Created: 2012/07/26 13:42

2012 Mathematical Society Japan
AUTUMN MEETING

Dates: September 18th–21st, 2012
Venue: Ito Campus, Kyushu University
Contact to: Faculty of Mathematics, Kyushu University
Motooka 744, Nishi-ku, Fukuoka
Phone +81 (0) 92 802 4402
Fax +81 (0) 92 802 4405
E-mail kyushu12sept@mathsoc.jp
During session: Phone +81 (0) 80 4060 7734
Fax +81 (0) 92 802 4405
Mathematical Society of Japan
Phone +81 (0) 3 3835 3483

	I Room 2308	II Room 2307	III Room 2306	IV Room 2305	V Room 2304	VI Room 2407	VII Room 2406	VIII Room 2404	IX Room 2403
18th (Tue)	Algebra 9:00–12:00 14:15–16:15	Complex Analysis 10:00–12:00 14:30–16:15	Functional Equations 9:00–12:00 14:15–16:15		Statistics and Probability 9:15–12:00 14:15–14:45	Applied Mathematics 9:30–12:00 14:15–16:40	Infinite Analysis 9:30–11:45 14:15–14:45	Geometry 9:00–12:00 14:15–16:00	Topology 9:15–12:00 14:15–16:00
	Featured Invited Talks 13:00–14:00								
	Invited Talk 16:30–17:30	Invited Talk 16:30–17:30	Invited Talk 16:30–17:30		Invited Talks 15:00–16:00 16:15–17:15	Invited Talk 16:50–17:50	Invited Talk 15:00–16:00	Invited Talk 16:15–17:15	Invited Talk 16:20–17:20
19th (Wed)	Algebra 9:00–12:00	Complex Analysis 10:00–12:00 Invited Talk 13:15–14:15	Functional Equations 9:00–12:00 Invited Talk 13:15–14:15	Functional Analysis 9:45–11:50 Invited Talk 13:00–14:00	Statistics and Probability 9:15–12:00	Applied Mathematics 9:30–12:15	Infinite Analysis 10:30–11:50 Invited Talk 13:30–14:30	Geometry / Topology Invited Talks 10:50–11:50 13:15–14:15	
	MSJ Prizes Presentation (VIII + IX) ····· (14:50–15:20)								
	Plenary Talks (VIII + IX) MSJ Autumn Prize Winner ····· (15:30–16:30)								
	Kengo Hirachi (Univ. of Tokyo) ····· (16:45–17:45)								
	Official Party (Inamori Center, Inamori Hall) ····· (18:00–20:00)								
20th (Thu)	Algebra 10:00–11:30 14:15–16:45	Real Analysis 10:00–11:45 14:15–15:40	Functional Equations 9:00–12:00 14:15–16:15	Functional Analysis 9:30–11:50 14:15–16:30	Statistics and Probability 9:15–12:00	Applied Mathematics 9:30–12:00 Special Session 14:15–16:40	Found. of Math. and History of Math. 9:00–11:20 14:15–17:05	Geometry 9:00–12:00 14:15–16:15	Topology 9:30–11:45 14:15–15:40
	Featured Invited Talks 13:00–14:00								
	Invited Talk 17:00–18:00	Invited Talk 15:50–16:50	Invited Talk 16:30–17:30	Invited Talk 16:30–17:30	Invited Talks 14:30–15:30 15:45–16:45	Invited Talk 16:50–17:50		Invited Talk 16:30–17:30	Invited Talk 16:00–17:00
21st (Fri)	Algebra 9:00–11:00 14:15–15:45	Real Analysis 9:40–12:00 14:15–16:00	Functional Equations 9:00–12:00 14:15–16:30	Functional Analysis 9:30–11:50		Applied Mathematics 9:00–12:00 14:15–16:30	Found. of Math. and History of Math. 9:00–11:40		Topology 9:15–12:00
	Featured Invited Talks 13:00–14:00								
	Invited Talks 11:00–12:00 15:45–16:45	Invited Talk 16:10–17:10	Invited Talk 16:45–17:45	Invited Talk 14:15–15:15		Invited Talk 16:45–17:45	Invited Talk 13:20–14:20		

All the Conference Rooms of the Autumn Meeting are located on the Ito Campus of Kyushu University, in Center Zone Building No. 2 while the MSJ–KMS Joint Meeting on September 17th (Mon) is held in the downtown area of Fukuoka City, in Hospital Campus.

Plenary Talks

September 19th (Wed) Conference Room VIII + IX

MSJ Autumn Prize Winner ..... (15:30〜16:30)

Kengo Hirachi (Univ. of Tokyo)♯ Einstein equations and conformal invariants ..... (16:45〜17:45)

Featured Invited Talks

September 18th (Tue)

Conference Room IX

Chin-Lung Wang (Nat. Taiwan Univ.) Quantum Leray–Hirsch and analytic continuations ..... (13:00〜14:00)

Conference Room II

Shinichi Kobayashi (Tohoku Univ.)♯ p-adic approaches to the Birch and Swinnerton–Dyer conjecture ..... (13:00〜14:00)

September 20th (Thu)

Conference Room IX

Kaoru Ono (Kyoto Univ.)* Spectral invariants for Hamiltonian diffeomorphisms and their applications ..... (13:00〜14:00)

Conference Room II

Kenjiro Yanagi (Yamaguchi Univ.)♯ Progress of quantum information theory —From classical information to quantum information— ..... (13:00〜14:00)

Conference Room VI

Hisashi Inaba (Univ. of Tokyo)♯ Mathematics of the basic reproduction number R_0 —Chasing a key parameter of population dynamics— ..... (13:00〜14:00)

September 21st (Fri)

Conference Room VI

Yuji Tachikawa (Univ. of Tokyo)♯ Mathematics and supersymmetric quantum field theory ..... (13:00〜14:00)

Conference Room VII

Yuichi Komori (Chiba Univ.)* Small talks on mathematical logic for mathematician ..... (13:00〜14:00)

Talks invited by Research Sections and Special Session

September 18th (Tue)

Algebra (Conference Room I)

Yoichi Mieda (Kyoto Univ.)♯ Toward generalization of the non-abelian Lubin–Tate theory ... (16:30〜17:30)

Geometry (Conference Room VIII)
Toshihiro Shoda (Saga Univ.)♯ On Morse index of minimal surfaces ····· (16:15〜17:15)

Complex Analysis (Conference Room II)
Toshiyuki Sugawa (Tohoku Univ.)♯ Generalization of the Schwarzian derivative —Towards more invariance and higher orders ····· (16:30〜17:30)

Functional Equations (Conference Room III)
Satoshi Tanaka (Okayama Univ. of Sci.)♯ Nonuniqueness of positive solutions of superlinear two-point boundary value problems - Symmetry-breaking of even positive solutions - ····· (16:30〜17:30)

Statistics and Probability (Conference Room V)
Toshihiro Uemura (Kansai Univ.)♯ On jump-type Markov processes and the associated Dirichlet forms ····· (15:00〜16:00)

Kazumasa Kuwada (Ochanomizu Univ.)♯ Coupling methods for heat distributions and curvature-dimension conditions ····· (16:15〜17:15)

Applied Mathematics (Conference Room VI)
Yusuke Suzuki (Niigata Univ.)♯ 1-embedded graphs as seen from a viewpoint of re-embedding structures ····· (16:50〜17:50)

Topology (Conference Room IX)
Toshio Sumi (Kyushu Univ.)* The Smith equivalence problem and Smith sets of Oliver groups ····· (16:20〜17:20)

Infinite Analysis (Conference Room VII)
Junichi Shiraishi (Univ. of Tokyo)♯ Vertex operators, Nekrasov partition functions and Macdonald polynomials ····· (15:00〜16:00)

September 19th (Wed)

Geometry (Conference Room VIII + IX)
Ken'ichi Ohshika (Osaka Univ.)♯ Topological structure of deformation spaces of Kleinian groups ····· (10:50〜11:50)

Yukinobu Toda (Univ. of Tokyo)♯ Stability conditions and Donaldson–Thomas type invariants on Calabi–Yau 3-folds ····· (13:15〜14:15)

Complex Analysis (Conference Room II)
Hiroshi Yamaguchi (Shiga Univ.)♯ Pseudoconvex domains in the Hopf surface ····· (13:15〜14:15)

Functional Equations (Conference Room III)
Naoto Kumano-go (Kogakuin Univ.)♯ Phase space path integrals as analysis on path space ····· (13:15〜14:15)

Functional Analysis (Conference Room IV)
Kiyoomi Kataoka (Univ. of Tokyo)♯ A system of fifth-order partial differential equations describing a surface which contains several continuous families of circular arcs ····· (13:00〜14:00)

Infinite Analysis (Conference Room VII)
Yoshiyuki Kimura (Osaka City Univ.)♯ Quiver varieties and quantum cluster algebras ····· (13:30〜14:30)

September 20th (Thu)

Algebra (Conference Room I)

Hyohe Miyachi ♯ (Nagoya Univ. / Osaka City Univ.) — Comparison between module categories over modular quantum general linear groups · · · · · (17:00〜18:00)

Geometry (Conference Room VIII)

Atsushi Kasue (Kanazawa Univ.) * — Embedding of graphs and Rayleigh monotonicity law · · · · · (16:30〜17:30)

Functional Equations (Conference Room III)

Hideyuki Miura (Osaka Univ.) — On fundamental solutions for fractional diffusion equations with divergence free drift · · · · · (16:30〜17:30)

Real Analysis (Conference Room II)

Jürgen Appell (Univ. Würzburg) ♯ — Condensing operators and applications: old and new · · · · · (15:50〜16:50)

Functional Analysis (Conference Room IV)

Shûichi Ohno (Nippon Inst. of Tech.) * — Topological structure of the space of weighted composition operators on H^∞ · · · · · (16:30〜17:30)

Statistics and Probability (Conference Room V)

Shogo Kato (Inst. of Stat. Math.) ♯ — The Cauchy distribution on the circle and related statistical models · · · · · (14:30〜15:30)

Hidetoshi Murakami ♯ (Nat. Defense Acad. of Japan) — Some saddlepoint approximations to the nonparametric tests and biased for two-sided alternatives · · · · · (15:45〜16:45)

Applied Mathematics (Conference Room VI)

Yuji Kodama (Ohio State Univ.) ♯ — KP solitons and Mach reflection in shallow water · · · · · (16:50〜17:50)

Topology (Conference Room IX)

Koya Shimokawa (Saitama Univ.) ♯ — Tangle analysis of site-specific recombinations · · · · · (16:00〜17:00)

September 21st (Fri)

Foundation of Mathematics and History of Mathematics (Conference Room VII)

Kenshi Miyabe (Kyoto Univ.) ♯ — Natural properties that a randomness notion should have · · · · · (13:20〜14:20)

Algebra (Conference Room I)

Yoshinori Gongyo (Univ. of Tokyo) ♯ — Log pluricanonical representations and abundance · · · · · (11:00〜12:00)

Shigeru Kuroda (Tokyo Metro. Univ.) ♯ — Wild automorphisms of a polynomial ring · · · · · (15:45〜16:45)

Functional Equations (Conference Room III)

Katsuyuki Ishii (Kobe Univ.) ♯ — Mathematical analysis of some algorithms for mean curvature flow · · · · · (16:45〜17:45)

Real Analysis (Conference Room II)

Okihiro Sawada (Gifu Univ.) ♯ — The ill-posedness theory of the Navier–Stokes equations in the critical space · · · · · (16:10〜17:10)

Functional Analysis (Conference Room IV)

Mutsumi Saito (Hokkaido Univ.) ♯ — Irreducible quotients of A-hypergeometric systems · · · · · (14:15〜15:15)

Applied Mathematics (Conference Room VI)

Daisuke Tagami (Kyushu Univ.)♯ Numerical analysis of flow problems with finite element methods —From error analysis to parallel computations · · · · · · · · · · · · · · (16:45∼17:45)

Open Lectures for Citizens

Sponsored: Mathematical Society of Japan
Co-sponsored: Faculty of Mathematics and Institute of Mathematics for Industry, Kyushu University
Date: September 22nd (Sat) 14:00–16:30
Venue: Faculty of Mathematics Bldg., Large Lecture Room No. 3
Program: Opening Speech:
Hideki Kosaki (Kyushu Univ.) · (14:00–14:10)

Lecture 1:
Kazushi Ahara (Meiji Univ.)
Survey of interactive geometry software · (14:10–15:10)

Lecture 2:
Masaaki Takase (Kyushu Univ.)
Sekiguchi, Hiraki and the mathematics in Kaga Province (Prefecture of Ishikawa) (15:30–16:30)

Web Page: `http://mathsoc.jp/en/meeting/kyushu12sept/`

MSJ–KMS Joint Meeting 2012

Sponsored by: Mathematical Society of Japan, and The Korean Mathematical Society

Partially supported by:
Faculty of Mathematics and Institute of Mathematics for Industry, Kyushu University
Date: September 17th (Mon)
Venue: Centennial Hall, Kyushu Univeristy Medical School

Organizing Committee:

MSJ	KMS
Yoichi Miyaoka (Univ. of Tokyo)	JongHae Keum (KIAS)
Miyuki Koiso (Kyushu Univ.)	Yongjin Song (Inha Univ.)
Takayoshi Ogawa (Tohoku Univ.)	Dohan Kim (SNU)
Takashi Tsuboi (Univ. of Tokyo)	Dongsu Kim (KAIST)

Program

Plenary Talks — Main Hall

10:00–11:00 Gen Nakamura (Hokkaido Univ.)
Inversion schemes for diffusion equations

11:30–12:30 Jun-Muk Hwang (KIAS)
Compactifications of $\mathbb{C}^n$

Algebra Session — Main Hall

14:00–14:40 Yukinobu Toda (Univ. of Tokyo)
Stability conditions and birational geometry

14:50–15:30 Changheon KIM (Hanyang Univ.)
Arithmetic properties of weakly harmonic Maass forms

16:10–16:50 Shuji Saito (Tokyo Tech)
Higher dimensional Hasse principle and resolution of quotient singularities

17:00–17:40 Yongnam Lee (Sogang Univ.)
Q-Gorenstein deformation theory and its applications

Geometry and Topology Session — Hall 1

14:00–14:40 Shin-ichi Ohta (Kyoto Univ.)
Ricci curvature in Finsler geometry and applications

14:50–15:30 Sang-hyun Kim (KAIST)
Embeddability between right-angled Artin groups

16:10–16:50 Shigeyuki Morita (Univ. of Tokyo*)
Characteristic classes in low dimensional topology —Prospects and computations—

17:00–17:40 Jaigyoung Choe (KIAS)
Higher dimensional versions of the Enneper surface, catenoid and helicoid

Analysis Session — Hall 2

14:00–14:40 Kenji Nakanishi (Kyoto Univ.)
Global dynamics of nonlinear dispersive equations

14:50–15:30 Ki-Ahm Lee (SNU)
Homogenization of the oscillating data on a lower dimensional surface

16:10–16:50 Yoshikazu Giga (Univ. of Tokyo)
Blow-up arguments and the Navier-Stokes equations

17:00–17:40 Kang Tae Kim (POSTECH)
On a generalization of Forelli's theorem

Probability Theory and Applied Mathematics Session — Hall 3

14:00–14:40 Makiko Sasada (Keio Univ.)
Microscopic dynamics for the porous medium equation and other degenerate parabolic equations

14:50–15:30 Jung Hee Cheon (SNU)
Discrete logarithm with auxiliary inputs

16:10–16:50 Takashi Kumagai (Kyoto Univ.)
Random walks on disordered media and their scaling limits

17:00–17:40 Hyeong In Choi (SNU)
Commodity Futures model and applications

Foundation of Mathematics and History of Mathematics

September 20th (Thu) Conference Room VII

9:00–11:20

1 Shigeru Masuda (Kyoto Univ.) ♯ Traditional diversion of real to imaginary since Euler, and innovative strictness by Poisson's sense ····· 20

2 Shigeru Masuda (Kyoto Univ.) ♯ Proofs and applications relating to describability of an arbitrary function by trigonometric series in the 19C ····· 20

3 Teruaki Asai (Nara Univ. of Edu.) * On the $2/n$ table of the Rhind Mathematical Papyrus ····· 10

4 Shunji Horiguchi (Niigata Sangyo Univ.) ♯ The surveyings of Gonemon Higuchi and his pupils ····· 15

5 Shunji Horiguchi (Niigata Sangyo Univ.) ♯ The mariner's compass of Seizaemon Kanazawa and that of Yoemon Shizuno ····· 15

6 Hideyuki Majima (Ochanomizu Univ.) ♯ On the determinat by SEKI Takakazu in "Sangaku-genkun" ····· 30

11:25–12:25 Mathematics History Team Meeting

14:15–17:05

7 Tsukane Ogawa (Yokkaichi Univ.) ♯ Geometry studied in the Shisei-Sanka School ····· 25

8 Shotaro Tanaka * Representation of fractional function in power series —De Moivre, L. Euler, G. H. Hardy, Y. Wada, M. Fujiwara— ····· 20

9 Toshimichi Usuba (Nagoya Univ.) ♯ Large cardinals and indestructibly Lindeöf spaces ····· 15

10 Takahiro Seki (Niigata Univ.) ♯ On relations among double negation translations in substructural logics ····· 15

11 Takayuki Kihara (JAIST) ♯, Kojiro Higuchi (Tohoku Univ.) Stong measure zero sets in computability theory I —Lightface Π^0_1 sets and the perfect set property— ····· 15

12 Takayuki Kihara (JAIST) ♯, Kenshi Miyabe (Kyoto Univ.) Strong measure zero sets in computability theory II —Kolmogorov complexity and triviality— ····· 20

13 Toshio Suzuki (Tokyo Metro. Univ.) ♯, Ryota Nakamura (Tokyo Metro. Univ.) The eigen distribution of an AND-OR tree under directional algorithms ····· 15

14 Toshio Suzuki (Tokyo Metro. Univ.) ♯, Masahiro Kumabe (Open Univ. of Japan) Resource-bounded randomness and computable Dowd-type generic sets ····· 15

September 21st (Fri) Conference Room VII

9:00–11:40

15 Yoshihiro Abe (Kanagawa Univ.) ♯ Restricted structural properties of ideals on $\mathcal{P}_\kappa\lambda$ and weak normality ····· 15

16 Tatsuya Shimura (Nihon Univ.) ♯ Admissible rules for one variable formulas and disjunction property ····· 15

17 Katsumi Sasaki (Nanzan Univ.) ♯ The exact model constructed from normal forms in normal modal logics containing **K4** ····· 10

18 Keita Yokoyama (Tokyo Tech) ♯ Ramsey's theorem without Σ_1-induction ····· 10

19 Keita Yokoyama (Tokyo Tech) ♯ Some versions of Friedman's self-embedding theorem ····· 10

20 Keita Yokoyama (Tokyo Tech) ♯ A generalization of Schnorr's theorem ····· 10

21 Kenji Fukuzaki (Int. Univ. of Kagoshima) * Definability of the ring of integers in some infinite algebraic extensions of the rationals ····· 15

22 Yoshihito Tanaka (Kyushu Sangyo Univ.) ♯
Agi Kurucz (King's Coll. London)
Frank Wolter (Univ. of Liverpool)
Michael Zakharyaschev (Birkbeck Coll. London)
Conservativity of Boolean algebras with operators over semilattices with operators · · · 15

23 Hiroaki Minami ♯
Michael Hrušák (Univ. Nacional Autónoma de México)
Mathias–Prikry forcing and dominating reals · · · 15

24 Hirotaka Kikyo (Kobe Univ.) ♯
On small superstable generic structures · · · 15

11:45–12:15 Research Section Assembly

13:20–14:20 Talk invited by Section on Foundation and History of Mathematics
Kenshi Miyabe (Kyoto Univ.) ♯
Natural properties that a randomness notion should have

Algebra

September 18th (Tue) Conference Room I

9:00–12:00

1 Yukio Ohkubo (Int. Univ. of Kagoshima) ♯
Distribution of the first digits of prime numbers · · · 10

2 Yoshifumi Tsuchimoto (Kochi Univ.) *
Hajime Kuroiwa (Kochi Univ.)
Tatsuya Itagaki (Kochi Univ.)
Yuusuke Watou (Kochi Univ.)
On splitting behaviors of polynomials at primes · · · 15

3 Kenichi Shimizu *
Prime values of quadratic polynomials and imaginary quadratic fields · · · 10

4 Soichi Ikeda (Nagoya Univ.) *
Kaneaki Matsuoka (Nagoya Univ.)
On transcendental numbers generated by certain integer sequences · · · 10

5 Kazuhito Kozuka *
(Miyakonojo Nat. Coll. of Tech.)
Knopp type identities for generalized multiple Dedekind type sums attached to matrices and Dirichlet characters · · · 10

6 Yoshinori Hamahata (Ritsumeikan Univ.) ♯
Continued fractions and Dedekind sums for function fields · · · 10

7 Masanori Katsurada (Keio Univ.) ♯
Shintani zeta-functions of several variables and Lauricella hypergeometric functions II · · · 10

8 Tomoya Machide (Kinki Univ.) ♯
On a parameterized sum formula for triple zeta values · · · 10

9 Tomoya Machide (Kinki Univ.) ♯
On a relation between multiple zeta values and the gamma function · · · 10

10 Yoshio Tanigawa (Nagoya Univ.) *
Jun Furuya (Okinawa Nat. Coll. of Tech.)
Makoto Minamide (Kyoto Sangyo Univ.)
On relations among Dirichlet and multiple L-values mod 4 · · · 10

11 Ick Sun Eum (KAIST) ♯
Ja Kyung Koo (KAIST)
Dong Hwa Shin (Hankuk Univ. of Foreign Studies)
Some applications of modular units · · · 15

12 Yuichi Sakai (Kyushu Univ.) * — The Ramanujan–Serre differential operators and certain elliptic curves · · · · 10
Masanobu Kaneko (Kyushu Univ.)

13 Tomoyoshi Ibukiyama (Osaka Univ.) ♯ — A lift to vector valued Siegel modular forms of half integral weight and Shimura type conjecture revisited · · · · 10

14 Toshiyuki Kikuta (Osaka Inst. of Tech.) * — On Ramanujan type congruences for modular forms with several variables
Shoyu Nagaoka (Kinki Univ.) · · · · 10

15 Shoyu Nagaoka (Kinki Univ.) * — On p-adic properties of Siegel modular forms · · · · 10
Siegfried Böcherer
(Univ. Manheim / Univ. of Tokyo)

14:15–16:15

16 Daisuke Shiomi (Tokyo Univ. of Sci.) * — On the Hasse–Witt invariants of the maximal real subfields of cyclotomic function fields · · · · 10

17 Hizuru Yamagishi (Tokyo Denki Univ.) ♯ — On hyperelliptic curves of Chebyshev type · · · · 15

18 Shinnya Okumura (Kyushu Univ.) ♯ — On the number of $\mathbb{F}_p$-valued points of elliptic curves · · · · 15

19 Yuki Kato (Tohoku Gakuin Univ.) * — The isomorphism between motivic cohomology and K-groups for equi-characteristic regular local rings · · · · 10

20 Yoshiyasu Ozeki (Kyoto Univ.) ♯ — Full faithfulness theorem for torsion crystalline representations · · · · 10

21 Manabu Yoshida (Kyushu Univ.) ♯ — A refinement of the local class field theory of Serre and Hazewinkel · · · · 10

22 Yuto Takahashi (Nagoya Univ.) ♯ — Infiniteness of class field towers degrees of extensions of which are restricted to products of 2 and 3 · · · · 10

23 Mitsul Tohkailin (Kinki Univ.) ♯ — A characterization of some number fields of infinite degree using absolute Galois groups · · · · 15
Manabu Ozaki (Waseda Univ.)

24 Teruhisa Kadokami ♯ — Iwasawa invariants of cyclic branched covers of links · · · · 10
(East China Norm. Univ.)
Yasushi Mizusawa (Nagoya Inst. of Tech.)

16:30–17:30 Talk invited by Algebra Section

Yoichi Mieda (Kyoto Univ.) ♯ — Toward generalization of the non-abelian Lubin–Tate theory

September 19th (Wed) Conference Room I

9:00–12:00

25 Akinari Hoshi (Rikkyo Univ.) ♯ — Noether's problem and unramified Brauer groups · · · · 10
Ming-chang Kang (Nat. Taiwan Univ.)
Boris E. Kunyavskii (Bar-Ilan Univ.)

26 Aiichi Yamasaki (Kyoto Univ.) ♯ — Table of conjugacy classes of finite groups in $GL(5,\mathbb{Z})$, $GL(6,\mathbb{Z})$ and some calculations on elliptic curves · · · · 10

27 Akinari Hoshi (Rikkyo Univ.) — Rationality problem for algebraic tori · · · · 10
Aiichi Yamasaki (Kyoto Univ.)

28 Yasushi Gomi (Sophia Univ.) ♯ — q-analogue of Gauss sums on the symmetric groups · · · · 10

29 Tomoyuki Arakawa (Kyoto Univ.) ♯ — Zhu's algebra and C_2-algebra of parafermion vertex operator algebras · · · · 15
Ching Hung Lam (Academia Sinica)
Hiromichi Yamada (Hitotsubashi Univ.)

30 Kenichi Shimizu (Nagoya Univ.) ♯ — Real representations of Hopf $*$-algebras · · · · 20

31 Masao Kiyota (Tokyo Med. Dent. Univ.) * — The heights of irreducible Brauer characters in 2-blocks of the symmetric groups · · · 15
Tetsuro Okuyama (Hokkaido Univ. of Edu.)
Tomoyuki Wada (Tokyo Univ. of Agri. and Tech.)

32 Seok-Jin Kang (Seoul Nat. Univ.) ♯ — Geometric realization of Khovanov–Lauda–Rouquier algebras associated with Borcherds–Cartan data · · · 15
Masaki Kashiwara (Kyoto Univ. / Seoul Nat. Univ.)
Euiyong Park (Seoul Nat. Univ.)

33 Myungho Kim (KIAS) ♯ — Khovanov–Lauda–Rouquier algebras and R-matrices · · · 15
Seok-Jin Kang (Seoul Nat. Univ.)
Masaki Kashiwara (Kyoto Univ. / Seoul Nat. Univ.)

34 Masahide Konishi (Nagoya Univ.) ♯ — Level 1 cyclotomic KLR algebras of cyclic quivers · · · 10

35 Sei-Qwon Oh (Chungnam Nat. Univ.) ♯ — Poisson brackets and Poisson spectra in polynomial algebras · · · 15

September 20th (Thu) Conference Room I

10:00–11:30

36 Manabu Matsuoka * (Kuwana-Kita High School) — Polynomial realization of sequential codes · · · 10

37 Yasuyuki Hirano (Naruto Univ. of Edu.) ♯ — On rings with primitive idempotents · · · 10

38 Satoshi Yamanaka (Okayama Univ.) ♯ — On Galois polynomials of degree p in skew polynomial rings of derivation type · · · 10
Shûichi Ikehata (Okayama Univ.)

39 Akira Ueda (Shimane Univ.) * — Skew Rees rings which are maximal orders · · · 10
Monika Rianti Helmi (Andalas Univ.)
Hidetoshi Marubayashi (Tokushima Bunri Univ.)

40 Takao Sumiyama (Aichi Inst. of Tech.) — On Szele matrices of finite rings · · · 10

41 Tsunekazu Nishinaka ♯ (Okayama Shoka Univ.) — On primitivity of group rings of one-relator groups · · · 10

42 Kazutoshi Koike ♯ (Okinawa Nat. Coll. of Tech.) — Morita duality and finite ring extensions · · · 10

43 Hiroaki Komatsu (Okayama Pref. Univ.) * — A characterization of separable algebras by generalized derivations · · · 10

11:30–12:00 Research Section Assembly

14:15–16:45

44 Ryo Akiyama (Shizuoka Univ.) ♯ — 3-iterated quadratic Ore extensions · · · 10

45 Kenta Ueyama (Shizuoka Univ.) ♯ — Fixed subalgebras of AS-regular algebras under finite cyclic group actions · · 15

46 Yasuhiko Takehana ♯ (Hakodate Nat. Coll. of Tech.) — A generalization of stable torsion theory · · · 10

47 Hideto Asashiba (Shizuoka Univ.) ♯ — Derived equivalence classification of generalized multifold extensions of piecewise hereditary algebras of tree type · · · 10
Mayumi Kimura (Shizuoka Univ.)

48 Hideto Asashiba (Shizuoka Univ.) ♯ — Induced pseudofunctors and derived equivalences of oplax 2-representations of a category · · · 15

17:00–18:00 Talk invited by Algebra Section

Hyohe Miyachi ♯ Comparison between module categories over modular quantum general linear groups
(Nagoya Univ./Osaka City Univ.)

September 21st (Fri) Conference Room I

9:00–11:00

11:00–12:00 Talk invited by Algebra Section

Yoshinori Gongyo (Univ. of Tokyo) ♯ Log pluricanonical representations and abundance

14:15–15:45

66 Yosuke Kuratomi * On Goldie extending modules and extending modules 10
(Kitakyushu Nat. Coll. of Tech.)

67 Yousuke Kuratomi * On semi-lifting modules 10
(Kitakyushu Nat. Coll. of Tech.)

15:45–16:45 Talk invited by Algebra Section
Shigeru Kuroda (Tokyo Metro. Univ.) ♯ Wild automorphisms of a polynomial ring

---

Geometry

September 18th (Tue) Conference Room VIII

9:00–12:00

1 Sadahiro Maeda (Saga Univ.) * Some characterizations of isoparametric hypersurfaces in a sphere 15

2 Sadahiro Maeda (Saga Univ.) * Congruence classes of minimal ruled real hypersurfaces in a nonflat complex space form 15
Toshiaki Adachi (Nagoya Inst. of Tech.)
Tuya Bao
(Inner Mongolia Univ. for Nat.)

3 Kazuhiro Okumura ♯ η-Einstein real hypersurfaces in a nonflat complex space form 10
(Asahikawa Nat. Coll. of Tech.)

4 Kazuyuki Enomoto (Tokyo Univ. of Sci.) ♯ Total torsion of curves in E^3 15
Jin-ichi Itoh (Kumamoto Univ.)

5 Naoyuki Koike (Tokyo Univ. of Sci.) * The classifications of certain kind of isoparametric submanifolds in non-compact symmetric spaces 15

6 Makiko Tanaka (Tokyo Univ. of Sci.) * The intersection of two real forms in Hermitian symmetric spaces of compact type II 15
Hiroyuki Tasaki (Univ. of Tsukuba)

7 Hiroshi Iriyeh (Tokyo Denki Univ.) * On the structure of the intersection of real flag manifolds in a complex flag manifold 10
Takashi Sakai (Tokyo Metro. Univ.)
Hiroyuki Tasaki (Univ. of Tsukuba)

8 Akira Kubo (Hiroshima Univ.) ♯ Congruency of orbits of the solvable parts of parabolic subgroups 10
Hiroshi Tamaru (Hiroshima Univ.)

9 Kastuei Kemnotsu (Tohoku Univ.) * On the global existence of generalized rotational hypersurfaces with prescribed mean curvature in the Euclidean 15
Takeyuki Nagasawa (Saitama Univ.)

10 Sung-Hong Min (KIAS) ♯ Optimal isoperimetric inequalities for complete proper minimal submanifolds in hyperbolic space 15
Keomkyo Seo
(Sookmyung Women's Univ.)

11 Keomkyo Seo ♯ Geometric inequalities for submanifolds with bounded mean curvature 15
(Sookmyung Women's Univ.)

14:15–16:00

12 Hironori Kumura (Shizuoka Univ.) Exit radii of submanifolds from cylindrical domains in warped product manifolds · · · 15

13 Hiraku Nozawa (IHÉS) ♯ On Haefliger cohomology of Riemannian foliations · · · 15
José Ignacio Royo Prieto (Univ. Basque Country)

14 Oliver Goertsches (Univ. Hamburg) ♯ On vanishing and rigidity of basic cohomology of Sasakian manifolds · · · 15
Hiraku Nozawa (IHÉS)
Dirk Töben (Univ. São Paulo)

15 Jesús Antonio Álvarez López ♯ Characteristic classes of transversely homogeneous foliations · · · 15
(Univ. Santiago de Compostela)
Hiraku Nozawa (IHÉS)

16 Seoung Dal Jung (Jeju Nat. Univ.) ♯ Transverse Killing forms on foliated Riemannian manifolds · · · 15

17 Hiraku Abe (Tokyo Metro. Univ.) ♯ Schubert calculus for weighted Grassmannians · · · 15
Tomoo Matsumura (KAIST)

16:15–17:15 Talk invited by Geometry Section

Toshihiro Shoda (Saga Univ.) ♯ On Morse index of minimal surfaces

September 19th (Wed) Conference Room VIII + IX

10:30–10:45 Presentation Ceremony for 2012 Geometry Prize

10:50–11:50 Award Lecture for 2012 Geometry Prize

Ken'ichi Ohshika (Osaka Univ.) ♯ Topological structure of deformation spaces of Kleinian groups

13:15–14:15 Award Lecture for 2012 Geometry Prize

Yukinobu Toda (Univ. of Tokyo) ♯ Stability conditions and Donaldson–Thomas type invariants on Calabi–Yau 3-folds

September 20th (Thu) Conference Room VIII

9:00–12:00

18 Hiroaki Izumi (Elpida Memory, Inc.) ♯ The mathematical full solution of business cycle as a phase transition · · · 15

19 Tetsuya Nagano (Univ. of Nagasaki) ♯ Linear parallel displacements along a infinitesimal parallelogram and "curvature" · · · 15

20 Tomoyo Kanazawa (Tokyo Univ. of Sci.) ♯ Wigner function of the MIC-Kepler problem · · · 10
Akira Yoshioka (Tokyo Univ. of Sci.)

21 Tsukasa Takeuchi (Tokyo Univ. of Sci.) ♯ A recursion operator for the geodesic flow of Schwarzschild metric · · · 10
Kiyonori Hosokawa (Tokyo Univ. of Sci.)
Shinsuke Takatani (Tokyo Univ. of Sci.)

22 Yukiko Konishi (Kyoto Univ.) * Mixed Frobenius structure and local A-model · · · 15
Satoshi Minabe (Tokyo Denki Univ.)

23 Tomoaki Yatsui (Asahikawa Med. Univ.) ♯ On the prolongations of free pseudo-product fundamental graded Lie algebras · · · 10

24 Yuichiro Tanaka (Univ. of Tokyo) * Visible actions on flag varieties and a generalization of the Cartan decomposition · · · 15

25 Yoshihiko Matsumoto (Univ. of Tokyo) ♯ The second variational formula of the total Q-curvature in conformal geometry ····· 15

26 Hiroaki Ishida (Osaka City Univ.) ♯ Complex manifolds with maximal torus actions ····· 15

27 Sanae Kurosu (Tokyo Univ. of Sci.) * A characterization of a pluriharmonic affine immersion of codimension two ····· 10

28 Hiroshi Matsuzoe (Nagoya Inst. of Tech.) * Quasi-statistical manifolds and geometry of affine distributions ····· 10
Takashi Kurose (Kwansei Gakuin Univ.)
Masayuki Henmi (Inst. of Stat. Math.)

29 Hiroshi Matsuzoe (Nagoya Inst. of Tech.) * Generalized conformal structures on statistical manifolds and geometry of q-exponential families ····· 10
Atsumi Ohara (Univ. of Fukui)
Shun-ichi Amari (RIKEN)

14:15–16:15

30 Shin Kikuta (Sophia Univ.) Numerical comparison between Carathéodory measure hyperbolicity and positivity of canonical bundle along subvarieties ····· 20

31 Mitsuhiro Imada (Keio Univ.) ♯ Normality of complex contact manifolds ····· 15

32 Yohsuke Imagi (Kyoto Univ.) * On the boundary of the Moduli space of special Lagrangian submanifolds ·· 15

33 Hisashi Kasuya (Univ. of Tokyo) * Vaisman metrics on solvmanifolds and Oeljeklaus–Toma manifolds ····· 15

34 Mitsuhiro Itoh (Univ. of Tsukuba) ♯ Rigidity, volume entropy and Kähler, quaternionic Kähler Hadamard manifolds ····· 10
Hiroyasu Satoh (Tokyo Denki Univ.)
Young Jin Suh (Kyungpook Nat. Univ.)

35 Peng Fei Bai (Nagoya Inst. of Tech.) * On volumes of trajectory-balls for Kaehler magnetic fields ····· 10
Toshiaki Adachi (Nagoya Inst. of Tech.)

36 Ayato Mitsuishi (Tohoku Univ.) * Locally Lipschitz contractibility of Alexandrov spaces and its applications ·· 20
Takao Yamaguchi (Univ. of Tsukuba)

16:30–17:30 Talk invited by Geometry Section

Atsushi Kasue (Kanazawa Univ.) * Embedding of graphs and Rayleigh monotonicity law

---

Complex Analysis

September 18th (Tue) Conference Room II

10:00–12:00

1 Hitoshi Shiraishi (Kinki Univ.) ♯ Extensions of Nunokawa lemma for argument properties ····· 15

2 Toshio Hayami (Kinki Univ.) ♯ A sufficient condition for p-valently harmonic functions ····· 15

3 Tsubasa Itoh (Hokkaido Univ.) ♯ Modulus of continuity of p-Dirichlet solutions in a metric measure space ··· 15

4 Rikio Yoneda (Otaru Univ. of Commerce) * Toeplitz and Hankel operators on the Bergman spaces with closed range ··· 15

5 Fumi-Yuki Maeda (Hiroshima Univ.) * Approximate identities and Young type inequalities in Musielak–Orlicz spaces ····· 15
Mizuta Yoshihiro (Hiroshima Inst. of Tech.)
Takao Ohno (Oita Univ.)
Tetsu Shimomura (Hiroshima Univ.)

14:30–16:15

6 Yoshihiko Shinomiya (Tokyo Tech) ♯ Veech holomorphic families of Riemann surfaces and Diophantine problems 15

7 Masahiro Yanagishita (Waseda Univ.) ♯ Teichmüller distance and Kobayashi distance on subspaces of the universal Teichmüller space 15

8 Hideki Miyachi (Osaka Univ.) ♯ A Characterization of biholomorphic automorphisms of Teichmüller space .. 15

9 Yohei Komori (Waseda Univ.) ♯ On growth rates of 3-dimensional hyperbolic Coxeter prisms 15

10 Katsuhiko Matsuzaki (Waseda Univ.) ♯ Conjugation of a circle diffeomorphism group to a Moebius group 15

16:30–17:30 Talk invited by Complex Analysis Section

Toshiyuki Sugawa (Tohoku Univ.) ♯ Generalization of the Schwarzian derivative —Towards more invariance and higher orders

September 19th (Wed) Conference Room II

10:00–12:00

11 Yan-Yan Wang (Nagoya Univ.) * Variations of Bergman kernels for some explicitly given families of planar domains 20

12 Shin Kikuta (Sophia Univ.) On restricted Carathéodory pseudo-volume forms (corrections) 20

13 Sachiko Hamano (Fukushima Univ.) ♯ Log-plurisubharmonicity of metric deformations induced by Schiffer and harmonic spans 15

14 Peter Duren (Univ. of Michigan) ♯ Two-point distortion theorems for harmonic and pluriharmonic mappings .. 15
Hidetaka Hamada (Kyushu Sangyo Univ.)
Gabriela Kohr (Babeş-Bolyai Univ.)

15 Ian Graham (Univ. of Toronto) ♯ Extension operators and subordination chains 15
Hidetaka Hamada (Kyushu Sangyo Univ.)
Gabriela Kohr (Babeş-Bolyai Univ.)

16 Satoru Shimizu (Tohoku Univ.) Diffeomorphisms between Siegel domains of the first kind preserving the holomorphic automorphism groups and applications 15
Akio Kodama (Kanazawa Univ.)

13:15–14:15 Talk invited by Complex Analysis Section

Hiroshi Yamaguchi (Shiga Univ.) ♯ Pseudoconvex domains in the Hopf surface

---

Functional Equations

September 18th (Tue) Conference Room III

9:00–12:00

1 Takashi Oyabu 10 talks including “Evolution equations of parabolic type” 5

2 Hidetoshi Tahara (Sophia Univ.) * Summability of formal solutions of some linear partial differential equations 10
Hiroshi Yamazawa (Shibaura Inst. of Tech.)

3 Masashi Yamaguchi (Univ. of Tokyo) ♯
Sakai Hidetaka (Univ. of Tokyo)
Rigidity index and q-middle convolution of linear q-difference equations · · · · 10

4 Yoko Umeta (Hokkaido Univ.) *
Construction of general formal solutions for equations of the second Painlevé hierarchy · · · · 10

5 Tomonari Sei (Keio Univ.) ♯
Akimichi Takemura (Univ. of Tokyo)
Katsuyoshi Ohara (Kanazawa Univ.)
Nobuki Takayama (Kobe Univ.)
Holonomic gradient descent for Fisher distribution on the rotation group $SO(3)$ · · · · 10

6 Tamio Koyama ♯
(Kobe Univ. / JST CREST)
Hiromasa Nakayama
(Kobe Univ. / JST CREST)
Kenta Nishiyama
(Osaka Univ. / JST CREST)
Nobuki Takayama
(Kobe Univ. / JST CREST)
The holonomic rank of the Fisher–Bingham system of differential equations · · · · 10

7 Mika Tanda (Kinki Univ.) ♯
Takashi Aoki (Kinki Univ.)
Borel sums of Voros coefficients and parametric Stokes phenomena for hypergeometric differential equations · · · · 10

8 Kana Ando (Chiba Univ.) *
Numerical computation of Stokes multipliers · · · · 10

9 Shinji Sasaki (Kyoto Univ.) ♯
On the Borel summability of WKB-theoretic transformation series concerning fixed singularities · · · · 10

10 Masafumi Yoshino (Hiroshima Univ.) ♯
On connection problem of some Hamiltonian system · · · · 10

11 Hisashi Morioka (Univ. of Tsukuba) ♯
Hiroshi Isozaki (Univ. of Tsukuba)
A Rellich type theorem for discrete Schrödinger operators · · · · 10

12 Hironori Kumura (Shizuoka Univ.) *
Limiting absorption principle on manifolds having ends with various measure growth rate limits · · · · 10

13 Haruya Mizutani (Kyoto Univ.) ♯
On Strichartz estimates for Schrödinger equations with unbounded electromagnetic potentials · · · · 10

14 Haruya Mizutani (Kyoto Univ.) ♯
Remarks on Strichartz estimates for Schrödinger equations on manifolds with ends · · · · 10

14:15–16:15

15 Takehiro Nagaoka (Kyoto Univ.) ♯
Yorimasa Oshime (Doshisha Univ.)
Asymptotic behavior of solutions of linear differential systems · · · · 10

16 Hideaki Matsunaga (Osaka Pref. Univ.) ♯
Satoru Murakami
(Okayama Univ. of Sci.)
Yutaka Nagabuchi
(Okayama Univ. of Sci.)
Formal adjoint operators and asymptotic formula for solutions of integral equations · · · · 10

17 Jitsuro Sugie (Shimane Univ.) ♯
Tsunehiko Shimadu (Shimane Univ.)
Takashi Yamasaki (Shimane Univ.)
Criteria for global asymptotic stability of damped superlinear oscillators · · · 10

18 Kunihiko Taniguchi *
(Mojigakuen Senior High School)
Hiroyuki Usami (Gifu Univ.)
Extinction in a two-species nonautonomous Lotka–Volterra competition system · · · · 10

19 Shinji Adachi (Shizuoka Univ.) *
Masataka Shibata (Tokyo Tech)
Tatsuya Watanabe (Kyoto Sangyo Univ.)
Uniqueness and non-degeneracy of positive solutions for a class of quasilinear elliptic equations with general nonlinearities · · · · 10

20 Naoki Sioji (Yokohama Nat. Univ.) * Kohtaro Watanabe (Nat. Defense Acad. of Japan) — Radial symmetry of n-mode positive solutions for semilinear elliptic equations in a disc and its applications to the Hénon equation ····· 10

21 Ryuji Kajikiya (Saga Univ.) * — Multiple bifurcations of solutions for one-dimensional p-Laplace equation ·· 10

22 Ryuji Kajikiya (Saga Univ.) * — Least energy solutions of the Hénon equation in point symmetric or reflectionally symmetric domains ····· 10

23 Ryuji Kajikiya (Saga Univ.) * — Asymmetry of solutions for the Hénon equation in general symmetric domains ····· 10

16:30–17:30 Talk invited by Functional Equations Section

Satoshi Tanaka (Okayama Univ. of Sci.) ♯ — Nonuniqueness of positive solutions of superlinear two-point boundary value problems - Symmetry-breaking of even positive solutions -

September 19th (Wed) Conference Room Ⅲ

9:00–12:00

24 Toru Kan (Tohoku Univ.) * — On non-radially symmetric solutions of the Liouville–Gel'fand equation on a two-dimensional annular domain ····· 10

25 Mieko Tanaka (Tokyo Univ. of Sci.) * — The antimaximum principle and the existence of a solution for the generalized p-Laplace equations with indefinite weight ····· 10

26 Mieko Tanaka (Tokyo Univ. of Sci.) * Dumitru Motreanu (Univ. de Perpignan) — Multiple existence results of solutions for quasilinear elliptic equations with a nonlinearity depending on a parameter ····· 10

27 Tetsutaro Shibata (Hiroshima Univ.) * — Critical exponents of the asymptotic formulas for two-parameter variational eigencurves ····· 10

28 Futoshi Takahashi (Osaka City Univ.) ♯ — On the number of maximum points of least energy solution to a two-dimensional Hénon equation with large exponent ····· 10

29 Shuichi Jimbo (Hokkaido Univ.) ♯ — Regular domain variation and electromagnetic frequencies ····· 10

30 Yasuhito Miyamoto (Keio Univ.) ♯ — Global branches of sign-changing solutions to a semilinear Dirichlet problem in a disk ····· 10

31 Yasuhito Miyamoto (Keio Univ.) ♯ — A planar convex domain with many isolated hot spots on the boundary ··· 10

32 Goro Akagi (Kobe Univ.) ♯ Ryuji Kajikiya (Saga Univ.) — Symmetry and stability of asymptotic profiles for fast diffusion equations ·· 10

33 Goro Akagi (Kobe Univ.) ♯ Ryuji Kajikiya (Saga Univ.) — Symmetry breaking of least energy solutions of Emden–Fowler equations ··· 10

34 Yuki Kaneko (Waseda Univ.) ♯ Yoshio Yamada (Waseda Univ.) — A free boundary problem related to an ecological model in multi-dimensional annulus ····· 10

35 Kazuhiro Oeda (Waseda Univ.) * — Stationary solutions for a prey-predator model with nonlinear diffusion and a protection zone ····· 10

36 Yan-Yu Chen (Meiji Univ.) ♯ Jong-Shenq Guo (Tamkang Univ.) Hirokazu Ninomiya (Meiji Univ.) — Existence and uniqueness of rigidly rotating spiral waves by a wave front interaction model ····· 10

37 Keisuke Takasao (Hokkaido Univ.) * Yoshihiro Tonegawa (Hokkaido Univ.) — The existence of the weak solution for mean curvature flow with transport term ····· 10

38 Masashi Mizuno (Nihon Univ.) * Yoshihiro Tonegawa (Hokkaido Univ.) — Boundary monotonicity formula for the Allen–Cahn equation with Neumann boundary condition ····· 10

13:15–14:15 Talk invited by Functional Equations Section

Naoto Kumano-go (Kogakuin Univ.)♯ Phase space path integrals as analysis on path space

September 20th (Thu) Conference Room Ⅲ

9:00–12:00

39 Michiaki Onodera (Tohoku Univ.)♯ A variational problem and a related geometric evolution equation ····· 10

40 Aya Ishizeki (Saitama Univ.)* The removability of singurality of density and the absolute integrability of variational formulae for Möbius energy ····· 10
Takeyuki Nagasawa (Saitama Univ.)

41 Sachiko Ishida (Tokyo Univ. of Sci.)♯ Possibility of the blow-up in quasilinear degenerate Keller–Segel systems ··· 10
Takashi Ono (Tokyo Jitsugyo High School)
Tomomi Yokota (Tokyo Univ. of Sci.)

42 Takashi Suzuki (Osaka Univ.)♯ Exclusion of boundary blowup for 2D chemotaxis system provided with Dirichlet boundary condition for the Poisson part ····· 10

43 Masahiko Shimojo (Hokkaido Univ.)♯ Control of blow-up set by spatial inhomogeneous coefficient for a semilinear parabolic equation ····· 10
Jong-Shenq Guo (Tamkang Univ.)
Chang-Shou Lin (Nat. Taiwan Normal Univ.)
Yung-Jen Lin Guo (Nat. Taiwan Normal Univ.)

44 Kazushige Nakagawa (Tohoku Univ.)* The Phragmén–Lindelöf theorem of fully nonlinear systems for L^p-viscosity solutions with unbounded ingredients ····· 10

45 Hiroyoshi Mitake (Fukuoka Univ.)* On the large time behavior of solutions of Hamilton–Jacobi equations associated with nonlinear boundary conditions ····· 10
Hitoshi Ishii (Waseda Univ.)
Guy Barles (Univ. de Tours)

46 Hiroyoshi Mitake (Fukuoka Univ.)* Remarks on the large time behavior of viscosity solutions of quasi-monotone weakly coupled systems of Hamilton–Jacobi equations ····· 10
Hung Vinh Tran (UC, Berkeley)

47 Atsushi Nakayasu (Univ. of Tokyo)* Eikonal equations in metric spaces ····· 10
Yoshikazu Giga (Univ. of Tokyo)
Nao Hamamuki (Univ. of Tokyo)

48 Gen Nakamura (Hokkaido Univ.)♯ Linear sampling method for identifying cavities in a heat conductor ····· 10
Haibing Wang (Hokkaido Univ.)

49 Junichi Harada (Waseda Univ.)* Some blow-up solutions of the heat equation with nonlinear boundary conditions ····· 10

50 Yusuke Yamauchi (Waseda Univ.)* Life span of positive solutions for the Cauchy problem for the parabolic equations ····· 10

51 Masakazu Yamamoto (Hirosaki Univ.)* Asymptotic behavior of solutions to the dissipative equation with anomalous diffusion ····· 10

52 Michiyuki Watanabe (Niigata Univ.)* Inverse scattering at fixed amplitude for nonlinear Schrödinger equations ·· 10

53 Tomoyuki Niizato (Osaka Univ.)* The decay rates of solutions to the non-linear dissipative-dispersive wave equations ····· 10

12:10–12:30 Presentation Ceremony for 2012 Analysis Prize

14:15–16:15

54 Yoshihisa Nakamura (Kumamoto Univ.) * Large time behavior of small solutions to multi-component nonlinear Schrödinger equations · · · · · 10
Naoyasu Kita (Univ. of Miyazaki)

55 Kota Uriya (Tohoku Univ.) * Asymptotic behavior of a solution to a nonlinear Schrödinger system · · · · · 10
Takayoshi Ogawa (Tohoku Univ.)

56 Hironobu Sasaki (Chiba Univ.) * Scattering problems for the one-dimensional nonlinear Dirac equation with power nonlinearity · · · · · 10

57 Toshiyuki Suzuki (Tokyo Univ. of Sci.) ♯ Energy methods for Hartree type equations with inverse-square potentials · · 10

58 Masahiro Ikeda (Osaka Univ.) ♯ Remark on nonrelativistic limit for nonlinear Klein–Gordon system with mass resonance · · · · · 10
Yuta Wakasugi (Osaka Univ.)

59 Nakao Hayashi (Osaka Univ.) * Asymptotic behavior of solutions to nonlinear Klein–Gordon equations in 1d · · · · · 10

60 Norihisa Ikoma (Tohoku Univ.) * On compactness of minimizing sequences for some nonlinear Schrödinger system · · · · · 10

61 Yohei Yamazaki (Kyoto Univ.) ♯ Transverse instability for a system of nonlinear Schrödinger equations · · · · · 10

62 Satoshi Masaki (Gakushuin Univ.) ♯ On minimal non-scattering solution for L^2 subcritical nonlinear Schrödinger equation. · · · · · 10

63 Shingo Ito (Tokyo Univ. of Sci.) * Estimates on modulation spaces for Schroedinger evolution operators with a potential · · · · · 10
Keiichi Kato (Tokyo Univ. of Sci.)
Masaharu Kobayashi (Yamagata Univ.)

16:30–17:30 Talk invited by Functional Equations Section

Hideyuki Miura (Osaka Univ.) On fundamental solutions for fractional diffusion equations with divergence free drift

September 21st (Fri) Conference Room Ⅲ

9:00–12:00

64 Ryosuke Hyakuna (Waseda Univ.) * On global solutions to the nonlinear Schrödinger equation with L^p-initial data · · · · · 10

65 Tsukasa Iwabuchi (Chuo Univ.) * Ill-posedness for the nonlinear Schrödinger equations in one and two space dimensions · · · · · 10
Takayoshi Ogawa (Tohoku Univ.)

66 Mamoru Okamoto (Kyoto Univ.) ♯ Well-posedness of the Cauchy problem for the Chern–Simons–Dirac system · · · · · 10

67 Shuji Machihara (Saitama Univ.) ♯ Time global solutions in L^p for Chern–Simons–Dirac equation in 1+1 dimesion · · · · · 10
Takayoshi Ogawa (Tohoku Univ.)

68 Takamori Kato (Kyoto Univ.) ♯ Unconditional well-posedness of the fifth order modified KdV equation with periodic boundary condition · · · · · 10
Kotaro Tsugawa (Nagoya Univ.)

69 Eiji Onodera (Kochi Univ.) * A fourth-order dispersive flow into Kähler manifolds · · · · · 10
Hiroyuki Chihara (Kagoshima Univ.)

70 Eiji Onodera (Kochi Univ.) * A fourth-order dispersive flow for closed curves on compact Riemann surfaces · · · · · 10

71 Jun-ichi Segata (Tohoku Univ.) * Well-posedness for the fourth order nonlinear Schrödinger type equation on torus · · · · · 10

72 Yusuke Sugiyama (Tokyo Univ. of Sci.) ♯ Global solvability for some quasilinear wave equation in one space dimension · · · · · 10

73 Hideo Kubo (Tohoku Univ.) ♯
Ayako Osaka (Tohoku Univ.)
Muhammet Yazici (Tohoku Univ.)
Existence and blow-up of solutions to nonlinear wave equations in one space dimension · · · · · 10

74 Hiroyuki Takamura (Future Univ.-Hakodate) *
Kyouhei Wakasa (Future Univ.-Hakodate)
The lifespan of solutions of a nonlinear wave equations with a quadratic term of non-single and indefinite sign in four space dimensions · · · · · 10

75 Erika Ushikoshi (Tohoku Univ.) *
Hadamard variational formula for the Green function for the velocity and pressure of the Stokes equations with the Dirichlet boundary condition · · · · 10

76 Ken Abe (Univ. of Tokyo) *
Yoshikazu Giga (Univ. of Tokyo)
The L^∞-Stokes semigroup in exterior domains · · · · · 10

77 Hirokazu Saito (Waseda Univ.) ♯
On the L_p-L_q maximal regularity of the Neumann–Dirichlet problem for the Stokes equations in an infinite layer · · · · · 10

78 Miho Murata (Waseda Univ.) ♯
Yoshihiro Shibata (Waseda Univ.)
On the sectorial $\mathcal{R}$-boundedness of the Stokes operator for the compressible viscous fluid flow · · · · · 10

14:15–16:30

79 Tomoyuki Nakatsuka (Nagoya Univ.) *
Uniqueness of steady Navier–Stokes flows in exterior domains · · · · · 10

80 Hajime Koba (Univ. of Tokyo) *
Nonlinear stability of Ekman boundary layers in rotating stratified fluids · · 10

81 Tsukasa Iwabuchi (Chuo Univ.) *
Ryo Takada (Kyoto Univ.)
Time periodic solutions to the Navier–Stokes equations in the rotational framework · · · · · 10

82 Tsukasa Iwabuchi (Chuo Univ.) *
Ryo Takada (Kyoto Univ.)
Global solutions for the Navier–Stokes equations in the rotational framework · · · · · 10

83 Tsuyoshi Yoneda (Hokkaido Univ.)
A mathematical clue to the separation phenomena on the two-dimensional Navier–Stokes equation · · · · · 10

84 Kei Matsuura (Waseda Univ.) *
Mitsuharu Ôtani (Waseda Univ.)
Initial-boundary value problem for micropolar fluid equations with spin-vorticity interaction boundary condition · · · · · 10

85 Noboru Chikami (Tohoku Univ.) *
The local existence and blow-up criterion of the compressible Navier–Stokes system with a Yukawa-potential · · · · · 10

86 Jan Brezina (Kyushu Univ.) ♯
Yoshiyuki Kagei (Kyushu Univ.)
Asymptotic behavior of solutions to the compressible Navier–Stokes equation around a time-periodic parallel flow · · · · · 10

87 Masashi Ohnawa (Waseda Univ. / Tokyo Tech) *
Shinya Nishibata (Tokyo Tech)
On the convergence rates towards traveling waves for a model system of radiating gas · · · · · 10

88 Masashi Ohnawa (Waseda Univ. / Tokyo Tech) *
Shinya Nishibata (Tokyo Tech)
Asymptotic stability of a stationary solution to the Euler–Poisson equations including fluid-boundary interaction · · · · · 10

89 Masahiro Suzuki (Tokyo Tech) *
Masahiro Takayama (Keio Univ.)
Bongsuk Kwon (Ulsan Nat. Inst. of Sci. and Tech.)
Asymptotic behavior of solutions to a shallow water equation · · · · · 10

90 Tetu Makino (Yamaguchi Univ.) *
Application of Nash–Moser theory to gasdynamics · · · · · 10

16:45–17:45 Talk invited by Functional Equations Section

Katsuyuki Ishii (Kobe Univ.) ♯
Mathematical analysis of some algorithms for mean curvature flow

Real Analysis

September 20th (Thu) Conference Room II

10:00–11:45

1 Yuichi Kanjin (Kanazawa Univ.) ♯
Kunio Sato (Yamagata Univ.)
Hardy-type inequalities for the generalized Mehler transform ····· 15

2 Yutaka Terasawa (Univ. of Tokyo) ♯
Hitoshi Tanaka (Univ. of Tokyo)
Positive operators and maximal operators in a filtered measure space ····· 15

3 Yoshihiro Mizuta ♯ (Hiroshima Inst. of Tech.)
Eiichi Nakai (Ibaraki Univ.)
Yoshihiro Sawano (Tokyo Metro. Univ.)
Tetsu Shimomura (Hiroshima Univ.)
Gagliardo–Nirenberg inequality for generalized Riesz potentials of functions in Musielak–Orlicz spaces ····· 15

4 Yohei Tsutsui (Waseda Univ.)
Weighted inequalities for convolution operators with smooth functions on Hardy spaces and an application to decay property of solutions to Navier–Stokes equations ····· 15

5 Takanori Yamamoto * (Hokkai-Gakuen Univ.)
Takahiko Nakazi (Hokusei Gakuen Univ.)
An argument of a function in $H^{1/2}$ ····· 15

6 Shinya Moritoh (Nara Women's Univ.) *
Mulholland's inequality revisited ····· 10

14:15–15:40

7 Aoi Honda (Kyushu Inst. of Tech.) ♯
Yoshiaki Okazaki (Kyushu Inst. of Tech.)
Hiroshi Sato (Kyushu Univ.)
On the linearity and metrics of a new sequence space $\Lambda_2(f)$ ····· 15

8 Mikio Kato (Shinshu Univ.) *
Takayuki Tamura (Chiba Univ.)
Weak nearly uniform smoothness of direct sums of Banach spaces ····· 15

9 Mikio Kato (Shinshu Univ.) *
Yasuji Takahashi (Okayama Pref. Univ.)
On relations between $C_{NJ}(X)$ and $J(X)$ and a new geometric constant $A(X)$ ····· 15

10 Koji Aoyama (Chiba Univ.) ♯
Strong convergence of an iterative sequence for maximal monotone operators in a Hilbert space ····· 15

11 Sachiko Atsushiba (Univ. of Yamanashi) ♯
Nonlinear mean convergence theorems for nonlinear mappings ····· 15

15:50–16:50 Talk invited by Real Analysis Section

Jürgen Appell (Univ. Würzburg) ♯
Condensing operators and applications: old and new

September 21st (Fri) Conference Room II

9:40–12:00

12 Toshikazu Watanabe (Niigata Univ.) ♯
On non-additive measures which take values in an ordered topological vector space ····· 15

13 Yasunori Kimura (Toho Univ.) ♯
Kenzi Satô (Tamagawa Univ.)
Convergence of subsets of a complete geodesic space with curvature bounded above and its applications ····· 15

14 Yoichi Miyazaki (Nihon Univ.) *
A Method to evaluate resolvent kernels of elliptic operators ····· 12

15 Noriaki Yamazaki (Kanagawa Univ.) ♯
Lingling Zhang (Taiyuan Univ. of Tech.)
Chengbo Zhai (Shanxi Univ.)
Optimal control of positive solutions to second order impulsive differential equations · · · 15

16 Makoto Nakamura (Tohoku Univ.) *
Remarks on global solutions for nonlinear wave equations under the standard null conditions · · · 10

17 Makoto Nakamura (Tohoku Univ.) *
Hidemitsu Wadade (Gifu Univ.)
The Cauchy problem for dissipative wave equations with weighted nonlinear terms · · · 10

18 Yukino Tomizawa (Chuo Univ.) ♯
Yoshikazu Kobayashi (Chuo Univ.)
Naoki Tanaka (Shizuoka Univ.)
Unique solutions to nonautonomous differential equations in Banach spaces · · · 20

19 Motohiro Sobajima (Tokyo Univ. of Sci.) ♯
Generalized Hardy–Rellich inequalities in $\mathbb{R}^N$ for operators with singular first order terms · · · 15

20 Risei Kano (Kochi Univ.) ♯
Akio Ito (Kinki Univ.)
Asymptotic behavior of solutions for the tumor invasion models · · · 15

14:15–16:00

21 Hiroshi Watanabe (Salasian Polytecnic) ♯
Entropy solutions to initial value problems for strongly degenerate parabolic equations with discontinuous coefficients · · · 15

22 Naoki Sato (Nagaoka Nat. Coll. of Tech.) ♯
Toyohiko Aiki (Japan Women's Univ.)
Yusuke Murase (Meijo Univ.)
On a one dimensional free boundary problem for adsorption phenomena · · · 20

23 Yusuke Murase (Meijo Univ.) ♯
Akio Ito (Kinki Univ.)
Existence results for a mathematical modeling for brewing process of Japanese Sake · · · 15

24 Shun Uchida (Waseda Univ.) *
Mitsuharu Ôtani (Waseda Univ.)
The solvability of double-diffusive convection system with Soret's coefficient depending on the concentration of solute · · · 15

25 Goro Akagi (Kobe Univ.) ♯
Doubly nonlinear parabolic equations involving variable exponents · · · 15

26 Kota Kumazaki ♯
(Tomakomai Nat. Coll. of Tech.)
On a mathematical model of moisture transport with a time-dependent porosity in concrete carbonation process · · · 15

16:10–17:10 Talk invited by Real Analysis Section

Okihiro Sawada (Gifu Univ.) ♯
The ill-posedness theory of the Navier–Stokes equations in the critical space

---

Functional Analysis

September 19th (Wed) Conference Room IV

9:45–11:50

1 Kazunori Ando (Univ. of Tsukuba) ♯
Inverse scattering theory for discrete Schrödinger operators on the hexagonal lattice · · · 15

2 Hisashi Morioka (Univ. of Tsukuba) ♯
Hiroshi Isozaki (Univ. of Tsukuba)
Inverse scattering at a fixed energy for discrete Schrödinger operators on the square lattice · · · 15

3 Yuji Nomura (Ehime Univ.) ♯
Takuya Mine (Kyoto Inst. Tech.)
Landau levels of Schrödinger operators with periodic Aharonov–Bohm magnetic fields on the hyperbolic plane · · · 15

4 Toshihisa Kubo (Univ. of Tokyo) ♯ Conformally invariant systems of second-order differential operators ····· 20

5 Yoshinori Kametaka (Osaka Univ.) ♯ The best constant of discrete Sobolev inequality on a small Fullerene and Carbon nano tube ····· 15

6 Jun Hong Ha (Korea Tech.) ♯ Unique identification for linearized sine-Gordon equation ····· 15
Semion Gutman (Univ. of Oklahoma)

7 Shin-ichi Nakagiri (Kobe Univ.) ♯ Identifiability of advection-diffusion equations ····· 15

13:00–14:00 Talk invited by Functional Analysis Section

Kiyoomi Kataoka (Univ. of Tokyo) ♯ A system of fifth-order partial differential equations describing a surface which contains several continuous families of circular arcs

September 20th (Thu) Conference Room IV

9:30–11:50

8 Kengo Matsumoto (Joetsu Univ. of Edu.) * Full groups of one-sided topological Markov shifts and classification of Cuntz–Krieger algebras ····· 15

9 Takahiro Sudo (Univ. of Ryukyus) ♯ Corona rank for Banach or C^*-algebras ····· 15

10 Rui Okayasu (Osaka Kyoiku Univ.) ♯ Free group C^*-algebras associated with ℓ_p ····· 15

11 Yusuke Isono (Univ. of Tokyo) ♯ Weak exactness for C^*-algebras and application to condition (AO) ····· 15

12 Norio Nawata (Chiba Univ.) ♯ Fundamental group of uniquely ergodic Cantor minimal systems ····· 15

13 Tsuyoshi Kajiwara (Okayama Univ.) ♯ Ideals of the core of C*-algebras associated with self-similar maps ····· 15
Yasuo Watatani (Kyushu Univ.)

14 Hiroki Sako (Kyoto Univ.) * Property A and the operator norm localization property for discrete metric spaces ····· 15

15 Takahiro Hasebe (Kyoto Univ.) ♯ Cumulants for spreadability system ····· 15
Franz Lehner (Graz Univ. of Tech.)

14:15–16:30

16 Masaru Nagisa (Chiba Univ.) * Characterization of the diagonality for operators ····· 10
Takashi Itoh (Gunma Univ.)

17 Masaru Nagisa (Chiba Univ.) ♯ Some operator monotone functions ····· 10
Masato Kawasaki (Chiba Univ.)

18 Takeaki Yamazaki (Toyo Univ.) ♯ On some matrix inequalities for the matrix power and Karcher means ····· 10
Yongdo Lim (Kyungpook Nat. Univ.)

19 Yuki Seo (Osaka Kyoiku Univ.) ♯ The Jensen inequality in an external formula ····· 10

20 Mitsuru Uchiyama (Shimane Univ.) ♯ The principal inverse of the gamma function ····· 15

21 Keiichi Watanabe (Niigata Univ.) * An inequality between products of $x^p - 1$ ····· 15

22 Kei Ji Izuchi (Niigata Univ.) * Sums of weighted composition operators on H^∞ ····· 10
Shûichi Ohno (Nippon Inst. of Tech.)

23 Takuya Hosokawa (Ibaraki Univ.) * Differences of weighted composition operators from the Bloch space to H^∞ ····· 15
Shûichi Ohno (Nippon Inst. of Tech.)

16:30–17:30 Talk invited by Functional Analysis Section

Shûichi Ohno (Nippon Inst. of Tech.) * Topological structure of the space of weighted composition operators on H^∞

September 21st (Fri) Conference Room IV

9:30–11:50

24 Masatoshi Enooto (Koshien Univ.) * Yasuo Watatani (Kyushu Univ.) Brick Hilbert representaions of the Kronecker quiver by perturbation of a finite rank operator · · · 15

25 Reiji Tomatsu (Hokkaido Univ.) ♯ On a classification of Rohlin flows on von Neumann algebras · · · 15

26 Satoshi Goto (Sophia Univ.) ♯ On a mixed quantum double construction of subfactors · · · 10

27 Satoshi Goto (Sophia Univ.) ♯ On a generalization of quantum multiple construction of subfactors · · · 10

28 Yoshikata Kida (Kyoto Univ.) * Orbit equivalence invariants for actions of Baumslag–Solitar groups · · · 15

29 Yoshikata Kida (Kyoto Univ.) * Stability in orbit equivalence for Baumslag–Solitar groups and Vaes groups · · · 15

30 Masafumi Sakao (Chiba Univ.) ♯ Tatsuya Tsurii (Osaka Pref. Univ.) Satoe Yamanaka (Osaka Pref. Univ.) Satoshi Kawakami (Nara Univ. of Edu.) The extension problem of discrete Abelian groups by hypergroups of order two · · · 15

31 Akihito Wachi (Hokkaido Univ. of Edu.) * Capelli identities of odd type · · · 15

32 Hiroshi Yamashita (Hokkaido Univ.) ♯ Fuhai Zhu (Nankai Univ.) Quantization of singular quaternionic nilpotent K-orbits · · · 15

14:15–15:15 Talk invited by Functional Analysis Section

Mutsumi Saito (Hokkaido Univ.) ♯ Irreducible quotients of A-hypergeometric systems

---

Statistics and Probability

September 18th (Tue) Conference Room V

9:15–12:00

1 Tomoko Takemura (Nara Women's Univ.) * Matsuyo Tomisaki (Nara Women's Univ.) Lévy measure density corresponding to inverse local time · · · 15

2 Yuji Hamana (Kumamoto Univ.) * Hiroyuki Matsumoto (Aoyama Gakuin Univ.) On the distributions of the first hitting times of Bessel processes · · · 15

3 Yuji Hamana (Kumamoto Univ.) * Hiroyuki Matsumoto (Aoyama Gakuin Univ.) On the expected volume of the Wiener sausage in even dimensions · · · 15

4 Katusi Fukuyama (Kobe Univ.) * Sho Miyamoto Metric discrepancy results for Erdős–Fortet sequence · · · 5

5 Satoshi Ishiwata (Yamagata Univ.) * Hiroshi Kawabi (Okayama Univ.) Tsubasa Teruya (Okinawa Kaiho Bank) An effect of fragile non-symmetry to the transition probability of random walks on the triangular lattice · · · 15

6 Naoki Kubota (Nihon Univ.) ♯ Large deviations for simple random walk on supercritical percolation clusters · · · 15

7 Daisuke Shiraishi (Kyoto Univ.)♯ Cut points for simple random walks ····· 15

8 Sergio Albeverio (Univ. Bonn)♯ Minoru W Yoshida (Tokyo City Univ.) Probabilistic conclusion of constructive Euclidean $(\Phi_4)^4$ quantum field theory I ····· 15

9 Itaru Mitoma (Saga Univ.)♯ Asymptotic expansion for oscillatory integrals of Wiener functionals ····· 25

14:15–14:45

10 Naoyuki Ichihara (Hiroshima Univ.)* Criticality of Hamilton–Jacobi–Bellman equations and stochastic ergodic control ····· 15

11 Masaaki Tsuchiya (Kanazawa Univ.)* Probabilistic representation of weak solutions to a parabolic equation with a mixed boundary condition ····· 15

15:00–16:00 Talk invited by Statistics and Probability Section

Toshihiro Uemura (Kansai Univ.)♯ On jump-type Markov processes and the associated Dirichlet forms

16:15–17:15 Talk invited by Statistics and Probability Section

Kazumasa Kuwada (Ochanomizu Univ.)♯ Coupling methods for heat distributions and curvature-dimension conditions

September 19th (Wed) Conference Room V

9:15–12:00

12 Takahiro Hasebe (Kyoto Univ.)♯ Noriyoshi Sakuma (Aichi Univ. of Edu.) Octavio Arizmendi (Univ. des Saarlandes) Examples of infinitely divisible distributions in free probability ····· 15

13 Sho Matsumoto (Nagoya Univ.)♯ Tomoyuki Shirai (Kyushu Univ.) Correlation functions for real zeros of a Gaussian power series and Pfaffians ····· 15

14 Akihiko Inoue (Hiroshima Univ.)♯ Yukio Kasahara (Hokkaido Univ.) Mohsen Pourahmadi (Texas A&M Univ.) Multivariate completely nondeterministic stationary processes ····· 15

15 Hiroki Hashiguchi (Saitama Univ.)♯ Yasuhide Numata (Univ. of Tokyo / JST CREST) Nobuki Takayama (Kobe Univ.) Akimichi Takemura (Univ. of Tokyo) Holonomic gradient method for the distribution function of the largest root of a Wishart matrix ····· 15

16 Tamio Koyama (Kobe Univ.)♯ Akimichi Takemura (Univ. of Tokyo) Calculation of the orthant probability by the holonomic gradient method ·· 15

17 Hajime Yamato (Kagoshima Univ.)♯ Asymptotic distribution of number of distinct observations among a sample from mixture of Dirichlet processes ····· 10

18 Yoichi Nishiyama (Inst. of Stat. Math.)♯ Moment convergence of Z-estimators ····· 15

19 Yoichi Nishiyama (Inst. of Stat. Math.)♯ Z-process method for change point problems ····· 15

20 Akio Tanikawa (Osaka Inst. of Tech.)♯ Hiro Mukai (Washington Univ.) Min Xu (Washington Univ.) On the rate of convergence of the sequential quadratic method for differential games ····· 10

21 Satoshi Suzuki (Shimane Univ.)♯ Daishi Kuroiwa (Shimane Univ.) On surrogate duality for quasiconvex programming ····· 20

12:05–12:35 Research Section Assembly

September 20th (Thu) Conference Room V

9:15–12:00

22 Yoshifumi Hyodo ♯ (Okayama Univ. of Sci./Int. Inst. for Nat. Sci.), Hiromu Yumiba (Int. Inst. for Nat. Sci.), Masahide Kuwada (Int. Inst. for Nat. Sci.)
Existence conditions for balanced fractional 2^m factorial designs of resolution $2\ell+1$ derived from simple arrays ····· 15

23 Sanpei Kageyama ♯ (Hiroshima Inst. of Tech.), Kazuki Matsubara (Hiroshima Univ.)
The existence of 2 pairwise additive BIB designs ····· 15

24 Ryota Shinjo (Tokyo Univ. of Sci.) ♯, Kouji Yamamoto (Osaka Univ.), Sadao Tomizawa (Tokyo Univ. of Sci.)
Improved measure on extended marginal homogeneity for square contingency tables with ordered categories ····· 10

25 Kouji Yamamoto (Osaka Univ.) ♯, Kouji Tahata (Tokyo Univ. of Sci.), Sadao Tomizawa (Tokyo Univ. of Sci.)
Generalized asymmetry model for cumulative probabilities and its decomposition for square tables ····· 10

26 Kouji Tahata (Tokyo Univ. of Sci.) ♯, Kouji Yamamoto (Osaka Univ.), Sadao Tomizawa (Tokyo Univ. of Sci.)
Decomposition of symmetry using palindromic symmetry model for square contingency tables ····· 10

27 Nobuhiro Taneichi (Kagoshima Univ.) ♯, Yuri Sekiya (Hokkaido Univ. of Edu.)
On asymptotic expansions of the null distributions of ϕ-divergence statistics for testing a logistic regression model ····· 15

28 Kazuyoshi Yata (Univ. of Tsukuba) ♯, Makoto Aoshima (Univ. of Tsukuba)
PCA consistency for high-dimensional data under generalized models ····· 15

29 Kenta Hamada (Waseda Univ.) ♯, Masanobu Taniguchi (Waseda Univ.)
Shrinkage estimation and prediction for time series ····· 15

30 Yoshihide Kakizawa (Hokkaido Univ.) ♯
Generalized Cordeiro–Ferrari Bartlett-type adjustment ····· 10

31 Yoshihide Kakizawa (Hokkaido Univ.) ♯
Third-order local powers of several Bartlett-type adjusted tests ····· 15

32 Hiroki Masuda (Kyushu Univ.) ♯
On self-normalized residuals of SDE ····· 10

14:30–15:30 Talk invited by Statistics and Probability Section

Shogo Kato (Inst. of Stat. Math.) ♯
The Cauchy distribution on the circle and related statistical models

15:45–16:45 Talk invited by Statistics and Probability Section

Hidetoshi Murakami ♯ (Nat. Defense Acad. of Japan)
Some saddlepoint approximations to the nonparametric tests and biased for two-sided alternatives

Applied Mathematics

September 18th (Tue) Conference Room VI

9:30–12:00

1 Takamichi Sushida (Ryukoku Univ.) ♯
Akio Hizume (Ryukoku Univ.)
Yoshikazu Yamagishi (Ryukoku Univ.)
Triangular spiral tilings · · · · · 20

2 Midori Kobayashi (Univ. of Shizuoka) ♯
Nobuaki Mutoh (Univ. of Shizuoka)
Gisaku Nakamura (Univ. of Shizuoka)
Dudeney's round table problem and neighbour-balanced Hamilton decompositions · · · · · 10

3 Tomoki Nakamigawa ♯
(Shonan Inst. of Technology)
A Ramsey type problem for multiple disjoint copies of induced subgraphs · · 10

4 Shuya Chiba (Tokyo Univ. of Sci.) ♯
Roman Čada (Univ. of West Bohemian)
Kenta Ozeki (Nat. Inst. of Information)
Petr Vrána (Univ. of West Bohemian)
Kiyoshi Yoshimoto (Nihon Univ.)
Tutte cycles and Hamiltonicity of 4-connected claw-free graphs · · · · · 20

5 Norio Konno (Yokohama Nat. Univ.) ♯
Iwao Sato (Oyama Nat. Coll. of Tech.)
The graph isomorphism problem and quantum walk · · · · · 15

6 Iwao Sato (Oyama Nat. Coll. of Tech.) ♯
Seiya Negami (Yokohama Nat. Univ.)
Weighted zeta functions for quotients of regular coverings of graphs · · · · · 15

7 Hye Jin Jang (POSTECH) ♯
Jack Koolen (POSTECH)
Akihiro Munemasa (Tohoku Univ.)
Tetsuji Taniguchi (Matsue Coll. of Tech.)
On fat Hoffman graphs with smallest eigenvalue at least -3 · · · · · 10

8 Chie Nara (Tokai Univ.) ♯
Jin-ichi Itoh (Kumamoto Univ.)
Erik D. Demaine (MIT)
Martin L. Demaine (MIT)
Anna Lubiw (Univ. Waterloo)
Joseph O'Rourke (Smith Coll.)
Refold rigidity of convex polyhedra · · · · · 15

9 Kazuhiko Ushio (Kinki Univ.) ♯
Balanced (C_7, C_{12})-foil designs and related designs · · · · · 15

14:15–16:40

10 Yutaka Sueyoshi (Nagasaki Univ.) ♯
Ryuichi Harasawa (Nagasaki Univ.)
Aichi Kudo (Nagasaki Univ.)
On a construction of equitable round-robin tournaments with home-away assignments · · · · · 20

11 Yasuo Katsumata (Asia Univ.) *
Sakae Tsuda (Kokugauin High School)
Kenichi Nagashima (Waseda Univ.)
Hajime Yamashita (Waseda Univ.)
Analysis of a fuzzy Shapley value and its application · · · · · 10

12 Hiromasa Nakayama ♯
(Kobe Univ. / JST CREST)
Tamio Koyama (Kobe Univ.)
Kenta Nishiyama
(Osaka Univ. / JST CREST)
Nobuki Takayama (Kobe Univ.)
Holonomic gradient descent method for the Fisher–Bingham distribution on the n-dimensional sphere · · · · · 15

13 Myoungnyoun Kim (NIMS) ♯
Tae Young Ha (NIMS)
Eung Je Woo (Kyung-Hee Univ.)
Oh In Kwon (Konkuk Univ.)
Improving reconstruction image using weighted voxel specific signal-to-noise ratios in MREIT 15

14 Hidehiro Shinohara (Tohoku Univ.) ♯
Square Lehman matrices which are not cores of minimally non-ideal clutters 15

15 Akira Saito (Nihon Univ.) ♯
Mikio Kano (Ibaraki Univ.)
Star-factors with large components 15

16 Kenta Noguchi (Keio Univ.) ♯
Relations between current graphs, voltage graphs and cycle parities 15

17 Kenta Ozeki (Nat. Inst. of Information) ♯
Hamiltonicity of k-prism, a k-tree, a k-walk and a k-cycle cover of graphs 15

16:50–17:50 Talk invited by Applied Mathematics Section

Yusuke Suzuki (Niigata Univ.) ♯
1-embedded graphs as seen from a viewpoint of re-embedding structures

September 19th (Wed) Conference Room VI

9:30–12:15

18 Shunji Horiguchi (Niigata Sangyo Univ.) ♯
Convergence comparison in the conditional expressions II of Tsuchikura–Horiguchi's method (Yoshimasu Murase–Newton type's first enhancing recurrence formula) 15

19 Shunji Horiguchi (Niigata Sangyo Univ.) ♯
Nnumerical computations concerning elementary functions of a general convergence comparison in the conditional expression II of Tsuchikura–Horiguchi's method 15

20 Yuji Katsuta (Ube Nat. Coll. of Tech.) ♯
George Miyake (Ube Nat. Coll. of Tech.)
An analysis of a eight-order nonlinear symmetrical differential equation with dihedral group D_4 and odd function 20

21 Hirotake Yaguchi (Mie Univ.) *
Construction and security of hash functions based on β-transformations on [1,2) 15

22 Shy-Der Lin *
(Chung Yuan Christian Univ.)
Chia-Hung Lu
(Chung Yuan Christian Univ.)
Particular solutions of associated Cauchy–Euler fractional partial differential equation 15

23 Noppharat Chaifong (Chuo Univ.) ♯
A dynamical model of human immune response to two type influenza virus infections 15

24 Eunok Jung (Konkuk Univ.) ♯
Wanho Lee (Konkuk Univ.)
Yongsam Kim (Chung-Ang Univ.)
Mathematical models of circulatory systems 15

25 Jeongwhan Choi (Korea Univ.) ♯
Shu-Ming Sun (Virginia PolyTech)
Sungim Whang (Ajou Univ.)
Supercritical surface waves generated by a negative or oscillatory forcing ... 15

26 Prashant Kumar (POSTECH) ♯
Kim Kwang Ik (POSTECH)
Mathematical modelling of the ship hydrodynamics in Pohang New Harbor 15

September 20th (Thu) Conference Room VI

9:30–12:00

27 Kiyohisa Tokunaga (Fukuoka Inst. of Tech.) ♯ The curl theorem of a triangular integral · · · · · 15

28 Yoshihiro Saito (Gifu Shotoku Gakuen Univ.) ♯ Numerical asymptotic stability of the θ-Maruyama simplified scheme · · · · · 15

29 Shingo Saito (Kyushu Univ.) * Relation between the premium principle based on Wang's transform and the Hermite polynomials · · · · · 10

30 Koya Sakakibara (Meiji Univ.) ♯ A new method approximating holomorphic functions by linear combinations of $1/(z-\zeta)$ I —Analysis in an elliptic domain— · · · · · 15

31 Koya Sakakibara (Meiji Univ.) ♯ A new method approximating holomorphic functions by linear combinations of $1/(z-\zeta)$ II —Analysis in an annular domain— · · · · · 15

32 Shingo Iwami (Kyushu Univ.) ♯ Modeling acute phase of viral infection · · · · · 20

33 Michiel Bertsch (Univ. Rome Tor Vergata) ♯
Danielle Hilhorst (Univ. de Paris-Sud)
Hirofumi Izuhara (Meiji Univ.)
Masayasu Mimura (Meiji Univ.)
Tohru Wakasa (Kyushu Inst. of Tech.)
Traveling wave solutions arising in a tumour growth model with contact inhibition · · · · · 15

34 Tatsuki Mori (Ryukoku Univ.) ♯
Shoji Yotsutani (Ryukoku Univ.)
Numerical study on stationary solutions and the stability of a 2d SKT cross-diffusion equation · · · · · 15

14:15–16:40 Special Session —Medicine and Mathematics—

Yasushi Okada (RIKEN) ♯ Understanding the functions of biological molecular motors through modeling · · · · · 45

Motohisa Osaka (Nippon Verterinary and Life Sci. Univ.) ♯ Applied mathematics on sudden cardiac death and rhythm · · · · · 45

Jun-ichi Okada (Univ. of Tokyo) ♯ Multiscale multiphysics heart simulator based on finite element method · · · · 45

16:50–17:50 Talk invited by Applied Mathematics Section

Yuji Kodama (Ohio State Univ.) ♯ KP solitons and Mach reflection in shallow water

September 21st (Fri) Conference Room VI

9:00–12:00

35 Junichi Nakagawa (Nippon Steal Corp.) ♯
Gen Nakamura (Hokkaido Univ.)
Satoshi Sasayama (Hokkaido Univ.)
Haibing Wang (Hokkaido Univ.)
Evolution of local maximums of non-symmetric solutions to some reaction-diffusion systems · · · · · 10

36 Kazumi Tanuma (Gunma Univ.) *
Chi-Sing Man (Univ. of Kentucky)
Wenwen Du (Univ. of Kentucky)
Perturbation of phase velocity of Rayleigh waves and Stoneley waves in anisotropic elastic media with orthorhombic principal part · · · · · 15

37 Nobuyuki Higashimori (Hitotsubashi Univ.) ♯
Hiroshi Fujiwara (Kyoto Univ.)
A direct numerical method for solving the initial boundary value problem of the three dimensional radiative transport equation · · · · · 15

Topology

September 18th (Tue) Conference Room IX

9:15–12:00

2 Misako Yokoyama (Shizuoka Univ.) ♯
Yoshihiro Takeuchi (Aichi Univ. of Edu.)
Finding a system of essential 2-suborbifolds ····· 15

3 Selman Akbulut (Michigan State Univ.) *
Kouichi Yasui (Hiroshima Univ.)
Gluck twisting 4-manifolds with odd intersection form ····· 10

4 Takuya Sakasai (Univ. of Tokyo) ♯
Masaaki Suzuki (Akita Univ.)
Shigeyuki Morita (Univ. of Tokyo)
The abelianization of the symplectic derivation Lie algebra of the free associative algebra ····· 15

5 Kazuki Toda (Univ. of Tokyo) *
The second cohomology of the homological Goldman Lie algebra ····· 10

6 Nariya Kawazumi (Univ. of Tokyo) ♯
Yusuke Kuno (Tsuda Coll.)
On the Turaev cobracket and the Morita traces ····· 20

7 Jong Bum Lee (Sogang Univ.) ♯
The geometry of Sol^3 ····· 15

8 Suyoung Choi (Ajou Univ.) ♯
Hanchul Park (Ajou Univ.)
Rational homology of real toric variety over graph associahedra ····· 15

9 Junhui Kim (Wonkwang Univ.) ♯
A non-2-starcompact Tychonoff space whose hyperspace is 2-starcompact ·· 15

14:15–16:00

10 Kenshi Ishiguro (Fukuoka Univ.) ♯
Shotaro Kudo (Fukuoka Univ.)
Tomohiro Nakano (Wajiro Junior High School)
Pairings and monomorphisms of classifying spaces ····· 10

11 Tomohisa Inoue (Shinshu Univ.) ♯
Juno Mukai (Matsumoto Univ.)
The 31-stem homotopy groups of 9 and 10-dimensional spheres ····· 10

12 Ippei Ichigi (Kochi Nat. Coll. of Tech.)
Katsumi Shimomura (Kochi Univ.)
Yutaro Terahara (Kochi Univ.)
The homotopy groups of a type two spectrum grading over the Picard group of $\mathcal{L}_2$ ····· 15

13 Takahito Naito (Shinshu Univ.) ♯
String topology on rational Gorenstein spaces ····· 15

14 Ryo Kato (Nagoya Univ.) ♯
Katsumi Shimomura (Kochi Univ.)
Yutaro Tatehara (Kochi Univ.)
On the generalized retract conjecture ····· 10

15 Tadayuki Haraguchi (Okayama Univ.) *
Model structure of numerically generated spaces ····· 15

16:20–17:20 Talk invited by Topology Section

Toshio Sumi (Kyushu Univ.) *
The Smith equivalence problem and Smith sets of Oliver groups

September 19th (Wed) Conference Room VIII + IX

10:30–10:45 Presentation Ceremony for 2012 Geometry Prize

10:50–11:50 Award Lecture for 2012 Geometry Prize

Ken'ichi Ohshika (Osaka Univ.) ♯
Topological structure of deformation spaces of Kleinian groups

13:15–14:15 Award Lecture for 2012 Geometry Prize

Yukinobu Toda (Univ. of Tokyo) ♯
Stability conditions and Donaldson–Thomas type invariants on Calabi–Yau 3-folds

September 20th (Thu) Conference Room IX

9:30–11:45

16 Takuji Nakamura (Osaka Electro-Comm. Univ.) * — The state numbers of plane curves and knots · · · · · 10
Yasutaka Nakanishi (Kobe Univ.)
Shin Satoh (Kobe Univ.)
Yumi Toyama (Kobe Univ.)

17 Reiko Shinjo (Waseda Univ.) ♯ — On the inclusive relation of three properties of knot diagrams · · · · · 10
Kokoro Tanaka (Tokyo Gakugei Univ.)

18 Kokoro Tanaka (Tokyo Gakugei Univ.) ♯ — Interpretation of rack coloring knot invariants in terms of quandles · · · · · 15
Yuma Taniguchi (Tokyo Gakugei Univ.)

19 Masao Hara (Tokai Univ.) ♯ — On Jones polynomials of alternating pretzel knots · · · · · 10
Makoto Yamamoto (Chuo Univ.)

20 Atsuhiko Mizusawa (Waseda Univ.) ♯ — Yokota type invariants for oriented spatial graphs derived from Costantino–Murakami's invariants · · · · · 15

21 Kenta Okazaki (Kyoto Univ.) ♯ — On the Turaev–Viro–Ocneanu invariants of 3-manifolds associated with the E_6 and E_8 subfactor planar algebras · · · · · 10

22 Inasa Nakamura (Gakushuin Univ.) ♯ — Unknotting numbers and triple point cancelling numbers of torus-covering knots · · · · · 10

23 Yeonhee Jang (Nara Women's Univ.) ♯ — Distance of bridge presentations of links and essential surfaces in the link exteriors · · · · · 15

14:15–15:40

24 Kengo Kishimoto (Osaka Inst. of Tech.) ♯ — Simple ribbon fusions for links II · · · · · 10
Tetsuo Shibuya (Osaka Inst. of Tech.)
Tatsuya Tsukamoto (Osaka Inst. of Tech.)

25 Tetsuya Abe (Kyoto Univ.) ♯ — Annulus twists and diffeomorphic 4-manifolds · · · · · 15
In Dae Jong (Osaka Pref. Univ.)

26 Tetsuya Abe (Kyoto Univ.) ♯ — Omae's knot and 12_{a990} are ribbon · · · · · 15
Motoo Tange (Univ. of Tsukuba)

27 Yuichi Yamada (Univ. of Electro-Comm.) ♯ — Divide knot presentations of sporadic knots of Berge's lens space surgery · · 10

28 Motoo Tange (Univ. of Tsukuba) ♯ — Primitive/Seifert knots in the Poincaré homology sphere · · · · · 15

16:00–17:00 Talk invited by Topology Section

Koya Shimokawa (Saitama Univ.) ♯ — Tangle analysis of site-specific recombinations

September 21st (Fri) Conference Room IX

9:15–12:00

29 Yusuke Mizota (Kyushu Univ.) ♯ — Explicit construction of generators for the module of liftable vector fields · · 15

30 Masaru Kada (Osaka Pref. Univ.) ♯ — Galois–Tukey connection involving order structures of metrics · · · · · 20
Yasuo Yoshinobu (Nagoya Univ.)

31 Hanbiao Yang (Univ. of Tsukuba) * — Metrization of function spaces with the Fell topology · · · · · 10

32 Katsuhisa Koshino (Univ. of Tsukuba) * — Characterizing infinite-dimensional manifolds and its applications · · · · · 15

Infinite Analysis

September 18th (Tue) Conference Room VII

9:30–11:45

14:15–14:45

15:00–16:00 Talk invited by Infinite Analysis Special Session

September 19th (Wed) Conference Room VII

10:30–11:50

13:30–14:30 Talk invited by Infinite Analysis Special Session

Information for Speakers

The Organizing Committee apologizes that it had to cut the duration of contributed talks because of technical reasons. Since the schedule is very tight, we ask the speakers to strictly keep time. A bell will be rung when 2/3 of the assigned time has passed. A second bell will be rung as soon as the time is up, and the speaker has to leave the stage. The talks with $*$ mark are presented through document camera, while $\sharp$ marks denote PC presentations. The speakers with $\star$ marks are professors emeriti. If you find anything wrong in the program, do not hesitate to inform the Chair of Organizing Committee by sending e-mail to the address `program@mathsoc.jp`.

Each conference room is equipped with a black board, a document camera, and a projector for PC presentation. You are asked to use your own PC for a PC presentation. The time for connecting your PC to the projector is included in the assigned duration of your talk. You are recommended to check beforehand if your PC can be connected to the projector in the conference room. We strongly advise you to prepare an alternative method to present your talk such as printed sheets for the document camera in case your PC does not fit to the projector.

Information for Participants

Smoking is not allowed in any building on the Ito Campus. You may, however, find outdoor smoking spaces.

You can take lunch in Student Cafeteria in the building of Conference Rooms, a restaurant named BIG ORRANGE, and in a Chinese restaurant TEN-TEN in Inamori Memorial Hall.

The Mathematical Society of Japan has set up a webpage

`http://mathsoc.jp/i/`

which can be accessed by cell phones during the meeting. The Organizing Committee may announce there urgent notices such as traffic information on a typhoon storm day.

Official Party

Time: September 19th (Wed), 18:00–20:00
Venue: Inamori Center, Inamori Hall
Participants are asked to pay 5,000 JPY at the party.

Created: 2012/07/26 13:42

Directions

2012 MSJ AUTUMN MEETING

Dates : September 18th (Tue)–21st (Fri), 2012
Venue : Ito Campus, Kyushu University
Address : Motooka 744, Nishi-ku, Fukuoka
Contact to : Faculty of Mathematics, Kyushu Univeristy
Motooka 744, Nishi-ku, Fukuoka
Phone +81 (0) 92 802 4402
Fax +81 (0) 92 802 4405
E-mail kyushu12sept@mathsoc.jp
During session : Phone +81 (0) 80 4060 7734
Fax +81 (0) 92 802 4405
Web Site : http://mathsoc.jp/en/meeting/kyushu12sept/

Conference Rooms

	Room Number	Research Sections
Conference Room I	Center Zone Bldg. No. 2, Room 2308	Algebra
Conference Room II	Center Zone Bldg. No. 2, Room 2307	Complex Analysis, Real Analysis, Featured Invited Talks
Conference Room III	Center Zone Bldg. No. 2, Room 2306	Functional Equations
Conference Room IV	Center Zone Bldg. No. 2, Room 2305	Functional Analysis
Conference Room V	Center Zone Bldg. No. 2, Room 2304	Statistics and Probability
Conference Room VI	Center Zone Bldg. No. 2, Room 2407	Applied Mathematics, Featured Invited Talks
Conference Room VII	Center Zone Bldg. No. 2, Room 2406	Infinite Analysis, Foundation of Mathematics and History of Mathematics, Featured Invited Talk
Conference Room VIII	Center Zone Bldg. No. 2, Room 2404	Geometry
Conference Room IX	Center Zone Bldg. No. 2, Room 2403	Topology, Featured Invited Talks
Plenary Talks	Center Zone Bldg. No. 2, Room 2403 + 2403	
Open Lectures for Citizens	Faculty of Mathematics Bldg., Large Lecture Room No. 3	

All the conference rooms are in the Center Zone Building No. 2 on the 3rd and 4th floors. Moreover below is the list of rooms with important function:

Other Rooms

Extended Abstracts and Membership	Center Zone Bldg. No. 2, Room 2211
Discussion Rooms	Center Zone Bldg. No. 2, Room 2212, 2310, 2409
Book Display and Sale	Center Zone Bldg. No. 2, Room 2215, 2216
Executive Committee, MSJ President	Center Zone Bldg. No. 2, Room 2214
Official Party	Inamori Center, Inamori Hall