Workshop on Statistical Designs and Related Combinatorics 2014

Dates: December 13 to 15, 2014

Venue: Kinosaki International Arts Center

Program

December 13

- 1 3 : 3 0 \sim 1 3 : 5 0 Tetsuji Taniguchi (Hiroshima Inst. Tech.) Hoffman graphs with the smallest eigenvalue at least -3
- 1 3 : 5 0 \sim 1 4 : 0 5 Kazutaka Isaka (Nagoya Univ.) Optimal combinatorial structure in group testing with erasures
- 1 4 : 0 5 \sim 1 4 : 2 5 Kumi Kobata (Kinki Univ.) Enumeration of 2-connected graphs whose complement is also 2-connected
- 1 4 : 3 5 \sim 1 4 : 5 0 Lingfeng Chen (Nagoya Univ.) Low conflict codes with weight 4 and conflict 2
- 1 4 : 5 0 \sim 1 5 : 1 0 Mieko Yamada (Tokyo Woman's Christian Univ.) Menon-Hadamard difference sets obtained from a local field by natural projections
- 1 5 : 1 5 \sim 1 5 : 3 0 Jun Asahina (Gifu Univ.) A new series of optimal tight conflict-avoiding codes of odd length and weight 3
- 1 5 : 3 0 \sim 1 5 : 5 0 Yuichiro Fujiwara (Caltech) TBA
- 1 6 : 0 0 \sim 1 6 : 5 0 Ryoh Fuji-Hara (Univ. Tsukuba) Classification of Authentication codes and a new model

December 14

- 9 : 1 5 \sim 9 : 3 0 Kohei Yamada (Nagoya Univ.) A Graham-Lovász's problem on distance matrices of graphs and affine resolvable designs
- 9 : 3 0 \sim 9 : 5 0 Chin-Mei Fu (Tamkang Univ.) Four-cycle systems with four-regular leaves
- 9 : 5 0 \sim 1 0 : 0 5 Yuuki Kageyama (Osaka Prefecture Univ.) Geometric construction of optimal linear codes
- 1 0 : 1 5 \sim 1 0 : 3 5 Shinya Fujita (Yokohama City Univ.) Covering problem on edge-colored hypergraphs
- 1 0 : 3 5 \sim 1 0 : 5 0 Hitoshi Kanda (Osaka Prefecture Univ.) On the 3-extendability of quaternary linear codes
- 1 0 : 5 0 \sim 1 1 : 1 0 Hung-Lin Fu (National Chiao Tung Univ.) Learning a hidden hypergraph
- 1 1 : 2 0 \sim 1 2 : 0 0 Naoyuki Tamura (Kobe Univ.) SAT solver and its application to combinatorial problems
- 1 3 : 4 5 \sim 1 4 : 0 5 Kazuki Matsubara (Matsunaga High School) Some existence of pairwise additive cyclic BIB designs with block size 2 and 3
- 1 4 : 1 0 \sim 1 4 : 2 5 Syunpei Ishi (Kumamoto Univ.) Codes from complete bipartite graphs
- 1 4 : 2 5 \sim 1 4 : 4 5 Ying Miao (Univ. Tsukuba) On an extension of collaboration distance
- 1 4 : 5 5 \sim 1 5 : 4 5 Sanpei Kageyama (Hiroshima Inst. Tech.) On the Kageyama number in forty-four years

- $15:55\sim18:20$ Free discussion
- 18:30 ~ Banquet (KKR Kinosaki Gembu)

December 15

- 9 : 3 0 \sim 9 : 4 5 Xiao-Nan Lu (Nagoya Univ.) Affine-invariant quadruple systems and related number theoretical conjecture
- 9:45 \sim 10:05 Koji Momihara (Kumamoto Univ.) New projective two-intersection sets and related Hadamard difference sets
- 1 0 : 0 5 \sim 1 0 : 2 0 Satoshi Noguchi (Nagoya Univ.) q-ary cyclic codes with large minimum distance and their relation to combinatorial designs
- 10:30 ~ 10:50 Hiroshi Yumiba (Inter. Inst. Nat. Sci.) Existence conditions for balanced fractional 2^m factorial designs of resolution $R^*(\{1\}|\Omega_\ell)$ with $N < \nu_\ell(m)$
- 1 0 : 5 0 \sim 1 1 : 0 5 Yoshitaka Koga (Kumamoto Univ.) A MacWillams equivalent theorem for higher weights
- 1 1 : 1 0 \sim 1 1 : 2 5 Shoko Chisaki (Tokyo Univ. Science) Some existence of perfect difference systems of sets
- 1 1 : 2 5 \sim 1 1 : 4 5 Akihiro Munemasa (Tohoku Univ.) A parametric family of complex Hadamard matrices
- $11:45\sim11:50$ Closing

Organizers:

Ying Miao (Univ. Tsukuba) Masanori Sawa (Kobe Univ.) Masatake Hirao (Aichi Prefectural Univ.) Kohei Yamada (Nagoya Univ.) Xiao-Nan Lu (Nagoya Univ.)