

The 11th Symposium on Algebra and Computation (AC2015)

Organizers

Hirofumi Tsumura (Tokyo Metropolitan Univ.)
Shigenori Uchiyama (Tokyo Metropolitan Univ.)
Katsushi Waki (Yamagata Univ.)
Takuya Ikuta (Kobe Gakuin Univ.)
Yukihiro Uchida (Tokyo Metropolitan Univ.)
Masanori Sawa (Kobe Univ.)

Date: 14(Mon.) – 16(Wed.) December 2015

Place: Tokyo Metropolitan University International House

[Program]

Dec. 14 (Mon.)

12:50 - 12:55: Opening

13:00 - 13:40: [Special lecture] Claus Fieker (Tech. Univ. Kaiserslautern)

”Classical Algorithmic Number Theory”

13:50 - 14:30: [Special lecture] Andreas Enge (INRIA Bordeaux-Sud-Ouest)

”Computing with theta functions on abelian surfaces”

14:50 - 15:20: Takafumi Miyazaki (Gunma University)

”On a ternary exponential Diophantine equation related to primitive Pythagorean numbers”

15:30 - 16:20: [Special lecture] Yasuo Ohno (Tohoku University)

”Poly-Bernoulli numbers and related topics”

16:30 - 17:00: Koji Tasaka (Nagoya University)

”Numerical experiments of linear relations among periods”

Dec. 15 (Tue.)

10:00 - 10:30: Shohei Satake (Nagoya University), Masanori Sawa (Kobe University), Masakazu Jimbo (Chubu University)

”Asymmetry and Automorphisms of Directed Graphs”

10:40 - 11:00: MUNEMASA Akihiro (Tohoku University), HARADA, Masaaki (Tohoku University)

”Covering radii and shadows of binary self-dual codes”

11:00 - 11:20: Yutaka Hiramane (Kumamoto University)

”On planar difference sets and related divisible designs admitting SCT groups”

13:30 - 14:20: [Special lecture] Masashi Shinohara (Shiga University)

”On classification problems of planar distance sets and regular polygons”

14:40 - 15:10: Hiroshi Nozaki (Aichi University of Education)

”On the largest subsets avoiding the diameter of $(0, \pm 1)$ -vectors”

15:20 - 16:00: R. Oishi-Tomiyasu (JST)

”On a few algebraic problems I worked on for development of crystallographic software Conograph”

16:10 - 16:30: Norichika Matsuki (Toyama Chemical Co., Ltd.)

”Summation formulae for polynomials in binary variables”

Dec. 16 (Wed.)

10:00 - 10:30: Hiroshi Onuki (Tokyo Metropolitan University), Tadanori Teruya (National Institute of Advanced Industrial Science and Technology), Naoki Kanayama (University of Tsukuba), Shigenori Uchiyama (Tokyo Metropolitan University)

”The optimal ate pairing over the Barreto-Naehrig curve via parallelizing elliptic nets”

10:30 - 10:50: Keiji OKANO (Tsuru university)

”On the non-ideal case of family of pairing-friendly elliptic curves”

11:00 - 11:20: Takanori Yasuda (Institute of Systems, Information Technologies and Nanotechnologies), Xavier Dahan (Ochanomizu University), Kouichi Sakurai (Kyushu University)

”Security Evaluation of NTRU-like Lattice-based Cryptography using the Irreducible Decomposition of Ring”

11:20 - 11:40: Shun’ichi Yokoyama (Kyushu University)

”Development of LMFDB: a database in number theory”

13:50 - 14:40: [Special lecture] Tetsuya Taniguchi (Kanazawa Institute of Technology)

”Computation of Relative Class Numbers of Cyclotomic Fields”

15:00 - 15:50: [Special lecture] Naoyuki Shinohara (National Institute of Information and Communications Technology)

”Algorithms for Discrete Logarithm Problems over Finite Fields of Small Characteristic”

16:00 - 16:30: Momonari Kudo (Kyushu University)

”High-speed computation of the dimensions of coherent cohomology by computer algebra systems”

16:40 - 16:50: Closing