Final: 2021/8/10

2021 The Mathematical Society of Japan

AUTUMN MEETING

Dates: September 14th (Tue)–17th (Fri), 2021

Venue: Nishi-Chiba Campus, Chiba University
and Online via Zoom Webinar

Contact to: E-mail chiba21sept@mathsoc.jp

The Mathematical Society of Japan

	I	II	III	IV	V	VI	VII	VIII	IX
14th (Tue)	Infinite Analysis 10:00–12:00	Algebra 10:00–11:45 15:40–16:50	Geometry 10:00–12:00 14:25–15:25	Complex Analysis 10:00–12:00	Functional Equations 9:00–12:00 14:25–15:30	Functional Analysis 9:30–10:45	Statistics and Probability 9:15–11:40	Applied Mathematics 14:25–15:30	Topology 9:30–12:00 15:50–16:45
	Featured Invited Talks 13:00–14:00								
	Invited Talk 14:25–15:25	Invited Talk 14:25–15:25	Invited Talk 15:40–16:40	Invited Talk 14:25–15:25	Invited Talk 15:45–16:45	Invited Talk 11:00–12:00	Invited Talks 14:25–15:25 15:45–16:45	Invited Talk 15:45–16:45	Invited Talk 14:25–15:25
15th (Wed)	Infinite Analysis 10:00–11:00 Invited Talk 11:15–12:15	Algebra 9:30–12:00 Invited Talk 13:00–14:00		Complex Analysis 10:00–10:30 Invited Talk 11:00–12:00	Functional Equations 9:00–12:00 Invited Talk 13:00–14:00	Functional Analysis 9:00–10:45 Invited Talk 11:00–12:00	Statistics and Probability 10:00–11:40	Applied Mathematics 10:00–12:00	Geometry &Topology Invited Talks 10:35–11:35 13:15–14:15
	MSJ Prizes Presentation (General Studies Complex Bldg. 2) ····· (14:30–15:00) Plenary Talks (General Studies Complex Bldg. 2) Kazuo Akutagawa (Chuo Univ.) ····· (16:40–17:40) Autumn Prize Winner ····· (15:15–16:15)								
16th (Thu)	Found. of Math. & Hist. of Math. 10:15–12:00 14:40–15:30	Algebra 9:15–11:15 15:40–16:50	Geometry 10:00–12:00 14:25–15:25	Real Analysis 10:45–12:00 14:25–15:00	Functional Equations 9:00–12:00 14:25–15:30	Functional Analysis 9:00–10:45	Statistics and Probability 9:45–11:45	Applied Mathematics 9:30–10:45 14:25–15:35	Topology 9:30–12:00 15:50–16:50
	Featured Invited Talks 13:00–14:00								
		Invited Talk 14:25–15:25	Invited Talk 15:40–16:40	Invited Talk 15:15–16:15	Invited Talk 15:45–16:45	Invited Talk 11:00–12:00	Invited Talks 14:25–15:25 15:45–16:45	Invited Talks 11:00–12:00 15:50–16:50	Invited Talk 14:25–15:25
17th (Fri)	Found. of Math. & Hist. of Math. 9:20–10:15	Algebra 9:00–12:00 15:40–16:50		Real Analysis 9:45–12:00 14:25–15:00	Functional Equations 9:00–12:00 14:25–15:30			Applied Mathematics 10:30–12:00	
	Featured Invited Talks 13:00–14:00								
	Invited Talk 11:00–12:00	Invited Talk 14:25–15:25		Invited Talk 15:15–16:15	Invited Talk 15:45–16:45				

Plenary Talks

September 15th (Wed) General Studies Complex Bldg. 2 (Online via Zoom Webinar)

Award Lecture for the 2021 MSJ Autumn Prize

Autumn Prize Winner [Z] ..... (15:15–16:15)

Kazuo Akutagawa (Chuo Univ.) [Z] The Ricci flow on manifolds with boundary ..... (16:40–17:40)

Featured Invited Talks

September 14th (Tue)

Conference Room II

Atsushi Ichino (Kyoto Univ.) [Z] Automorphic forms of half-integral weight ..... (13:00–14:00)

Conference Room V

Yoshiyuki Kagei (Tokyo Tech) [Z] Stability and bifurcation analysis of the compressible Navier–Stokes equations ..... (13:00–14:00)

September 16th (Thu)

Conference Room II

Katsutoshi Yamanoi (Osaka Univ.) [Z] Topics on value distribution theory for holomorphic mappings ..... (13:00–14:00)

Conference Room V

Yoshio Tsutsumi (Kyoto Univ.) [Z] Nonlinear dispersive equations and function spaces ..... (13:00–14:00)

September 17th (Fri)

Conference Room II

Motoko Kotani (Tohoku Univ.) [Z] Discrete geometric analysis and its application ..... (13:00–14:00)

Conference Room VII

Shinichi Kotani [Z] KdV equation with ergodic initial data ..... (13:00–14:00)
(Osaka Univ.*/Nanjing Univ.)

Talks Invited by Research Sections and Special Session

September 14th (Tue)

Algebra (Conference Room II)

Kazuma Shimomoto (Nihon Univ.) Z — Arithmetical commutative ring theory —Beyond the homological conjectures— (14:25–15:25)

Geometry (Conference Room III)

Ryunosuke Ozawa (Nat. Defense Acad. of Japan) Z — Geometric analysis on directed graphs of Lin–Lu–Yau type Ricci curvature bounded below (15:40–16:40)

Complex Analysis (Conference Room IV)

Yûsuke Okuyama (Kyoto Inst. Tech.) Z — Complex dynamics and non-archimedean dynamics: moduli, degeneration, and reduction (14:25–15:25)

Functional Equations (Conference Room V)

Kohei Iwaki (Univ. of Tokyo) Z — Exact WKB analysis and related topics (15:45–16:45)

Functional Analysis (Conference Room VI)

Haruya Mizutani (Osaka Univ.) Z — Global-in-time Strichartz estimates for Schrödinger equations with potentials (11:00–12:00)

Statistics and Probability (Conference Room VII)

Syota Esaki (Fukuoka Univ.) Z — Stochastic analysis for long range interacting particle systems with jumps (14:25–15:25)

Daehong Kim (Kumamoto Univ.) Z — Scattering lengths for positive additive functionals and their related problems (15:45–16:45)

Applied Mathematics (Conference Room VIII)

Keisuke Shiromoto (Kumamoto Univ.) Z — Critical Problem for matroids (15:45–16:45)

Topology (Conference Room IX)

Naohiko Kasuya (Hokkaido Univ.) Z — Contact structure on the boundary of a strongly pseudoconcave complex surface (14:25–15:25)

Infinite Analysis (Conference Room I)

Hironori Oya (Shibaura Inst. of Tech.) Z — Twist maps and their applications (14:25–15:25)

September 15th (Wed)

Algebra (Conference Room II)

Sven Möller (Kyoto Univ.) Z — A geometric classification of the holomorphic vertex operator algebras of central charge 24 (13:00–14:00)

Complex Analysis (Conference Room IV)

Genki Hosono (Tohoku Univ.) Z — Optimal L^2 extension theorem and L^2 theoretic positivity (11:00–12:00)

Functional Equations (Conference Room V)

Masahiko Shimojo (Tokyo Metro. Univ.) Z — Spreading and extinction of solutions to the logarithmic diffusion equation with a logistic reaction (13:00–14:00)

Functional Analysis (Conference Room VI)

Hideto Nakashima (Inst. of Stat. Math.) Z — Functional equations of zeta functions associated with homogeneous cones and their gamma matrices ····· (11:00–12:00)

Topology (Conference Room IX)

Award Lecture for the 2021 MSJ Geometry Prize

Nariya Kawazumi (Univ. of Tokyo) Z, Yusuke Kuno (Tsuda Coll.) — In search of the Lie algebra of the mapping class group ··· (10:35–11:35)

Award Lecture for the 2021 MSJ Geometry Prize

Jun Murakami (Waseda Univ.) Z — The Jones polynomial and its applications ····· (13:15–14:15)

Infinite Analysis (Conference Room I)

Satoshi Tsujimoto (Kyoto Univ.) Z — The rational Heun operator and Wilson biorthogonal rational functions ····· (11:15–12:15)

September 16th (Thu)

Algebra (Conference Room II)

Atsushi Kanazawa (Keio Univ.) Z — Attractor mechanisms of Calabi–Yau manifolds and around ····· (14:25–15:25)

Geometry (Conference Room III)

Hitoshi Furuhata (Hokkaido Univ.) Z — Submanifold theory in statistical manifolds ····· (15:40–16:40)

Functional Equations (Conference Room V)

Mamoru Okamoto (Osaka Univ.) Z — Almost sure global well-posedness for a nonlinear Klein–Gordon equation in three dimensions ····· (15:45–16:45)

Real Analysis (Conference Room IV)

Shohei Nakamura (Osaka Univ.) Z — A study of the Fourier extension operator via X-ray tomography principle ····· (15:15–16:15)

Functional Analysis (Conference Room VI)

Takeaki Yamazaki (Toyo Univ.) Z — Operator means and operator inequalities ····· (11:00–12:00)

Statistics and Probability (Conference Room VII)

Yugo Nakayama (Kyoto Univ.) Z — High-dimensional data classification based on Gaussian kernel ····· (14:25–15:25)

Keisuke Yano (Inst. of Stat. Math.) Z — Recent development of predictive densities ····· (15:45–16:45)

Applied Mathematics (Conference Room VIII)

Tomoo Yokoyama (Gifu Univ.) Z — Topological flow analysis and its application ····· (11:00–12:00)

Masakazu Akiyama (Meiji Univ.) Z — A mathematical study on the left-right asymmetry of living organisms ····· (15:50–16:50)

Topology (Conference Room IX)

Yasushi Yamashita (Nara Women's Univ.) Z — Computer experiments on Möbius transformations and random Kleinian groups ····· (14:25–15:25)

September 17th (Fri)

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

Takayuki Kihara (Nagoya Univ.) Z Hierarchies of computability and definability ····· (11:00–12:00)

Algebra (Conference Room II)

Daichi Takeuchi (RIKEN) Z Characteristic epsilon cycles of ℓ-adic sheaves on varieties · (14:25–15:25)

Functional Equations (Conference Room V)

Masahiro Suzuki (Nagoya Inst. of Tech.) Z Mathematical analysis of plasma boundary layers ····· (15:45–16:45)

Real Analysis (Conference Room IV)

Hiroki Ohwa (Niigata Univ.) Z An L^p shock admissibility condition for conservation laws · (15:15–16:15)

Open Lectures for Citizens

Date: September 18th (Sat) 14:00–15:10
Venue: Online via Zoom Webinar
Sponsored by: The Mathematical Society of Japan
Co-sponsored by: Department of Mathematics and Informatics,
Faculty of Science, Chiba University
Program: Opening Speech ····· (14:00–14:10)
Senjou Shimizu (President of MSJ / Kyoto Univ.)

Lecture 1: "Mathematics and language in Japan —on the occasion of 120th year of Kiyoshi Oka's birth—" ····· (14:10–15:10)
Junjiro Noguchi (Univ. of Tokyo / Tokyo Inst. Tech.)

Web Page: `https://www.mathsoc.jp/en/meeting/chiba21sept/`

Foundation of Mathematics and History of Mathematics

September 16th (Thu) Conference Room I

10:15–12:00

1 Kohtaro Tadaki (Chubu Univ.) [Z] A refinement of quantum information theory by algorithmic randomness V 15

2 Takahiro Seki (Niigata Univ.) [Z] A classification of a family of associativity associated with exchange 15

3 Yuya Okawa (Chiba Univ.) [Z] Unary interpretability logics for sublogics of the interpretability logic **IL** 15

4 Taishi Kurahashi (Kobe Univ.) [Z] On inclusions between quantified provability logics 15

5 Sohei Iwata (Kobe Univ.) [Z] Topological semantics of extensions of the conservativity logic CL 15
Taishi Kurahashi (Kobe Univ.)

6 Taishi Kurahashi (Kobe Univ.) [Z] Disjunction and existence properties in modal arithmetic 15

14:40–15:30

7 Daniel Găină (Kyushu Univ.) [Z] Omitting Types Theorem in hybrid-dynamic first-order logic with rigid symbols 15
Guillermo Badia
(Univ. of Queensland / Johannes Kepler Univ. Linz)
Tomasz Kowalski (La Trobe Univ.)

8 Akito Tsuboi (Univ. of Tsukuba*) [Z] Torsion-free groups and model completeness 10

9 Koichiro Ikeda (Hosei Univ.) [Z] Groups in generic structures 15

September 17th (Fri) Conference Room I

9:20–10:15

10 Ryosuke Maki (Osaka Pref. Univ.) [Z] Sierpiński–Zygmund number and Suslin forcing 15
Masaru Kada (Osaka Pref. Univ.)

11 Toshimichi Usuba (Waseda Univ.) [Z] Generically extendible cardinals 15

12 Sakaé Fuchino (Kobe Univ.) [Z] First-order definability of generic and Laver-generic large cardinals 15

10:30–10:45 Research Section Assembly

11:00–12:00 Talk Invited by Section on Foundation and History of Mathematics

Takayuki Kihara (Nagoya Univ.) [Z] Hierarchies of computability and definability

Afternoon

13 Shigeru Masuda (Res. Workshop of Classical Fluid Dynamics) Theory of the Eulerian integrals by Legendre ..... *

14 Shigeru Masuda (Res. Workshop of Classical Fluid Dynamics) Legendre's theory of elliptic functions and Abel's theories ..... *

15 Shigeru Masuda (Res. Workshop of Classical Fluid Dynamics) Jacobi's papers to Abel and Legendre on the theory of the elliptic functions ..... *

16 Saburou Saitoh (Gunma Univ.*/Inst. of Reproducing Kernels) — Division by zero and division by zero calculus ····· *

17 Kyohei Yokomizo (Kanto Gakuin Univ.), Tatsuya Shimura (Nihon Univ.) — The conservativity problem on between fragments of a generalization of Avron's hypersequent calculus **GLCW** ····· *

18 Kenetsu Fujita (Gunma Univ.), Toshihiko Kurata (Hosei Univ.) — On formalization of logic puzzles à la George Boolos ····· *

19 Yukinobu Yajima (Kanagawa Univ./Math Art Laboratory), Yasushi Hirata (Kanagawa Univ.) — Inequality and equality for the extent of products with a special factor ····· *

20 Yukinobu Yajima (Kanagawa Univ./Math Art Laboratory), Yasushi Hirata (Kanagawa Univ.), Toshimichi Usuba (Waseda Univ.) — Equalities for the extent of infinite products and Σ-products ····· *

14:45–15:00 Mathematics History Team Meeting

Algebra

September 14th (Tue) Conference Room II

10:00–11:45

1 Toshinori Kobayashi (Meiji Univ.) Z — Characterizations of nearly Gorenstein rings ····· 10

2 Maiko Ono (Okayama Univ. of Sci.) Z, Saeed Nasseh (Georgia Southern Univ.), Yuji Yoshino (Okayama Univ.) — On naïvely liftable DG modules ····· 15

3 Tsutomu Nakamura (Univ. of Tokyo) Z — Adelic complexes over commutative noetherian rings ····· 15

4 Hiroki Matsui (Univ. of Tokyo) Z — Prime thick subcategories of triangulated categories and its applications ····· 15

5 Shinnosuke Ishiro (Nihon Univ.) Z, Kazuma Shimomoto (Nihon Univ.), Kei Nakazato (Nagoya Univ.) — Local log-regular rings and its small tilt ····· 15

6 Takeshi Yoshizawa (Toyota Nat. Coll. of Tech.) — Annihilators of local cohomology modules over a finite-dimensional Cohen–Macaulay ring ····· *

14:25–15:25 Talk Invited by Algebra Section

Kazuma Shimomoto (Nihon Univ.) Z — Arithmetical commutative ring theory —Beyond the homological conjectures—

15:40–16:50

7 Yoshiharu Shibata (Yamaguchi Univ.) Z
Isao Kikumasa (Yamaguchi Univ.)
Yosuke Kuratomi (Yamaguchi Univ.)
On relative almost projectivity and relative generalized projectivity .. 10

8 Haigang Hu (Shizuoka Univ.) Z
Masaki Matsuno (Shizuoka Univ.)
Izuru Mori (Shizuoka Univ.)
Noncommutative conics in Sklyanin Quantum Projective Planes 15

9 Sota Asai (Osaka Univ.) Z
Osamu Iyama (Univ. of Tokyo)
Canonical decompositions and numerical torsion pairs for elements in the Grothendieck group 15

10 Kazuho Ozeki (Yamaguchi Univ.) Z
The reduction number of stretched ideals 15

11 Shuhei Tsujie (Hokkaido Univ. of Edu.)
Masamichi Kuroda (Nippon Bunri Univ.)
Characteristic quasi-polynomials of hyperplane arrangements over the rings of integers of algebraic number fields ..... ∗

12 Yousuke Kuratomi (Yamaguchi Univ.)
On direct sums of hollow modules ..... ∗

September 15th (Wed) Conference Room II

9:30–12:00

13 Satoshi Usui (Tokyo Univ. of Sci.) Z
Eventually periodic Gorenstein algebras and Tate–Hochschild cohomology rings 15

14 Shigeo Koshitani (Chiba Univ.) Z
İpek Tuvay (Mimar Sinan Fine Arts Univ.)
The Brauer indecomposability of the Scott module for a finite group with a semidihedral Sylow 2-subgroup 10

15 Shigeo Koshitani (Chiba Univ.) Z
Caroline Lassueur (TU Kaiserslautern)
Benjamin Sambale (Leibniz Univ. Hannover)
Splendid Morita equivalences for principal blocks with semidihedral defect groups 10

16 Taro Sakurai (Chiba Univ.) Z
Shigeo Koshitani (Chiba Univ.)
Principal blocks with four irreducible characters 10

17 Yuto Moriwaki (Kyoto Univ.) Z
Construction of new conformal field theories with codes 15

18 Naoki Genra (Univ. of Tokyo) Z
On Adamović path in type A 10

19 Mawo Ito (Kyoto Univ.) Z
Shuhei Kamioka (Kyoto Univ.)
A generalized hook-content formula derived from the Askey–Wilson polynomials 10

20 Masahiko Yoshinaga (Hokkaido Univ.) Z
Christopher de Vries (Bremen Univ. / Hokkaido Univ.)
The Ehrhart quasi-polynomials of rationally translated lattice polytopes 15

21 Toshiya Yurikusa (Tohoku Univ.)
Cluster algebras with dense g-vector fans ..... ∗

22 Mamoru Ueda (Kyoto Univ.)
Affine twisted Yangians and rectangular W-algebras of type D ..... ∗

23 Yuanqing Cai (Kanazawa Univ.)
Twisted doubling integrals for Brylinski–Deligne extensions of classical groups ..... ∗

24 Yugen Takegahara (Muroran Inst. of Tech.) — p-adic properties of the numbers of representations in wreath products ····· ∗

25 Shigeto Kawata (Nagoya City Univ.) — On tensor products and Scott lattices over group rings ····· ∗

13:00–14:00 Talk Invited by Algebra Section

Sven Möller (Kyoto Univ.) Z — A geometric classification of the holomorphic vertex operator algebras of central charge 24

September 16th (Thu) Conference Room II

9:15–11:15

26 Shingo Yashiro (Japan Univ. of Econ.) Z — ACM curves on Del Pezzo surfaces ····· 15

27 Riku Kudou (Waseda Univ.) Z — An affine criterion for affine bundles over quasi-affine varieties ····· 15

28 Akiyoshi Tsuchiya (Univ. of Tokyo) Z — Castelnuovo polytopes ····· 15

29 Selvi Kara (Univ. South Alabama) Z, Irem Portakal (Otto-von-Guericke-Univ. Magdeburg), Akiyoshi Tsuchiya (Univ. of Tokyo) — Rigidity of Gorenstein toric Fano varieties arising from graphs ····· 15

30 Kaori Suzuki (Yokohama Nat. Univ.) Z — On Fano-3folds of codim 5 with large Fano index ····· 15

31 Norihiko Minami (Nagoya Inst. of Tech.) Z — Relations among higheries originating from lower rationality = higher uniruledness —separably (-i) rationally connectedness— ····· 15

11:30–12:00 Research Section Assembly

14:25–15:25 Talk Invited by Algebra Section

Atsushi Kanazawa (Keio Univ.) Z — Attractor mechanisms of Calabi–Yau manifolds and around

15:40–16:50

32 Makoto Sakurai (Kaichi Gakuen) Z — Factorization algebras and the quasi-modular form conjecture of mirror symmetry ····· 15

33 Kotaro Kawatani (Osaka Pref. Univ. / Yamato Univ.) Z — Stability conditions on morphisms on a category ····· 15

34 Yoshimune Koreeda (Hiroshima Univ.) Z — On the configuration of the singular fibers of jet schemes of rational double points ····· 15

35 Kenta Sato (Kyushu Univ.) Z, Shunsuke Takagi (Univ. of Tokyo) — Deformation of klt/lc singularities ····· 15

36 Tomohiro Iwami (Kyushu Inst. of Tech.) — Threefolds whose numerical Kodaira dimensions 1 or 2 and three-dimensional Miyaoka–Yau type inequality with the 3rd Chern classes driven by symmetric 2-forms ····· ∗

37 Tetsuya Ando (Chiba Univ.) — Test set —as an application of characteristic varieties of inequalities— ····· ∗

38 Michio Amano (Meisei Univ.) — On the Cartier duality of certain finite group schemes over $\mathbb{Z}_{(p)}$-algebra containing some nilpotent elements ····· ∗

39 Mariko Ohara (Oshima Nat. Coll. of Maritime Tech.) — On Algebraic K-theory of duoidal category ····· ∗

40 Momonari Kudo (Univ. of Tokyo), Shushi Harashita (Yokohama Nat. Univ.) — Parameterizing generic curves of genus five and its application to finding curves with many rational points ····· *

41 Yusuke Suyama (Osaka City Univ.) — 2-Fano Bott manifolds ····· *

42 Taku Suzuki (Utsunomiya Univ.) — Slope stability of Fano manifolds ····· *

September 17th (Fri) Conference Room II

9:00–12:00

43 Yoshiaki Okumura (Toyo Univ.) Z — On congruence of Galois representations attached to A-motives ····· 12

44 Hiroto Horiba Z, Masanari Kida (Tokyo Univ. of Sci.), Genki Koda (Tokyo Univ. of Sci.) — Galois theoretic study on simultaneous representation of primes by binary quadratic forms ····· 12

45 Akinari Hoshi (Niigata Univ.) Z, Kazuki Kanai (Niigata Univ.) — Davenport and Hasse's theorems and lifts of multiplication matrices of Gaussian periods ····· 10

46 Norihiko Minami Z (Nagoya Inst. of Tech.) — Relations among higheries originating from lower rationality = higher uniruledness —applications to Noether's problem for finite groups— ····· 12

47 Yasuhiro Terakado (NCTS) Z — Mass formulas on the basic loci of unitary Shimura varieties ····· 12

48 Yasuhiro Oki (Univ. of Tokyo) Z — A question on the weak approximation on tori over the rational number field ····· 12

49 Masahiro Mine (Sophia Univ.) Z — Large deviations for values of automorphic L-functions ····· 12

50 Yasufumi Hashimoto Z (Univ. of Ryukyus) — Square integral of Selberg's zeta function in the critical strip ····· 12

51 Kohichi Ohki (OK Lab. Co. Ltd.) Z — The determinant representation of the entire Riemann's Zeta function and proof of it's matrix is Hermitian ····· 12

52 Masato Kobayashi (Kanagawa Univ.) Z, Shunji Sasaki (Kamiaoki Junior High School) — Some infinite series analogous to Riemann's zeta function ····· 12

53 Wataru Takeda (Tokyo Univ. of Sci.) Z, Maki Nakasuji (Sophia Univ.) — Extended Jacobi–Trudi formula for Schur multiple zeta functions and its applications ····· 12

54 Daichi Matsuzuki (Nagoya Univ.) Z — Finite multiple zeta values with non-all-positive indices in positive characteristic ····· 12

14:25–15:25 Talk Invited by Algebra Section

Daichi Takeuchi (RIKEN) Z — Characteristic epsilon cycles of ℓ-adic sheaves on varieties

15:40–16:50

55 Kota Saito (Nagoya Univ.) Z — Prime-representing functions and Hausdorff dimension ····· 12

56 Daniel Tsai (Nagoya Univ.) Z — A recurring pattern in natural numbers of a certain property ····· 12

57 Takafumi Miyazaki (Gunma Univ.) Z — Number of solutions to the exponential Diophantine equation $a^x + b^y = c^z$ ····· 12

Geometry

September 14th (Tue) Conference Room Ⅲ

10:00–12:00

14:25–15:25

7 Kotaro Kawai (Gakushuin Univ.) [Z]
Hikaru Yamamoto (Univ. of Tsukuba)
Deformation theory of deformed Donaldson–Thomas connections for Spin(7)-manifolds ····· 15

8 Kotaro Kawai (Gakushuin Univ.) [Z]
Hikaru Yamamoto (Univ. of Tsukuba)
Mirror of volume functionals on manifolds with special holonomy ····· 15

9 Tatsuki Kuwagaki (Osaka Univ.) [Z]
Symplectic geometry and exact WKB analysis ····· 15

10 Homare Tadano (Yamaguchi Univ.)
Boju–Funar type theorems via m-Bakry–Émery and m-modified Ricci curvatures ····· *

11 Homare Tadano (Yamaguchi Univ.)
m-Bakry–Émery Ricci curvatures, Riccati inequalities, and bounded diameters ····· *

12 Takayuki Moriyama (Mie Univ.)
Takashi Nitta (Mie Univ.)
Quaternionic k-vector fields on quaternionic Kähler manifolds ····· *

15:40–16:40 Talk Invited by Geometry Section

Ryunosuke Ozawa [Z]
(Nat. Defense Acad. of Japan)
Geometric analysis on directed graphs of Lin–Lu–Yau type Ricci curvature bounded below

September 15th (Wed) Conference Room IX

10:10–10:20 Announcement of the 2021 MSJ Geometry Prize

10:35–11:35 Award Lecture for the 2021 MSJ Geometry Prize

Nariya Kawazumi (Univ. of Tokyo) [Z]
Yusuke Kuno (Tsuda Coll.)
In search of the Lie algebra of the mapping class group

13:15–14:15 Award Lecture for the 2021 MSJ Geometry Prize

Jun Murakami (Waseda Univ.) [Z]
The Jones polynomial and its applications

September 16th (Thu) Conference Room III

10:00–12:00

13 Taito Tauchi (Kyushu Univ.) [Z]
Tsuyoshi Yoneda (Univ. of Tokyo)
Positivity for the curvature of the diffeomorphism group corresponding to the incompressible Euler equation with Coriolis force ····· 15

14 Masahiro Kawamata (Hiroshima Univ.) [Z]
On properties of the generalized Monge–Ampère equation and its geometric singular solutions ····· 15

15 Yoshiki Jikumaru (Kyushu Univ.) [Z]
On the stability problem of discrete planar curves ····· 15

16 Yuichiro Sato (Tokyo Metro. Univ.) [Z]
Duality of hypersurfaces in pseudo-Riemannian space forms and light-cones ····· 15

17 Johannes Jaerisch (Nagoya Univ.) [Z]
Hiroki Takahasi (Keio Univ.)
Cusp winding spectra for some hyperbolic surfaces ····· 15

18 Tomoki Fujii (Tokyo Univ. of Sci.) [Z]
Graphical translating solitons for the mean curvature flow and isoparametric functions ····· 15

14:25–15:25

19 Yoshio Agaoka (Hiroshima Univ.*) Takahiro Hashinaga (Kitakyushu Nat. Coll. of Tech.) — Local isometric embedding of 3-dimensional warped product metrics and the Monge–Ampère equation ····· 15

20 Kazuyuki Enomoto (Tokyo Univ. of Sci.*) Jin-ichi Itoh (Sugiyama Jogakuen Univ.) — Total integral of curvatures of spherical curves ····· 15

21 Makiko Sumi Tanaka (Tokyo Univ. of Sci.) Hiroyuki Tasaki (Univ. of Tsukuba) — Maximal antipodal sets of classical compact symmetric spaces II ····· 15

22 Katsuhiro Moriya (Univ. of Hyogo) — Transforms of minimal surfaces in the unit sphere ····· *

23 Yuuki Sasaki (Tokyo Nat. Coll. of Tech.) — Maximal antipodal sets of F_4 and FI ····· *

24 Yuichiro Sato (Tokyo Metro. Univ.) — Classification of isoparametric hypersurfaces with diagonalizable shape operator in pseudo-spheres ····· *

15:40–16:40 Talk Invited by Geometry Section

Hitoshi Furuhata (Hokkaido Univ.) — Submanifold theory in statistical manifolds

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Complex Analysis

September 14th (Tue) Conference Room IV

10:00–12:00

1 Hiroshi Yanagihara (Yamaguchi Univ.) Shota Hoshinaga (Yamaguchi Univ.) — The sharp distortion estimate concerning Julia's lemma ····· 15

2 Hiroaki Aikawa (Chubu Univ.) Michiel van den Berg (Univ. of Bristol) Jun Masamune (Hokkaido Univ.) — Intrinsic ultracontractivity for domains in negatively curved manifolds ····· 15

3 Shun Kumagai (Tohoku Univ.) — Veech groups of general origamis ····· 15

4 Ikkei Hotta (Yamaguchi Univ.) Pavel Gumenyuk (Univ. Politecnico di Milano) — Univalent functions with quasiconformal extensions: Becker's class and estimates of the third coefficient ····· 15

5 Ikkei Hotta (Yamaguchi Univ.) Makoto Katori (Chuo Univ.) Andrea del Monaco (Univ. degli Studi di Roma "Tor Vergata") Sebastian Schleißinger (Univ. Würzburg) — Limits of multiple SLE and a Burgers–Loewner differential equation ····· 15

6 Ikkei Hotta (Yamaguchi Univ.) Takahiro Hasebe (Hokkaido Univ.) — Additive processes on the unit circle and Loewner chains ····· 15

7 Sei-Ichiro Ueki (Tokai Univ.) Mean Lipschitz condition and growth of area integral mean in the Bergman space ····· *

8 Saburou Saitoh (Gunma Univ.*/Inst. of Reproducing Kernels) Hiroshi Okumura Mysterious properties of the Laurent expansions in connection with geometry ····· *

14:25–15:25 Talk Invited by Complex Analysis Section

Yûsuke Okuyama (Kyoto Inst. Tech.) Z Complex dynamics and non-archimedean dynamics: moduli, degeneration, and reduction

September 15th (Wed) Conference Room IV

10:00–10:30

9 Takanori Ayano (Osaka City Univ.) Z Victor M. Buchstaber (Steklov Inst. of Math.) Restrictions of the domain of the hyperelliptic functions of genus 2 ····· 15

10 Masanori Adachi (Shizuoka Univ.) Z Judith Brinkschulte (Univ. Leipzig) Dynamical aspects of foliations with ample normal bundle ····· 15

11 Makoto Abe (Hiroshima Univ.) Shun Sugiyama (NEC Comm. Systems, Ltd.) A characterization of subpluriharmonicity by using quadratic functions ····· *

12 Shinichi Tajima (Niigata Univ.*) Katsusuke Nabeshima (Tokyo Univ. of Sci.) A new deterministic method for computing Milnor number of an ICIS ····· *

13 Yuta Takada (Hokkaido Univ.) Katsunori Iwasaki (Hokkaido Univ.) Siegel disks on K3 surfaces and Picard numbers ····· *

14 Masataka Iwai (Tohoku Univ.) On the structure of a log smooth pair in the equality case of the Bogomolov–Gieseker inequality ····· *

15 Takeo Ohsawa (Nagoya Univ.) L^2 cohomology with weights and bundle convexity of certain locally pseudoconvex domains ····· *

16 Takeo Ohsawa (Nagoya Univ.) On the Levi problem on Kähler manifolds under the negativity of canonical bundles on the boundary ····· *

11:00–12:00 Talk Invited by Complex Analysis Section

Genki Hosono (Tohoku Univ.) Z Optimal L^2 extension theorem and L^2 theoretic positivity

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Functional Equations

September 14th (Tue) Conference Room V

9:00–12:00

1 Saiei-Jaeyeong Matsubara-Heo Z (Kobe Univ.) Localization formulas of cohomology intersection numbers ····· 14

2 Sunao Ōuchi (Sophia Univ.*) Z Transformation and construction of solutions of a system of nonlinear ordinary differential equations by Borel summable functions ····· 14

3 Mika Tanda (Kwansei Gakuin Univ.) Z Exact WKB analysis of the hypergeometric differential equation with a simple pole ····· 14

4 Kanam Park (Kwansei Gakuin Univ.) Z A 3×3 Lax form for q-Painlevé equations of type E_6 ····· 14

5 Masakazu Onitsuka (Okayama Univ. of Sci.) Z Ulam stability for Cayley quantum equations ····· 14

6 Kotaro Watanabe (Nat. Defense Acad. of Japan), Satoshi Tanaka (Tohoku Univ.), Naoki Shioji Z Multiple existence of positive even function solutions for a two point boundary value problem on some very narrow possible parameter set ····· 14

7 Kodai Fujimoto (Osaka Pref. Univ.), Miroslav Bartušek (Masaryk Univ.) Z Singular solutions of ordinary differential equations with $p(t)$-Laplacian ····· 14

8 Kazuki Ishibashi (Hiroshima Nat. Coll. of Maritime Tech.) Z Oscillation problem for modified Mathieu differential equation ····· 10

9 Tetsutaro Shibata (Hiroshima Univ.) Z Global structure of bifurcation curves related to inverse bifurcation problems ····· 14

10 Ryuji Kajikiya (Saga Univ.) Z Bifurcation of nodal solutions for the Moore–Nehari differential equation ····· 14

11 Yasuhito Miyamoto (Univ. of Tokyo), Norihisa Ikoma (Keio Univ.) Z Stable standing waves of nonlinear Schrödinger equations with potentials and general nonlinearities ····· 10

12 Shinji Adachi (Shizuoka Univ.), Tatsuya Watanabe (Kyoto Sangyo Univ.) Z G-invariant positive solutions for a class of locally superlinear Schrödinger equations ····· 14

14:25–15:30

13 Tatsuki Mori (Musashino Univ.), Tohru Tsujikawa (Univ. of Miyazaki*), Shoji Yotsutani (Ryukoku Univ.*) Z Representation formulas for stationary solutions of a cell polarization model ····· 14

14 Eita Tomimatsu (Tokyo Tech) Z Some Allard type regularity theorem for one-dimensional integral varifolds ····· 10

15 Kensuke Yoshizawa (Tohoku Univ.) Z The critical points of the elastic energy among curves pinned at endpoints ····· 14

16 Erika Ushikoshi (Yokohama Nat. Univ./Osaka Univ.), Shuichi Jimbo (Hokkaido Univ.), Hiromasa Yoshihara (Yokohama Nat. Univ.) Z Asymptotic behavior of the eigenfrequencies of a thin elastic rod with non-uniform cross-section for non-isotropic shrinking ····· 14

17 Hidetoshi Tahara (Sophia Univ.*) Uniqueness of the solution of some nonlinear singular partial differential equations ····· *

18 Humihiko Watanabe (Nat. Defense Acad. of Japan), Yasuhiro Mizutani (Nat. Defense Acad. of Japan) On integrals of hypergeometric type of genus 2 ····· *

19 Hiroyuki Usami (Gifu Univ.)
Sokea Luey (Gifu Univ.)
Asymptotic forms of solutions of perturbed half-linear ordinary differential equations ····· *

20 Akari Ishida (Osaka Univ.)
A depth-dependent stability estimate in an iterative method for solving a Cauchy problem for the Laplace equation ····· *

21 Kazuhiro Takimoto (Hiroshima Univ.)
Exact blowup rate near the boundary of boundary blowup solutions to k-Hessian equation ····· *

22 Saburou Saitoh (Gunma Univ.*/Inst. of Reproducing Kernels)
Many problems in differential equations from the viewpoint of division by zero calculus ····· *

15:45–16:45 Talk Invited by Functional Equations Section

Kohei Iwaki (Univ. of Tokyo) Z
Exact WKB analysis and related topics

September 15th (Wed) Conference Room V

9:00–12:00

23 Masato Hashizume (Hiroshima Univ.) Z
Asymptotic behavior of critical points for subcritical Trudinger–Moser functional ····· 14

24 Takashi Suzuki (Osaka Univ.) Z
Blowup of solutions to nonlinear elliptic eigenvalue problems ····· 5

25 Evan William Chandra (Osaka Univ.) Z
Michinori Ishiwata (Osaka Univ.)
Rolando Magnanini (Univ. of Florence)
Hidemitsu Wadade (Kanazawa Univ.)
Variational p-harmonious functions: existence and convergence to p-harmonic functions ····· 14

26 Yuya Tanaka (Tokyo Univ. of Sci.) Z
Boundedness and blow-up in a quasilinear parabolic-elliptic chemotaxis system with logistic source and nonlinear production ····· 14

27 Yutaro Chiyo (Tokyo Univ. of Sci.) Z
Tomomi Yokota (Tokyo Univ. of Sci.)
Boundedness in an attraction-repulsion chemotaxis system with nonlinear diffusion and singular sensitivity ····· 14

28 Taiki Takeuchi (Waseda Univ.) Z
On the Keller–Segel system of parabolic-parabolic type in homogeneous Besov spaces framework ····· 12

29 Yūki Naito (Hiroshima Univ.) Z
Blow-up criteria for the classical Keller–Segel system in higher dimensions ····· 10

30 Tatsuya Hosono (Tohoku Univ.) Z
Takayoshi Ogawa (Tohoku Univ.)
Finite time blow-up of solutions to an attraction-repulsion chemotaxis system in higher dimensions ····· 14

31 Ryu Fujiwara (Meiji Univ.) Z
Discontinuous steady states of the nonlocal prey-predator system ···· 14

32 Yuta Ishii (Ibaraki Nat. Coll. of Tech.) Z
On one-peak stationary solutions for the Gierer–Meinhardt model with heterogeneity on Y-shaped metric graph ····· 14

33 Ken-Ichi Nakamura (Kanazawa Univ.) Z
Yoshihisa Morita (Ryukoku Univ.)
Toshiko Ogiwara (Josai Univ.)
Front propagation and blocking of the competition-diffusion system in a domain of half-lines with a junction ····· 14

34 Ken-Ichi Nakamura (Kanazawa Univ.) Z
Toshiko Ogiwara (Josai Univ.)
A classification of strong competition conditions by the speed of traveling waves for Lotka–Volterra competition-diffusion systems ····· 14

35 Kenta Nakamura (Kumamoto Univ.)
Masashi Misawa (Kumamoto Univ.)
Intrinsic scaling method for fast diffusive type doubly nonlinear equations ····· *

36 Yasuhito Miyamoto (Univ. of Tokyo)
Masamitsu Suzuki (Univ. of Tokyo)
Thresholds on growth of nonlinearities and singularity of initial functions for semilinear heat equations ····· *

37 Tomoyuki Tanaka (Nagoya Univ.)
Luc Molinet (Univ. de Tours)
Unconditional well-posedness for some nonlinear periodic one-dimensional dispersive equations ····· *

38 Noboru Chikami (Nagoya Inst. of Tech.)
Masahiro Ikeda (RIKEN/Keio Univ.)
Koichi Taniguchi (Tohoku Univ.)
Optimal well-posedness of Hardy–Hénon parabolic equation ····· *

39 Atsushi Nakayasu (Kyoto Univ.)
Homogenization of Hamilton–Jacobi equations on the Sierpinski gasket ····· *

40 Isamu Ohnishi (Hiroshima Univ.)
Characterization of a long-term behavior of solutions to nonlinear parabolic PDEs with a jumping effect ····· *

41 Kota Ikeda (Meiji Univ.)
Center manifold theory for a mathematical model of camphor boats ····· *

42 Yikan Liu (Hokkaido Univ.)
Uniqueness for the simultaneous determination of multiple coefficients in a fractional evolution equation by a single measurement ····· *

13:00–14:00 Talk Invited by Functional Equations Section

Masahiko Shimojo (Tokyo Metro. Univ.) Z
Spreading and extinction of solutions to the logarithmic diffusion equation with a logistic reaction

September 16th (Thu) Conference Room V

9:00–12:00

43 Nao Hamamuki (Hokkaido Univ.) Z
Kuniyasu Misu (Hokkaido Univ.)
Asymptotic shape of solutions to the mean curvature flow equation with discontinuous source terms ····· 14

44 Takashi Kagaya (Kyushu Univ.) Z
Qing Liu (Fukuoka Univ.)
Singular Neumann boundary problems for a class of fully nonlinear parabolic equations ····· 14

45 Takeshi Suguro (Tohoku Univ.) Z
Takayoshi Ogawa (Tohoku Univ.)
Asymptotic behavior of a solution to the drift-diffusion equation for a fast-diffusion case via a generalized entropy ····· 14

46 Kotaro Sato (Tohoku Univ.) Z
Goro Akagi (Tohoku Univ.)
On some quasistatic evolution equation with irreversibility and energy-conservation ····· 14

47 Naoki Hamamoto (Osaka Pref. Univ.) Z
Sharp uncertainty principle inequality for solenoidal fields ····· 12

48 Kenta Higuchi (Ritsumeikan Univ.) Z
Semiclassical resonances for systems near a non-trapping energy for scalar Schrödinger operators ····· 14

49 Naoki Matsui (Tokyo Univ. of Sci.) Z
Minimal-mass blow-up solutions for nonlinear Schrödinger equations with potentials ····· 14

50 Yuki Osada (Tokyo Metro. Univ.) Z
Asymptotic expansion of the ground state energy for nonlinear Schrödinger system with three wave interaction ····· 14

51 Masaru Hamano (Saitama Univ.) Z
Masahiro Ikeda (RIKEN/Keio Univ.)
Scattering solutions of the nonlinear Schrödinger equation with a long range potential ····· 10

52 Hideaki Sunagawa (Osaka City Univ.) Z
Chunhua Li (Yanbian Univ.)
Yoshinori Nishii (Osaka Univ.)
Yuji Sagawa (Saitama Univ.)
On the derivative nonlinear Schrödinger equation with weakly dissipative structure ····· 10

53 Yoshinori Nishii (Osaka Univ.) Z Non-decay of the energy for a system of semilinear wave equations ··· 10

14:25–15:30

54 Kimitoshi Tsutaya (Hirosaki Univ.) Z
Yuta Wakasugi (Hiroshima Univ.)
On Glassey's conjecture for semilinear wave equations in FLRW spacetime ····· 14

55 Kimitoshi Tsutaya (Hirosaki Univ.) Z
Yuta Wakasugi (Hiroshima Univ.)
Blow up of solutions of space derivative nonlinear wave equations in FLRW spacetime ····· 14

56 Fumihiko Hirosawa (Yamaguchi Univ.) Z
On the energy estimates of semi-discrete wave equations with time dependent propagation speed ····· 14

57 Hiroshi Takase (Univ. of Tokyo) Z
Inverse problems for first-order hyperbolic equations ····· 14

58 Sojiro Murai
(Tokyo Metropolitan Coll. of Indus. Tech.)
Strichartz estimates for magnetic Schrödinger equation in exterior domain and its application ····· ∗

59 Takashi Furuya (Hokkaido Univ.)
The direct and inverse scattering problem for the semilinear Schrödinger equation ····· ∗

60 Gen Nakamura (Hokkaido Univ.)
Manmohan Vashisth
(Indian Inst. of Tech., Jammu)
Michiyuki Watanabe
(Okayama Univ. of Sci.)
Inverse initial boundary value problem for a non-linear hyperbolic partial differential equation ····· ∗

61 Gen Nakamura (Hokkaido Univ.)
Holmgren–John unique continuation theorem for viscoelastic equations ····· ∗

15:45–16:45 Talk Invited by Functional Equations Section

Mamoru Okamoto (Osaka Univ.) Z
Almost sure global well-posedness for a nonlinear Klein–Gordon equation in three dimensions

September 17th (Fri) Conference Room V

9:00–12:00

62 Masakazu Kato Z
(Muroran Inst. of Tech.)
Hideo Kubo (Hokkaido Univ.)
Existence of a global solution to a nonlinear wave equation with non-negative potential and slowly decreasing initial data ····· 12

63 Shunsuke Kitamura (Tohoku Univ.) Z
Katsuaki Morisawa (Tohoku Univ.)
Hiroyuki Takamura (Tohoku Univ.)
The lifespan of classical solutions of semilinear wave equations with spatial weights and compactly supported data in one space dimension ····· 14

64 Kimitoshi Tsutaya (Hirosaki Univ.) Z
Yuta Wakasugi (Hiroshima Univ.)
Blow up of solutions of semilinear wave equations in de Sitter spacetime ····· 14

65 Yuta Wakasugi (Hiroshima Univ.) Z
Energy decay of solutions to the wave equation with space-dependent damping and absorbing nonlinearity ····· 14

66 Yusuke Ishigaki (Tokyo Tech) Z
On L^1 estimates of solutions of compressible viscoelastic system ····· 14

67 Kenta Oishi (Waseda Univ.) Z
Yoshihiro Shibata (Waseda Univ.)
Local well-posedness for free boundary problem of viscous incompressible magnetohydrodynamics ····· 12

68 Souhei Sugizaki (Tokyo Tech) Z
Shinya Nishibata (Tokyo Tech)
Itsuko Hashimoto (Kanazawa Univ.)
Asymptotic stability of radially symmetric stationary solutions for the compressible Navier–Stokes equations ····· 14

69 Hiroki Ohyama (Kyushu Univ.) Z
Ryo Takada (Kyushu Univ.)
Asymptotic limit of fast rotation for the incompressible Navier–Stokes equations in a 3D layer ····· 14

70 Ryo Kanamaru (Photon Sansu Club) Z
Tatsuki Yamamoto (Waseda Univ.)
Logarithmically improved extension criteria involving the pressure for the Navier–Stokes equations in $\mathbb{R}^3$ ····· 14

71 Fumitaka Wakabayashi (Waseda Univ.) Z
Hideo Kozono (Waseda Univ.)
Erika Ushikoshi (Yokohama Nat. Univ. / Osaka Univ.)
Removability of time-dependent singularities of the Navier–Stokes equations ····· 14

72 Kazuyuki Tsuda (Kyushu Sangyo Univ.) Z
Reinhard Farwig (TU Darmstadt)
The Fujita–Kato approach for the Navier–Stokes equations with moving boundary and its application ····· 14

73 Tsukasa Iwabuchi (Tohoku Univ.) Z
Takayoshi Ogawa (Tohoku Univ.)
Ill-posedness for two dimensional compressible Navier–Stokes equations with scaling critical regularity ····· 14

14:25–15:30

74 Ryosuke Nakasato (Tohoku Univ.) Z
Global well-posedness for the Hall-magnetohydrodynamic system in critical Fourier–Besov spaces ····· 14

75 Tatsu-Hiko Miura (Kyoto Univ.) Z
Linear stability and enhanced dissipation for the two-jet Kolmogorv type flow on the unit sphere ····· 14

76 Tatsu-Hiko Miura (Kyoto Univ.) Z
Yasunori Maekawa (Kyoto Univ.)
Rate of the enhanced dissipation for the two-jet Kolmogorov type flow on the unit sphere ····· 14

77 Zhongyang Gu (Univ. of Tokyo) Z
Yoshikazu Giga (Univ. of Tokyo)
On the Helmholtz decomposition of a space of vector fields with bounded mean oscillation in a curved domain ····· 10

78 Natsumi Yoshida (Univ. of Yamanashi)
Asymptotics toward the rarefaction waves to the Cauchy problem for the scalar non-viscous diffusive dispersive conservation laws ····· ∗

79 Natsumi Yoshida (Univ. of Yamanashi)
Global asymptotic stability of a multiwave pattern for the generalized Korteweg–de Vries-Burgers–Kuramoto equation ····· ∗

80 Masashi Ohnawa (Tokyo Univ. of Marine Sci. and Tech.)
Masahiro Suzuki (Nagoya Inst. of Tech.)
Asymptotic stability of shock waves in expanding nozzles ····· ∗

81 Yoshihiro Shibata (Waseda Univ.)
Matsumura–Nishida theory in the L_p-L_q framework ····· ∗

82 Yoshihiro Shibata (Waseda Univ.)
On the Navier–Stokes equations in a periodically moving exterior domain ····· ∗

83 Ken Furukawa (RIKEN)
Yoshikazu Giga (Univ. of Tokyo)
Takahito Kashiwabara (Univ. of Tokyo)
Mathematical justification of the hydrostatic approximation in the primitive equations under the Dirichlet boundary conditions ····· ∗

15:45–16:45 Talk Invited by Functional Equations Section

Masahiro Suzuki (Nagoya Inst. of Tech.) Z
Mathematical analysis of plasma boundary layers

Real Analysis

September 16th (Thu) Conference Room IV

10:45–12:00

1 Koji Aoyama (Chiba Univ.) Z — Characterizations of a Meir–Keeler type mapping ····· 15

2 Shin-ya Matsushita (Akita Pref. Univ.) Z — On modified primal-dual splitting algorithms ····· 15

3 Ryoji Fukuda (Oita Univ.) Z; Aoi Honda (Kyushu Inst. of Tech.); Yoshiaki Okazaki (Fuzzy Logic Systems Inst.) — On strong zero-set with respect to a k-additive measure ····· 15

4 Keiji Yoneda (Kyushu Univ.) Z; Ryo Takada (Kyushu Univ.) — Higher-order interpolation inequalities with weights for radial functions ····· 15

14:25–15:00

5 Satoshi Yamaguchi (Ibaraki Univ.) Z — An extension of the VMO-H^1 duality and the Riesz transforms ····· 15

6 Ryota Kawasumi Z; Eiichi Nakai (Ibaraki Univ.) — Weighted boundedness of the Hardy–Littlewood maximal operator on Orlicz–Morrey and weak Orlicz–Morrey spaces ····· 15

7 Kohei Amagai; Eiichi Nakai (Ibaraki Univ.); Gaku Sadasue (Osaka Kyoiku Univ.) — Generalized fractional integral operators based on symmetric Markovian semigroups ····· ∗

8 Sachiko Atsushiba (Tokyo Woman's Christian Univ.) — Attractive points and convergence theorems for generic 2-generalized hybrid mappings ····· ∗

9 Hiroko Manaka (Nihon Univ.) — The projection methods with Bregman distance in Banach spaces ···· ∗

15:15–16:15 Talk Invited by Real Analysis Section

Shohei Nakamura (Osaka Univ.) Z — A study of the Fourier extension operator via X-ray tomography principle

September 17th (Fri) Conference Room IV

9:45–12:00

10 Shodai Kubota (Chiba Univ.) Z — Decomposition Theorem of the subdifferential of 1D-regularized total variation with nonhomogeneous coefficients ····· 15

11 Hiroaki Naito (Kyoto Univ. of Edu.) Z; Takeshi Fukao (Kyoto Univ. of Edu.) — Long time behavior of single obstacle problems ····· 15

12 Yutaro Chiyo (Tokyo Univ. of Sci.) Z; Masaaki Mizukami (Kyoto Univ. of Edu.); Tomomi Yokota (Tokyo Univ. of Sci.) — Global existence and boundedness in an attraction-repulsion chemotaxis system with signal-dependent sensitivities without logistic source ····· 15

13 Shunsuke Kurima (Tokyo Univ. of Sci.) Z — A singular nonlocal phase field system with inertial term ····· 15

14 Chiharu Kosugi (Japan Women's Univ.) Z; Toyohiko Aiki (Japan Women's Univ.) — Uniqueness of weak solutions for the model representing motions of compressible elastic materials on plane ····· 15

15 Kota Kumazaki (Nagasaki Univ.) Z Global existence of a solution of a free boundary problem describing diffusants penetration into rubber ····· 15

16 Shun Uchida (Oita Univ.) Z Nonlinear evolution equation associated with Hypergraph Laplacian ·· 15
Masahiro Ikeda (RIKEN / Keio Univ.)

14:25–15:00

17 Hiroshi Watanabe (Oita Univ.) Z Propagation speed of the interface for entropy solutions to 1D Cauchy problems for scalar parabolic-hyperbolic conservation laws ····· 15

18 Noriaki Yamazaki (Kanagawa Univ.) Z Quasi-variational approach to doubly nonlinear evolution inclusions of time-dependent subdifferentials ····· 15
Nobuyuki Kenmochi (Chiba Univ.*)
Ken Shirakawa (Chiba Univ.)

19 Takuto Nagata (Oita Univ.) An error estimate for the structure-preserving finite difference scheme of thermoviscoelastoplasticity under uniform temperature distribution ····· *
Shuji Yoshikawa (Oita Univ.)

20 Ken Shirakawa (Chiba Univ.) Optimal heat controls of 1D Warren–Kobayashi–Lobkovsky–Carter type systems with dynamic boundary conditions ····· *
Shodai Kubota (Chiba Univ.)
Ryota Nakayashiki (Salesian Polytech.)

15:15–16:15 Talk Invited by Real Analysis Section

Hiroki Ohwa (Niigata Univ.) Z An L^p shock admissibility condition for conservation laws

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Functional Analysis

September 14th (Tue) Conference Room VI

9:30–10:45

1 Yoritaka Iwata (Kansai Univ.) Z Campbell–Baker–Hausdorff formula for unbounded operators defined in thes B(X)-module ····· 15

2 Hisashi Morioka (Ehime Univ.) Z Time-independent scattering theory for multi-dimensional quantum walks ····· 15
Takashi Komatsu
(Math. Res. Inst. Calc for Industry)
Norio Konno (Yokohama Nat. Univ.)
Etsuo Segawa (Yokohama Nat. Univ.)

3 Masaki Kawamoto (Ehime Univ.) Z Existence and nonexistence of wave operators for time-decaying harmonic oscillators ····· 15
Atsuhide Ishida (Tokyo Univ. of Sci.)

4 Hajime Moriya (Kanazawa Univ.) Z Gibbs variational formula for thermal equilibrium states in terms of quantum relative entropy density ····· 15

5 Shuji Watanabe (Gunma Univ.) An operator-theoretical treatment of the critical magnetic field near absolute zero temperature in the BCS-Bogoliubov model ····· *

6 Kyohei Itakura (Ritsumeikan Univ.) Strong radiation condition and stationery wave operators for one-body Stark operators ····· *
Tadayoshi Adachi (Kyoto Univ.)
Kenichi Ito (Univ. of Tokyo)
Erik Skibsted (Aarhus Univ.)

11:00–12:00 Talk Invited by Functional Analysis Section

Haruya Mizutani (Osaka Univ.) Z Global-in-time Strichartz estimates for Schrödinger equations with potentials

September 15th (Wed) Conference Room VI

9:00–10:45

7 Takashi Satomi (Univ. of Tokyo) Z An inequality about convolutions on unimodular locally compact groups and the application to Kemperman's theorem ····· 15

8 Takuma Hayashi (Osaka Univ.) Z Geomtric realization of real absolutely irreducible representations of connected real semisimple algebraic groups ····· 15

9 Cid Reyes-Bustos (Tokyo Tech) Z Heat kernel for the asymmetric quantum Rabi model ····· 15

10 Cid Reyes-Bustos (Tokyo Tech) Z, Masato Wakayama (Tokyo Univ. of Sci.) Degeneracy and hidden symmetry of the asymmetric quantum Rabi model ····· 15

11 Atsumu Sasaki (Tokai Univ.) Z Visible actions and criteria for multiplicity-freeness of representations of Heisenberg groups ····· 15

12 Takeyoshi Kogiso (Josai Univ.) Two deformations of Markov triples and their interrelationships ····· ∗

11:00–12:00 Talk Invited by Functional Analysis Section

Hideto Nakashima (Inst. of Stat. Math.) Z Functional equations of zeta functions associated with homogeneous cones and their gamma matrices

September 16th (Thu) Conference Room VI

9:00–10:45

13 Yuki Seo (Osaka Kyoiku Univ.) Z The upper boundary for the ratio between n-variable operator power means ····· 15

14 Sora Hiramatsu (Osaka Kyoiku Univ.) Z, Yuki Seo (Osaka Kyoiku Univ.) Determinant for positive operators and Oppenheim's inquality ····· 15

15 Masatoshi Ito (Maebashi Inst. of Tech.) Z A family of weighted operator means including the weighted Heinz and Lehmer means ····· 15

16 Keiichi Watanabe (Niigata Univ.) Z On Lipschitz continuity of linear contractions with respect to the Möbius operations and metric ····· 15

17 Michiya Mori (RIKEN) Z, Peter Šemrl (Univ. Ljubljana) Continuous coexistency preservers on effect algebras ····· 15

18 Rui Okayasu (Osaka Kyoiku Univ.) Z Injective factors with trivial bicentralizer ····· 15

19 Yuhei Suzuki (Hokkaido Univ.) C*-simplicity has no local obstruction ····· ∗

20 Toshihiko Masuda (Kyushu Univ.) Classification of outer actions of discrete amenable groupoids on injective factors ····· ∗

21 Yasuo Iida (Kanazawa Med. Univ.) Isometries of the Zygmund F-algebra on the upper half plane ····· ∗

11:00–12:00 Talk Invited by Functional Analysis Section

Takeaki Yamazaki (Toyo Univ.) Z Operator means and operator inequalities

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Statistics and Probability

September 14th (Tue) Conference Room VII

9:15–11:40

1 Yuki Hirai (Osaka Univ.) Z Itô–Föllmer calculus in infinite dimensions ····· 15

2 Kiyoiki Hoshino (Osaka Pref. Univ.) Z Identification of random functions from the stochastic Fourier coefficients by the process with quadratic variation ····· 15

3 Ryosuke Shimizu (Kyoto Univ.) Z Construction of nonlinear potential theory on fractals ····· 15

4 Yuichi Shiozawa (Osaka Univ.) Z
Jian Wang (Fujian Normal Univ.)
Compactness of semigroups generated by symmetric non-local Dirichlet forms with unbounded coefficients ····· 15

5 Takuya Murayama (Chuo Univ.) Z On the continuity of half-plane capacity with respect to Carathéodory convergence ····· 15

6 Takashi Imamura (Chiba Univ.) Z
Matteo Mucciconi (Univ. Warwick)
Tomohiro Sasamoto (Tokyo Tech)
A relation between KPZ models and the determinantal point process associated with fermions at positive temperature ····· 15

7 Kouji Yano (Kyoto Univ.) Z Arcsine law for a piecewise linear random interval map ····· 15

8 Hiroki Takahashi (Keio Univ.) Z
Shintaro Suzuki (Keio Univ.)
Distribution of random cycles for random uniformly expanding interval maps ····· 15

9 Masanori Hino (Kyoto Univ.)
Madoka Yasui
Singularity of energy measures on a class of inhomogeneous Sierpinski gaskets ····· *

10 Yuto Nakajima (Kyoto Univ.) The Hausdorff dimension of some planar sets with unbounded digits ····· *

11 Kenichiro Yamamoto (Nagaoka Univ. of Tech.)
Yong Moo Chung (Hiroshima Univ.)
Large deviation principle for piecewise monotonic maps ····· *

14:25–15:25 Talk Invited by Statistics and Probability Section

Syota Esaki (Fukuoka Univ.) Z Stochastic analysis for long range interacting particle systems with jumps

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

Daehong Kim (Kumamoto Univ.) Z Scattering lengths for positive additive functionals and their related problems

September 15th (Wed) Conference Room VII

10:00–11:40

12 Masatake Hirao (Aichi Pref. Univ.) Z — On random point configurations on Q-polynomial schemes ····· 15

13 Kazuki Matsubara (Saitama Univ.) Z, Sanpei Kageyama (Hiroshima Univ.*) — Some constructions of ordered multi-designs ····· 15

14 Yuzo Maruyama (Kobe Univ.) Z — On admissible estimation of a mean vector when the scale is unknown ····· 15

15 Koshiro Yonenaga (Hokkaido Univ.) Z, Akio Suzukawa (Hokkaido Univ.) — Exact distribution of the product of a Wishart matrix and a normal vector with uncommon covariance matrices ····· 15

16 Eri Kurita (Tokyo Univ. of Sci.) Z, Takashi Seo (Tokyo Univ. of Sci.) — Multivariate normality test statistic based on multivariate kurtosis with two-step monotone type of missing data ····· 15

17 Koichi Yamagata (Univ. of Electro-Comm.) Z — Monotone metrics induced from trace non-increasing maps ····· 10

September 16th (Thu) Conference Room VII

9:45–11:45

18 Yan Liu (Waseda Univ.) Z, Yuichi Goto (Waseda Univ.), Masanobu Taniguchi (Waseda Univ.) — Detection of relevant change in frequency domain ····· 15

19 Yuichi Goto (Waseda Univ.) Z, Koichi Arakaki (Waseda Univ.), Yan Liu (Waseda Univ.), Masanobu Taniguchi (Waseda Univ.) — Homogeneity tests for one-way models with dependent errors ····· 15

20 Yuichi Goto (Waseda Univ.) Z, Kou Fujimori (Shinshu Univ.) — Test for conditional variance of integer-valued time series ····· 15

21 Nakahiro Yoshida (Univ. of Tokyo) Z — Adaptive estimation for a degenerate diffusion process ····· 15

22 Nakahiro Yoshida (Univ. of Tokyo) Z — Edgeworth expansion for the Euler–Maruyama approximation ····· 15

23 Xiaofei Xu (Waseda Univ.) Z, Yan Liu (Waseda Univ.), Masanobu Taniguchi (Waseda Univ.) — Higher order asymptotics of minimax estimators for time series ····· 15

24 Yuta Koike (Univ. of Tokyo) Z, Xiao Fang (Chinese Univ. of Hong Kong) — Gaussian approximation to high-dimensional Wishart matrices under a moment assumption ····· 15

14:25–15:25 Talk Invited by Statistics and Probability Section

Yugo Nakayama (Kyoto Univ.) Z — High-dimensional data classification based on Gaussian kernel

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

Keisuke Yano (Inst. of Stat. Math.) Z — Recent development of predictive densities

September 17th (Fri) Conference Room VII

Morning

25 Toshiharu Fujita (Kyushu Inst. of Tech.) — Decision process with converging branch system —Multiplicative reward system— ∗

26 Satoshi Suzuki (Shimane Univ.) — KKT optimality condition for quasiconvex programming ∗

27 Shoko Chisaki (Osaka Inst. of Tech.), Nobuko Miyamoto (Tokyo Univ. of Sci.), Ryoh Fuji-Hara (Univ. of Tsukuba⋆) — A construction for spanning bipartite block designs ∗

28 Takao Namiki (Hokkaido Univ.), Ichiro Tsuda (Chubu Univ. / Chubu Univ.), Shunsuke Kajikawa (Kyoto Univ.), Masao Matsuhashi (Kyoto Univ.), Akio Ikeda (Kyoto Univ.) — Discrete dynamical system for high frequency oscillation in epileptic seizures ∗

29 Yoshihide Kakizawa (Hokkaido Univ.) — On asymmetric kernel density estimation for biased data ∗

30 Koji Tsukuda (Kyushu Univ.), Shun Matsuura (Keio Univ.) — High-dimensional testing for common principal components hypothesis on two covariance matrices ∗

31 Kento Egashira (Univ. of Tsukuba) — Asymptotic properties of multicategory support vector machine under high dimensional settings ∗

32 Shintaro Hashimoto (Hiroshima Univ.) — Predictive probability matching priors for non-regular models ∗

33 Ken-ichi Koike (Nihon Univ.), Shintaro Hashimoto (Hiroshima Univ.) — Improvement of Bobrovsky–Mayor-Wolf–Zakai bound ∗

Applied Mathematics

September 14th (Tue) Conference Room VIII

Morning

1 Shinya Fujita (Yokohama City Univ.) — Recent results and open problems on safe sets in graphs ∗

2 Kazuhide Hirohata (Ibaraki Nat. Coll. of Tech.), Ronald J. Gould (Emory Univ.), Ariel Keller Rorabaugh (Univ. of Tennessee) — Vertex-disjoint chorded cycles and degree sum conditions ∗

3 Robert E. L. Aldred (Univ. of Otago), Jun Fujisawa (Keio Univ.) — Generalization of the distance restricted matching extension problem in graphs on surfaces ∗

4 Xiao-Nan Lu (Univ. of Yamanashi) — Searching for edges in a multi-partite graph ∗

5 Ayaka Ishikawa (Yokohama Nat. Univ.) — The Sato zeta function corresponding to the Szegedy walk ∗

6 Chusei Kiumi (Yokohama Nat. Univ.), Kei Saito (Kanagawa Univ.) — Strongly trapped space-inhomogeneous quantum walks in one dimension ····· *

7 Yasuo Nishii (Univ. of Tsukuba) — Approximation of Frankl's conjecture in the complement family ····· *

14:25–15:30

8 Yuuya Yoshida (Nagoya Univ.) Z — Mathematical aspects of classical-quantum differential privacy ····· 15

9 Chie Nara (Meiji Univ.) Z, Jin-ichi Itoh (Sugiyama Jogakuen Univ.) — Continuous flattening: the 2-skeleton of a regular 24-cell ····· 15

10 Masahiro Hachimori (Univ. of Tsukuba) Z — Hierarchy of partitions on nonpure simplicial complexes ····· 15

11 Yuya Ikeda (Hiroshima Univ.) Z — Designs on vector bundles ····· 10

15:45–16:45 Talk Invited by Applied Mathematics Section

Keisuke Shiromoto (Kumamoto Univ.) Z — Critical Problem for matroids

September 15th (Wed) Conference Room VIII

10:00–12:00

12 Iwao Sato (Oyama Nat. Coll. of Tech.) Z, Norio Konno (Yokohama Nat. Univ.), Takashi Komatsu (Math. Res. Inst. Calc for Industry/Hiroshima Univ.) — Grover/Zeta correspondence ····· 15

13 Takashi Komatsu (Math. Res. Inst. Calc for Industry/Hiroshima Univ.) Z, Norio Konno (Yokohama Nat. Univ.), Iwao Sato (Oyama Nat. Coll. of Tech.) — Walk/Zeta correspondence ····· 15

14 Kazuyuki Wada (Nat. Inst. of Tech., Hachinohe Coll.) Z, Akito Suzuki (Shinshu Univ.), Yohei Tanaka (Shinshu Univ.), Noriaki Teranishi (Hokkaido Univ.), Yasumichi Matsuzawa (Shinshu Univ.) — The Witten index of the non-Fredholm split-step quantum walks ····· 15

15 Kiyoshi Ando (Nat. Inst. of Informatics) Z — A constructive characterization of 4-connected graphs ····· 15

16 Kenta Noguchi (Tokyo Univ. of Sci.) Z, Naoki Matsumoto (Keio Univ.), Takamasa Yashima (Seikei Univ.) — Cubic graphs having only k-cycles in each 2-factor ····· 15

17 Sho Kubota (Yokohama Nat. Univ.) Z — Combinatorial necessary conditions for regular graphs to induce periodic quantum walks ····· 15

September 16th (Thu) Conference Room VIII

9:30–10:45

18 Toshiyuki Ogawa (Meiji Univ.) Z, Ayuki Sekisaka (Meiji Univ.) — Geometrical structures of a four-scroll attractor model ····· 15

19 Takashi Sakajo (Kyoto Univ.) Z
Bartosz Protas (McMaster Univ.)
Stefan Llewellyn Smith (UCSD)
Rotating and translating vortex sheet equilibria with endpoints ····· 15

20 Takashi Sakajo (Kyoto Univ.) Z
Penghao Wang (Kyoto Univ.)
Spot dynamics of a reaction-diffusion equation on the surface of a torus ····· 15

21 Koya Sakakibara Z
(Okayama Univ. of Sci.)
Mitsunori Nara (Iwate Univ.)
Hiroshi Matano (Meiji Univ.)
Yoichiro Mori (Univ. of Pennsylvania)
Asymptotic behavior of solutions of the bidomain model ····· 15

11:00–12:00 Talk Invited by Applied Mathematics Section

Tomoo Yokoyama (Gifu Univ.) Z
Topological flow analysis and its application

14:25–15:35

22 Hirofumi Notsu (Kanazawa Univ.) Z
Débora O. Medeiros
(Univ. of São Paulo)
Cassio M. Oishi (São Paulo State Univ.)
A second-order approximation in time of the upper-convected time derivative based on the generalized Lie derivative ····· 15

23 Shin-ichiro Ei (Hokkaido Univ.) Z
Hiroyuki Ochiai (Kyushu Univ.)
Yoshitaro Tanaka
(Future Univ.-Hakodate)
Method of fundamental solutions for Neumann problems of the modified Helmholtz equation in disk domains ····· 15

24 Tatsuki Mori (Musashino Univ.) Z
Tohru Tsujikawa (Univ. of Miyazaki*)
Shoji Yotsutani (Ryukoku Univ.*)
Semi-analytical methods of obtaining bifurcation diagrams for a cell polarization model ····· 15

25 Yasushi Ota (St. Andrew's Univ.) Z
Shunsuke Kaji (Meijo Univ.)
Inverse parabolic problem with the Heaviside function arising in finance ····· 15

15:50–16:50 Talk Invited by Applied Mathematics Section

Masakazu Akiyama (Meiji Univ.) Z
A mathematical study on the left-right asymmetry of living organisms

September 17th (Fri) Conference Room VIII

10:30–12:00

26 Hiroshi Kokubu (Kyoto Univ.) Z
Masato Hara (Kyoto Univ.)
Learning dynamics by reservoir computing: Case of the logistic maps ····· 15

27 Hiroshi Kokubu (Kyoto Univ.) Z
Masato Hara (Kyoto Univ.)
Learning dynamics by reservoir computing: A mathematical framework ····· 15

28 Satoru Iwasaki (Osaka Univ.) Z
Shuichi Jimbo (Hokkaido Univ.)
Yoshihisa Morita (Ryukoku Univ.)
Standing waves of reaction-diffusion equations on an infinite graph with two vertices ····· 15

29 Masaji Watanabe (Okayama Univ.*) Z
Fusako Kawai (Okayama Univ.*)
Yukitaka Kimura (Okayama Univ.)
Mathematical study on biodegradation of synthetic polymer ····· 15

30 Masaharu Nagayama (Hokkaido Univ.) Z
Minsoo Kim (Hokkaido Univ.)
Yasuaki Kobayashi (Hokkaido Univ.)
Satoshi Nakata (Hiroshima Univ.)
Shi-npei Tanaka (Hiroshima Univ.)
Mathematical modeling for the clustering phenomenon of self-propelled oil-droplets 15

Afternoon

31 Yoshitaka Watanabe (Kyushu Univ.)
Shuting Cai (Fujian Jiangxia Univ.)
Computer-assisted proofs of a symmetry-breaking bifurcation point for the Kolmogorov problem ..... *

32 Koya Sakakibara
(Okayama Univ. of Sci. / RIKEN)
Yusaku Shimoji (Meiji Univ.)
Shigetoshi Yazaki (Meiji Univ.)
Numerical computations for magnetic Hele-Shaw problems by the method of fundamental solutions ..... *

33 Daisuke Koyama
(Univ. of Electro-Comm.)
Estimates of the condition number of matrices arising in an interior penalty method for the biharmonic problem ..... *

34 Takuya Tsuchiya
(Hachinohe Inst. of Tech.)
Structure preserving numerical calculation of hyperbolic partial differential equations with finite element method ..... *

35 Shunsuke Kobayashi
(Kyoto Univ. / RIKEN)
Shigetoshi Yazaki (Meiji Univ.)
On the existence, uniqueness, and convergence of a Crank–Nicolson scheme for the Kuramoto–Sivashinsky equation defined on an expanding circle ..... *

36 Hirotada Honda (Toyo Univ.)
On partial differential equation-based neural network with additional parameters ..... *

37 Yu Ichida (Meiji Univ.)
Traveling waves with singularities in a damped hyperbolic MEMS type equation in the presence of negative powers nonlinearity ..... *

38 Jumpei Nagase (Shibaura Inst. of Tech.)
Aoi Honda (Kyushu Inst. of Tech.)
Tetsuya Ishiwata
(Shibaura Inst. of Tech.)
Constructing inclusion-exclusion integral neural networks with perceptrons ..... *

39 Yoshikazu Yamagishi (Ryukoku Univ.)
Takamichi Sushida (Salesian Polytech.)
Jean-François Sadoc (Univ. Paris-Sud)
Area convergence of Voronoi cells on spiral lattices ..... *

Topology

September 14th (Tue) Conference Room IX

9:30–12:00

1 Yuta Nozaki (Hiroshima Univ.) Z
Masatoshi Sato (Tokyo Denki Univ.)
Masaaki Suzuki (Meiji Univ.)
On the kernel of the surgery map restricted to the 1-loop part 15

2 Naoyuki Monden (Okayama Univ.) Z
On minimal generating sets for the mapping class group of a punctured surface 15

3 Erika Kuno (Osaka Univ.) Z
Takuya Katayama (Gakushuin Univ.)
The mapping class group of a nonorientable surface is quasi-isometrically embedded in the mapping class group of the orientation double cover I 10

4 Takuya Katayama (Gakushuin Univ.) Z
Erika Kuno (Osaka Univ.)
The mapping class group of a nonorientable surface is quasi-isometrically embedded in the mapping class group of the orientation double cover II 15

5 Takuya Katayama (Gakushuin Univ.) Z
Erika Kuno (Osaka Univ.)
Right-angled Artin groups and curve graphs of nonorientable surfaces I 15

6 Erika Kuno (Osaka Univ.) Z
Takuya Katayama (Gakushuin Univ.)
Right-angled Artin groups and curve graphs of nonorientable surfaces II 10

7 Shuhei Maruyama (Nagoya Univ.) Z
Morimichi Kawasaki (Aoyama Gakuin Univ.)
On the spaces of bounded characteristic classes and non-descendable quasimorphisms 15

8 Koji Yamazaki (Tokyo Tech) Z
Fibration structure for Gromov h-principle 15

14:25–15:25 Talk Invited by Topology Section

Naohiko Kasuya (Hokkaido Univ.) Z
Contact structure on the boundary of a strongly pseudoconcave complex surface

15:50–16:45

9 Hiroki Okajima (Kochi Univ.) Z
A note on the Greek letter elements in the stable homotopy groups of spheres 10

10 Yoshiyuki Oshima (Shimane Univ.) Z
Various connectedness and generalized inverse limits 15

11 Norihiko Minami (Nagoya Inst. of Tech.) Z
Classifying space of finite group BG and the Noether's program of finite group G, upgraded from the view point of lower rationality = higher ruledness 15

September 15th (Wed) Conference Room IX

10:10–10:20 Announcement of the 2021 MSJ Geometry Prize

10:35–11:35 Award Lecture for the 2021 MSJ Geometry Prize

Nariya Kawazumi (Univ. of Tokyo) Z
Yusuke Kuno (Tsuda Coll.)
In search of the Lie algebra of the mapping class group

13:15–14:15 Award Lecture for the 2021 MSJ Geometry Prize

Jun Murakami (Waseda Univ.) Z
The Jones polynomial and its applications

September 16th (Thu) Conference Room IX

9:30–12:00

12 Naoki Kitazawa (Kyushu Univ.) Z
On special generic maps and Massey products of manifolds 15

13 Kentaro Saji (Kobe Univ.) Z
Samuel Paulino Santos (São Paulo State Univ.)
Geometry of bifurcation sets of generic unfoldings of corank two functions 10

14 Ippei Ishii [Z] Positive flow-spines and contact 3-manifolds 15
Masaharu Ishikawa (Keio Univ.)
Yuya Koda (Hiroshima Univ.)
Hironobu Naoe (Chuo Univ.)

15 Ramón Barral Lijó (Ritsumeikan Univ.) [Z] Inverse symbolic coding of geodesics in hyperbolic surfaces 15
Hiraku Nozawa (Ritsumeikan Univ.)

16 Ramón Barral Lijó (Ritsumeikan Univ.) [Z] Chaos in the universal space of pointed colored graphs 15
Hiraku Nozawa (Ritsumeikan Univ.)

17 Tetsuya Abe (Ritsumeikan Univ.) [Z] The construction of slice knots and amphicheiral knots via annulus twists 15

18 Tatsumasa Suzuki (Tokyo Tech) [Z] Constructions of homotopy 4-spheres by pochette surgery 10

19 Sakumi Sugawara (Hokkaido Univ.) [Z] Divides with cusps and Kirby diagrams for line arrangements 15
Masahiko Yoshinaga (Hokkaido Univ.)

20 Masaki Ogawa (Saitama Univ.) [Z] A stably equivalence of a multibranched handlebody decomposition of a 3-manifold 10

21 Naoki Kitazawa (Kyushu Univ.) Cup products of closed and simply-connected manifolds and dimensions of Euclidean spaces into which these manifolds admit special generic maps ..... *

22 Tomoyuki Yasuda (Nara Nat. Coll. of Tech.) Amphicheirality of ribbon 2-knots. ..... *

14:25–15:25 Talk Invited by Topology Section

Yasushi Yamashita (Nara Women's Univ.) [Z] Computer experiments on Möbius transformations and random Kleinian groups

15:50–16:50

23 Sonia Mahmoudi (Tohoku Univ.) [Z] Study of weaves using weaving diagrams 15

24 Taketo Sano (Univ. of Tokyo) [Z] A Bar-Natan homotopy type 15

25 Takefumi Nosaka (Tokyo Tech) [Z] Meta-nilpotent knot invariants and symplectic automorphism groups of free nilpotent groups 15

26 Kazuhiro Ichihara (Nihon Univ.) Knots in homology lens spaces determined by their complements ..... *
Toshio Saito (Joetsu Univ. of Edu.)

27 Ryoto Tange (Waseda Univ.) Liminal representations and odd cyclic branched coverings of the figure-eight knot ..... *

Infinite Analysis

September 14th (Tue) Conference Room I

10:00–12:00

1 Tomohiro Sasamoto (Tokyo Tech) [Z] q-Whittaker function and free fermion at finite temperature 15
Takashi Imamura (Chiba Univ.)
Matteo Mucciconi (Univ. Warwick)

2 Genki Shibukawa (Kobe Univ.) Z An explicit formula of powers of 2×2 quantum matrices 15

3 Akihito Yoneyama (Univ. of Tokyo) Z 3D reflection maps from tetrahedron maps 15

4 Takeo Kojima (Yamagata Univ.) Z Quadratic relations of the deformed W-superalgebra $\mathcal{W}_{q,t}\big(A(M,N)\big)$ 15

5 Hiroyuki Yamane (Univ. of Toyama) Z Hamiltonian circuits of Cayley graphs of Weyl groupoids of generalized quantum groups 15

6 Yusuke Ohkubo (Daiichi Univ. of Pharm.) Z
Jun'ichi Shiraishi (Univ. of Tokyo)
Ayumu Hoshino (Hiroshima Inst. of Tech.)
Explicit formula for the q-Toda function of type B 15

7 Masaru Sugawara (Tohoku Univ.) Z The product formulas for universal R-matrices of quantum affine enveloping algebras of type $A_3^{(1)}$, $D_4^{(1)}$ and quantum dilogarithm identities 15

8 Masaki Kato (Toyama Nat. Coll. of Tech.) Sums of two-parameter deformations of multiple polylogarithms ..... *

9 Takashi Imoto (Nat. Inst. of Adv. Industrial Sci. and Tech.)
Tetsuo Deguchi (Ochanomizu Univ.)
Regularization of the singular solution for the XXX spin chain using twisted boundary condition ..... *

10 Youichi Shibukawa (Hokkaido Univ.)
Yudai Otsuto (Hokkaido Univ.)
FRT construction of Hopf algebroids ..... *

14:25–15:25 Talk Invited by Infinite Analysis Special Session

Hironori Oya (Shibaura Inst. of Tech.) Z Twist maps and their applications

September 15th (Wed) Conference Room I

10:00–11:00

11 Takao Suzuki (Kinki Univ.) Z A Lax formulation of a generalized q-Garnier system 15

12 Shota Shigetomi (Kyushu Univ.) Z
Kenji Kajiwara (Kyushu Univ.)
Explicit formulas of curves with constant torsion and discrete curves with constant torsion angle 15

13 Masashi Hamanaka (Nagoya Univ.) Z
Shan-Chi Huang (Nagoya Univ.)
Multi-soliton dynamics of anti-self-dual gauge fields 15

14 Nobutaka Nakazono (Tokyo Univ. of Agri. and Tech.) Special solutions to the multiplicative type discrete KdV equation ..... *

11:15–12:15 Talk Invited by Infinite Analysis Special Session

Satoshi Tsujimoto (Kyoto Univ.) Z The rational Heun operator and Wilson biorthogonal rational functions