The 14th Algebraic Combinatorics Symposium

IN HONOR OF PROFESSOR MICHIO SUZUKI'S 70TH BIRTHDAY

International Christian University, Mitaka, Tokyo, JAPAN

July 14 – 17, 1997

PROGRAM

July 14 (Monday)

9:00 – 9:50   Walter Feit (Yale University)
Integral Representations of Weyl Groups and Related Topics

10:10 – 11:00   Michael Aschbacher (California Institute of Technology)
Quasithin Groups

11:20 – 12:10   Paul J. Flavell (The University of Birmingham)
Solubility Criteria for Finite Groups

13:40 – 14:30   Alexander A. Ivanov (Imperial College)
A Cover of the 3-local Geometry of Co_1

14:40 – 15:10   Miller Maley (Princeton University)
Hall Polynomials for Classical Groups

15:40 – 16:30   Eiichi Bannai (Kyushu University)
Codes over Finite Rings and Finite Abelian Groups (A Survey)

16:40 – 17:30   Hiroshi Suzuki (International Christian University)
Problems of Distance-Regular Graphs and Related Topics (A Survey)

July 15 (Tuesday)

9:00 – 9:50   Toshiaki Shoji (Science University of Tokyo)
Representations of Finite Chevalley Groups

10:10 – 11:00   Tomoyuki Yoshida (Hokkaido University)
Exponential Formulas Related to Finite Groups and Toposes

11:20 – 12:10   Gernot Stroth (Martin-Luther-Universität Halle)
Small Modules

Room A (Parallel Session)

13:40 – 14:05   Yoko Usami (Ochanomizu University)
Principal Blocks with Extra-Special Defect Groups of Order 27

14:05 – 14:30   Katsuhiro Uno (Osaka University)
    Vertex of Non-Periodic Modules in the Auslander-Reiten Quiver of
Finite Groups

14:40 – 15:05   Shigeo Koshitani (Chiba University)
    Morita Equivalent Blocks of Finite Groups

15:05 – 15:30   Atsumi Watanabe (Kumamoto University)
    Perfect Isometries and Glauberman Correspondences

    Room B (Parallel Session)

13:40 – 14:05   Jack Koolen (Kyushu University)
    Are There Finitely Many Distance-Regular Graphs with a Given
Valency?

14:05 – 14:30   Akira Hiraki (Osaka Kyoiku University)
    An Improvement of a Diameter Bound by Ivanov (Joint work with
Jack Koolen)

14:40 – 15:05   Tatsuro Ito (Kanazawa University)
    Nonthin T-Modules of Endpoint 1

15:05 – 15:30   Yasuo Teranishi (Nagoya University)
    The Number of Spanning Trees and Laplacian Eigenvalues of a
Graph

    Room A (Parallel Session)

16:05 – 16:30   Kazumasa Nomura (Tokyo Medical and Dental Univer-
sity)
    Some Formulas for Spin Models on Distance-Regular Graphs, I

16:40 – 17:05   Brian Curtin (Kyushu University)
    Some Formulas for Spin Models on Distance-Regular Graphs, II

17:05 – 17:30   Mitsuhiro Sawano (Kyushu University)
    The Classification of Four-Weight Spin Models with Size 5

    Room B (Parallel Session)

16:05 – 16:30   Hiroki Sasaki (Ehime University)
    The mod 2 Cohomology Algebras of Finite Groups with Wreathed
Sylow 2-Subgroups

16:40 – 17:05   Hiroshi Kimura (Ehime University)
    Construction of Hadamard Matrices Using Dihedral Groups

July 16 (Wednesday)

9:00 – 9:50   Helmut Bender (Christian-Albrechts-Universität zu Kiel)

Generalized Fitting π-Subgroups of Finite Groups

10:10 – 11:00   Bernd Stellmacher (Christian-Albrechts-Universität zu Kiel)
    J-Components in Finite Groups

11:20 – 12:10   Don G. Higman (University of Michigan)
    Association Schemes and Geometries

13:40 – 14:30   Ronald Solomon (The Ohio State University)
    The Semisimple Method for the Classification of the Finite Simple Groups

14:40 – 15:10   Michael Aschbacher (California Institute of Technology)
    Groups Disconnected at the Prime 2

15:40 – 16:30   Koichiro Harada (The Ohio State University)
    Professor Michio Suzuki's Contribution to the Theory of Finite Groups

16:40 – 17:30 Michio Suzuki (The University of Illinois Urbana-Champaign)
    On the Prime Graph of Finite Simple Groups — An Application of a Method of Feit–Thompson–Bender–Glauberman

(Banquet, from 18:00 at ICU Cafeteria West Room)

July 17 (Thursday)

9:00 – 9:50   John McKay (Concordia University)
    Moonshine — from Dedekind and Fricke, Klein to the Present Day

10:10 – 11:00   Masahiko Miyamoto (Tsukuba University)
    The Finite Group Theory on Vertex Operator Algebras

11:20 – 12:10   Franz Timmesfeld (Justus-Liebig-Universität Giessen)
    Identifications of Lie-type Groups.

    Room A (Parallel Session)

13:40 – 14:05   Paul-Hermann Zieschang (Kyushu University)
    The Classification of the Buildings of Spherical Type in the Light of the Theory of Association Schemes

14:05 – 14:30   Satoshi Yoshiara (Osaka Kyoiku University)
    Subgroup Complexes for Finite Simple Groups

14:40 – 15:05   Michio Ozeki (Yamagata University)
    A Polynomial Approach to the Covering Radius Problem for Ternary Self-Dual Codes

    Room B (Parallel Session)

13:40 – 14:05   Masaaki Kitazume (Chiba University)
     Binary Codes Vertex Operator Algebras and Finite Automorphism
Groups

14:05 – 14:30   Hiromichi Yamada (Hitotsubashi University)
     Ternary Code Vertex Operator Algebras

14:40 – 15:05   Norio Yamazaki (Kyushu University)
     On Local Structures of Some Group Association Schemes

15:05 – 15:30   Masato Tomiyama (Osaka Kyoiku University)
     Characterization of the Group Association Scheme of $PSL(2,7)$

     Room A (Parallel Session)

15:40 – 16:05   Masaaki Harada (Yamagata University)
     New 5-Desings Constructed from the Lifted Golay Code over Z_4

16:05 – 16:30   Takeshi Kondo (Tokyo Women's Chrisitian University)
     Some Examples of Non-Solvable Unramified Extensions over Quadratic Fields

     Room B (Parallel Session)

15:40 – 16:05   Mitsugu Hirasaka (Kyushu University)
     On Association Schemes with a Nonsymmetric Relation of Valency
4

16:05 – 16:30   Akihiro Munemasa (Kyushu University)
     Primitive Trinomials and Orthogonal Arrays over $GF(2)$

     Room A

16:40 – 17:30   Hiroyoshi Yamaki (Kumamoto University)
     Prime Graphs (Joint work with N. Chigira and N. Iiyori)