

RIMS Joint Research on
Algebraic Coding Theory, Combinatorial Designs and Related Areas

Research Institute for Mathematical Sciences,
Kyoto University, Japan

Organizer: Koichi Betsumiya (Hirosaki University)

Date: March 7, 2011(Mon) — March 9, 2011 (Wed)

Place: Room 420, RIMS, Kyoto University
Kitashirakawa, Kyoto, 606-8502, Japan

Access: <http://www.kurims.kyoto-u.ac.jp/en/access-01.html>

Program

March 7, Monday

- 10:00 – 11:00 Satoshi Shinohara (Meisei University)
Optical orthogonal codes – construction and search methods
- 11:15 – 12:15 Ying Miao (Tsukuba University)
Anti-collusion codes and tracing algorithms for
multimedia fingerprinting
- 14:00 – 15:00 Koji Momihara (University of Tsukuba)
Divisible difference families over Galois rings with
characteristic 4
- 15:15 – 16:15 Tadashi Wadayama (Nagoya Institute of Technology)
On permutation codes based on linearly constrained
permutation matrices

March 8, Tuesday

- 09:00 – 10:00 Hidehiro Shinohara (Osaka University)
On some solutions of $XY = J + I$
- 10:15 – 11:15 Masatake Hirao (Nagoya University)
On Euclidean design and its probabilistic application
- 11:30 – 12:30 Masanori Sawa (Nagoya University)
Unifying some known constructions of combinatorial 3-designs
and its application to the theory of cubature formula
- 14:00 – 15:00 Keisuke Shiromoto (Kumamoto University)
Quantum information theory and combinatorial design
- 15:15 – 16:15 Tadashi Wadayama (Nagoya Institute of Technology)
Codes and polytopes

March 9, Wednesday

- 10:00 – 11:00 Shigeo Koshitani (Chiba University)
Recent progress in representations of finite groups
- 11:15 – 12:15 Rebecca Waldecker (University of Halle, Germany)
The Z_p^* -project
- 14:00 – 15:00 Hajime Matsui (Toyota Technological Institute)
On generalized quasi-cyclic codes—their basic identities and
construction
- 15:15 – 16:15 Vladimir Tonchev (Michigan Technological University, USA)
Affine geometry designs, polarities, and related codes

Web page for this joint research:

<http://www.st.hirosaki-u.ac.jp/~betsumi/rims2011/>.