25	20298 Animated Teaching Materials for Statistics Education in Beginner-level University Classes-Shunji Ouchi, Setsuo Takato
Room 4: (Chair: Jaehak Lee)	
14:30-14:55	20312 Analysis of Utilizing GSP Processes in Solving Geometry Problems by the Gifted- Jaehak Lee, In Suk Choi
15:00-15:25	20317 GeoGebra for tablets and on other devices-Zsolt Lavicza, Balazs Koren
14:30-15:30	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room 5) 20215 Learning calculus and sequences with an advanced scientific calculator Marian Kemp, Barry Kissane
	(GC Room 6) 20706 EXPLORING CONCEPTS AND APPLICATIONS OF MATHEMATICS USING CASIO GRAPHIC DISPLAY CALCULATOR: Ashish Sannigrahi
	(CW1 Computer Room 1) 20316 AUTOGRAPH – DYNAMIC SOFTWARE FOR PROBABILITY and STATISTICS Douglas Butler
	(CW2 Computer Room 2) 20313 Relationship Among Familiar Polyhedrons- Jen-chung Chuan
15:30-16:00	Tea Break and Poster Sessions: 20220 Consideration about the possibility of the technology in the department of elementary school arithmetic of Japan- Tsutomu Ishii 20318 GeoGebra for tablets and on other devices- Zsolt Lavicza, Balazs Koren
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: Deane Arganbright)	
16:00-16:25	20256 Virtual Manipulatives as a Tool for Discourse in Teaching Children Mathematics- William Speer
16:30-16:55	20282 Exploring Taxicab Geometry with Excel Maryanne Bagore, Jeffrey Ambelye, Deane Arganbright
Room 2: (Chair: Manisha Malhotra)	
16:20-16:25	20296 Interactive Videos: Engaging Students in and out of the Classroom-Haitham Solh
16:30-16:55	20337 Technology enhances classroom control and improves students' performance- Bikash Jain
Room 3: (Chair: Jen-chung Chuan)	
16:00-16:50 (50 minutes)	20334 Activity Theory: what does it have to offer to research and practice with mathematics and technology?-Kate Mackrell
Room 4: (Chair: Shou Hsing Shih)	
16:00-16:25	20343 Role of Technology within Teaching and Studying-“Connect”-Mujo Mesanovic,-Madhu Ashok Bathija
16:30-16:55	20371 Developing New Models Using Percentage Time Series-Shou Hsing Shih
16:00-17:00	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room 5) 20268 Developing a Deeper Understanding of Mathematical Concepts Through Handheld Technology Wee Leng Ng
	(GC Room 6) 20300 EXPLORING CONCEPTS AND APPLICATIONS OF MATHEMATICS USING A GRAPHICS CALCULATOR Jonaki Ghosh
	(CW1 Computer Room 1)
	(CW2 Computer Room 2)
09:00-17:00 Exhibitions	
18:30-20:30 IPC meeting	

December 10, 2013 (Tuesday)**8:00-8:50 Registration:**

9:00-9:50 **Panel Discussion:** *How evolving technologies impacted our mathematics teaching in schools?* Members: Douglas Butler (UK), Hee-chan Lew (South Korea), Dinesh Kumar (India), Werner Olivier (South Africa).
Room 1: Moderator: Wei-Chi Yang

10:00-10:30 Tea Break

10:30-11:20 **Plenary Speech 4 : Room 1: Chair: Hee-Chan Lew**
 20349 *ICT (I see it) in Math education-Inder K.Rana*

11:30-12:30 **Hands-on Workshops** (GC stands for calculator workshops; CW stands for computer workshops)
 (GC Room 2) 20216 Learning with graphics calculators Marian Kemp, Barry Kissane
 (CW1 Computer Room 1) 20326 Interactive Learning and Teaching Mathematics with dynamic software MathDisk Ajit Kumar, Mohamed Jaffarali
 (CW2 Computer Room 2) 20319 Tricky constructions of folding nets of platonic solid and experiments with their convex hulls with Cabri 3D Jean-Jacques Dahan

11:30-12:30 **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 Madhu Ashok Bathija :)

11:30-12:20 (50 minutes) 20290 Activities for Cultivating Creativity in Statistics course- Kyoko KAKIHANA, Takumi MAKINODAN, Atsumi Kimura

Room 2: (Chair:Girish Belkar)

11:30-11:55 20291 THE MOVEMENT FROM BEHAVORISTIC ORIENTATION 'COMPUTER ASSISTED INSTRUCTION' TO CONSTRUCTIVISTIC ORIENTATION 'STUDENT PROGRAMMING' IN MATHEMATICS EDUCATION- Mamdouh Soliman

12:00-12:25 20310 PILOT STUDY USING CASIO MATHS TEACHING AND LEARNING TOOLS AT HIGHER SECONDARY STAGE IN DELHI NCR REGION-P. K. Chaurasia

Room 3: (Chair: Anthony Desouza)

11:30-12:20 (50 minutes) 20200 Improving Students' Conceptual Understanding Through the Use of Interactive Smart Boards and Virtual Manipulatives-Beverly Ferrucci

Room 4: (Chair: Amitava Saraswati)

11:30-11:55 20614 BRTS (Bus Rapid Transit System)- Solution to a problem or problem itself-I: Ana Amir, Chhaya Joshi, Radhika Khandelwal, Saurabh Jain

12:00-12:25 20615 BRTS (Bus Rapid Transit System)- Solution to a problem or problem itself-I:

11:30-12:30 **Hands-on Workshops** (GC stands for calculator workshops; CW stands for computer workshops)
 (GC Room 5) 20203 Explore Runge-Kutta Method with Advanced Scientific Calculator Wei Ching Quek
 (GC Room 6) 20332 Hands on workshop : TI 84 Plus C SE PIYUSH MARU

12:30-13:30 Lunch Break

13:30-14:20 **Invited Talks part I**
Invited Speaker 9: Room 1: (Chair: Sneha Titus) 20508 Thinking with pictures : Ujjwal Rane
Invited Speaker 10: Room 2: (Chair: P. K. Chaurasia): 20504 Changing Dynamics of a Mathematics Classroom: Sangeeta Gulati
Invited Speaker 11: Room 3: (Chair: Ashwini Karwande): 20505 Math and City: Ravi Shankar
 14:30-15:20 **Invited Talks part II**
Invited Speaker 12: Room 1: (Chair: Beverly Ferrucci): 10506 Smart Board and GCD into the Secondary School Mathematics Classroom, Anthony Desouza
Invited Speaker 13: Room 2: (Chair: Shailesh Shirali): 20501 Mathematics with Mathematica: Aravind Hanasoge
Invited Speaker 14: Room 3: (Chair: Gaurav Tekeriwal) : 20703 Mental Mathematics – Lecture cum demo: Gaurav Tekriwal

14:30-15:30	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room 4) 20708 Learning to do math with TI-Nspire CX handheld: Thomas Yeo
	(GC Room 5)
	(CW1 Computer Room 1) 207209 Geobebra for Secondary Teachers: Amitava Saraswati and Girish Belkar
	(CW2 Computer Room 2)
15:30-16:00	Tea Break and Poster Sessions 20220 Consideration about the possibility of the technology in the department of elementary school arithmetic of Japan- Tsutomu Ishii 20318 GeoGebra for tablets and on other devices- Zsolt Lavicza, Balazs Koren
16:00-17:00	Parallel Session VIII. 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: Kalpana Gairola)	
16:00-16:25	20606 Use of Innovative Teaching Aids: Kalpana Gairola
16:30-17:00	20601 Teaching Fractions Using Constructivist Approach: An Experimental Study: Ashwini Karwande and Indu Garg
Room 2: (Chair: Christopher JeffersonY)	
16:00-16:25	20604 Mathematics Anxiety in Isolated Students: Christopher JeffersonY. and Chandramouleeswaran M
16:30-16:55	20610 Easy Learning of Basic Mathematics at School Level: Sandeep Kumar Bhakat
Room 3: (Chair: M.S. Solanki)	
16:00-16:55	20616 Facilitating Students to learn Geometry Practically: M. S. Solanki
Room 4: (Chair: Haitham Solh)	
16:00-16:25	20608 Explaining Mathematical Concepts with Innovative Personification: Manisha Malhotra
16:30-16:55	
16:00-17:00	Hands-on Workshops (GC stands for calculator workshops; CW stands for computer workshops)
	(GC Room 5) 20704 Exploring Senior Secondary Level Calculus with Graphic Display Calculator: Jonaki B. Ghosh
	(GC Room 6)
	(CW1 Computer Room 1)
	(CW2 Computer Room 2)
09:00-17:00 Exhibitions	

December 11, 2013 (Wednesday)

9:00-9:50	Plenary Speech 5: Room 1: Chair: Wei-Chi Yang <i>20350 Key factors for Successful Integration of Technology into the Classroom: Textbooks and Teachers- Hee-chan Lew</i>
10:00-10:50	Invited Speaker 15: Room 1: (Chair: Vladirmir Nodelman) 20400 TECHNOLOGY ENHANCED PROBLEM BASED LEARNING WITH APPLICATIONS TO REAL-WORLD PROBLEMS -Padmanabhan Seshaiyer
	Invited Speaker 16: Room 2: (Chair:Indu Garg) 20502 On The Shoulders of a Technology Gaint: Sneha Titus
	Invited Speaker 17: Room 3: (Chair: Sandeep Kumar Bhakat) 20507 Reasoning in Mathematics: P. K. Chaurasia
	Invited Speaker 18: Room 4: (Chair: Bikas Jain) 20509 Teaching Mathematics Effectively using TI-Nspire: Thomas Yeo
11:00-11:30	Tea Break
11:30-12:30	Closing Ceremony
12:30-13:30	Lunch and Farewell
	Half day conference tour