Program The Joint Conference of ASCM 2009 and MACIS 2009

Update:2009.12.08

Date	Sunday, December 13.	Monday, December 14, 2009		Tuesday, December 15, 2009		Wednesday, December 16, 2009		Thursday, December 17, 2009	
8:00-9:00		reception		reception		reception			
Room Type		RIGEL	BOARD ROOM	RIGEL	BOARD ROOM	RIGEL	BOARD ROOM	RIGEL	BOARD ROOM
9:00-10:00		Invited Speaker Prof. Zhi		Invited Speaker Prof. Sugihara		Invited Speaker Prof. Rosenkranz		Invited Speaker Prof. Oaku	
10:00-10:30		Coffee Break 30 min. **travel expenses counter**		Coffee Break 30 min.		Coffee Break 30 min.		Coffee Break 30 min.	
10:30-12:00		1 ASCM-REG1 ①Michael Sagraloff, Michael Kerber and Michael Hemmer: "Certified Complex Root Isolation via Adaptive Root Separation Bounds" ②François Boulier, Changbo Chen, François Lemaire and Marc Moreno Maza: "Real Root Isolation of Regular Chains" ③Katsusuke Nabeshima, Yayoi Nakamura and Shinichi Tajima: "An Algorithm to Compute Parametric Standard Bases Using Algebraic Local Cohomology for Zero Dimensional Ideals"	2 MACIS-CS1 ①Fu-Cheng Wang, Hsiang-An Chan, Jason Zheng Jiang and Malcolm C. Smith. Optimization and Network Synthesis for a Mechatronic System ②Takuya Kitamoto and Tetsu Yamaguchi. On the computation of the optimal H ∞ norm of a parametric system achievable by a feedback controller ③Hiroyuki Ichihara and Hirokazu Anai. A Sum of Squares Approach to Nonlinear Gain Analysis of a Class of Nonlinear Dynamical Systems	7 ASCM-REG5 ①Hidenao Iwane, Hitoshi Yanami and Hirokazu Anai: "A Symbolic-Numeric Approach to Some Classes of Parametric Optimization Problems for Manufacturing Design" ②Takuya Kitamoto and Tetsu Yamaguchi: "Design of a PI controller with H ∞ performance and step response constraints" ③Ming-Gong Lee and Rei-Wei Song: "A Family of Block Numerical Multistage-Multistep Method"	8 MACIS-PO1 ①Antoine Colin and Marc Giusti. Efficient computation of square-free Lagrange resolvents ②Xavier Dahan. On some probabilistic aspects around modular methods ③Changbo Chen and Marc Moreno Maza. Intersection Formulas and Algorithms for Computing Triangular Decompositions	13ASCM-CAN ① Akinari Hoshi "On the simplest quartic felds and related Thue equations" ②Yoshinori Aono "Simplifcation of the lattice based attack of Boneh and Durfee for RSA cryptoanalysis" ③Seyed Mohammad Mahdi Javadi and Michael Monagan "In-place Arithmetic for Univariate Polynomials over an Algebraic Number Field"	14 MACIS-PO2 ①Francisco Jesus Castro-Jiménez, Manuel Jesus Gago-Vargas, Hartillo Maria Isabel, Justo Puerto and Jose Maria Ucha. Computer Algebra for Integer Portfolio problems ②Fabrice Rouillier and Rong Xiao. On Using Triangular Decomposition for Solving Parametric Polynomial Systems	15 ASCM-REG6 ①Chun Xiong, Tom Kelsey, Steve Linton and Ulf Leonhardt: "Towards the calculation of Casimir forces for inhomogeneous planar media" ②Barry Drake, Jingu Kim, Mahendra Mallick and Haesun Park: "Raman Spectra Estimation with Classical and Nonnegative Weighted Least Squares" ③Kengo Taira and Seiji Fujino: "Finite Element Time Domain Method for Electromagnetic Wave Problems"	16 MACIS-PO3 ①Jin-San Cheng, Xiao-Shan Gao and Leilei Guo. Root Isolation of Zero-dimensional Polynomial Systems with Linear Univariate Representation ②William Hanan, Dagash Mehta,Guillaume Moroz and Sepanda Pouryahya. Stability and Bifurcation Analysis of Coupled Fitzhugh-Nagumo Oscillators ③Daniel Lazard. Algebraic points in geometry and application to CAD
Lunch 12:00-14:00						Reception for Excursion 1F		Lunch 12:00-14:00	
14:00-15:30		3 ASCM-REG2 ①Yao Sun and Dingkang Wang: "The Implementation and Complexity Analysis of the Branch Groebner Bases Algorithm over Boolean Ring" ②Akira Suzuki: "Computing Boolean Groebner Bases within Linear Algebra" ③Shutaro Inoue and Akira Nagai: "On the Implementation of Boolean Groebner Base"	4 MACIS-CS2 ①Xiaoliang LI, Chenqi Mou, Wei Niu and Dongming Wang. Stability Analysis for Discrete Biological Models Using Algebraic Methods ②Hiroshi YOSHIDA and Kinji Kimura. Algebraic approaches to underdetermined systems	9 ASCM-DIG1 60min.14:00-15:00 ①David Ruddy, (invited talk) "Digitized Mathematical Literature and the Semantic Web" Coffee Break 30 min. 11 ASCM-DIG2 120min. ①John Gardner, Vladimir Bulatov, Masakazu Suzuki and Katsuhito Yamaguchi "Audio / Visual / Tactual Presentation of Scientific Graphics" ②Oleg Golubitsky, Vadim Mazalov and Stephen Watt "Orientation-Independent Recognition of Handwritten Characters with Integral Invariants" ③Petr Sojka "Digitisation Workflow in the Czech Digital Mathematics Library" ④Walaa ALY, Seiichi UCHIDA and Masakazu SUZUKI "Extract Baseline Information Using Support Vector Machine" ⑤Mihai Grigore, Magdalena Wolska and Michael Kohlhase "Towards Context-based Disambiguation of Mathematical Expressions"	10 ASCM-VAL1 ① Shin'ichi Oishi, Akitoshi Takayasu, Takayuki Kubo Numerical Verification Method for Nonlinear Differential Equations ② Nobito Yamamoto, Ryuji Ukawa, Nozomu Matsuda Construction of an automatic validated computation for boundary value problems of ODEs ③ Kaori Nagatou Computer Assisted Proofs for Spectral Problems	13:00-19:00 Excursion		17 ASCM-REG7 ①Heinz Kredel: "Comprehensive Groebner Bases in a Java Computer Algebra System" ②Katsusuke Nabeshima: "PGB: A package for computing parametric polynomial systems" ③Tateaki Sasaki: "Practical Method for Floating-point Groebner Basis Computation"	18 MACIS-SS1 ①Tudor Jebelean. Practical Aspects of Logical Based Algorithm Synthesis ②Robert van Engelen. Automatically Generating High-Performance Parallel Code for Atmospheric Simulation Models: Challenges and Solutions for Auto-Programming Tools ③Jeremy Johnson. SPIRAL and Beyond: Automatic Derivation and Optimization of DSP Algorithms and More ** Short talk ** Kittisak Kerdprasop and Nittaya Kerdprasop. Automated induction of frequent patterns with knowledge-based software engineering
		Coffee Break 30 min.			Coffee Break 30 min.			Coffee Break 30 min.	
16:00-17:30		5 ASCM-REG3 ①Howard Cheng and George Labahn: "A Practical Implementation of a Modular Algorithm for Ore Polynomial Matrices" ②Mark Giesbrecht, George Labahn and Yang Zhang: "Computing Popov Forms of Matrices over PBW Extensions" ③Katsuyoshi OHARA and Shinichi Tajima "Spectral Decomposition and Eigenvectors of Matrices by Residue analysis" ④Sylvain Petitjean: "Characterizing the Intersection Pattern of Two Conics: A Bezoutian-Based Approach"	6 ASCM-REG4 ①Akira Terui: "GPGCD, an Iterative Method for Calculating Approximate GCD of Univariate Polynomials, with the Complex Coefficients" ②Hiroshi Sekigawa: "A Sequence of Nearest Polynomials with Given Factors" ③Tateaki Sasaki and Daiju Inaba: "Series Expansion of Multivariate Algebraic Functions at Singular Points -- Nonmonic Case --" ④Takaki Kubo: "Computing Monodromy Groups defined by Plane Algebraic Curves by using Extended Hensel Construction"		12ASCM-VAL2 ④ Xiaojun Chen, Andreas Frommer, Bruno Lang Computational Existence Proofs for Spherical t-Designs ⑤ Daniel Wilczak Rigorous numerics for homoclinic dynamics ⑥ Takashi Hisakado, Masakazu Yagi Error Bound for Harmonic Balance Method Using Groebner Base		19 ASCM-REG8 ①Masakazu Naito,Toshiyuki Yamauchi, Taishi Inoue, Yuuki Tomari, Koichiro Nishimura, Takuma Nakaoka, Soh Tatsumi, Ryohei Miyadera, Wataru Ogasa and Daisuke Minematsu: "Discrete Mathematics and Computer Algebra System" ②Xavier Dahan and Jean-Pierre Tillich: "Ramanujan graphs of larger girth" ③Zhaocheng Xuan, Yaohui Li and Zengfa Zhou: "Computation of trustworthy interval for quantities of interest in elasticity"	20 MACIS-SS2 ①Nittaya Kerdprasop and Kittisak Kerdprasop. A logic-based approach to the implementation of medical knowledge mining ②Gabriel Dos Reis and Bjarne Stroustrup. A Principled, Complete, and Efficient Representation of C++ ③Stephen Watt. On the Future of Computer Algebra Systems at the Threshold of 2010
		18:00						**Closing**	
18:00-21:00	18:00-20:00 Reception Party			19:00-21:00 Reception for Banquet 34F open 18:30 Toast starts at 19:00!					