

Remark

- The order of authors is written according to your input order. The first author is not necessarily the speaker. If the talk have two or more authors, then the speaker is underlined.
- The mark \blackboard means the presentation by using the blackboard. If you talk by using your PC/tablet, no mark is written.
- The mark \star means emeritus professor.
- The number on the right side of the title implies the time of talk (minutes). There are some talks whose limited time is shortened due to various reasons. Your kind understanding is appreciated.

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Algebra	4
Geometry	9
Complex Analysis	12
Functional Equations	13
Real Analysis	19
Functional Analysis	22
Statistics and Probability	24
Applied Mathematics	27
Topology	32
Infinite Analysis	35

Foundation of Mathematics and History of Mathematics

September 5th (Thu)

9:30–11:30

- 01-01-0019
1 Katsushi Waki (Yamagata Univ.) Composition of the SAKUMA Collection Digital Archive 5
- 01-01-0011
2 Noriko Tanaka (Naragakuen Univ.) Probability and statistics for real-world —Pattern theory 15
Nozomu Matsubara (Univ. of Tokyo*)
- 01-01-0017
3 Makoto Tamura (Osaka Sangyo Univ.) On the “Suanshu” Jiazhong of Qin dynasty bamboo slips housed at Peking University 15
- 01-01-0023
4 Hideyuki Majima (Ochanomizu Univ.*) On the number 3.16 as Pi in JINKOUKI by YOSHIDA Mitsuyoshi 15
- 01-01-0012
5 Noriko Tanaka (Naragakuen Univ.) A Study on the Takuma School “Kijutsu Kairoho (Yakushiki-kyutsu)” 15
Tsukane Ogawa (Yokkaichi Univ.)
- 01-01-0010
6 Tsukane Ogawa (Yokkaichi Univ.) On the cultural theory of mathematical plates 15
Noriko Tanaka (Naragakuen Univ.)
- 01-01-0009
7 Ken Saito Hypsicles’ work on regular polyhedra (so-called Book 14 of the *Elements*) 15
(Osaka Pref. Univ.*/Yokkaichi Univ.)

11:45–12:00 Mathematics History Team Meeting

14:15–15:15 Talk Invited by Section on Foundation and History of Mathematics

- 01-02-0002
Etsuro Date (Osaka Univ.) On “Zenkoku Shijo Sugaku Danwakai”

15:30–17:00

- 01-01-0015
8 Koichiro Ikeda (Hosei Univ.) On stable theories having a type with infinite weight 15
- 01-01-0024
9 Hisashi Aratake Axiomatizability of models represented by sheaves 15
(Oyama Nat. Coll. of Tech.)
- 01-01-0018
10 Koki Okura (Univ. of Tsukuba) Avoiding cell decomposition 15
- 01-01-0008
11 Ikuo Yoneda (Tokuyama Coll. of Tech.) Weak one-basedness and CM-triviality in rosy theories 15
- 01-01-0021
12 Wataru Komine (Univ. of Tsukuba) On prime models of locally o-minimal theories 15
Akito Tsuboi (Univ. of Tsukuba*)
- 01-01-0014
13 Hirotaka Kikyo (Kobe Univ.) On dividing and forking in random hypergraphs 15
Akito Tsuboi (Univ. of Tsukuba*)

September 6th (Fri)

9:30–10:30

- 01-01-0001
14 Kenta Tsukuura (Hosei Univ.) Minimal walk method and semistationary subsets in Namba forcing extensions 15
- 01-01-0005
15 Teruyuki Yorioka (Shizuoka Univ.) Some preservation theorems for forcing notions with models as side conditions 15
- 01-01-0006
16 Teruyuki Yorioka (Shizuoka Univ.) Uncountable linear orders in Y-proper forcing axiom 15
- 01-01-0004
17 Toshimichi Usuba (Waseda Univ.) The tightness function of ultrapower embeddings 15

10:45–11:45 Talk Invited by Section on Foundation and History of Mathematics

01-02-0001

Tadatoshi Miyamoto (Nanzan Univ.) Families of sets by side conditions

12:00–12:15 Research Section Assembly**14:15–16:30**

01-01-0022

18 Kohtaro Tadaki (Chubu Univ.) A refinement of quantum mechanics by algorithmic randomness IV:
Continuous spectrum 15

01-99-0001

19 Masaaki Kumazawa (Abeno Shogaku High School) b On a characterization of the upper semi-lattice in BCK-algebras 15

01-01-0013

20 Akinori Maniwa (Tokyo Tech) Syntactic cut-elimination for provability logic **GL** via nested sequents
Ryo Kashima (Tokyo Tech) 15

01-01-0020

21 Yuta Sato (Kobe Univ.) Interpolation properties of some extensions of the pure logic of necessi-
tation **N** 15

01-01-0007

22 Haruka Kogure (Kobe Univ.) Interpolation properties for the bimodal provability logic **GR** 15
Taishi Kurahashi (Kobe Univ.)

01-01-0002

23 Taishi Kurahashi (Kobe Univ.) On some characterizations of collection principles 15

01-01-0003

24 Taishi Kurahashi (Kobe Univ.) On essential incompleteness restricted to finite extensions 15
Albert Visser (Utrecht Univ.)

01-01-0016

25 Tatsuya Shimura (Nihon Univ.) A family of intermediate propositional logics with strong disjunction
property and finite model property 15

Algebra

September 3rd (Tue)

9:30–12:00

02-01-0034

- 1 Kaveh Mousavand (Okinawa Inst. of Sci. and Tech. Grad. Univ.) Hom-orthogonal modules and bricks 15

02-01-0035

- 2 Naoya Hiramae (Kyoto Univ.) On τ -tilting finiteness of group algebras of some semidirect products 15
Yuta Kozakai (Tokyo Univ. of Sci.)

02-01-0052

- 3 Naoko Kunugi (Tokyo Univ. of Sci.) Morita equivalences for the principal blocks of 2-dimensional general linear groups 15
Kyoichi Suzuki (Tokyo Univ. of Sci.)

02-01-0012

- 4 Masahiko Miyamoto (Univ. of Tsukuba*) 1-point functions on a VOA of moonshine type 15

02-01-0041

- 5 Ching Hung Lam (Academia Sinica) Automorphism groups of parafermion vertex operator algebras: general case 10
Xingjun Lin (Wuhan Univ.)
Hiroki Shimakura (Fukuoka Univ.)

02-01-0028

- 6 Kazuya Kawasetsu (Kumamoto Univ.) Rogers–Ramanujan exact sequences and free modules over free generalized vertex algebras 15

02-01-0053

- 7 Naoki Genra (Univ. of Tokyo) Reduction by stages on W-algebras 10

02-01-0060

- 8 Ryota Wakao (Okayama Univ. of Sci.) On the construction of certain semisimple Hopf superalgebras 10

02-01-0017

- 9 Sin Yi Tsang (Ochanomizu Univ.) On skew brace representations 15
Yuta Kozakai (Tokyo Univ. of Sci.)

02-01-0063

- 10 Kento Ogawa (Hiroshima Univ.) An algebraic generalization of association schemes 10

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

02-02-0002

- Hailong Dao (Univ. of Kansas) Local singularities: algebraic, categorical and combinatorial aspects

15:30–18:00

02-01-0059

- 11 Jun Horiuchi (Nippon Inst. of Tech.) Matijević–Roberts type theorems for certain graded rings 13
Kazuma Shimomoto (Tokyo Tech)

02-01-0010

- 12 Ryo Ishizuka (Tokyo Tech) A generalization of Kunz’s theorem to mixed characteristic via p -adic cohomology theory 13
Kei Nakazato (Proxima Tech. Inc.)

02-01-0029

- 13 Akihiro Higashitani (Osaka Univ.) Non-finitely generated monoids corresponding to finitely generated subalgebras 13
Koichiro Tani (Osaka Univ.)

02-01-0038

- 14 Akiyoshi Tsuchiya (Toho Univ.) Quadratic toric rings and Kempe equivalence 13
Hidefumi Ohsugi (Kwansei Gakuin Univ.)

02-01-0001

- 15 Koji Matsushita (Osaka Univ.) Dual F -signatures of Veronese subrings and Segre products of polynomial rings 13

02-01-0005

- 16 Sora Miyashita (Osaka Univ.) A linear variant of the nearly Gorenstein property 13

02-01-0014		
17	Tadahito Harima (Niigata Univ.) Satoru Isogawa (Nat. Inst. of Tech., Kumamoto Coll.) Junzo Watanabe (Tokai Univ.*)	A binary tree of complete intersections with the strong Lefschetz property 10
02-01-0046		
18	Shuhei Tsujie (Hokkaido Univ. of Edu.) Daisuke Suyama (Hokkai-Gakuen Univ.)	On a q -analogue using Jackson integrals of logarithmic vector fields of a braid multiarrangement of hyperplanes 10
02-01-0049		
19	Hideo Kojima (Niigata Univ.) Takanori Nagamine (Nihon Univ.) Riko Sasagawa (Tokamachi High School)	Retracts of polynomial rings in three variables 13
02-01-0055		
20	Naoki Endo (Meiji Univ.)	Cohen–Macaulay normal Rees algebras of integrally closed ideals 13

September 4th (Wed)

9:15–10:45

02-01-0025		
21	Hideya Watanabe (Rikkyo Univ.)	Integrable modules for quantum symmetric pair coideal subalgebras 10
02-01-0043		
22	Robert Muth (Duquesne Univ.) Thomas Nicewicz (Washington and Jefferson Coll.) Liron Speyer (Okinawa Inst. of Sci. and Tech. Grad. Univ.) Louise Sutton (Okinawa Inst. of Sci. and Tech. Grad. Univ.)	A new construction of simple modules for type A KLR algebras 15
02-01-0054		
23	Takeshi Suzuki (Okayama Univ.) Kento Nakada (Okayama Univ.) Yoshitaka Toyosawa (Okayama Univ.)	Poset structure concerning cylindric diagrams 15
02-01-0062		
24	Shunsuke Kano (Tohoku Univ.) Tsukasa Ishibashi (Tohoku Univ.)	Entropy of cluster DT transformations and the finite-tame-wild trichotomy of acyclic quivers 15
02-01-0027		
25	Ryo Uchiumi (Osaka Univ.) Masahiko Yoshinaga (Osaka Univ.)	The quasi-polynomiality of mod q permutation representations for a linear finite group action on a lattice 15

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

02-02-0004	Sota Asai (Univ. of Tokyo)	New trends in tilting theory: semibricks and TF equivalences
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13:00–14:00

02-01-0019		
26	Shinya Kumashiro (Osaka Inst. of Tech.)	When are trace ideals finite? 15
02-01-0036		
27	Kaito Kimura (Nagoya Univ.) Justin Lyle (SLMath) Yuya Otake (Nagoya Univ.) Ryo Takahashi (Nagoya Univ.)	On the existence of counterexamples for vanishing problems of Ext and Tor 15
02-01-0047		
28	Yu Saito (Shizuoka Univ.) Masaki Matsuno (Tokyo Univ. of Sci.) Ayako Itaba (Tokyo Univ. of Sci.)	Classification of 3-dimensional cubic AS-regular algebras whose point schemes are reducible 15
02-01-0013		
29	Yutaka Yoshii (Ibaraki Univ.)	Some linear isomorphisms induced by the multiplication in the hyperalgebra of a simple algebraic group 10

September 5th (Thu)

9:30–12:00

02-01-0023

30 Yuki Imamura (Osaka Univ.) A formal category theoretic approach to the homotopy theory of dg categories 15

02-01-0032

31 Yuji Tsuno (Nat. Inst. of Tech., Wakayama Coll.) On the Grothendieck resolution for a certain finite flat commutative group scheme of order p^n over an \mathbb{F}_p -algebra 15

02-01-0051

32 Fumitake Hyodo (Kawasaki Univ. of Med. Welfare) Global properties of a Hecke ring associated with the Heisenberg Lie algebra 15

02-01-0050

33 Akinari Hoshi (Niigata Univ.) Norm one tori and Hasse norm principle, III: Degree 16 case 15
Kazuki Kanai (Kure Nat. Coll. of Tech.)
Aiichi Yamasaki (Kyoto Univ.)

02-01-0003

34 Taiga Adachi (Kyushu Univ.) Iwasawa theory for weighted graphs 15
Kosuke Mizuno (Nagoya Univ.)
Sohei Tateno (Nagoya Univ.)

02-01-0039

35 Naoki Kumakawa (Waseda Univ.) On \mathbb{Z}_2 -extensions unramified outside $(1 + \sqrt{-7})/2$ 10
Yasushi Mizusawa (Rikkyo Univ.)

02-01-0026

36 Ryota Tajima (Kyushu Univ.)^b The p -adic constant for mock modular forms and the degree of a certain modular parameterization of CM elliptic curves. 15

02-01-0004

37 Kenji Sakugawa (Shinshu Univ.) Integrality of Hecke eigenvalues for Hilbert and Siegel modular forms 10
Shingo Sugiyama (Kanazawa Univ.)

02-01-0057

38 Kohei Takehira (Tohoku Univ.) On the dynamical height zeta functions 15

12:00–12:30 Research Section Assembly**14:15–16:45**

02-01-0002

39 Tomohiro Iwami (Kyushu Inst. of Tech.) Analogous S. Bloch's formula related to recovering conductors of (\mathbb{Q} -)conic bundles via three-dimensional Miyaoka–Yau type inequality with third Chern classes 15

02-01-0033

40 Michio Amano (Meisei Univ.) On the injectivity of certain homomorphisms between extensions of $\widehat{\mathcal{G}}^{(\lambda)}$ by $\widehat{\mathbb{G}}_m$ over a $\mathbb{Z}_{(p)}$ -algebra 15

02-01-0065

41 Rin Gotou (Osaka Inst. of Tech.)^b Marking-weighted tree stratification of geometric moduli spaces of dynamical systems over \mathbf{P}^1 15

02-01-0030

42 Yuta Takada (Univ. of Tokyo) Dynamical degrees of automorphisms of K3 surfaces with Picard number 2 15

02-01-0066

43 Taiki Takatsu (Tokyo Univ. of Sci.) On automorphism groups of K3 surfaces and their virtual cohomological dimension 15

02-01-0048

44 Hisashi Usui (Gunma Nat. Coll. of Tech.) An example of the explicit generators of the Mordell–Weil lattice of a supersingular elliptic K3 surface in characteristic 11 15

02-01-0006

45 Ken Sato (Tokyo Tech.)^b On higher Chow cycles on K3 surfaces 15

02-01-0067

46 Norihiko Minami (Yamato Univ./Nagoya Inst. of Tech.*) Algebro-geometric invariant reflected in counter-examples the integral conjectures of Hodge and Tate 15

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

02-02-0001

Kenta Hasizume (Niigata Univ.) On minimal model theory for polarized log pairs

September 6th (Fri)

9:15–10:45

02-01-0031

47 Takeshi Torii (Okayama Univ.) The moduli of subalgebras of the full matrix ring (3) 15
Kazunori Nakamoto
(Univ. of Yamanashi)

02-01-0044

48 Takuya Saito (Hokkaido Univ.) Recent developments in the combinatorics of discriminantal arrange-
ments 15
Simona Settepanella (Torino Univ.)
Pragnya Das

02-01-0021

49 Akihiro Higashitani (Osaka Univ.) Characteristic quasi-polynomials of restrictions of Shi arrangements of
type B 15
Norihiro Nakashima
(Nagoya Inst. of Tech.)

02-01-0022

50 Nobukazu Kowaki (Osaka Univ.) Tropical hyperplane arrangements and combinatorial mutations of the
matching field polytopes of Grassmannians 15

02-01-0015

51 Mao Nagamine (Hokkaido Univ.) A -hypergeometric series with parameters in the core 15**11:00–12:00 Talk Invited by Algebra Section**

02-02-0003

Kota Saito Arithmetic properties of the integer and fractional parts of a sequence
(Univ. of Tsukuba/Sophia Univ.)**14:15–17:30**

02-01-0040

52 Xin Ren (Osaka Univ.) Arithmetic on q -deformed rational numbers 15
Takeyoshi Kogiso (Josai Univ.)
Kengo Miyamoto (Ibaraki Univ.)
Michihisa Wakui (Kansai Univ.)
Kohji Yanagawa (Kansai Univ.)

02-01-0045

53 Yasuaki Gyoda (Univ. of Tokyo) $SL(2, \mathbb{Z})$ -matrixization of generalized Markov numbers 15
Shuhei Maruyama (Kanazawa Univ.)
Yusuke Sato (Osaka Inst. of Tech.)

02-01-0042

54 Akihiro Goto (Kyushu Univ.) On some values which do not belong to the image of Ramanujan's tau
function 15

02-01-0056

55 Hayato Kanno (Tohoku Univ.) The Fourier expansion of multiple Eisenstein series of arbitrary level
and Goncharov's coproduct formula 15

02-01-0037

56 Yoshitaka Sasaki On multiple Mahler measures and multiple T values 10
(Tohoku Gakuin Univ.)

02-01-0061

57 Takumi Anzawa (Nagoya Univ.) Certain congruence of q -Fibonacci sequence and related finite transe-
cendental numbers 15
Hidetaka Funakura (Nagoya Univ.)

02-01-0024

58 Fumi Ogihara (Sophia Univ.) On the short interval average of the representation function for a variant
of the Hardy–Littlewood conjecture 15
Yuta Suzuki (Rikkyo Univ.)

02-01-0020

59 Yuichiro Toma (Nagoya Univ.) On the averages of quadratic twists of the Möbius function 10

- 02-01-0018
60 Yuuya Yoshida (Nagoya Inst. of Tech.) The numbers of solutions of linear equations in Piatetski-Shapiro sequences 15
- 02-01-0016
61 Yuuya Kanado (Nagoya Univ.) Normality of algebraic numbers and the Riemann zeta function 15
Kota Saito
(Univ. of Tsukuba/Sophia Univ.)
- 02-01-0011
62 Tomohiro Yamada On an analogue of superperfect numbers involving both ordinary and
(Kobe Univ./Osaka Univ.) infinitary divisors 15
- 02-01-0007
63 Masaya Kitajima (Nagoya Univ.) Generalized Bessel functions corresponding to lattice point problems of
generalized circles 15

Geometry

September 3rd (Tue)

9:30–11:45

- 03-01-0001
1 Yoshito Ishiki (Tokyo Metro. Univ.)^b Spaces of metrics are Baire 15
- 03-01-0002
2 Yoshiki Jikumaru (Toyo Univ.) Symmetries in the linear theory of the deformation of thin shells 15
- 03-01-0045
3 Kenzi Satô (Tamagawa Univ.) A intrinsic characterization of a centroid of a spherical or hyperbolic simplex 15
- 03-01-0017
4 Yuichiro Sato (Waseda Univ.)
Takanao Tsuyuki
(Hokkaido Information Univ.) Spatially homogeneous solutions of vacuum Einstein equations in general dimensions 15
- 03-01-0018
5 Shoichi Fujimori (Hiroshima Univ.)
Yu Kawakami (Kanazawa Univ.)
Masatoshi Kokubu (Tokyo Denki Univ.) Surfaces with concentric or parallel K -contours 15
- 03-01-0040
6 Yuta Sasahara (Tokyo Metro. Univ.) 4-dimensional isoparametric hypersurfaces of index 2 in the pseudo-Riemannian space forms 15
- 03-01-0038
7 Jun O'Hara (Chiba Univ.) Residues of manifolds and curvatures 15
- ## 14:15–16:15
- 03-01-0042
8 Hiroaki Nagaya (Hiroshima Univ.) A study of bornological proper actions 10
- 03-01-0044
9 Taika Okuda (Tokyo Univ. of Sci.)
Akifumi Sako (Tokyo Univ. of Sci.) Recent progress on twisted Fock representations of complex Grassmannians 15
- 03-01-0012
10 Kazushi Kobayashi (Mie Univ.) On a B-field transform of generalized complex structures over complex tori 15
- 03-01-0013
11 Yuto Yamamoto (RIKEN) The Gross–Siebert program and non-archimedean SYZ fibrations 15
- 03-01-0003
12 Masao Jinzenji (Okayama Univ.)
Ken Kuwata
(Kagawa Nat. Coll. of Tech.) Elliptic virtual structure constants and generalizations of BCOV-Zinger formula to projective fano hypersurfaces 15
- 03-01-0020
13 Natsuo Miyatake (Tohoku Univ.) Quantification and evaluation in the degree of mutual misalignment of harmonic metrics on cyclic Higgs bundles 15

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

- 03-02-0004
Hiroshi Iritani (Kyoto Univ.)^b Quantum cohomology of blowups

September 4th (Wed)

10:00–10:15 Presentation Ceremony for the 2024 MSJ Geometry Prize

10:20–11:20 Award Lecture for the 2024 MSJ Geometry Prize

- 03-02-0003
Hokuto Konno (Univ. of Tokyo) Diffeomorphism group and gauge theory

12:50–13:50 Award Lecture for the 2024 MSJ Geometry Prize

- 03-02-0002
Shinobu Hosono (Gakushuin Univ.) Families of Calabi-Yau manifolds and mirror symmetry

September 5th (Thu)

9:30–11:45

03-01-0029

- 14 Kentaro Yamaguchi (Tokyo Metro. Univ.) Submanifolds with boundary and corners in Delzant polytopes associated to affine subspaces 15

03-01-0037

- 15 Masahiro Morimoto (Tokyo Metro. Univ.) The parallel transport map over affine symmetric space 15

03-01-0036

- 16 Takahiro Hashinaga (Saga Univ.) Local isometric embeddings of three-dimensional homogeneous spaces into four-dimensional space forms 15

03-01-0004

- 17 Makiko Sumi Tanaka (Tokyo Univ. of Sci.) Maximal antipodal subgroups and covering homomorphisms with odd degree 15
- Hiroyuki Tasaki
(Tokyo Metro. Univ./Univ. of Tsukuba)

03-01-0022

- 18 Tadashi Fujioka (Osaka Univ.) A sphere theorem for a positively curved homology manifold and its links 15

03-01-0008

- 19 Shota Hamanaka (Osaka Univ.) Scalar curvature lower bounds of steady gradient Ricci soliton 15

03-01-0010

- 20 Kei Funano (Tohoku Univ.) A universal inequality for Neumann eigenvalues of the Laplacian 10

14:15–18:00

03-01-0028

- 21 Takahiro Aoi (Nat. Inst. of Tech., Wakayama Coll.) Skoda–Zeriahi type integrability and entropy compactness for Poincaré type Kähler metrics 15

03-01-0025

- 22 Naoto Yotsutani (Kagawa Univ.) Chow stability of λ -stable toric varieties 15
- King Leung Lee
(IMAG, Univ. of Montpellier)

03-01-0026

- 23 Naoto Yotsutani (Kagawa Univ.) Numerical semistability of projective toric varieties 15

03-01-0047

- 24 Shuhei Yonehara (Osaka Univ.) Actions of cosymplectic groupoids and a reduction theorem 15

03-01-0006

- 25 Yuji Hirota (Azabu Univ.) On reduction of vector-valued symplectic manifolds with homotopy momentum sections 15
- Noriaki Ikeda (Ritsumeikan Univ.)

03-01-0035

- 26 Tomoya Nakamura (Kogakuin Univ.) A generalization of Koszul–Vinberg manifolds 15
- Naoki Kimura (Tokyo Univ. of Sci.)

03-01-0030

- 27 Hiroshi Sawai (Numazu Nat. Coll. of Tech.) Lee form on a non-Vaisman LCK solvmanifold associated to a one-dimensional of a nilmanifold 15

03-01-0033

- 28 Yoshiaki Suzuki (Niigata Univ.) The spectrum of the Folland–Stein operator on Heisenberg Bieberbach manifolds 15

03-01-0024

- 29 Isami Koga (Kyushu Int. Univ.) Classification of Sp-equivariant harmonic maps from complex projective spaces into complex projective spaces 15
- Yasuyuki Nagatomo (Meiji Univ.)

03-01-0023

- 30 Takashi Hashimoto (Tottori Univ.) A hyperkähler metric on a complex coadjoint orbit 15

03-01-0039

- 31 Genki Ishikawa (Ritsumeikan Univ.) An elliptic fibration arising from the Lagrange top and its monodromy 15

September 6th (Fri)

9:30–11:45

03-01-0005

32 Sheng-Chen Mao (Fudan Univ.)
Ye Zhang
(Okinawa Inst. of Sci. and Tech. Grad. Univ.)

On gradient estimates of the heat semigroups on step-two Carnot groups
..... 15

03-01-0009

33 Xiaodan Zhou
(Okinawa Inst. of Sci. and Tech. Grad. Univ.)

Non-uniqueness of Green functions on metric spaces 15

03-01-0031

34 Naotaka Kajino (Kyoto Univ.)
Ryosuke Shimizu (Waseda Univ.)

Sharp Hölder regularity estimates of harmonic functions for p -resistance forms 15

03-01-0032

35 Naotaka Kajino (Kyoto Univ.)
Ryosuke Shimizu (Waseda Univ.)

On singularity of p -energy measures among distinct values of p for some p.-c.f. self-similar sets 15

03-01-0041

36 Naomichi Nakajima
(Shibaura Inst. of Tech.)

Dually flat geometry of plane curves and singularity theory 15

03-01-0034

37 Kaito Kayo (Hokkaido Univ.)

Statistical manifold with degenerate metric 15

03-01-0007

38 Hikoza Kobayashi (Hiroshima Univ.)
Yu Ohno (Hokkaido Univ.)
Takayuki Okuda (Hiroshima Univ.)
Hiroshi Tamaru (Osaka Metro. Univ.)

Moduli spaces of left-invariant statistical structures, dually-flatness and conjugate symmetries 15

14:15–16:45

03-01-0027

39 Kazumasa Narita (Nagoya Univ.)

Geometric interpretation of majorization and its application to graph realization problem 15

03-01-0016

40 Takumi Matsuka (Tokyo Metro. Univ.)
Tomohiro Fukaya (Tokyo Metro. Univ.)

Boundary of free products of coarsely convex spaces 15

03-01-0021

41 Masato Mimura (Tohoku Univ.)
Morimichi Kawasaki (Hokkaido Univ.)
Mitsuaki Kimura (Osaka Dent. Univ.)
Takahiro Matsushita (Shinshu Univ.)
Shuhei Maruyama (Kanazawa Univ.)

Generalized mixed Bavard duality 15

03-01-0048

42 Tetsu Toyoda (Kogakuin Univ.)

The Andoni–Naor–Neiman inequalities and isometric embeddability into a CAT(0) space 15

03-01-0043

43 Hiroyasu Izeki (Keio Univ.)
Anders Karlsson (Univ. Geneva)

A fixed-point property of finitely generated torsion groups with subexponential growth for CAT(0) spaces 15

03-01-0015

44 Syota Esaki (Oita Univ.)
Daisuke Kazukawa (Kyushu Univ.)
Ayato Mitsuishi (Fukuoka Univ.)

Convergence of l_p -product Gaussian spaces and its applications 15

03-01-0011

45 Shin-ichi Oguni (Ehime Univ.)
Motoko Kato (Univ. of Ryukyus)

Acyindrical hyperbolicity of Artin groups associated with graphs that are not cliques 15

Complex Analysis

September 3rd (Tue)

9:30–11:00

- [04-01-0007](#)
1 Shunji Horiguchi Newton–Mandelbrot set and Murase–Mandelbrot set 15
- [04-01-0003](#)
2 Masaki Tsukamoto (Kyoto Univ.) Rate distortion dimension of random Brody curves 15
- [04-01-0010](#)
3 Michael Heins (Univ. of Würzburg) b Peschl–Minda derivatives and convergent Wick star products 15
Annika Moucha (Univ. of Würzburg)
Oliver Roth (Univ. of Würzburg)
Toshiyuki Sugawa (Tohoku Univ.)
- [04-01-0008](#)
4 Katsuhiko Matsuzaki (Waseda Univ.) The Teichmüller space of circle diffeomorphisms in the Zygmund smooth class 15
- [04-01-0006](#)
5 Kento Sakai (Osaka Univ.) Degeneration of hyperbolic surfaces with boundary via harmonic maps 15

14:20–15:20 Talk Invited by Complex Analysis Section

- [04-02-0001](#)
Shinpei Baba (Osaka Univ.) b Bers’ simultaneous uniformization theorem and complex projective structures on Riemann surfaces

September 4th (Wed)

9:30–11:00

- [04-01-0009](#)
6 Takanori Ayano (Osaka Metro. Univ.) Expressions of hyperelliptic functions of genus $2g$ in terms of hyperelliptic functions of genus g 15
- [04-01-0001](#)
7 Tatsuhiro Honda (Senshu Univ.) Bohr’s phenomena for pluriharmonic mappings in a separable complex Hilbert space 15
Hidetaka Hamada
(Kyushu Sangyo Univ.)
- [04-01-0002](#)
8 Takeo Ohsawa (Nagoya Univ.) b On Stein neighborhood basis of certain Stein domains 15
- [04-01-0004](#)
9 Yuta Watanabe (Chuo Univ.) ω -trace and Griffiths positivity for singular Hermitian metrics 15
- [04-01-0005](#)
10 Taiji Marugame Ambient and Poincaré metrics for CR 3-manifolds corresponding to Einstein ACH metrics 15
(Univ. of Electro-Comm.)

13:00–14:00 Talk Invited by Complex Analysis Section

- [04-02-0002](#)
Hajime Tsuji (Sophia Univ.*) Discrete Kähler–Ricci flows

Functional Equations

September 3rd (Tue)

9:00–12:00

05-01-0067

1 Yumiko Takei

(Ibaraki Nat. Coll. of Tech.)

Yoshitsugu Takei (Doshisha Univ.)

A system of differential-difference equations and an integral representation of solutions for the hypergeometric functions 12

05-01-0004

2 Keiji Matsumoto (Hokkaido Univ.)

Jyoichi Kaneko (Univ. of Ryukyus*)

Katsuyoshi Ohara (Kanazawa Univ.)

Tomohide Terasoma (Hosei Univ.)

A system of hypergeometric differential equations in m variables I, the rank and the singular locus. 12

05-01-0005

3 Keiji Matsumoto (Hokkaido Univ.)

Jyoichi Kaneko (Univ. of Ryukyus*)

Katsuyoshi Ohara (Kanazawa Univ.)

Tomohide Terasoma (Hosei Univ.)

A system of hypergeometric differential equations in m variables II, the monodromy representation. 12

05-01-0080

4 Tatsuya Hosoi (Univ. of Tokyo)

Hidetaka Sakai (Univ. of Tokyo)

A study on the bilinear equation of the sixth Painlevé transcendents 12

05-01-0079

5 Tatsuya Hosoi (Univ. of Tokyo)

Formal series solutions of fourth-order homogeneous quadratic differential equations with complex powers depending on initial values and their convergence 12

05-01-0029

6 Junya Nishiguchi (Tohoku Univ.)

On regularity of mild solutions for linear delay differential equations 12

05-01-0001

7 Mingzhu Qu (Osaka Pref. Univ.)

Hideaki Matsunaga

(Osaka Metro. Univ.)

Asymptotic stability in a linear differential equation with two kinds of delays 12

05-01-0056

8 Hiroyuki Usami (Gifu Univ.)

Asymptotic behavior of positive solutions of perturbed third order half-linear ordinary differential equations 12

05-01-0043

9 Masakazu Onitsuka

(Okayama Univ. of Sci.)

Satoshi Tanaka (Tohoku Univ.)

Box-counting dimension of spiral orbits for two-dimensional nonautonomous nonlinear differential systems 12

05-01-0068

10 Yasuhisa Saito (Shimane Univ.)

Backward bifurcation of an epidemic model with treatment capacity and the proportion of severe cases 12

05-01-0007

11 Kazuki Ishibashi

(Hiroshima Inst. of Tech.)

Wintner-type nonoscillation theorems for Sturm–Liouville differential equations using a PD controller 12

05-01-0006

12 Tetsutaro Shibata (Hiroshima Univ.)

Asymptotics of solution curves of Kirchhoff type elliptic equations with logarithmic Kirchhoff function 12

05-01-0012

13 Satoshi Masaki (Hokkaido Univ.)

On representation of solutions to a class of systems of ordinary differential equations 12

14:15–16:45

05-01-0039

- 14 Tatsuki Mori (Musashino Univ.) Stability of stationary solutions of a phase-field model 12
Sohei Tasaki (Hokkaido Univ.)
Tohru Tsujikawa
(Univ. of Miyazaki*/Meiji Univ.)
Yasuhito Miyamoto (Univ. of Tokyo)
Shoji Yotsutani (Ryukoku Univ.*)

05-01-0040

- 15 Shoji Yotsutani (Ryukoku Univ.*) All eigenvalues and eigenfunctions of a nonlocal linearized eigenvalue
problem 12
Sohei Tasaki (Hokkaido Univ.)
Tohru Tsujikawa
(Univ. of Miyazaki*/Meiji Univ.)
Yasuhito Miyamoto (Univ. of Tokyo)
Tatsuki Mori (Musashino Univ.)

05-01-0031

- 16 Yuta Ishii (Ibaraki Nat. Coll. of Tech.) Existence of spiky stationary solutions for the Gierer–Meinhardt model
with advection term on the Y -shaped metric graph 12

05-01-0069

- 17 Ryunosuke Mori (Meiji Univ.) Blocking and propagation in two-dimensional cylinders with spatial
periodicity 12
Hiroshi Matano (Meiji Univ.)

05-01-0078

- 18 Ayuki Sekisaka (Meiji Univ.) Eigenvalue problem and the Evans function of reaction-diffusion systems
in cylinder domains 12
Hiroko Yamamoto (RIKEN)

05-01-0010

- 19 Yuki Kaneko (Kanto Gakuin Univ.) Stability and bifurcation diagram for a shadow Gierer–Meinhardt sys-
tem in one spatial dimension 10
Yasuhito Miyamoto (Univ. of Tokyo)
Tohru Wakasa (Kyushu Inst. of Tech.)

05-01-0051

- 20 Masahiko Shimojo Stability of traveling waves in non-cooperative systems with nonlocal
dispersal of equal diffusivities 12
(Tokyo Metro. Univ.)
Jong-Shenq Guo (Tamkang Univ.)

05-01-0047

- 21 Masahiko Shimojo Spreading dynamics for a predator-prey system with two predators and
one prey in a shifting habitat 12
(Tokyo Metro. Univ.)
Jong-Shenq Guo (Tamkang Univ.)
Chin-Chin Wu (Chung Hsing Univ.)

05-01-0033

- 22 Kenta Kumagai (Tokyo Tech) Bifurcation structure of supercritical semilinear elliptic equations in two
dimensions 12

05-01-0030

- 23 Yasuhito Miyamoto (Univ. of Tokyo) A bifurcation diagram of solutions to semilinear elliptic equations with
general supercritical growth 12
Yūki Naito (Hiroshima Univ.)

17:00–18:00 Talk Invited by Functional Equations Section

05-02-0004

- Fumihiko Nakano (Tohoku Univ.) Statistics for random Schroedinger operators and random walk

September 4th (Wed)

9:00–12:00

05-01-0061

- 24 Minami Watanabe (Tsuda Coll.) Long time perturbation theory for nonlinear Schrodinger equation with
exponential nonlinearity 10

05-01-0063

- 25 Sho Katayama (Univ. of Tokyo) Existence and multiplicity of solutions to non-homogeneous Dirichlet
problems for the Lane–Emden equation 12

05-01-0038	26 Satoshi Tanaka (Tohoku Univ.)	Existence of positive solutions to an eigenvalue problem with a variable exponent	12
05-01-0014	27 Mieko Tanaka (Tokyo Univ. of Sci.)	Remarks on non-local eigenvalue problems for the p -Laplacian	12
05-01-0008	28 <u>Ryuji Kajikiya</u> (Osaka Electro-Comm. Univ.) Mieko Tanaka (Tokyo Univ. of Sci.) Satoshi Tanaka (Tohoku Univ.)	The best constant for the Sobolev–Poincaré inequality, I. Asymptotic behavior	12
05-01-0009	29 <u>Ryuji Kajikiya</u> (Osaka Electro-Comm. Univ.) Mieko Tanaka (Tokyo Univ. of Sci.) Satoshi Tanaka (Tohoku Univ.)	The best constant for the Sobolev–Poincaré inequality, II. Monotonicity	12
05-01-0042	30 Youhei Tsutsui (Kyoto Univ.)	Two-weight inequality for the heat flow and solvability of Hardy–Hénon type equation	12
05-01-0034	31 <u>Yuki Osada</u> (Saitama Univ.) Yohei Sato (Saitama Univ.)	A construction of peak solutions by a local mountain pass approach for a nonlinear Schrödinger system with three wave interaction	12
05-01-0011	32 <u>Tomoharu Kinoshita</u> (Waseda Univ.) Yuki Osada (Saitama Univ.)	Multiplicity of solutions for a nonlinear Schrödinger system with three wave interaction	10
05-01-0044	33 <u>Shimpei Makida</u> (Hokkaido Univ.) Atsushi Nakayasu (Univ. of Tokyo)	Stability of metric viscosity solutions under Hausdorff convergence . . .	12
05-01-0058	34 <u>Erbol Zhanpeisov</u> (Okinawa Inst. of Sci. and Tech. Grad. Univ.) Qing Liu (Okinawa Inst. of Sci. and Tech. Grad. Univ.)	Liouville-type theorems for fully nonlinear elliptic and parabolic equations with boundary degeneracy	12
05-01-0028	35 <u>Yasuhiro Fujita</u> (Univ. of Toyama) Norikazu Yamaguchi (Univ. of Toyama)	A difference between Weierstrass function and Takagi function from the viewpoint of Hamilton–Jacobi flows	12
05-01-0036	36 <u>Tokuhiro Eto</u> (Univ. of Tokyo) Yoshikazu Giga (Univ. of Tokyo)	A convergence result for a minimizing movement scheme for mean curvature flow with prescribed contact angle in a curved domain	12

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

05-02-0001	Mieko Tanaka (Tokyo Univ. of Sci.)	Eigenvalue problems for (p, q) -Laplace equations with two parameters	
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September 5th (Thu)

9:00–12:00

05-01-0021	37 Junichi Harada (Akita Univ.)	Stability of the nondegenerate ODE type blowup for the Fujita type heat equation	10
05-01-0065	38 <u>Ikki Fukuda</u> (Shinshu Univ.) Shinya Sato (Shinshu Univ.)	Higher-order asymptotic profiles of solutions to the convection-diffusion equation with variable diffusion	12
05-01-0023	39 Ryunosuke Kusaba (Waseda Univ.)	Asymptotic expansions for the convection-diffusion equation in the Fujita-subcritical case	12
05-01-0035	40 <u>Yuya Tanaka</u> (Kwansei Gakuin Univ.) Masahiko Shimojo (Tokyo Metro. Univ.)	Asymptotic behavior of solutions for diffusive epidemic models with logistic source	12

05-01-0017	41 Takashi Suzuki (Osaka Univ.)	Mathematical analysis for Brownian particle gas models, II	5
05-01-0054	42 Kouta Araki (Nihon Univ.) Masashi Mizuno (Nihon Univ.)	Long-time behavior of free energy in nonlinear Fokker–Planck models with inhomogeneous diffusion	12
05-01-0077	43 Masashi Mizuno (Nihon Univ.) Yekaterina Epshteyn (Univ. of Utah) Chun Liu (Illinois Inst. of Tech.)	The entropy dissipation method to non-linear Fokker–Planck equations with inhomogeneous diffusion	12
05-01-0002	44 Masaki Sakuma (Univ. of Tokyo)	Existence of infinite sequences of solutions to some critical fractional Choquard-type equations with generalized convolution kernels	12
05-01-0048	45 Masamitsu Suzuki (Meiji Univ.)	Local existence and nonexistence for fractional in time reaction-diffusion equations and systems with rapidly growing nonlinear terms	12
05-01-0026	46 Mizuki Kojima (Tokyo Tech)	On Fujita critical time-fractional semilinear heat equations in uniformly local weak Zygmund spaces	12
05-01-0041	47 Tatsu-Hiko Miura (Hirosaki Univ.)	Thin-film limit of the Ginzburg–Landau heat flow in a curved thin domain	12
05-01-0070	48 Fuya Hiroi (Tohoku Univ.) Shinya Okabe (Tohoku Univ.)	Curve diffusion flow with the boundary on two skew lines	12
05-01-0027	49 Tatsuya Miura (Kyoto Univ.) Kensuke Yoshizawa (Nagasaki Univ.)	Stability of pinned planar p -elasticae	12

12:15–12:45 Presentation Ceremony for the 2024 MSJ Analysis Prize

14:30–16:45

05-01-0081	50 Naoki Hamamoto (Osaka Metro. Univ.)	Sharp L^2 remainder term in Hardy inequality for curl-free vector fields on the ball	12
05-01-0037	51 Aya Ishizeki (Saitama Univ.) Takeyuki Nagasawa (Saitama Univ.)	Möbius energies for multi-component-links, and their Möbius-invariant decomposition	10
05-01-0032	52 Akitoshi Hoshiya (Univ. of Tokyo)	Orthonormal Strichartz estimate for Schrödinger operator	10
05-01-0076	53 Masaki Kawamoto (Okayama Univ.) Haruya Mizutani (Osaka Univ.)	Modified scattering for nonlinear Schrödinger equations with long-range potentials	12
05-01-0013	54 Satoshi Masaki (Hokkaido Univ.)	Partial classification of the asymptotic behavior of solutions to NLS systems with coercive conserved quantity	12
05-01-0045	55 Shunya Hashimoto (Saitama Univ.) Masaru Hamano (Waseda Univ.) Shuji Machihara (Saitama Univ.)	Global solutions of stochastic nonlinear Schrödinger system	12
05-01-0049	56 Kaito Kokubu (Tokyo Univ. of Sci.)	Stability of travelling waves to Benjamin–Ono type equations with double power nonlinearities	12
05-01-0064	57 Stephen Gustafson (Univ. of British Columbia) Takahisa Inui (Osaka Univ.) Ikkei Shimizu (Osaka Univ.)	Multi-solitons for the nonlinear Schrödinger equation with repulsive Dirac delta potential	12
05-01-0060	58 Sonaë Hadama (Kyoto Univ.) Antoine Borie (Univ. of Rennes) Julien Sabin (Univ. of Rennes)	Asymptotic stability of stationary solutions of the Hartree equations for infinite quantum systems	12

17:00–18:00 Talk Invited by Functional Equations Section

05-02-0003

- Takahisa Inui (Osaka Univ.) Global dynamics of threshold solutions for the nonlinear Schrödinger equation with repulsive Dirac delta potential

September 6th (Fri)

9:15–12:00

05-01-0050

- 59 Yuki Haruyama (Tohoku Univ.)
Hiroyuki Takamura (Tohoku Univ.) Blow-up of classical solutions of quasilinear wave equations in one space dimension 10

05-01-0052

- 60 Motohiro Sobajima (Tokyo Univ. of Sci.) Asymptotic behavior for wave equations with space-dependent damping in a weighted energy class 12

05-01-0062

- 61 Yoshinori Nishii (Tokyo Univ. of Sci.) On the decay estimate for small solutions to nonlinear Klein–Gordon equations with dissipative structure 12

05-01-0019

- 62 Masahiro Takayama (Keio Univ.)
Tatsuo Iguchi (Keio Univ.) Well-posedness of the initial boundary value problem for degenerate hyperbolic systems with a localized term 12

05-01-0020

- 63 Masahiro Takayama (Keio Univ.)
Tatsuo Iguchi (Keio Univ.) Well-posedness of the initial boundary value problem for the linearized system for the motion of an inextensible hanging string 12

05-01-0022

- 64 Hiroyuki Tsurumi (Tokushima Univ.)
Jin Tan (CY Cergy Paris Univ.)
Xin Zhang (Tongji Univ.) Solutions to the stationary Hall–MHD equations in Besov spaces 12

05-01-0075

- 65 Shintaro Kondo (Gifu Univ.)
Tatsuki Nakamura (AISIN CORPORATION) Global strong solution for the 2D MHD equations with shearing-periodic boundary condition 12

05-01-0015

- 66 Masahiro Suzuki (Nagoya Inst. of Tech.)
Walter A. Strauss (Brown Univ.) Gas discharge in an annular region I: stability analysis 12

05-01-0016

- 67 Masahiro Suzuki (Nagoya Inst. of Tech.)
Walter A. Strauss (Brown Univ.) Gas discharge in an annular region II: bifurcation 12

05-01-0018

- 68 Kai Koike (Tokyo Tech)
Franck Sueur (Univ. Bordeaux)
Gastón Vergara-Hermosilla (Univ. Paris-Saclay) Local exact Lagrangian controllability of the 1D compressible Navier–Stokes equations 12

05-01-0059

- 69 Naoto Deguchi (Tokyo Tech) Low Mach number limit of the compressible Navier–Stokes equation with stationary force 12

14:15–16:45

05-01-0003

- 70 Taiki Takeuchi (Kyoto Univ.)
Keiichi Watanabe (Suwa Univ. of Sci.) Maximal regularity approach to the Keller–Segel–Navier–Stokes system with nonlinear boundary conditions 12

05-01-0074

- 71 Yoshiki Iida (Waseda Univ.) Global well-posedness of the primitive equations on non-flat layers in the framework of maximal L^q -regularity 12

05-01-0057

- 72 Ryosuke Nakasato (Shinshu Univ.) Analyticity and asymptotic behavior of solutions to the Navier–Stokes equations in critical Fourier–Herz spaces 12

05-01-0066

- 73 Hideo Kozono (Waseda Univ.)
Yutaka Terasawa (Nagoya Univ.)
Yuta Wakasugi (Hiroshima Univ.) Asymptotic behavior of solutions to elliptic equations in 2D exterior domains 10

05-01-0053

- 74 Kenta Oishi (Kagawa Nat. Coll. of Tech.) Hirokazu Saito (Univ. of Electro-Comm.) Global solvability of the two-phase problem of inhomogeneous incompressible viscous fluids 12

05-01-0071

- 75 Kazuyuki Tsuda (Kyushu Sangyo Univ.) Reinhard Farwig (TU Darmstadt) The time periodic problem for the Navier–Stokes equations on half spaces with moving boundary: Linear theory 12

05-01-0072

- 76 Kazuyuki Tsuda (Kyushu Sangyo Univ.) Reinhard Farwig (TU Darmstadt) The time periodic problem for the Navier–Stokes equations on half spaces with moving boundary: Nonlinear theory 12

05-01-0055

- 77 Giovanni Paolo Galdi (Univ. of Pittsburgh) Tatsuki Yamamoto (Waseda Univ.) Nonhomogeneous boundary value problem for the steady Navier–Stokes equations with the slip boundary conditions 12

05-01-0025

- 78 Keiichi Watanabe (Suwa Univ. of Sci.) The Helmholtz decomposition of vector fields for two-dimensional exterior Lipschitz domains 12

05-01-0024

- 79 Tomoki Takahashi (Kanagawa Univ.) Keiichi Watanabe (Suwa Univ. of Sci.) The Navier–Stokes flow in the exterior of a moving obstacle with a Lipschitz boundary 12

17:00–18:00 Talk Invited by Functional Equations Section

05-02-0002

- Jan Brezina (Kyushu Univ.) Long-time behavior of the dissipative compressible MHD

Real Analysis

September 5th (Thu)

9:00–12:00

06-01-0016

- 1 Tomoya Kato (Gifu Univ.) Bilinear oscillatory Fourier multipliers 15
 Akihiko Miyachi
 (Tokyo Woman's Christian Univ.)
 Naoto Shida (Nagoya Univ.)
 Naohito Tomita (Osaka Univ.)

06-01-0017

- 2 Yanhan Chen (Kyoto Univ.) Weighted weak type bounds for fractionally sparsely dominated operators 15

06-01-0011

- 3 Akira Lee (Nara Women's Univ.) Pandey–Upadhyay's wavelet transform and microlocal singularities of functions 15
 Shinya Moritoh (Nara Women's Univ.)

06-01-0005

- 4 Tomoya Kato (Gifu Univ.) Estimates for some bilinear wave operators 15
 Akihiko Miyachi
 (Tokyo Woman's Christian Univ.)
 Naohito Tomita (Osaka Univ.)

06-01-0009

- 5 Ryota Kawasumi (Kobe Gakuin Univ.) Difference between the deep neural network and the Fourier series from pointwise convergence for the indicator function 15
 Tsuyoshi Yoneda (Hitotsubashi Univ.)

06-01-0032

- 6 Satoshi Yamaguchi (Ibaraki Univ.) Generalized fractional integral operators on subspaces of generalized Morrey spaces with variable growth condition 15
 Eiichi Nakai (Ibaraki Univ.)

06-01-0027

- 7 Toru Nogayama (Tokyo Univ. of Sci.) Weighted maximal inequalities for local Bourgain–Morrey spaces 15

06-01-0019

- 8 Gen Nakamura On the characterizat on of one-dimensional, n -order Sobolev spaces in terms of higher-order finite differences 15
 (Matsue Coll. of Tech.*/Akashi Coll. of Tech.)
 Kazuo Hashimoto
 (Hiroshima Jogakuin Univ.*)

06-01-0015

- 9 Youhei Tsutsui (Kyoto Univ.) A proof of Alvino's embedding $BV \hookrightarrow L^{n/(n-1),1}$ via medians 15

06-01-0007

- 10 Naoya Hatano (Chuo Univ.) Smoothing estimate for the heat semigroup with a homogeneous weight on Morrey spaces 15
 Masahiro Ikeda (RIKEN/Keio Univ.)

14:15–16:45

06-01-0006

- 11 Naoya Hatano (Chuo Univ.) Boundedness of composition operators from Lorentz spaces to Orlicz spaces 15
 Masahiro Ikeda (RIKEN/Keio Univ.)
 Ryota Kawasumi (Kobe Gakuin Univ.)

06-01-0003

- 12 Yoichi Miyazaki (Nihon Univ.) Logarithmic inequalities in Triebel–Lizorkin spaces 15

06-01-0001

- 13 Hiro-o Kita (Kagoshima Univ.*) On Δ_0 -condition for generalized weak Orlicz space constructed by φ -function 15
 Takashi Miyamoto
 (Osaka Kyoiku Univ.)
 Naoko Ogata (Kobe Univ.)

06-01-0031

- 14 Sachiko Atsushiba Convergence theorems for monotone nonexpansive mappings and mean-demiclosed mappings 15
 (Tokyo Woman's Christian Univ.)

06-01-0018		
15	Aoi Honda (Kyushu Inst. of Tech.) Ryoji Fukuda (Oita Univ.) <u>Yoshiaki Okazaki</u> (Fuzzy Logic Systems Inst.)	Uniform Structure of the Choquet Function Space $\mathcal{L}_1(\text{Ch})$ 15
06-01-0012	16 Jun Kawabe (Shinshu Univ.)	The abstract forms of the continuous Choquet integral representation theorems 15
06-01-0010	17 Toshiharu Kawasaki (Tamagawa Univ./Chiba Univ.)	On the extended indefinite integral 15
06-01-0013	18 Yoshifumi Ito (Tokushima Univ.*)	Study on space-time-matter 15

17:00–18:00 Talk Invited by Real Analysis Section

06-02-0001	Hiroki Saito (Nihon Univ.)	Fractional integrals and related phenomena in analysis
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September 6th (Fri)

10:00–12:00

06-01-0020	19 <u>Hana Kakiuchi</u> (Japan Women's Univ.) Toyohiko Aiki (Japan Women's Univ.)	On existence of solutions to free boundary problems representing the baking process 15
06-01-0021	20 <u>Naotaka Ukai</u> (Chiba Univ.) Daiki Mizuno (Chiba Univ.) Ken Shirakawa (Chiba Univ.) Harbir Antil (George Mason Univ.)	Uniqueness for gray-scale image-denoising process with anisotropic orientation adjustment 15
06-01-0024	21 <u>Daiki Mizuno</u> (Chiba Univ.) Ken Shirakawa (Chiba Univ.)	Pseudo-parabolic type regularity in parabolic KWC system with relaxation 15
06-01-0025	22 Yoshiho Akagawa (Gifu Nat. Coll. of Tech.)	Continuous dependence of a hardening plasticity model on the threshold function 15
06-01-0014	23 Masahiro Ikeda (RIKEN/Keio Univ.) <u>Shun Uchida</u> (Oita Univ.) Takeshi Fukao (Ryukoku Univ.)	Optimal control problem of ODE governed by hypergraph Laplacian 15
06-01-0008	24 Kota Kumazaki (Kyoto Univ. of Edu.)	Regularity of a solution to a one-dimensional free boundary problem 15
06-01-0030	25 <u>Risei Kano</u> (Kochi Univ.) Takahiro Yamanaka (Ogata High School)	On the solvability of the Bernoulli–Euler beam model with piezoelectric effects 15

14:15–15:05

06-01-0004	26 <u>Takeshi Fukao</u> (Ryukoku Univ.) Pierluigi Colli (Univ. di Pavia) Luca Scarpa (Politecnico di Milano)	An error estimate of some vanishing surface diffusion 15
06-01-0002	27 <u>Noriaki Yamazaki</u> (Kanagawa Univ.) Nobuyuki Kenmochi (Chiba Univ.*) Ken Shirakawa (Chiba Univ.)	Solvability result of second order nonlinear quasi-variational evolution inclusions 15
06-01-0028	28 <u>Takuma Yoshizumi</u> (Osaka Univ.) Makoto Nakamura (Osaka Univ.)	Global solutions for semi-linear Klein–Gordon equations in FLRW spacetimes 10
06-01-0029	29 <u>Takuma Yoshizumi</u> (Osaka Univ.) Makoto Nakamura (Osaka Univ.)	Blowing-up solutions for semi-linear Klein–Gordon equations in FLRW spacetimes 10

15:20–16:20 Talk Invited by Real Analysis Section

06-02-0002

Kosuke Kita (Tohoku Univ.) On nonlinear heat equations with nonlinear boundary conditions in a bounded domain

Functional Analysis

September 3rd (Tue)

9:00–10:45

07-01-0022

- 1 Nikita Evseev (Okinawa Inst. of Sci. and Tech. Grad. Univ.)
Malte Kampschulte (Charles Univ.)
Alexander Menovschikov (Ben-Gurion Univ. of the Negev)
- Zero-extension convergence and Sobolev spaces on changing domains 10

07-01-0014

- 2 Yoritaka Iwata (Osaka Univ. of Economics Law)
- Fractional power representation of general unbounded operators and the Heinz–Kato inequalities 15

07-01-0001

- 3 Shosuke Omori (Gunma Nat. Coll. of Tech./Waseda Univ.)
- On the rigged Hilbert space formulation for a quasi-Hermitian operator in composite system 15

07-01-0002

- 4 Shuji Watanabe (Gunma Univ.)
- The Bogoliubov transformation and the gap equation in the BCS model of superconductivity with external magnetic field II 15

07-01-0003

- 5 Itaru Sasaki (Shinshu Univ.)
Yasumichi Matsuzawa (Shinshu Univ.)
Shinnosuke Izumi (Shinshu Univ.)
Kouta Imura (Nagano Pref. Fujimi High School)
- Holomorphy of the ground states of the pair interaction models 15

07-01-0024

- 6 Fumio Hiroshima (Kyushu Univ.)
- Exponential decay of the ground state of the renormalized Nelson Hamiltonian by Agmon type metric 10

07-01-0025

- 7 Fumio Hiroshima (Kyushu Univ.)
- On the ergodicity of renormalized translation-invariant Nelson-type semigroups 10

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

07-02-0002

- Naoto Kumanogo (Kogakuin Univ.)
- Phase space Feynman path integrals on the torus —An analysis on path space

September 4th (Wed)

10:00–11:45

07-01-0004

- 8 Hiroto Inoue (Nishinippon Inst. of Tech.)
- F - t joint distributions associated to quadratic maps of homogeneous cones 15

07-01-0017

- 9 Taito Tauchi (Aoyama Gakuin Univ.)
Kyo Nishiyama (Aoyama Gakuin Univ.)
- Real double flag variety for indefinite unitary group $U(p, p)$ 15

07-01-0020

- 10 Ryoya Arimoto (Kyoto Univ.)
- Simplicity of crossed products of the actions of totally disconnected locally compact groups on their boundaries 15

07-01-0023

- 11 Akifumi Nakada (Hiroshima Univ.)
Kento Ogawa (Hiroshima Univ.)
Takayuki Okuda (Hiroshima Univ.)
- Harmonic analysis on compact association schemes 15

07-01-0028

- 12 Koichi Arashi (Tokyo Gakugei Univ.)
- Multiplicity-free representations of nilpotent Lie groups over a quasi-symmetric domain 15

07-01-0026

- 13 Hyuga Ito (Nagoya Univ.)
- On free divergence-free vector fields 15

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

07-02-0003

Hiroyoshi Tamori

(Shibaura Inst. of Tech.)

Strichartz estimates for the (k, a) -generalized Laguerre operator

September 5th (Thu)

10:00–12:00

07-01-0009

14 Daisuke Hirota

(Nat. Inst. of Tech., Tsuruoka Coll.)

Surjective isometries on the Banach algebra of continuously differentiable maps values in Lipschitz algebra 15

07-01-0007

15 Hiroshi Isa (Maebashi Inst. of Tech.)

Eizaburo Kamei

Hiroaki Tohyama

(Maebashi Inst. of Tech.)

Masayuki Watanabe

(Maebashi Inst. of Tech.*)

Inequalities among the n -th residual relative operator entropies 15

07-01-0012

16 Yuki Seo (Osaka Kyoiku Univ.)

Matrix trace inequalities related to the Tsallis relative entropies of real order 15

07-01-0016

17 Masatoshi Ito (Maebashi Inst. of Tech.)

The weighted power difference mean and its generalization 15

07-01-0021

18 Mitsuru Uchiyama

(Shimane Univ.*/Ritsumeikan Univ.)

Symmetric operator means 15

07-01-0005

19 Masaru Nagisa (Chiba Univ.)

Yasuo Watatani (Kyushu Univ.*)

Non-linear traces of the Choquet type on factors of type II 15

07-01-0006

20 Yasuo Watatani (Kyushu Univ.)

Masaru Nagisa

(Chiba Univ./Ritsumeikan Univ.)

Non-linear traces of the Sugeno type on factors of type II 15

14:15–16:00

07-01-0008

21 Hajime Moriya (Kanazawa Univ.)

 C^* -flow extension of discrete shift-translations on one-dimensional lattice systems 10

07-01-0010

22 Ryosuke Sato (Chuo Univ.)

CAR algebras and stochastic dynamics on random point processes ... 15

07-01-0015

23 Kengo Matsumoto

(Joetsu Univ. of Edu.)

Taro Sogabe (Kyoto Univ.)

The Ext-groups and the homotopy groups of the automorphisms groups of Cuntz–Krieger algebras 15

07-01-0018

24 Satoshi Goto (Sophia Univ.)

Shôryû Suzuki (Sophia Univ.)

On the connection system arising from the Haagerup fusion categories 15

07-01-0027

25 Yosuke Kubota (Kyoto Univ./RIKEN)

Examples of spectral sequence computations in C^* -algebra K-theory 15

07-01-0011

26 Michiya Mori (Univ. of Tokyo/RIKEN)

On the shape of correlation matrices for unitaries 15

16:15–17:15 Talk Invited by Functional Analysis Section

07-02-0001

Shigeru Furuichi (Nihon Univ.)

Generalized entropies and trace inequalities

Statistics and Probability

September 3rd (Tue)

9:30–11:50

08-01-0002

- 1 Ryo Inayoshi (Meijo Univ.) A characterization of the operator entropy in terms of an isometry property related to trace norms 15

08-01-0024

- 2 Jiro Akahori (Ritsumeikan Univ.) A quantization of interacting particle systems 15
 Norio Konno
 (Ritsumeikan Univ./Yokohama Nat. Univ.*)
 Rikuki Okamoto (Ritsumeikan Univ.)
 Iwao Sato (Oyama Nat. Coll. of Tech.)

08-01-0038

- 3 Hoang-Long Ngo Strong solutions and numerical schemes for non-colliding particle systems 15
 (Hanoi Nat. Univ. of Edu.)
 Minh Thang Do
 (Hanoi Nat. Univ. of Edu.)
 Dai Taguchi (Kansai Univ.)

08-01-0039

- 4 Kōhei Sasaya (Univ. of Tokyo) Construction of p -energy measures associated with strongly local p -energies 15

08-01-0026

- 5 Ryosuke Shimizu (Waseda Univ.) Construction of Korevaar–Schoen p -energy forms and associated p -energy measures 15
 Naotaka Kajino (Kyoto Univ.)

08-01-0014

- 6 Khanh Duy Trinh (Waseda Univ.) Classical beta ensembles at high temperature and the Markov–Krein relation 15
 Fumihiko Nakano (Tohoku Univ.)
 Hoang Dung Trinh
 (VNU Univ. of Science)

08-01-0013

- 7 Yuki Chino (NYCU) A characterization of symmetric environment for RWRE 15

08-01-0015

- 8 Zijian Xu (Fukuoka Univ.) The Littlewood–Paley–Stein inequality for tamed Dirichlet spaces 15
 Kazuhiro Kuwae (Fukuoka Univ.)
 Syota Esaki (Oita Univ.)

08-01-0020

- 9 Toshihiro Uemura (Kansai Univ.) On semi-Dirichlet forms of jump-diffusion processes based on the Sobolev space $W_0^{1,2}(D)$ 10

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

08-02-0001

- Takuya Murayama (Kyushu Univ.) Some problems on the traces and driving functions of the Loewner differential equation

15:30–16:30 Talk Invited by Statistics and Probability Section

08-02-0002

- Hiroaki Hata (Hitotsubashi Univ.) An optimal consumption and investment problem with a general nonlinear stochastic factor model and its policy improvement algorithm

September 4th (Wed)

9:30–11:40

08-01-0029

- 10 Nima Alibabaei (Kyoto Univ.) Weighted topological entropy and Hausdorff dimension 15

08-01-0037

- 11 Kazuki Nakajima Extreme value theory for stationary random fields on \mathbb{Z}^d 15
 (Grad. Univ. for Adv. Stud.)

08-01-0017	12	Ryoji Takano (Osaka Univ.)	Large deviation principle for stochastic differential equations driven by stochastic integrals	15
08-01-0006	13	Yushi Hamaguchi (Kyoto Univ.) Dai Taguchi (Kansai Univ.)	A generalized coupling approach for the weak approximation of stochastic functional differential equations	15
08-01-0007	14	Yumiharu Nakano (Tokyo Tech)	On convergence of the diffusion generative models	15
08-01-0035	15	Yoshinori Kamijima (Toyo Univ.)	A local limit theorem for the long-range self-avoiding walk	15
08-01-0031	16	Tomoki Yamagami (Univ. of Tokyo) Akihiro Narimatsu (Univ. of Fukuchiyama)	Analyses of Antlion random walks	15
08-01-0005	17	Yuma Tamura (Ritsumeikan Univ.) Jirô Akahori (Ritsumeikan Univ.) Norio Konno (Ritsumeikan Univ.) Iwao Sato (Oyama Nat. Coll. of Tech.)	Periodicity and absolute zeta function of multistate quantum walk on cycle graph	15

11:40–12:10 Research Section Assembly

September 5th (Thu)

9:30–11:40

08-01-0001	18	Hayato Takahashi (Random Data Lab.)	Exact Kolmogorov–Smirnov tests of random numbers with distributions of runs	15
08-01-0030	19	Hisashi Johno (Univ. of Yamanashi) Atsushi Komaba (Univ. of Yamanashi) Kazunori Nakamoto (Univ. of Yamanashi)	Extension of the one-sample Kolmogorov–Smirnov test	15
08-01-0003	20	Yoshihiko Maesono (Chuo Univ.) Shota Akiba (Chuo Univ.)	Asymptotic mean squared error of nonparametric quantile regression	15
08-01-0008	21	Koji Tsukuda (Kyushu Univ.) Shun Matsuura (Keio Univ.)	Estimator for allometric regression model	15
08-01-0027	22	Kohei Kawamoto (Kyushu Univ.) Yuichi Goto (Kyushu Univ.) Koji Tsukuda (Kyushu Univ.)	Spectral clustering algorithm for the allometric extension model	15
08-01-0009	23	Yuta Koike (Univ. of Tokyo)	Asymptotic expansion of coverage probability for the high-dimensional bootstrap	15
08-01-0032	24	Yozo Tonaki (Osaka Univ.) Yusuke Kaino (Kobe Univ.) Masayuki Uchida (Osaka Univ.)	Parameter estimation for a linear parabolic SPDE in two space dimensions	15
08-01-0010	25	Hiroki Masuda (Univ. of Tokyo) Shoichi Eguchi (Osaka Inst. of Tech.)	Robustified asymptotics for estimating volatility	15

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

08-02-0003		Yuma Uehara (Kansai Univ.)	Predictive model selection for jump diffusion models	
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15:30–16:30 Talk Invited by Statistics and Probability Section

08-02-0004		Shogo Nakakita (Univ. of Tokyo)	Recent development in theories of non-sparse high-dimensional statistics	
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September 6th (Fri)

10:00–11:45

08-01-0023

- 26 Kento Egashira (Tokyo Univ. of Sci.) Modification to k-means for high-dimensional data 15
Kazuyoshi Yata (Univ. of Tsukuba)
Makoto Aoshima (Univ. of Tsukuba)

08-01-0028

- 27 Yoshihiko Konno (Osaka Metro. Univ.) An adaptive singular value shrinkage for estimation problem of low-rank matrix mean with unknown covariance matrix 10

08-01-0036

- 28 Hirofumi Wakaki (Hiroshima Univ.) Complete bias modification of the risk of the model based on KL divergence 15
Hirokazu Yanagihara (Hiroshima Univ.)

08-01-0011

- 29 Rinka Sagawa (Waseda Univ.) An information criterion for detecting periodicities in functional time series 15
Yan Liu (Waseda Univ.)

08-01-0016

- 30 Xiaoqiang Zeng Whittle likelihood estimation in INAR(p) process 15
Yoshihide Kakizawa (Hokkaido Univ.)

08-01-0019

- 31 Yuichi Goto (Kyushu Univ.) A test for counting sequences of integer-valued autoregressive models 15
Kou Fujimori (Shinshu Univ.)

08-01-0033

- 32 Yujie Xue (Inst. of Stat. Math.) Introduction of general distributions on sphere and torus in view of time series spectra 10
Taniguchi Masanobu (Waseda Univ.)

14:15–15:45

08-01-0004

- 33 Hidefumi Kawasaki (Kyushu Univ.) A grading theorem of sets based on Borsuk's antipodal theorem 15

08-01-0025

- 34 Teruo Tanaka (Hiroshima City Univ.) Optimal stopping problems for discrete time multiparameter Markov processes 10

08-01-0012

- 35 Shoko Chisaki (Osaka Inst. of Tech.) A construction of GDD-type spanning bipartite block designs 10
Ryoh Fuji-Hara (Univ. of Tsukuba*)
Nobuko Miyamoto (Tokyo Univ. of Sci.)

08-01-0034

- 36 Hisaya Okahara (Tokyo Univ. of Sci.) Generalized ordinal quasi-symmetry model in multi-way tables and necessary and sufficient conditions for symmetry 15
Kouji Tahata (Tokyo Univ. of Sci.)

08-01-0021

- 37 Tetsuya Sato (Tokyo Univ. of Sci.) Sphericity test on variance-covariance matrices with monotone missing data for a multi-sample problem 15
Ayaka Yagi (Tokyo Univ. of Sci.)
Takashi Seo (Tokyo Univ. of Sci.)

08-01-0022

- 38 Riku Hosonuma (Tokyo Univ. of Sci.) Bartlett-type correction of the test statistics for sub-mean vector with two-step monotone missing data 15
Tamae Kawasaki
 (Aoyama Gakuin Univ.)
Takashi Seo (Tokyo Univ. of Sci.)

Applied Mathematics

September 3rd (Tue)

9:00–11:40

09-01-0005

- 1 Yoshinori Kametaka (Osaka Univ.*) The best constant of discrete Sobolev inequality on 1812 C60 fullerene isomers 15
 Kohtaro Watanabe
 (Nat. Defense Acad. of Japan)
 Atsushi Nagai (Tsuda Coll.)
 Kazuo Takemura (Nihon Univ.)
 Hiroyuki Yamagishi
 (Tokyo Metropolitan Coll. of Indus. Tech.)
 Hiroto Sekido (Osaka Seikei Univ.)

09-01-0046

- 2 Hideto Asashiba (Shizuoka Univ.) Interval replacements of persistence modules 15
 Etienne Gauthier (École Polytechnique)
 Enhao Liu (Kyoto Univ.)

09-01-0018

- 3 Akifumi Nakada (Hiroshima Univ.) Compact association schemes 15
 Kento Ogawa (Hiroshima Univ.)
 Takayuki Okuda (Hiroshima Univ.)

09-01-0054

- 4 Kento Ogawa (Hiroshima Univ.) An algebraization of association schemes 10

09-01-0028

- 5 Hiroshi Nozaki (Aichi Univ. of Edu.) Reducing the number of points of cubature formulas using polynomial space 15
 Masanori Sawa (Kobe Univ.)

09-01-0024

- 6 Hideki Matsumura On Galois conjugate weighted designs for Bessel polynomials 15
 (Tokyo Metro. Univ./Keio Univ.)
 Masanori Sawa (Kobe Univ.)

09-01-0043

- 7 Teruyuki Mishima On explicit construction of rational interval designs 15
 (Accenture Japan Ltd)
 Masanori Sawa (Kobe Univ.)
 Yukihiro Uchida (Tokyo Metro. Univ.)
 Xiao-Nan Lu (Gifu Univ.)

09-01-0049

- 8 Hiroaki Taniguchi On Incidence graphs of APN functions and Dillon's property 15
 (Yamato Univ./Kagawa Nat. Coll. of Tech.*)

09-01-0058

- 9 Yoshimi Egawa (Tokyo Univ. of Sci.*) Degree sum conditions for covering cycles in graphs 15
 Haruhide Matsuda
 (Shibaura Inst. of Tech.)

09-01-0009

- 10 Shinya Fujita (Yokohama City Univ.) On the existence of rainbow cycles in edge-colored graphs 10

14:15–15:15 Talk Invited by Applied Mathematics Section

09-02-0001

- Tsuyoshi Miezaki (Waseda Univ.) Universal graph series, chromatic functions, and their index theory

15:30–16:25

09-01-0037

- 11 Kuniharu Yokomura (Tokai Univ.) On degree conditions of balanced k -partite Hamiltonian-connected graphs 15

- 09-01-0039
12 Kazuhide Hirohata (Ibaraki Nat. Coll. of Tech.) Chorded pancyclicity with distance two degree condition 15
Megan Cream (Lehigh Univ.)
Ronald J. Gould (Emory Univ.)
- 09-01-0020
13 Masaki Kashima (Keio Univ.) Analogies of degree coloring in proper conflict-free colorings 15
Riste Škrekovski (Univ. of Ljubljana)
Rongxing Xu (Zhejiang Normal Univ.)
- 09-01-0010
14 Inasa Nakamura (Saga Univ.) Transformations of partial matchings and dotted graphs 10
- 16:40–17:40 Award Lecture for the 2023 Applied Mathematics Prize**
09-02-0002
Mikio Kano (Ibaraki Univ.*) Two degree factors of graphs and related topics

September 4th (Wed)

9:00–11:40

- 09-01-0050
15 Kenta Ozeki (Yokohama Nat. Univ.) Path-cycle systems in regular graphs 10
Mikio Kano (Ibaraki Univ.*)
Yoshimi Egawa (Tokyo Univ. of Sci.*)
- 09-01-0040
16 Kenta Mori (Kwansei Gakuin Univ.) The number of facets of symmetric edge polytopes arising from join graphs 15
Aki Mori (Setsunan Univ.)
Hidefumi Ohsugi (Kwansei Gakuin Univ.)
- 09-01-0027
17 Yosuke Sato (Waseda Univ.) Generalization of the vertex-weighted version of the chromatic symmetric function 15
- 09-01-0059
18 Hikari Sakamoto (Kanagawa Univ.) A method of discrimination of time series whether classical or quantum type via moment parameter estimation 15
Kei Saito (Nihon Univ.)
- 09-01-0030
19 Kei Saito (Nihon Univ.) A generalized spectral mapping theorem for quantum walks on graphs 15
Daiju Funakawa (Hokkai-Gakuen Univ.)
- 09-01-0057
20 Yasuaki Fujitani (Osaka Univ.) Transport distance between Grover walks on graphs and coarse Ricci curvature 15
Chusei Kiumi (Osaka Univ.)
- 09-01-0053
21 Kiyoto Yoshino (Hiroshima Inst. of Tech.) Symmetry of graphs and perfect state transfer in Grover walks 15
Sho Kubota (Aichi Univ. of Edu.)
- 09-01-0029
22 Takako Endo(Watanabe) (Tohoku Univ.) The second matrix-weighted zeta function of a graph 10
Takashi Komatsu (Univ. of Yamanashi)
Norio Konno (Ritsumeikan Univ./Yokohama Nat. Univ.*)
Hideo Mitsuhashi (Hosei Univ.)
Iwao Sato (Oyama Nat. Coll. of Tech.)
- 09-01-0033
23 Iwao Sato (Oyama Nat. Coll. of Tech.) The second matrix-weighted alternating zeta function of a digraph ... 15
Takako Endo (Tohoku Univ.)
Takashi Komatsu (Univ. of Yamanashi)
Norio Konno (Ritsumeikan Univ./Yokohama Nat. Univ.*)
Yohei Matsumoto (Shinshu Univ.)

09-01-0008

- 24 Iwao Sato (Oyama Nat. Coll. of Tech.) A zeta function of a pseudo quantization of a Markov chain on a graph
Akahori Jiro (Ritsumeikan Univ.) 15
 Norio Konno
 (Ritsumeikan Univ./Yokohama Nat. Univ.*)
 Suzuki Ryoichi (Ritsumeikan Univ.)

13:00–14:00

09-01-0034

- 25 Tomoki Kato (Nihon Univ.) Construction of multivariate orthogonal polynomials related to birth
Yusuke Ide (Nihon Univ.) and death chains 15
 Akihiro Narimatsu
 (Univ. of Fukuchiyama)
 Norio Konno
 (Ritsumeikan Univ./Yokohama Nat. Univ.*)

09-01-0045

- 26 Akihiro Narimatsu Continuous time quantum walk related to the multi- dimensional Ehren-
 (Univ. of Fukuchiyama) fest model 15
Yusuke Ide (Nihon Univ.)
 Norio Konno
 (Ritsumeikan Univ./Yokohama Nat. Univ.*)

09-01-0035

- 27 Hiroto Sekido (Yokohama Nat. Univ.) Periodicity and rhythmicity of quantum graph walks 15
Etsuo Segawa (Yokohama Nat. Univ.)

09-01-0019

- 28 Taisuke Hosaka (Yokohama Nat. Univ.) Pulsation of the quantum walk on the Johnson graph 15
Etsuo Segawa (Yokohama Nat. Univ.)

September 5th (Thu)

9:45–12:00

09-01-0001

- 29 Karel Svadlenka (Tokyo Metro. Univ.) On an approximation method for anisotropic interfacial motions on
 obstacle 15

09-01-0003

- 30 Yu Ichida (Kwansei Gakuin Univ.) Global dynamics of a simple model for wild and sterile mosquitoes
Yukihiko Nakata 15
 (Aoyama Gakuin Univ.)

09-01-0007

- 31 Bendong Lou (Shanghai Normal Univ.) Asymptotic behavior for solutions to reaction-diffusion equations on a
Yoshihisa Morita (Ryukoku Univ.*) root-like metric graph 15

09-01-0012

- 32 Makoto Okumura (Konan Univ.) Structure-preserving numerical methods based on square differences for
 conservative PDEs 15

09-01-0013

- 33 Junyong Eom (Hokkaido Univ.) Approximation peak time to time-domain fluorescence diffuse optical
Shuli Chen (Hokkaido Univ.) tomography for finite fluorescence lifetime 15
Gen Nakamura (Hokkaido Univ.)
Goro Nishimura (Hokkaido Univ.)

09-01-0014

- 34 Takaaki Nishida (Kyoto Univ.*) A thermal convection in the horizontal layer with non-uniform heat
Yoshiyuki Kagei (Tokyo Tech) supply 15
Hiroshi Fujiwara (Kyoto Univ.)

09-01-0015

- 35 Kazuo Takemura (Nihon Univ.) Positivity of the Green's function corresponding to clamped boundary
Atsushi Nagai (Tsuda Coll.) value problem for $(-1)^M(d/dx)^{2M}$ 15
Hiroto Sekido (Osaka Seikei Univ.)

09-01-0023

- 36 Takuya Tsuchiya (Meiji Gakuin Univ.) On convergence and behavior of solutions for semi-linear Klein–Gordon
Makoto Nakamura (Osaka Univ.) equation 15

14:15–16:00

09-01-0026

- 37 Tomoki Ohsawa (Univ. of Texas at Dallas)
Kazuyuki Yagasaki (Kyoto Univ.) Semiclassical perturbations of single-degree-of-freedom Hamiltonian systems: Separatrix splitting and nonintegrability 15

09-01-0032

- 38 Takashi Miura (Kyushu Univ.)
Toshiyuki Ogawa (Meiji Univ.)
Ayuki Sekisaka (Meiji Univ.)
Kei Sugihara (Kyushu Univ.) Segmented patterns appearing in seminiferous tubules and various properties of defects 15

09-01-0036

- 39 Koichi Anada (Waseda Univ. Senior High School)
Tetsuya Ishiwata (Shibaura Inst. of Tech.)
Takeo Ushijima (Tokyo Univ. of Sci.) Remark on the asymptotic behavior of curves in a curve shortening problem for convex immersed curves with self-crossing points 15

09-01-0041

- 40 Yuuki Ueda (Hokkaido Univ.)
Junyong Eom (Hokkaido Univ.)
Shinya Uchiumi (Hokkaido Univ.)
Yueyuan Gao (Shimane Univ.)
Shinji Nakaoka (Hokkaido Univ.)
Hiroshi Suito (Tohoku Univ.)
Shinji Kume (Shiga Univ. of Medical Sci.)
Hideki Katagiri (Tohoku Univ.)
Masaharu Nagayama (Hokkaido Univ.) Mathematical modeling of glucose-insulin metabolism dynamics and parameter estimation 15

09-01-0047

- 41 Toshiko Ogiwara (Josai Univ.)
Ken-Ichi Nakamura (Meiji Univ.) Propagating direction of bistable traveling fronts in the Lotka–Volterra competition-diffusion system 15

09-01-0051

- 42 Hidetomo Hoshino (Waseda Univ.)
Takuya Tsuchiya (Meiji Gakuin Univ.)
Gen Yoneda (Waseda Univ.) Analysis and improvement of numerical stability of the Einstein equations against homogeneous and isotropic spacetime background 15

16:15–17:15 Talk Invited by Applied Mathematics Section

09-02-0003

- Harunori Monobe (Osaka Metro. Univ.)^b On compact traveling waves in the singular limit problem of some reaction diffusion systems

September 6th (Fri)

10:00–12:00

09-01-0004

- 43 Yu Ichida (Kwansei Gakuin Univ.)
Takashi Sakamoto (Meiji Univ.) Geometric approach to the bifurcation at infinity: A case study 15

09-01-0006

- 44 Masumi Kondo (Okayama Univ. of Sci.)
Masakazu Onitsuka (Okayama Univ. of Sci.) Ulam stability for von Bertalanffy growth model with Allee effect 15

09-01-0011

- 45 Kota Takeda (Kyoto Univ.)
Takashi Sakajo (Kyoto Univ.) Uniform error bounds of the ensemble transform Kalman filter for chaotic dynamics with multiplicative covariance inflation 15

09-01-0017

- 46 Hiroshi Ishii (Hokkaido Univ.) On the propagation of solutions to Fisher-KPP type equation with time-fractional derivative 15

- 09-01-0021
47 Yoshitaka Watanabe (Kyushu Univ.) A verified operator norm estimation for the inverse of an infinite-dimensional linear operator with singular term by Büniger–Rump’s theory 15
- 09-01-0022
48 Fuminori Sakaguchi (Univ. of Fukui) A new integer-type algorithm with 2nd/3rd-order convergence for calculating eigenvalues of differential operators by using auto-cancellations of the singularities of their eigenfunctions 15
- 09-01-0025
49 Keita Iida (Osaka Univ.) Semiology-based clustering method for single-cell data 15
- 14:15–16:00**
- 09-01-0031
50 Yumihiko S. Ikura (Meiji Univ.) Hirokazu Ninomiya (Meiji Univ.) A mathematical study on the pattern dynamics of the Greenberg–Hastings cellular automaton. 15
- 09-01-0038
51 Shu Kanazawa (Kyoto Univ.) Yasuaki Hiraoka (Kyoto Univ.) Jun Miyanaga (Tohoku Univ.) Kenkichi Tsunoda (Kyushu Univ.) Large deviation principle for persistence diagrams of random cubical filtrations 15
- 09-01-0042
52 Kazuaki Tanaka (Waseda Univ.) Masahide Kashiwagi (Waseda Univ.) Yuki Naito (Hiroshima Univ.) Satoshi Tanaka (Tohoku Univ.) Kohtaro Watanabe (Nat. Defense Acad. of Japan) Computer-assisted uniqueness proof for sign-changing radially symmetric solutions of scalar field equations 15
- 09-01-0044
53 Takao Namiki (Hokkaido Univ.) Satoru Tadokoro (Hokkaido Univ.) Yuta Kishimoto (Hokkaido Univ.) Shunsuke Kajikawa (Kyoto Univ.) Masao Matsuhashi (Kyoto Univ.) Akio Ikeda (Kyoto Univ.) Ichiro Tsuda (Sapporo City Univ.) Permutation entropy and epileptogenic zone 10
- 09-01-0048
54 Itsuki Watanabe (Oita Univ.) Taiga Kumagai (Nat. Inst. of Tech., Maizuru Coll.) Markov chain approximation for Hamilton–Jacobi–Bellman equation with reflecting boundary 15
- 09-01-0052
55 Tetsuya Ishiwata (Shibaura Inst. of Tech.) Kouya Kawanishi (Japan Res. Inst., Ltd) On the learning behavior of SARSA and Q-learning in reinforcement learning and a hybrid algorithm 15
- 16:15–17:15 Talk Invited by Applied Mathematics Section**
- 09-02-0004
Kengo Nakai (Okayama Univ.) Evaluation of a data-driven model using reservoir computing from dynamical system point of view

Topology

September 3rd (Tue)

9:30–12:00

10-01-0018

- 1 Akihiro Higashitani (Osaka Univ.) Classification of generalized Alexander quandles 15
 Seiichi Kamada (Osaka Univ.)
 Jin Kosaka
 Hirotake Kurihara (Yamaguchi Univ.)

10-01-0005

- 2 Erika Kuno (Osaka Univ.) The automorphism groups of the fine curve graphs for nonorientable surfaces 10
 Mitsuaki Kimura (Osaka Dent. Univ.)

10-01-0009

- 3 Susumu Hirose (Tokyo Univ. of Sci.) On generating mapping class groups by pseudo-Anosov elements 15
 Naoyuki Monden (Okayama Univ.)

10-01-0014

- 4 Yasushi Kasahara Low dimensional MCG-invariant representations of surface groups in the naive deformation spaces 10
 (Kochi Univ. of Tech.)

10-01-0002

- 5 Toyo Taniguchi (Univ. of Tokyo) Topology of loops via non-commutative differential geometry 15

10-01-0012

- 6 Aoi Wakuda (Univ. of Tokyo) A generalization of the Center Theorem of the Thurston–Wolpert–Goldman Lie algebra 15

10-01-0027

- 7 Tatsuki Kuwagaki (Kyoto Univ.) On the construction of WKB spectral network 15

14:30–15:30 Talk Invited by Topology Section

10-02-0001

- Mai Katada (Kyushu Univ.) The stable Albanese homology of the IA-automorphism groups of free groups

September 4th (Wed)

10:00–10:15 Presentation Ceremony for the 2024 MSJ Geometry Prize

10:20–11:20 Award Lecture for the 2024 MSJ Geometry Prize

03-02-0003

- Hokuto Konno (Univ. of Tokyo) Diffeomorphism group and gauge theory

12:50–13:50 Award Lecture for the 2024 MSJ Geometry Prize

03-02-0002

- Shinobu Hosono (Gakushuin Univ.) Families of Calabi-Yau manifolds and mirror symmetry

September 5th (Thu)

9:30–12:00

10-01-0006

- 8 Kohei Tanaka (Shinshu Univ.) Cone complexes and group actions 15

10-01-0007

- 9 Ryo Kato (Kochi Univ. of Tech.) On the Greek letter elements of the homotopy groups of the $E(n)$ -localized sphere spectrum 10
 Katsumi Shimomura (Kochi Univ.)
 Mao-no-suke Shimomura (Kochi Univ.)

10-01-0024

- 10 Takahito Naito (Nippon Inst. of Tech.) Cartan calculus in string topology 15

10-01-0038

- 11 Yuki Kato (Ube Nat. Coll. of Tech.) Application of Smith ideal theory to almost ring theory of pointed symmetric monoidal model categories 15

10-01-0001			
12	Katsuhisa Koshino (Kanagawa Univ.)	The Borel complexity and the complete metrizable spaces of metrics	15
10-01-0016			
13	Yasushi Hirata (Kanagawa Univ.) Yukinobu Yajima (Kanagawa Univ.*)	Characterizations of irreducibility on GO-spaces and monotonically normal spaces by cardinal functions	15
10-01-0004			
14	Kenshi Ishiguro (Fukuoka Univ.) Naito Nishihara (Fukuoka Univ.)	Modular invariant rings and the Weyl groups of special unitary groups	10
10-01-0035			
15	Jun O'Hara (Chiba Univ.)	Characterization of generic finite metric spaces by magnitude	15

14:20–15:20 Talk Invited by Topology Section

10-02-0002	Masahiko Yoshinaga (Osaka Univ.)	Topology of real hyperplane arrangements	
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15:40–18:00

10-99-0001			
16	Mutsuo Oka (Tokyo Tech*/Tokyo Univ. of Sci.)	Comment on Briançon–Speder polynomial	15
10-01-0013			
17	Sakumi Sugawara (Hokkaido Univ.)	First homology groups of the Milnor fiber boundary for generic hyper- plane arrangements in \mathbb{C}^3	15
10-01-0025			
18	Masato Tanabe (Hokkaido Univ.)	Immersion of surface singularity links and their topology	10
10-01-0040			
19	Noboru Ogawa (Tokai Univ.) Toru Yoshiyasu (Kyoto Univ. of Edu.)	Suspension configuration of Liouville domains and compressibility of contact manifolds	15
10-01-0010			
20	Masaki Taho (Univ. of Tokyo)	Tangent spaces of diffeological spaces and their variants	15
10-01-0021			
21	Hiroyuki Hayashi (Kobe Univ.)	Geometry on curves passing through Whitney umbrella	15
10-01-0023			
22	Tadashi Fujioka (Osaka Univ.)	On the stratification of spaces with curvature bounded below	15
10-01-0015			
23	Chong Zheng (Waseda Univ.)	On the connectedness homomorphism between discrete Morse com- plexes	15

September 6th (Fri)

9:30–12:00

10-01-0003			
24	Jun Murakami (Waseda Univ.)	On the volume conjecture for double twist knots	15
10-01-0011			
25	Hiroshi Goda (Tokyo Univ. of Agri. and Tech.) Takayuki Morifuji (Keio Univ.)	A volume presentation of a hyperbolic fibered knot	10
10-01-0026			
26	Yasuharu Nakae (Akita Univ.) Teruaki Kitano (Soka Univ.)	Montesinos knots as an extension of symmetric unions and its Alexander polynomial	15
10-01-0036			
27	Takuji Nakamura (Univ. of Yamanashi) Yasutaka Nakanishi (Kobe Univ.) Shin Satoh (Kobe Univ.) Kodai Wada (Kobe Univ.)	Fox \mathbb{Z} -colorings and 12 equivalence relations on \mathbb{Z}^m	10
10-01-0019			
28	Yuka Kotorii (Hiroshima Univ./RIKEN) Sonia Mahmoudi (Tohoku Univ./RIKEN) Elisabetta Matsumoto (Georgia Tech.) Ken'ichi Yoshida (Hiroshima Univ.)	Coverings and isotopies of links in the thickened torus	15

10-01-0020	29 Ken'ichi Yoshida (Hiroshima Univ.)	Links in the spherical 3-manifold obtained from the quaternion group and their lifts	10
10-01-0039	30 Koki Yanagida (Tokyo Tech)	The Dijkgraaf–Witten invariant in topological K -theory	15
10-01-0029	31 <u>Chihaya Jibiki</u> (Tokyo Tech) Shuhei Maruyama (Kanazawa Univ.)	Construction of isolated orders using properties of $\text{Isom}_+(\mathbb{H}^2)$	15
14:20–16:50			
10-01-0017	32 Tsukasa Ishibashi (Tohoku Univ.) Shunsuke Kano (Tohoku Univ.) <u>Wataru Yuasa</u> (Kyoto Univ.)	Skein and cluster algebras with coefficients for unpunctured surfaces	10
10-01-0031	33 <u>Takuya Sakasai</u> (Univ. of Tokyo) Yuuki Tadokoro (Kisarazu Nat. Coll. of Tech.) Kokoro Tanaka (Tokyo Gakugei Univ.)	Matrix representations for groups of Kim–Manturov	10
10-01-0032	34 Hajime Kubota (Kyoto Univ.)	On the knot concordance invariant Upsilon using grid homology	15
10-01-0033	35 Yuichi Yamada (Univ. of Electro-Comm.)	Exceptional Dehn surgeries along a certain family of two component links	10
10-01-0022	36 <u>Motoo Tange</u> (Univ. of Tsukuba) Koichi Tauchi (Univ. of Tsukuba)	Lens space surgeries over homology spheres with $\lambda = -2, -3$	15
10-01-0028	37 Natsuya Takahashi (Osaka Univ.)	Non-diffeomorphic minimal genus relative trisections of the same 4-manifold with boundary	15
10-01-0030	38 <u>Tsukasa Isoshima</u> (Tokyo Tech) Masaki Ogawa (Tohoku Univ.)	Nielsen equivalence and multisections of 4-manifolds	15
10-01-0008	39 Yahiko Nimura (Tokai Univ.)	Charts of type $(2, 4, 2)$ with a lens of type 2	15
10-01-0037	40 <u>Jumpei Yasuda</u> (Osaka Univ.) Inasa Nakamura (Saga Univ.)	Knitted surfaces and presentations of knotted surfaces in a four ball	15

Infinite Analysis

September 3rd (Tue)

9:30–10:35

11-01-0001

- 1 Satoshi Tsuchimi (Kobe Univ.) A multivariate analogue of the Zwegers' μ -function 15
Genki Shibukawa (Kobe Univ.)

11-01-0006

- 2 Genki Shibukawa (Kobe Univ.) A generalization of “summatio quarundam serierum singularium” and specialization of the generalized μ -function 15

11-01-0003

- 3 Yumi Arai (Ochanomizu Univ.) On q -middle convolution and q -hypergeometric equations, I 15
Kouichi Takemura (Ochanomizu Univ.)

11-01-0004

- 4 Yumi Arai (Ochanomizu Univ.) On q -middle convolution and q -hypergeometric equations, II 15
Kouichi Takemura (Ochanomizu Univ.)

10:45–11:45 Talk Invited by Infinite Analysis Special Session

11-02-0002

- Takahiko Nobukawa (Kobe Univ.) ${}_{10}W_9$, ${}_8W_7$ and variant of ${}_2\varphi_1$ as democratic q -hypergeometric equations

September 4th (Wed)

9:30–10:30

11-01-0007

- 5 Kohei Yamaguchi (Nagoya Univ.) Equivariant K-homology of affine Grassmannian 15

11-01-0002

- 6 Yosuke Kawamoto (Okayama Univ.) The intertwining property for Laguerre processes with a fixed parameter 15
Alexander Bufetov
 (Steklov Math. Inst. of RAS, etc.)

11-01-0005

- 7 Akito Tatekawa (Meiji Univ.) Calculating the energy functions of diamond lattices of general dimensions as a generalization of the Kitaev model 10

11-01-0008

- 8 Tetsu Masuda (Aoyama Gakuin Univ.) Stieltjes type relations for the Umemura polynomials of the fifth Painlevé V equation 15

10:45–11:45 Talk Invited by Infinite Analysis Special Session

11-02-0001

- Atsushi Nakayashiki (Tsuda Coll.) Quasi-periodic solutions of the KP-hierarchy and vertex operator