

ICMS 2014 Schedule for August 5 at Room A

Time	ID	Title/Authors
Invited plenary talk 1		Chair: Hoon Hong
9:40–10:40	0.1	<i>Soft Math Math Soft</i> Bruno Buchberger
Mathematical Theory Exploration 1		Chair: Wolfgang Windsteiger
11:00–11:25	1.1	<i>Flyspecking Flyspeck</i> Mark Adams
11:25–11:50	1.2	<i>Symbolic Computing Package for Mathematica for Versatile Manipulation of Mathematical Expressions</i> Youngjoo Chung
11:50–12:15	1.3	<i>Representing, Archiving, and Searching the Space of Mathematical Knowledge</i> Mihnea Iancu , Michael Kohlhase, Corneliu Prodescu
Groebner Bases 1		Chair: Bruno Buchberger
2:00–2:25	10.1	<i>Software for discussing parametric polynomial systems: The Groebner Cover</i> Antonio Montes, Michael Wibmer
2:25–2:50	10.2	<i>Maximizing Likelihood Function for Parameter Estimation in Point Clouds</i> Joseph Awange, Bla Palncz, Robert Lewis
2:50–3:15	10.3	<i>What is new in CoCoA?</i> John Abbott, Anna M. Bigatti
3:15–3:40	10.4	<i>Application of Groebner Basis Methodology to Nonlinear Mechanics Problems</i> Y. Jane Liu, John Peddieson
Groebner Bases 2		Chair: Alexander Maletzky
4:00–4:25	10.5	<i>Groebner Basis Applications in Geodesy and Geoinformatics</i> Joseph Awange, Bla Palncz, Robert Lewis
4:25–4:50	10.6	<i>Generic and parallel Groebner bases in JAS</i> Heinz Kredel
4:50–5:15	10.7	<i>Verification of Groebner basis candidates</i> Masayuki Noro, Kazuhiro Yokoyama
5:15–5:40	10.8	<i>An algorithm for computing standard bases by change of ordering via algebraic local cohomology</i> Katsusuke Nabeshima, Shinichi Tajima

ICMS 2014 Schedule for August 5 at Room B

Time	ID	Title/Authors
Computational Topology 1		Chair: Michael Kerber
11:00–11:25	4.1	<i>Recent developments in Regina: Exact computation with triangulated 3-manifolds</i> Benjamin Burton
11:25–11:50	4.2	<i>Heuristic manifold recognition, bistellar flips and discrete Morse theory</i> Michael Joswig, Frank Lutz, Mimi Tsuruga
11:50–12:15	4.3	<i>Computing Persistence Modules on Commutative Ladder Quivers of Finite Type</i> Yasuaki Hiraoka, Emerson Escolar
12:15–12:40	4.4	<i>CAPD::RedHom v2 - Homology software based on reduction algorithms</i> Mateusz Juda, Marian Mrozek
Computational Group Theory 1		Chair: Alexander Hulpke
2:00–2:25	2.1	<i>Software for Groups: Theory and Practice</i> Alexander Hulpke
2:25–2:50	2.2	<i>New approaches in black box group theory</i> Alexandre Borovik, Sukru Yalcinkaya
2:50–3:15	2.3	<i>Approximating generators for integral arithmetic groups</i> Bettina Eick
3:15–3:40	2.4	<i>A GAP package for computing with real semisimple Lie algebras</i> Heiko Dietrich, Paolo Faccin, Willem A. de Graaf
Quantified Reasoning 1		Chair: Arie Gurfinkel
4:00–4:25	8.1	<i>Real Quantifier Elimination in the RegularChains Library</i> Changbo Chen, Marc Moreno Maza
4:25–4:50	8.2	<i>Skolemization Modulo Theories</i> Konstantin Korovin, Margus Veanes
4:50–5:15	8.3	<i>Incremental QBF Solving</i> Florian Losing, Uwe Egly
5:15–5:40	8.4	<i>Bit-Precise Quantifier Elimination</i> Ajith K. John, Supratik Chakraborty

ICMS 2014 Schedule for August 5 at Room C

Time	ID	Title/Authors
Geometry 1		Chair: Xiaoyu Chen
11:00–11:25	6.1	<i>CGAL - Reliable Geometric Computing for Academia and Industry</i> Eric Berberich
11:25–11:50	6.2	<i>Implementing the L_∞ Segment Voronoi Diagram in CGAL and Applying in VLSI Pattern Analysis</i> Panagiotis Cheilaris, Sandeep Kumar Dey, Maria Gabrani, Evanthia Papadopoulou
11:50–12:15	6.3	<i>BULL! - The Molecular Geometry Engine Based on Voronoi Diagram, Quasi-Triangulation, and Beta-Complex</i> Deok-Soo Kim, Youngsong Cho, Jae-Kwan Kim, Joonghyun Ryu, Mokwon Lee, Jehyun Cha, Chanyoung Song
12:15–12:40	6.4	<i>Integrating Circumradius and Area Formulae for Cyclic Pentagons</i> Shuichi Moritsugu
General 1		Chair: Hoon Hong
2:00–2:25	14.1	<i>Metalibm: A Mathematical Functions Code Generator</i> Olga Kupriianova, Christoph Lauter
2:25–2:50	14.2	<i>From Calculus to Algorithms without Errors</i> Norbert Mueller, Martin Ziegler
2:50–3:15	14.3	<i>Function Interval Arithmetic</i> Jan Duracz, Amin Farjudian, Michal Konecny, Walid Taha
3:15–3:40	14.4	<i>Analyze the Effect of Sparse Matrix Ordering for Iterative Solver on GPU</i> Ingyu Lee, Byung-Won On, Jung-In Choi
Curves and Surfaces 1		Chair: Vikram Sharma
4:00–4:25	7.1	<i>Robustly and Efficiently Computing Algebraic Curves and Surfaces</i> Eric Berberich
4:25–4:50	7.2	<i>Numerical algebraic geometric techniques for real curves and surfaces</i> Daniel Bates, Daniel Brake, Jonathan D. Hauenstein, Andrew J. Sommese, Charles W. Wampler
4:50–5:15	7.3	<i>Root Refinement for Real Polynomials</i> Michael Kerber
5:15–5:40	7.4	<i>Isotopic Epsilon-approximation of algebraic curves</i> Kai Jin

ICMS 2014 Schedule for August 6 at Room A

Time	ID	Title/Authors
Invited plenary talk 2		Chair: Deok-Soo Kim
9:40–10:40	0.2	<i>Principle of Independence for Robust Geometric Software Learned by the Human Visual Computation</i> Kokichi Sugihara
Mathematical Theory Exploration 2		Chair: Bruno Buchberger
11:00–11:25	1.5	<i>Discourse-Level Parallel Markup and Meaning Adoption in Flexiformal Theory Graphs</i> Michael Kohlhase, Mihnea Iancu
11:25–11:50	1.6	<i>Theorema 2.0: A System for Mathematical Theory Exploration</i> Wolfgang Windsteiger
11:50–12:15	1.7	<i>Complexity Analysis of the Bivariate Buchberger Algorithm in Theorema</i> Alexander Maletzky, Bruno Buchberger
12:15–12:40	1.8	<i>Formalizing a Key Theorem from Auction Theory using the Theorema System</i> Wolfgang Windsteiger, Manfred Kerber, Colin Rowat
Parametric Polynomial Systems 1		Chair: Hidenao Iwane
2:00–2:25	12.1	<i>An algorithm for computing Tjurina stratifications of mu-constant deformations using algebraic local cohomology</i> Katsusuke Nabeshima, Shinichi Tajima
2:25–2:50	12.2	<i>An implementation method of Boolean Groebner bases and comprehensive Boolean Groebner bases on general computer algebra systems</i> Akira Nagai , Shutaro Inoue
2:50–3:15	12.3	<i>Mathematical hierarchies of Sudoku puzzles and its computation by Boolean Groebner bases</i> Shutaro Inoue
3:15–3:40	12.4	<i>A method to determine if two parametric polynomial systems are equal</i> Dingkang Wang , Jie Zhou
Groebner Bases 3		Chair: John Abbott
4:00–4:25	10.9	<i>Groebner Bases in Theorema</i> Bruno Buchberger, Alexander Maletzky
4:25–4:50	10.10	<i>Effective Computation of Radical of Ideals and its Application to Invariant Theory</i> Amir Hashemi
4:50–5:15	10.11	<i>Groebner Bases in Teaching Mechanics</i> Y. Jane Liu, Rafal Ablamowicz
5:15–5:40	10.12	<i>Software Packages for Holonomic Gradient Method</i> Tamio Koyama, Hiromasa Nakayama, Katsuyoshi Ohara, Tomonari Sei, Nobuki Takayama

ICMS 2014 Schedule for August 6 at Room B

Time	ID	Title/Authors
Computational Topology 2		Chair: Michael Kerber
11:00–11:25	4.5	<i>PHAT - Persistent Homology Algorithms Toolbox</i> Ulrich Bauer, Michael Kerber, Jan Reininghaus, Hubert Wagner
11:25–11:50	4.6	<i>The Gudhi Library: Simplicial Complexes and Persistent Homology</i> Clement Maria, Jean-Daniel Boissonnat, Marc Glisse, Mariette Yvinec
11:50–12:15	4.7	<i>Distributed Persistent Homology via Mayer Vietoris</i> Ryan Lewis, Gunnar Carlsson
12:15–12:40	4.8	<i>javaPlex - an extensible platform for persistence</i> Henry Adams, Andrew Tausz, Mikael Vejdemo-Johansson
Computational Group Theory 2		Chair: Heiko Dietrich
2:00–2:25	2.5	<i>Bacterial Genomics and Computational Group Theory</i> Attila Egry-Nagy, Andrew Francis, Volker Gebhardt
2:25–2:50	2.6	<i>Cascade (De)Compositions of Finite Transformation Semigroups and Permutation Groups</i> Attila Egry-Nagy, James D. Mitchel, Chrystopher L. Nehaniv
2:50–3:15	2.7	<i>Computation of genus 0 Belyi functions</i> Mark van Hoeij, Raimundas Vidunas
3:15–3:40	2.8	<i>On computation of the first Baues-Wirsching cohomology of a freely-generated small category</i> Yasuhiro Momose, Yasuhide Numata
Quantified Reasoning 2		Chair: David Monniaux
4:00–4:25	8.5	<i>Software for Quantifier Elimination in Propositional Logic</i> Eugene Goldberg, Panagiotis (Pete) Manolios
4:25–4:50	8.6	<i>Quantified Reasoning Over the Reals</i> Sicun (Sean) Gao, Soonho Kong, Edmund M. Clarke
4:50–5:15	8.7	<i>NLCertify: A Tool for Formal Nonlinear Optimization</i> Victor Magron

ICMS 2014 Schedule for August 6 at Room C

Time	ID	Title/Authors
Geometry 2		Chair: Eric Berberich
11:00–11:25	6.5	<i>Computer Aided Geometry</i> Douglas Navarro Guevara, Adrian Navarro Alvarez
11:25–11:50	6.6	<i>The Sustainability of Digital Educational Resources</i> Yongsheng Rao, Ying Wang, Yu Zou, Jingzhong Zhang
11:50–12:15	6.7	<i>OpenGeo: An Open Geometric Knowledge Base</i> Dongming Wang, Xiaoyu Chen, Wenya An, Lei Jiang, Dan Song
12:15–12:40	6.8	<i>A Touch-Operation-Based Dynamic Geometry System: Design and Implementation</i> Wei Su, Paul S. Wang, Chuan Cai, Lian Li
General 2		Chair: Chee Yap
2:00–2:25	14.5	<i>swMATH -an information service for mathematical software</i> Gert-Martin Greuel
2:25–2:50	14.6	<i>MathLibre: modifiable desktop environment for mathematics</i> Tatsuyoshi Hamada
2:50–3:15	14.7	<i>Recent developments in Normaliz</i> Winfried Bruns, Christof Soeger
3:15–3:40	14.8	<i>Integration of libnormaliz in CoCoALib and CoCoA 5</i> John Abbott, Anna M. Bigatti, Christof Soeger
Curves and Surfaces 2		Chair: Kai Jin
4:00–4:25	7.5	<i>Computing The Orthogonal Projection of Rational Curves Onto Rational Parameterized Surface by Symbolic Methods</i> Zhiwang Gan, Meng Zhou
4:25–4:50	7.6	<i>Isotopic Arrangement of Simple Curves</i> Jyh-Ming Lien, Vikram Sharma, Gert Vegter, Chee Yap

ICMS 2014 Schedule for August 7 at Room A

Time	ID	Title/Authors
Invited plenary talk 3		Chair: Chee Yap
9:40–10:40	0.3	<i>CHEBFUN as a software project</i> Lloyd N. Trefethen
Tutorials		
11:50–12:40	15.1	<i>BULL! - Molecular Geometry Engine</i> Deok-Soo Kim
2:00–2:50	15.4	<i>Theorema 2.0: A Mathematical Theory Exploration System based on Mathematica</i> Bruno Buchberger, Wolfgang Windsteiger
2:50–3:40	15.6	<i>Recent Developments in Computational Semigroup Theory</i> Attila Egri-Nagy , James D. Mitchell

ICMS 2014 Schedule for August 7 at Room B

Time	ID	Title/Authors
Tutorials		
11:50–12:40	15.2	<i>CoCoA-5, CoCoALib, and a touch of normaliz</i> Anna M. Bigatti, John Abbott
2:00–2:50	15.5	<i>Which Convex Hull Algorithm Should I Use?</i> Michael Joswig
2:50–3:40	15.7	<i>A RegularChains Library Tutorial</i> Marc Moreno Maza

ICMS 2014 Schedule for August 7 at Room C

Time	ID	Title/Authors
Tutorial		
11:50–12:40	15.3	<i>Mathematical Analysis Using the Symbolic Computing Package for Mathematica</i> Youngjoo Chung
Demos/Posters (all in parallel)		
2:00–3:40	16.1	<i>Algebraic and visual representations of branch cuts in Maple</i> Matthew England
2:00–3:40	16.2	<i>BetaCavity and BetaConcept</i> Deok-Soo Kim
2:00–3:40	16.3	<i>CoCoA-5 and CoCoALib</i> Anna M. Bigatti, John Abbott
2:00–3:40	16.4	<i>Hom₄PS-3</i> Tianran Chen
2:00–3:40	16.5	<i>L_∞Segment Voronoi Diagram in CGAL - Applying in VLSI pattern analysis</i> Panagiotis Cheilaris , Sandeep Kumar Dey , Maria Gabrani , Evanthia Papadopoulou
2:00–3:40	16.6	<i>MathLibre: modifiable desktop environment for mathematics</i> Tatsuyoshi Hamada
2:00–3:40	16.7	<i>Metalibm, a mathematical functions code generator</i> Olga Kupriianova
2:00–3:40	16.8	<i>Normaliz</i> Christof Soeger
2:00–3:40	16.9	<i>Removing the blind spot</i> Norbert Mueller , Martin Ziegler
2:00–3:40	16.10	<i>Approximating Exact Real Numbers (AERN)</i> Michal Konecny
2:00–3:40	16.11	<i>Writing a scientific paper using GNU TeXmacs.</i> Franois Poulain
2:00–3:40	17.1	<i>L_∞Segment Voronoi Diagram in CGAL - Applying in VLSI pattern analysis</i> Panagiotis Cheilaris , Sandeep Kumar Dey , Maria Gabrani , Evanthia Papadopoulou
2:00–3:40	17.2	<i>Molecular Geometry and Molecular Geometry Operating System</i> Deok-Soo Kim
2:00–3:40	17.3	<i>The Sustainability of Digital Educational Resources</i> Rao Yongsheng

ICMS 2014 Schedule for August 8 at Room A

Time	ID	Title/Authors
Invited plenary talk 4		Chair: Dan Bates
9:40–10:40	0.4	<i>Numerical Algebraic Geometry</i> Andrew Sommese
Numerical Algebraic Geometry 1		Chair: Andrew Sommese
11:00–11:25	5.1	<i>An Introduction to Software in Numerical Algebraic Geometry</i> Jonathan Hauenstein
11:25–11:50	5.2	<i>Paramotopy: Software for Parameter Homotopies</i> Daniel Bates, Daniel Brake, Matthew Niemerg
11:50–12:15	5.3	<i>Hom4PS-3</i> Tianran Chen, Tsung-Lin Lee, Tien-Yien Li
12:15–12:40	5.4	<i>Bertini Real: Real Algebraic Curve and Surface Cellular Decomposition Software</i> Daniel Brake, Daniel Bates, Jonathan Hauenstein, Charles Wampler, Andrew Sommese, Wenrui Hao
Parametric Polynomial Systems 2		Chair: Yosuke Sato
2:00–2:25	12.5	<i>QE software based on comprehensive Groebner systems</i> Ryoya Fukasaku
2:25–2:50	12.6	<i>SyNRAC: A toolbox for solving real algebraic constraints</i> Hidenao Iwane, Hitoshi Yanami, Hirokazu Anai
2:50–3:15	12.7	<i>Software Using the Groebner Cover for Geometrical Loci Computation and Classification</i> Miguel Abanades, Francisco Botana, Antonio Montes, Tomas Recio
3:15–3:40	12.8	<i>Using Maple's RegularChains Library to Automatically Classify Plane Geometric Loci</i> Francisco Botana, Tomas Recio
Parametric Polynomial Systems 3		Chair: Antonio Montes
4:00–4:25	12.9	<i>Solving Parametric Polynomial Systems by RealComprehensiveTriangularize</i> Changbo Chen, Marc Moreno Maza
4:25–4:50	12.10	<i>A Package for Parametric Matrix Computations</i> Robert M. Corless, Steven E. Thornton

ICMS 2014 Schedule for August 8 at Room B

Time	ID	Title/Authors
Special Functions and Concrete Mathematics 1		Chair: Jon Borwein
11:00–11:25	9.1	<i>Fast algorithms for Monte Carlo simulation of self-avoiding walks</i> Nathan Clisby
11:25–11:50	9.2	<i>BetaSCP: A Program for the Optimal Prediction of Side-chains in Proteins</i> Joonghyun Ryu, Mokwon Lee, Jehyun Cha, Chanyoung Song, Deok-Soo Kim
11:50–12:15	9.3	<i>Computation of an Improved Lower Bound to Giuga's Primality Conjecture</i> Matthew Skerritt
12:15–12:40	9.4	<i>Mathematical software for modified Bessel functions</i> Juri Rappoport
Mathematical Web/Mobile Interfaces, Editing and Visualization 1		Chair: Andres Iglesias
2:00–2:25	13.1	<i>Math Web Interfaces and the Generation Gap of Mathematicians</i> Andrea Kohlhase
2:25–2:50	13.2	<i>An Implementation Method of a CAS with a Handwriting Interface on Tablet Devices</i> Mitsushi Fujimoto
2:50–3:15	13.3	<i>A Touch-based Mathematical Expression Editor</i> Wei Su, Paul S. Wang, Li Lian
3:15–3:40	13.4	<i>A Tablet-Compatible Web-Interface for Mathematical Collaboration</i> Marco Pollanen, Jeff Hooper, Bruce Cater, Sohee Kang
Mathematical Web/Mobile Interfaces, Editing and Visualization 2		Chair: Marco Pollanen
4:00–4:25	13.5	<i>Development and Evaluation of A Web-Based Drill System to Master A Basic Math Formula Using The New Interactive Math Input Method</i> Shizuka Shirai, Tetsuo Fukui
4:25–4:50	13.6	<i>GNU TeXmacs: towards a scientific office suite</i> Massimiliano Gubinelli, Joris van der Hoeven
4:50–5:15	13.7	<i>IFSGen4LaTeX: Interactive Graphical User Interface to Generate and Visualize Iterated Function Systems for LaTeX</i> Akemi Galvez Tomida, Kiyoshi Kitahara, Masataka Kaneko
5:15–5:40	13.8	<i>Computer Software for Representation and Visualization of Free-Form Curves with Bio-inspired Optimization Techniques</i> Andres Iglesias, Akemi Galvez Tomida

ICMS 2014 Schedule for August 8 at Room C

Time	ID	Title/Authors
General 3		Chair: Anna M. Bigatti
11:00–11:25	14.9	<i>Generating Optimized Sparse Matrix Vector Product over Finite Fields</i> Pascal Giorgi, Bastien Vialla
11:25–11:50	14.10	<i>Elements of Design for Containers and Solutions in the LinBox library</i> Brice Boyer, Jean-Guillaume Dumas, Pascal Giorgi, Clment Pernet, B. David Saunders
11:50–12:15	14.11	<i>Dense Arithmetic over Finite Fields with the CUMODP Library</i> Sardar Anisul Haque, Xin Li, Farnam Mansouri, Marc Moreno Maza, Wei Pan, Ning Xie
12:15–12:40	14.12	<i>The Basic Polynomial Algebra Subprograms</i> Changbo Chen, Farnam Mansouri, Marc Moreno Maza, Ning Xie, Yuzhen Xie
Coding Theory 1		Chair: Kwankyu Lee
2:00–2:25	3.1	<i>Lifts of Self-Dual Codes</i> Suat Karadeniz, Refia Aksoy
2:25–2:50	3.2	<i>Codes over a non chain ring with some applications</i> Aysegul Bayram, Elif Segah Oztas, Irfan Siap
2:50–3:15	3.3	<i>On the Weight Enumerators of the Projections of the 2-adic Golay Code of Length 24 to Z_2^e</i> Sunghyu Han
3:15–3:40	3.4	<i>Computer based reconstruction of binary extremal self-dual codes of length 32</i> Jon-Lark Kim
Coding Theory 2		Chair: Jon-Lark Kim
4:00–4:25	3.5	<i>Magma Implementation of Decoding Algorithms for General Algebraic Geometry Codes</i> Kwankyu Lee
4:25–4:50	3.6	<i>Formally Self-Dual Codes over a Ring of Characteristic 2 and Their Binary Images</i> Zeynep Odemis Ozger, Bahattin Yildiz
4:50–5:15	3.7	<i>Reversible codes and applications to DNA</i> Elif Segah Oztas, Irfan Siap, Bahattin Yildiz

ICMS 2014 Schedule for August 9 at Room A

Time	ID	Title/Authors
Invited plenary talk 5		Chair: James Davenport
9:40–10:40	0.5	<i>Computer Discovery and Visual Theorems in Mathematics</i> Jonathan M. Borwein
Triangular Decompositions of Polynomial Systems 1		Chair: Marc Moreno-Maza
11:00–11:25	11.1	<i>Cylindrical Algebraic Decomposition in the RegularChains Library</i> Changbo Chen, Marc Moreno Maza
11:25–11:50	11.2	<i>Choosing a Variable Ordering for Truth-Table Invariant Cylindrical Algebraic Decomposition by Incremental Triangular Decomposition</i> Matthew England, Russell Bradford, James H. Davenport, David Wilson
11:50–12:15	11.3	<i>Using the Regular Chains Library to Build Cylindrical Algebraic Decompositions by Projecting and Lifting</i> Matthew England, David Wilson, Russell Bradford, James H. Davenport
12:15–12:40	11.4	<i>Hierarchical Comprehensive Triangular Decomposition</i> Zhenghong Chen, Xiaoxian Tang, Bican Xia
Triangular Decompositions of Polynomial Systems 2		Chair: Marc Moreno-Maza
2:00–2:25	11.5	<i>Doing Algebraic Geometry with the RegularChains Library</i> Parisa Alvandi, Changbo Chen, Steffen Marcus, Marc Moreno Maza, Eric Schost, Paul Vrbik
2:25–2:50	11.6	<i>Computing Moore-Penrose Inverses of Ore Polynomial Matrices</i> Yang Zhang
2:50–3:15	11.7	<i>On Multivariate Birkhoff Rational Interpolation</i> Peng Xia, Bao-Xin Shang, Na Lei
3:15–3:40	11.8	<i>An Improvement of Rosenfeld-Groebner Algorithm</i> Amir Hashemi, Zahra Touraji
Numerical Algebraic Geometry 2		Chair: Andrew Sommese
4:00–4:25	5.5	<i>Bertini for Macaulay2</i> Jose I. Rodriguez, Daniel Bates, Elizabeth Gross, Anton Leykin
4:25–4:50	5.6	<i>Using Monodromy to Avoid High Precision in Homotopy Continuation</i> Matthew Niemerg, Daniel Bates
Mathematical Theory Exploration 3		Chair: Wolfgang Windsteiger
4:50–5:15	1.4	<i>Early Examples of Software in Mathematical Knowledge Management</i> Patrick Ion

ICMS 2014 Schedule for August 9 at Room C

Time	ID	Title/Authors
Mathematical Web/Mobile Interfaces, Editing and Visualization 3		Chair: Setsuo Takato
11:00–11:25	13.9	<i>Creating Interactive Graphics for Mathematics Education Utilizing KETpic</i> Shunji Ouchi, Yoshifumi Maeda, Kiyoshi Kitahara, Naoki Hamaguchi
11:25–11:50	13.10	<i>Generating Data of Mathematical Figures for 3D Printers with KETpic and Educational Impact of the Printed Models</i> Setsuo Takato, Naoki Hamaguchi, Haiduke Sarafian
11:50–12:15	13.11	<i>Establishment of KETpic programming styles for drawing</i> Satoshi Yamashita, Yoshifumi Maeda, Hisashi Usui, Kiyoshi Kitahara, Hideyo Makishita, Kazushi Ahara
12:15–12:40	13.12	<i>New Way of Explanation of the Stochastic Interpretation of Wave Functions and its Teaching Materials Using KETpic</i> Kenji Fukazawa
Mathematical Web/Mobile Interfaces, Editing and Visualization 4		Chair: Andres Iglesias
2:00–2:25	13.13	<i>Practice with Computer Algebra Systems in Mathematics Education and Teacher Training Courses</i> Hideyo Makishita
2:25–2:50	13.14	<i>On some attempts to verify the effect of using high-quality graphics in mathematics education</i> Kiyoshi Kitahara, Tadashi Takahashi, Masataka Kaneko
2:50–3:15	13.15	<i>Development of Visual Aid Materials in Teaching the Bivariate Normal Distributions</i> Toshifumi Nomachi, Toshihiko Koshiba, Shunji Ouchi
3:15–3:40	13.16	<i>Some problems of making educational materials of mathematics with CAS</i> Kazushi Ahara
Special Functions and Concrete Mathematics 2		Chair: Jon Borwein
4:00–4:25	9.5	<i>An extension and efficient calculation of the Horner's rule for matrices</i> Shinichi Tajima, Katsuyoshi Ohara, Akira Terui
4:25–4:50	9.6	<i>Expectations on IFS attractors</i> Michael Rose
4:50–5:15	9.7	<i>Developing linear algebra packages on Risa/Asir for eigenproblems</i> Katsuyoshi Ohara, Shinichi Tajima, Akira Terui