

The 7th Symposium on Algebra and Computation (AC2007)

Tokyo Metropolitan University

5 - 7 December 2007

<http://tnt.math.metro-u.ac.jp/ac/2007/>

Organizers

Ken Nakamura (Tokyo Metropolitan Univ.)

Michio Ozeki (Yamagata Univ.)

Nobuki Takayama (Kobe Univ.)

Katsushi Waki (Yamagata Univ.)

Hirofumi Tsumura (Tokyo Metropolitan Univ.)

Shigenori Uchiyama (Tokyo Metropolitan Univ.)

Program

Dec. 5 (Wed.)

9:20 - 9:30: Opening

9:30 - 10:00: Katsushi Waki(Yamagata University)

“On calculation of Decomposition numbers by GAP”

10:10 - 10:50: Hiromichi Yamada(Hitotsubashi University)

“Computation of affine vertex operator algebras by Asir”

11:10 - 11:40: Takuya Ikuta(Kobe Gakuin University), Akihiro Munemasa(Tohoku University)

“A new non-amorphous association scheme on $GF(2^{20})$ ”

11:50 - 12:10: Naoyuki Horiguchi(Chiba University)

“On the maximum clique and coclique designs and reconstructions of some strongly regular graphs”

14:00 - 14:50: [Special lecture] Fidel Nemenzo (Univ. Philippines)

“Counting self-dual codes over finite rings”

15:10 - 15:40: Michio Ozeki(Yamagata University)

“Computation of the coset weight distributions of second order Reed-Muller code of length 64 (A joint research with Prof. K. Waki)”

15:50 - 16:20: Akihiro Munemasa(Tohoku University)

“Classification of ternary extremal self-dual codes of length 28 (Joint work with Masaaki Harada and Boris Venkov)”

16:30 - 17:00: Yasutsugu Fujita(Tohoku Gakuin University)

“Any Diophantine quintuple contains a regular Diophantine quadruple”

Dec. 6 (Thu.)

10:00-10:20: Koji Yamaguchi, Naoto Niki(Tokyo University of Science)

“Base transformation algorithm of the symmetric polynomials for use in statistics”

10:30 - 11:00: HASHIMOTO Ryūta(Takuma national institute of technology)

“Examples of discriminants of quadratic orders with large fundamental units attached to a fixed length of the period of continued fractions”

11:20 - 12:10: [Special lecture] Yuichi Komano(Toshiba Corporation, Japan)

“Public Key Cryptosystems and Provable Security”

14:00 - 14:40: Akinari Hoshi(Waseda University)

“Note on the field isomorphism problem of generic polynomials (joint work with K. Miyake)”

14:50 - 15:10: Tanaka Satoru, Nishimoto Keiichiro, MATSUI Tetsushi, Uchiyama

Shigenori, NAKAMULA Ken(Tokyo Metropolitan University)

“Status and issues on development NZMATH”

15:20 - 15:50: ICHIKI Shingo, OGURA Naoki, KOIZUMI Masahiro, NISHIMOTO

Keiichiro, TANAKA Satoru, MATSUI Tetsushi, UCHIYAMA Shigenori, NAKAMULA Ken(Tokyo Metropolitan Univ.)

“A Brief Introduction to NZMATH”

16:10 - 17:00: [Special lecture] Tatsuyoshi Hamada(Fukuoka University)

“Forests of mathematical software, KNOPPIX/Math”

Dec. 7 (Fri.)

10:20 - 10:40: Ryozo MORIKAWA(Tokyo Metropolitan Univ.)

“Some concepts and methods to investigate problems of Waring type.”

10:50 - 11:10: Takao Komatsu(Hirosaki University), Carsten Elsner(FHDW Hannover)

“Three term recurrence relations associated with integer sequences”

11:20 - 11:40: Masanobu Kaneko(Kyushu University), Masayuki Noro(Kobe University),
Ken’ichi Tsurumaki(Oracle Corporation Japan)

“On a conjecture for the dimension of the space of the multiple zeta values”

13:30 - 14:20: [Special lecture] Andrej Dujella (Univ. Zagreb, CROATIA)

“Construction of high rank elliptic curves and related Diophantine problems”

14:40 - 15:10: MATSUI, Tetsushi(Tokyo Metropolitan University)

“Computational Complexity and Transcendence of Numbers”

15:20 - 15:50: Iekata Shiokawa, Yohei Tachiya(Keio University)

“Pattern sequences in $\langle q, r \rangle$ -numeration systems”

16:00 - 16:30: Keiichi Komatsu(Waseda Univ.), Takashi Fukuda(Nihon Univ.)

“A computational approach to Weber’s class number problem”

16:30 - 16:40: Closing