

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 \blacktriangleright 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.

Contents

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Algebra	4
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Complex Analysis	11
Functional Equations	13
Real Analysis	17
Functional Analysis	20
Statistics and Probability	22
Applied Mathematics	24
Topology	29
Infinite Analysis	31

Foundation of Mathematics and History of Mathematics

March 17th (Sun)

9:30–11:30

01-01-0020	1 <u>Souji Shizuma</u> (Osaka Pref. Univ.)	General theorem for nonsimultaneous hat puzzles	15
01-01-0001	2 <u>Kenta Tsukuura</u> (Hosei Univ.)	On semiproperness of Namba forcings in Prikry extensions	15
01-01-0011	3 <u>Teruyuki Yorioka</u> (Shizuoka Univ.)	Some preservation theorems for forcing notions with models as side conditions	15
01-01-0005	4 <u>Toshimichi Usuba</u> (Waseda Univ.)	Uniform ultrafilters in a choiceless context	15
01-01-0022	5 <u>Yasuo Yoshinobu</u> (Nagoya Univ.)	Convex sets and the axiom of choice	15
01-01-0010	6 <u>Akito Tsuboi</u> (Univ. of Tsukuba*)	Dividing and forking in random structures	15
01-01-0018	7 <u>Hiroataka Kikyo</u> (Kobe Univ.) <u>Akito Tsuboi</u> (Univ. of Tsukuba*)	On random hypergraphs and automorphisms with a single orbit	15

11:45–12:00 Research Section Assembly

14:30–17:00

01-01-0006	8 <u>Koichiro Ikeda</u> (Hosei Univ.)	A note on ω -categorical stable theories	15
01-01-0017	9 <u>Wataru Komine</u> (Univ. of Tsukuba)	On prime models of definably complete locally o-minimal theories	15
01-01-0008	10 <u>Koki Okura</u> (Univ. of Tsukuba)	On rationality of Poincaré series in expansions of the p -adic fields	15
01-01-0004	11 <u>Ikuo Yoneda</u> (Tokuyama Coll. of Tech.)	Weak one-basedness in the eq-structure and the existences of weak canonical bases in rosy theories	15
01-01-0009	12 <u>Noriaki Kamiya</u> (Univ. of Aizu*)	On the title “Lie algebra” of books published in Japan	15
01-01-0013	13 <u>Koichi Hirata</u> (Matsuyama Univ./Ehime Univ.*)	Geometric foundations of inversive coordinates of circles	15
01-01-0002	14 <u>Noriko Tanaka</u> (Naragakuen Univ.) <u>Tsukane Ogawa</u> (Yokkaichi Univ.)	A study on the relationship of Takuma school’s book Shouyaku-jutsu and a mathematical plate dedicated to the Zenkouji temple	15
01-01-0003	15 <u>Tsukane Ogawa</u> (Yokkaichi Univ.) <u>Noriko Tanaka</u> (Naragakuen Univ.)	Treatment of polynomials in Oka Yukitada’s “ <i>Kijutsu Kairohō (A method to solve the path to create a formula)</i> ” in the Takuma School (2)	15

17:15–17:30 Mathematics History Team Meeting

March 18th (Mon)

9:15–12:00

01-99-0001	16 <u>Masaaki Kumazawa</u> (Mino-Jiyu Gakuen High School)	On De Morgan algebras in BCK-algebras	15
01-01-0014	17 <u>Haruka Kogure</u> (Kanazawa Univ.) <u>Taishi Kurahashi</u> (Kobe Univ.)	On the conservation results for local reflection principles	15
01-01-0012	18 <u>Yuta Sato</u> (Kobe Univ.) <u>Taishi Kurahashi</u> (Kobe Univ.)	The finite frame property of some extensions of the pure logic of necessitation	15

01-01-0007			
19	Rihito Takase (Kobe Univ.) Taishi Kurahashi (Kobe Univ.)	The modal logic of provability and forcing	15
01-01-0019			
20	Taishi Kurahashi (Kobe Univ.) Albert Visser (Utrecht Univ.)	Incompleteness, undecidability, and inseparability of theories	15
01-01-0016			
21	Leonardo Pacheco (TU Wien)	A constructive variation of GL	15
01-01-0015			
22	Leonardo Pacheco (TU Wien)	Higher-order feedback computation	15
01-01-0023			
23	Toshio Suzuki (Tokyo Metro. Univ.)	Equilibria of AND-OR trees without assumptions on tree shapes (2)	15
01-01-0021			
24	Akitoshi Kawamura (Kyoto Univ.) Keita Hiroshima (Kyoto Univ.)	Elementarily traceable numbers	10
01-01-0024			
25	Kohtaro Tadaki (Chubu Univ.)	A refinement of quantum information theory by algorithmic randomness VIII	15
13:00–14:00 Talk Invited by Section on Foundation and History of Mathematics			
01-02-0001			
	Hajime Ishihara (Toho Univ.)	Reverse mathematics in constructive and predicative set theory	

Algebra

March 17th (Sun)

9:00–10:30

02-01-0039

- 1 Shinichi Tajima (Niigata Univ.*), Katsuyoshi Ohara (Kanazawa Univ.), Akira Terui (Univ. of Tsukuba) Efficient symbolic computation of the structure of Jordan chains 10

02-01-0056

- 2 Shuhei Tsujie (Hokkaido Univ. of Edu.), Daisuke Suyama (Nippon Bunri Univ.), Michele Torielli (Northern Arizona Univ.) On the coincidence of freeness of two types of hyperplane arrangements determined from gain graphs 10

02-01-0052

- 3 Norihiro Nakashima (Nagoya Inst. of Tech.), Yusuke Mori Characteristic quasi-polynomials for deformations of Weyl arrangements 10

02-01-0014

- 4 Takumi Ogasawara (Yokohama Nat. Univ.), Shushi Harashita (Yokohama Nat. Univ.), Ryo Ohashi (Univ. of Tokyo), Kosuke Sakata (Univ. of Tokyo) Superspecial genus-4 double covers of elliptic curves 15

02-01-0017

- 5 Yuya Yamamoto (Yokohama Nat. Univ.), Shushi Harashita (Yokohama Nat. Univ.) The multiplicity-one theorem for the superspeciality of curves of genus two 15

02-01-0013

- 6 Ryo Ohashi (Univ. of Tokyo) On the Rosenhain forms of superspecial genus-2 curves 15

10:45–11:45 Talk Invited by Algebra Section

02-02-0003

- Chikashi Miyazaki (Kumamoto Univ.) Castelnuovo–Mumford regularity of polynomial ideals and syzygy theoretic approach to vector bundles

14:15–18:00

02-01-0041

- 7 Kenta Mori (Kwansei Gakuin Univ.) Toric rings of perfectly matchable subgraph polytopes 10

02-01-0010

- 8 Sora Miyashita (Osaka Univ.) Comparing generalizations of Gorensteinness in semi-standard graded rings 15

02-01-0012

- 9 Koji Matsushita (Osaka Univ.), Sora Miyashita (Osaka Univ.) Conditions for multiplicities and almost Gorensteinness 15

02-01-0018

- 10 Akihiro Higashitani (Osaka Univ.) Difference of Hilbert series of homogeneous affine semigroup ring and its normalization 15

02-01-0001

- 11 Kaito Kimura (Nagoya Univ.) Asymptotic behavior of Bass numbers of modules 15

02-01-0005

- 12 Yuya Otake (Nagoya Univ.) Auslander–Bridger theory for complexes 15

02-01-0002

- 13 Yuki Mifune (Nagoya Univ.) On the finiteness of resolving subcategories and the category of MCM modules 15

02-01-0046

- 14 Naoki Wakasugi (Nagoya Univ.), Ryo Takahashi (Nagoya Univ.) On the category of cofinite modules and local cohomology modules 15

02-01-0030	15	Tokuji Araya (Okayama Univ. of Sci.) <u>Kei-ichiro Iima</u> (Nara Nat. Coll. of Tech.) Ryo Takahashi (Nagoya Univ.)	On the vanishing of DHKK complexities for singularity categories ····	15
02-01-0033	16	Naoki Endo (Meiji Univ.)	Sally modules of extended canonical ideals and Goto rings ······	15
02-01-0015	17	<u>Ken-ichi Yoshida</u> (Nihon Univ.) Tomohiro Okuma (Yamagata Univ.) Kei-ichi Watanabe (Nihon Univ./Meiji Univ.)	Normal tangent cone for the maximal ideal of a certain hypersurface ·····	15

March 18th (Mon)

9:30–12:00

02-01-0007	18	Shigeru Iitaka (Gakushuin Univ.*) Yukimasa Saito (Azabu Junior High School)	Perfect numbers of new kind ······	10
02-01-0023	19	Hayato Kanno (Tohoku Univ.)	A certain analogue of 2-1 formula and t -MZV of infinite depth ······	10
02-01-0024	20	Eisuke Otsuka (Tohoku Univ.)	On the periods obtained by iterated integrals on the Fermat curve of degree 2 ······	15
02-01-0027	21	Yusuke Tanuma (Keio Univ.)	Algebraic independence of the values of a certain family of power series ·····	10
02-01-0044	22	<u>Yasuaki Gyoda</u> (Univ. of Tokyo) Shuhe Maruyama (Kanazawa Univ.)	Uniqueness conjecture of generalized Markov equation and its partial solutions ······	15
02-01-0038	23	Ryosuke Shimada (Univ. of Tokyo)	Beyond the cases of Coxeter type ······	15
02-01-0047	24	Keita Nakai (Nagoya Univ.)	Discrete universality theorem for Matsumoto zeta-functions and non-trivial zeros of the Riemann zeta-function ······	15
02-01-0025	25	Masatoshi Suzuki (Tokyo Tech)	On the Hermitian form attached to the Weil distribution ······	15

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

02-02-0002		Teruhisa Koshikawa (Kyoto Univ.) ^b	Vanishing theorems for the cohomology of Shimura varieties	
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March 19th (Tue)

9:30–12:00

02-01-0003	26	Akinari Hoshi (Niigata Univ.) <u>Aiichi Yamasaki</u> (Kyoto Univ.)	Birational classification for algebraic tori (II) ······	10
02-01-0006	27	Akinari Hoshi (Niigata Univ.) <u>Hidetaka Kitayama</u> (Wakayama Univ.)	Rationality problem of two-dimensional quasi-monomial group actions ·····	10
02-01-0031	28	<u>Akinari Hoshi</u> (Niigata Univ.) Aiichi Yamasaki (Kyoto Univ.)	Rationality problem for norm one tori for dihedral extensions ······	7
02-01-0032	29	<u>Akinari Hoshi</u> (Niigata Univ.) Aiichi Yamasaki (Kyoto Univ.)	Rationality problem for norm one tori for A_5 and $\mathrm{PSL}_2(\mathbb{F}_8)$ extensions ·····	8

02-01-0035	30	Daisuke Tambara (Hirosaki Univ.*)	Intersection of subspaces A_v in A^2 for a three-dimensional division algebra A over a finite field	15
02-01-0019	31	Kenta Ueyama (Shinshu Univ.)	On noncommutative graded hypersurfaces of countable Cohen–Macaulay representation type	15
02-01-0036	32	Masaki Matsuno (Tokyo Univ. of Sci.) Ayako Itaba (Tokyo Univ. of Sci.)	Graded Ore extensions of 3-dimensional quadratic Calabi–Yau AS-regular algebras of Type S	15
02-01-0011	33	Sota Asai (Univ. of Tokyo) Osamu Iyama (Univ. of Tokyo)	M -TF equivalence in the real Grothendieck group	15

14:15–14:30 Presentation Ceremony for the 2024 MSJ Algebra Prize

14:40–15:40 Award Lecture for the 2024 MSJ Algebra Prize

02-02-0001		Hideto Asashiba (Shizuoka Univ.*/Kyoto Univ./Osaka Metro. Univ.)	Representation theory of finite-dimensional algebras and its applications (with a focus on coverings of derived equivalences and interval approximations)	
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16:00–17:00 Award Lecture for the 2024 MSJ Algebra Prize

02-02-0004		Kentaro Nakamura (Saga Univ.)	Iwasawa theory for rank two p -adic Galois representations	
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March 20th (Wed)

9:00–12:00

02-01-0029	34	Masayuki Sukenaga (Hiroshima Univ.)	Smooth tropical complete intersection curves of genus 3 in \mathbb{R}^3	15
02-01-0026	35	Masatomo Sawahara (Hirosaki Univ.)	Cylindricity of Du Val del Pezzo surfaces	15
02-01-0028	36	Kenta Watanabe (Nihon Univ.)	Donagi–Morrison conjecture concerning lifts of line bundles on curves contained in a K3 surface and its applications	15
02-01-0020	37	Kiwamu Watanabe (Chuo Univ.)	Contractions and non-free rational curves on Fano varieties	15
02-01-0008	38	Kaori Suzuki (Yokohama Nat. Univ.)	Graded Ring Database of Fano 3-folds with Bogomolov condition	15
02-01-0057	39	Fumiya Okamura (Nagoya Univ.)	Rational curves on Fano threefolds with terminal factorial singularities	15
02-01-0051	40	Runxuan Gao (Nagoya Univ.)	The geometric exceptional set in Manin’s conjecture for Batyrev and Tschinkel’s example	15
02-01-0058	41	Atsushi Noma (Yokohama Nat. Univ.)	Duality for projective morphisms finite in codimension one and the positivity of double point divisors of general inner projections	15
02-01-0004	42	Tomohiro Iwami (Kyushu Inst. of Tech.)	Canonical embedding of Clemens–Griffiths–Kuznetsov components via three-dimensional Miyaoka–Yau type inequality with the associated third Chern classes	15

14:15–18:00

02-01-0022	43	Kazuki Kanai (Kure Nat. Coll. of Tech.) Kengo Miyamoto (Ibaraki Univ.) Koji Nuida (Kyushu Univ.) Kazumasa Shinagawa (Ibaraki Univ.)	Uniform cyclic group factorization of finite groups and card-based cryptography	15
02-01-0037	44	Masanori Ando (Naragakuen Univ.) Kazuya Aokage (Ariake Nat. Coll. of Tech.)	Harada conjecture II in the covering groups of symmetric groups and alternating groups	10

02-01-0040	45 Kenichiro Tanabe (Tokyo City Univ.)	A Schur–Weyl type duality for twisted weak modules over a vertex algebra	15
02-01-0021	46 Kazuya Kawasetsu (Kumamoto Univ.)	On the commutant of the principal subalgebra in the A_1 lattice vertex algebra	10
02-01-0049	47 Naoko Kumugi (Tokyo Univ. of Sci.) Kyoichi Suzuki (Tokyo Univ. of Sci.)	Relative stable equivalences of Morita type and Morita equivalences for the principal blocks of finite groups	15
02-01-0050	48 Yuta Kozakai (Tokyo Univ. of Sci.) Arashi Sakai (Nagoya Univ.)	Clifford’s theorem for bricks	10
02-01-0034	49 Martín Forsberg Conde (Okinawa Inst. of Sci. and Tech. Grad. Univ.)	New homomorphisms between Specht modules of the symmetric group	15
02-01-0042	50 Liron Speyer (Okinawa Inst. of Sci. and Tech. Grad. Univ.)	Graded decomposition matrices for type C KLR algebras	15
02-01-0053	51 Takafumi Kouno (Waseda Univ.) Satoshi Naito (Tokyo Tech)	The Borel-type presentation of the equivariant quantum K -ring of the flag manifold in type C	15
02-01-0045	52 Yuta Kimura (Osaka Metro. Univ.)	Tilting ideals for deformed preprojective algebras	15
02-01-0016	53 Hideto Asashiba (Shizuoka Univ.*/Kyoto Univ./Osaka Metro. Univ.)	Relative Koszul coresolutions and relative Betti numbers	15
02-01-0009	54 Ryuji Tanimoto (Shizuoka Univ.)	Fundamental representations of \mathbb{G}_a into $SL(3, k)$ in positive characteristic	15

Geometry

March 17th (Sun)

9:30–11:45

03-01-0012

- 1 Ryu Ueno (Hokkaido Univ.) Statistical biharmonic map 15
Hitoshi Furuhashi (Hokkaido Univ.)

03-01-0020

- 2 Atsufumi Honda The total absolute curvature of closed curves with singularities 15
(Yokohama Nat. Univ.)
Chisa Tanaka
(NTT DATA Frontier Corp.)
Yuta Yamauchi (Yokohama Nat. Univ.)

03-01-0024

- 3 Isami Koga Harmonic totally real maps of the 3-sphere into the complex projective spaces 15
(Math. Res. Inst. Calc for Industry/Hiroshima Univ.)
Yasuyuki Nagatomo (Meiji Univ.)

03-01-0025

- 4 Riku Kishida (Tokyo Tech) The volume of conformally flat manifolds as hypersurfaces in the light-cone 15

03-01-0027

- 5 Yuuki Sasaki (Utsunomiya Univ.) Orbits of the isotropy group action on quaternionic symmetric spaces 15

03-01-0029

- 6 Toru Kajigaya (Tokyo Univ. of Sci.) Nonexistence of stable discrete maps into some homogeneous spaces of nonnegative curvature 15

03-01-0032

- 7 Yu Ohno (Hokkaido Univ.) Homogeneous Structures on $\mathbb{S}^2 \times \mathbb{R}$ and $\mathbb{H}^2 \times \mathbb{R}$ 15

14:15–16:10

03-01-0001

- 8 Noriaki Ikeda (Ritsumeikan Univ.) Hamilton Lie algebroids over Dirac structures 15

03-01-0002

- 9 Yuji Hirota (Azabu Univ.) Expansion of momentum maps, and quaternionic Kähler symmetries 15
Noriaki Ikeda (Ritsumeikan Univ.)

03-01-0010

- 10 Azuna Nishida (Chiba Univ.) Homological mirror symmetry for weighted projective spaces via Morse homotopy 15

03-01-0023

- 11 Kentaro Yamaguchi Torus-equivalently embedded toric manifolds associated to affine subspaces 15
(Tokyo Metro. Univ.)

03-01-0028

- 12 Hayato Nakanishi (Chiba Univ.) SYZ mirror of Hirzebruch surface \mathbb{F}_k and Morse homotopy 15

03-01-0033

- 13 Shuhei Yonehara (Osaka Univ.) Hamiltonian actions on coKähler manifolds and a reduction theorem 15

16:25–17:25 Talk Invited by Geometry Section

03-02-0002

- Kazushi Ueda (Univ. of Tokyo) Mirror symmetry and degeneration

March 18th (Mon)

10:10–10:25 Presentation Ceremony for the 2023 MSJ Geometry Prize

10:30–11:30 Award Lecture for the 2023 MSJ Geometry Prize

03-02-0003

- Kento Fujita (Osaka Univ.)^b On criteria for the K-stability of Fano varieties

13:00–14:00

03-01-0016

- 14 Yusei Aoki (Nagoya Inst. of Tech.) Estimates on characteristic magnetic focal value on Kähler manifold
Toshiaki Adachi (Nagoya Inst. of Tech.) 15

03-01-0030

- 15 Kenzi Satô (Tamagawa Univ.) Two kinds of new centroids of spherical and hyperbolic triangles 15

03-01-0035

- 16 Víctor Pérez-Valdés (Univ. of Tokyo) Differential symmetry breaking operators for principal series representations of the pair $(\mathrm{SO}(4,1), \mathrm{SO}(3,1))$ 15

March 19th (Tue)

9:30–11:45

03-01-0004

- 17 Shota Hamanaka Limit theorems for the total scalar curvature 15
(Mitsubishi Electric Corp. Adv. Tech. R&D Center)

03-01-0005

- 18 Tadashi Fujioka (Osaka Univ.) Upper curvature bound and the curvature integral 15

03-01-0006

- 19 Homare Tadano (Yamaguchi Univ.) Improved oscillation estimates and the Hitchin–Thorpe inequality on compact Ricci solitons 15

03-01-0007

- 20 Homare Tadano (Yamaguchi Univ.) Gradient estimates and Harnack inequalities for porous medium and fast diffusion equations via m -Bakry–Émery Ricci curvature with ε -range 15

03-01-0014

- 21 Masato Mimura (Tohoku Univ.)^b The space of non-extendable invariant quasimorphisms 15
Morimichi Kawasaki (Hokkaido Univ.)
Mitsuaki Kimura (Kyoto Univ.)
Takahiro Matsushita (Shinshu Univ.)
Shuhei Maruyama (Kanazawa Univ.)

03-01-0015

- 22 Masato Mimura (Tohoku Univ.)^b scl and coarse groups 15
Morimichi Kawasaki (Hokkaido Univ.)
Mitsuaki Kimura (Kyoto Univ.)
Takahiro Matsushita (Shinshu Univ.)
Shuhei Maruyama (Kanazawa Univ.)

03-01-0034

- 23 Shun Oshima (Tohoku Univ.) The observable diameter of metric measure spaces and the existence of points with positive measures. 15

14:15–17:10

03-01-0003

- 24 Yoshito Ishiki (RIKEN) Strongly rigid metrics in spaces of metrics 15

03-01-0008

- 25 Tomonari Sei (Univ. of Tokyo) Stein identity and Poincaré inequality for a discrete metric measure space 15
Ushio Tanaka (Osaka Metro. Univ.)

03-01-0011

- 26 Kenshiro Tashiro (Tohoku Univ.) Measure contraction property of the ℓ^p -Heisenberg group 15
Samuël Borza (SISSA)

03-01-0018

- 27 Nikita Evseev^b Sobolev curves in an arbitrary metric space 15
(Okinawa Inst. of Sci. and Tech. Grad. Univ.)

03-01-0019

- 28 Ye Zhang Semiconcavity results of squared sub-Riemannian distance on ideal Carnot groups 15
(Okinawa Inst. of Sci. and Tech. Grad. Univ.)

03-01-0022

- 29 Kazumasa Narita (Nagoya Univ.) An extremal eigenvalue problem for the Laplacian on a compact Kähler manifold 15

- [03-01-0026](#)
30 Yuya Takahashi (Nagoya Univ.) Operad structures in geometric quantization of the moduli space of flat $SU(2)$ -connections on a Riemann surface 15
- [03-01-0031](#)
31 Tatsuki Seto (Meiji Pharm. Univ.) A Fredholm module on self-similar sets built on n -cubes 15
Takashi Maruyama
(NEC Laboratories Europe)
- [03-01-0036](#)
32 Taika Okuda (Tokyo Univ. of Sci.) Star product with separation of variables on $G_{2,4}(\mathbb{C})$ 15
Akifumi Sako (Tokyo Univ. of Sci.)

March 20th (Wed)

9:20–10:15

- [03-01-0009](#)
33 Joonhyung Kim On the Kähler cone of the Heisenberg group 15
(Chungnam Nat. Univ.)
Ioannis D. Platis (Univ. of Crete)
Li-Jie Sun (Yamaguchi Univ.)
- [03-01-0013](#)
34 Yuya Takeuchi (Univ. of Tsukuba) Kohn–Rossi cohomology of spherical CR manifolds 15
- [03-01-0021](#)
35 Natsuo Miyatake (Tohoku Univ.) Extended Hitchin equation for cyclic Higgs bundles associated with a quasi-subharmonic function, and its Dirichlet problem 15

10:30–11:30 Talk Invited by Geometry Section

- [03-02-0001](#)
Hisashi Kasuya (Osaka Univ.) Vector bundles and Higgs bundles over Sasakian manifolds, present and future

Complex Analysis

March 17th (Sun)

9:50–11:20

04-01-0011

- 1 Kiyoki Tanaka (Meijo Univ.) Little Hankel operators on Bloch type spaces 15
 Satoshi Yamaji
 (Kobe City Coll. of Tech.)

04-01-0015

- 2 Toshiyuki Sugawa (Tohoku Univ.) On universal convexity of shifted hypergeometric functions 15
 Li-Mei Wang
 (Univ. of Int. Business and Econ.)
 Chengfa Wu (Shenzhen Univ.)

04-01-0014

- 3 Yohei Komori (Waseda Univ.) On the convergence of Thurston's hyperbolic circle packing algorithm
 15

04-01-0012

- 4 Katsuhiko Matsuzaki (Waseda Univ.) On the real-analytic structure of integrable Teichmüller spaces 15

04-01-0002

- 5 Hiroaki Aikawa (Chubu Univ.) Intrinsic ultracontractivity for planar domains with wide access property
 15

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

04-02-0001

- Takao Ohno (Oita Univ.) Boundedness of maximal operators and Sobolev-type inequalities for
 Riesz potentials

15:35–16:30

04-01-0003

- 6 Hidetaka Hamada Riesz type inequalities and a Hardy–Littlewood type theorem on bounded
 (Kyushu Sangyo Univ.) symmetric domains 15
 Shaolin Chen (Hengyang Normal Univ.)

04-01-0005

- 7 Hidetaka Hamada Harmonic functions with smooth moduli 10
 (Kyushu Sangyo Univ.)
 Shaolin Chen (Hengyang Normal Univ.)

04-01-0006

- 8 Hidetaka Hamada Holomorphic and pluriharmonic functions with smooth moduli and
 (Kyushu Sangyo Univ.) Hardy–Littlewood type theorems 10
 Shaolin Chen (Hengyang Normal Univ.)

04-01-0008

- 9 Hidetaka Hamada Pluriharmonic Lipschitz type spaces and composition operators 15
 (Kyushu Sangyo Univ.)
 Shaolin Chen (Hengyang Normal Univ.)

March 18th (Mon)

9:50–11:20

04-01-0010

- 10 Takanori Ayano (Osaka Metro. Univ.) An improvement on the power series expansion of the sigma function
 associated with the telescopic curves 15

04-01-0009

- 11 Li-Jie Sun (Yamaguchi Univ.) Geometric structures on the quaternionic Heisenberg group 15

04-01-0001

- 12 Tadashi Tomaru (Gunma Univ.*) Arnold's 14 exceptional singularities and families of elliptic curves with
 complex multiplications 15

04-01-0013

- 13 Takayuki Koike (Osaka Metro. Univ.) $\bar{\partial}$ cohomology of the complement of a semi-positive anticanonical divisor
 of a compact surface 15

[04-01-0007](#)

14 Takeo Ohsawa (Nagoya Univ.) On the Levi problem for locally pseudoconvex bounded domains of regular type with a curvature negativity on the boundary 15

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

[04-02-0002](#)

Tomoyuki Hisamoto Optimal degeneration for a Fano manifold
(Tokyo Metro. Univ.)

Functional Equations

March 17th (Sun)

9:30–12:00

05-01-0034

- 1 Kanam Park (Toba Nat. Coll. of Maritime Tech.) Birational representations of affine Weyl groups related to a 3×3 Lax formalism for the q -Painlevé equation of type $E_6^{(1)}$ 15

05-01-0036

- 2 Kodai Fujimoto (Shimane Univ.) Minimal set for solutions of ordinary differential equations involving $p(t)$ -Laplacian 15

05-01-0025

- 3 Hiroyuki Usami (Gifu Univ.) On target shooting problems 15
Takayuki Maeda (Gifu Univ.)

05-01-0001

- 4 Tetsutaro Shibata (Hiroshima Univ.) The first eigenvalue and eigenfunction of the nonlocal one-dimensional elliptic eigenvalue problem 15

05-01-0039

- 5 Junya Nishiguchi (Tohoku Univ.) On the notion of “mild solutions” to linear delay differential equations 15

05-01-0040

- 6 Junya Nishiguchi (Tohoku Univ.) Fundamental systems of solutions and fundamental matrix solutions to linear delay differential equations 15

05-01-0045

- 7 Naoki Hamamoto (Osaka Metro. Univ.) The Hardy’s constant for curl-free vector fields on the half-plane 12

05-01-0038

- 8 Takeshi Suguro (Kumamoto Univ.) Stability estimates for the logarithmic Sobolev inequality for a generalized entropy and an application to the uncertainty relation inequality 15

14:15–16:15

05-01-0043

- 9 Yukihide Tadano (Tokyo Univ. of Sci.) Continuum limit for discretized elliptic operators on square lattice ... 15
Shu Nakamura (Gakushuin Univ.)
Keita Mikami (RIKEN)

05-01-0002

- 10 Takashi Suzuki (Osaka Univ.) Interface vanishing of differential forms 5
Kazuo Watanabe (Kitasato Univ.)

05-01-0023

- 11 Shimpei Makida (Hokkaido Univ.) Stability of metric viscosity solutions under Hausdorff convergence ... 15
Atsushi Nakayasu (Kyoto Univ.)

05-01-0019

- 12 Tatsuya Ueno (Kanagawa Univ.) Existence of positive ground state solution of coupled nonlinear Kirchhoff–Schrödinger system for a subcritical and critical case 10

05-01-0003

- 13 Yasuhito Miyamoto (Univ. of Tokyo) Exact Morse index of radial solutions for semilinear elliptic equations with critical exponent on annuli 10

05-01-0012

- 14 Haruki Takemura (Univ. of Tokyo) Asymptotic formulas of the eigenvalues for the linearization of the scalar field equation 15
Yasuhito Miyamoto (Univ. of Tokyo)
Tohru Wakasa (Kyushu Inst. of Tech.)

05-01-0022

- 15 Kenta Nakamura (Kumamoto Univ.) Local properties of fractional parabolic De Giorgi classes 10

05-01-0013

- 16 Kotaro Sato (Tohoku Univ.) Long-time behavior of solutions to some quasistatic evolution equation 15

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

05-02-0001

- Yoshiaki Goto Hypergeometric integrals —homology and cohomology
(Otaru Univ. of Commerce)

March 18th (Mon)

9:30–12:00

05-01-0010

- 17 Ryunosuke Kusaba (Waseda Univ.) Higher order asymptotic expansions for the complex Ginzburg–Landau type equation in the supercritical case 15
Tohru Ozawa (Waseda Univ.)

05-01-0021

- 18 Shohei Kohatsu (Tokyo Univ. of Sci.) Immediate smoothing of measure-valued population densities in a Keller–Segel system with flux limitation 15

05-01-0006

- 19 Sachiko Ishida (Chiba Univ.) Global solvability for N -dimensional tumor invasion models via the maximum Sobolev regularity 10
Tomomi Yokota (Tokyo Univ. of Sci.)

05-01-0046

- 20 Tatsuya Hosono (Tohoku Univ.) Global existence and boundedness of solutions to the 4D fully parabolic chemotaxis system with indirect signal production 15
Philippe Laurençot
(CNRS/Univ. Savoie Mont Blanc)

05-01-0027

- 21 Masahiko Shimojo Convergence to traveling waves of predator-prey type reaction-diffusion systems with equal diffusivity by utilizing a relative entropy 15
(Tokyo Metro. Univ.)
Jong-Shenq Guo (Tamkang Univ.)

05-01-0037

- 22 Masahiko Shimojo Stability of monostable traveling waves in diffusive three-species competition systems 15
(Tokyo Metro. Univ.)
Jong-Shenq Guo (Tamkang Univ.)
Karen Guo (Providence Univ.)

05-01-0029

- 23 Masaharu Taniguchi (Okayama Univ.) Traveling front solutions of dimension n generate entire solutions of dimension $(n - 1)$ in reaction-diffusion equations 15
Hirokazu Ninomiya (Meiji Univ.)

05-01-0030

- 24 Masaharu Taniguchi (Okayama Univ.) Entire solutions with and without radial symmetry in balanced bistable reaction-diffusion equations 15

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

05-02-0002

- Qing Liu Monge solutions of eikonal equations in metric spaces
(Okinawa Inst. of Sci. and Tech. Grad. Univ.)

March 19th (Tue)

9:45–12:00

05-01-0017

- 25 Kaito Kokubu (Tokyo Univ. of Sci.) On solitary wave solutions to dispersive equations with double power nonlinearities 10

05-01-0044

- 26 Wataru Nakahashi (Tokyo Univ. of Sci.) Non-smoothness of the fundamental solutions for Schrödinger equations with super-quadratic and spherically symmetric potentials 15
Keiichi Kato (Tokyo Univ. of Sci.)
Yukihide Tadano (Tokyo Univ. of Sci.)

05-01-0042

- 27 Shun Takizawa (Tokyo Univ. of Sci.) Short-time asymptotics of the fundamental solutions for Schrödinger equations with non-smooth potentials 15

05-01-0004

- 28 Sonae Hadama (Kyoto Univ.) Almost sure existence of local solutions to the Hartree equation for infinite quantum systems 15
Takuto Yamamoto (Kyoto Univ.)

05-01-0032

- 29 Makoto Ikoma (Nagoya Univ.) Optimal constants of smoothing estimates for the 3D Dirac equation 15
Soichiro Suzuki (Chuo Univ.)

05-01-0047

- 30 Tomoyuki Tanaka (Doshisha Univ.) Improved bilinear Strichartz estimates with application to the well-posedness of periodic generalized KdV type equations 15
Luc Molinet (Univ. Tours)

05-01-0020

- 31 Takuya Sato (Kumamoto Univ.) Optimal L^2 -decay rate of solutions to dissipative nonlinear Schrödinger equations in the analytic class 15

14:15–16:00

05-01-0015

32 Jumpei Kawakami (Kyoto Univ.) Scattering and blow up for nonlinear Schrödinger equation with the averaged nonlinearity 15

05-01-0024

33 Hayato Miyazaki (Kagawa Univ.) Modified scattering operator for nonlinear Schrödinger equations with Masaki Kawamoto (Ehime Univ.) a time-decaying harmonic potential 15

05-01-0014

34 Shunsuke Kitamura (Tohoku Univ.) Lifespan of solutions of one dimensional semilinear wave equations with spatial weights and not-compactly supported data 15

05-01-0011

35 Kunio Hidano (Mie Univ.) Global existence for a 2-speed and 3-component semilinear system of Kazuyoshi Yokoyama wave equations in 3D 15
(Hokkaido Univ. of Sci.)

05-01-0028

36 Mamoru Okamoto (Osaka Univ.) Ill-posedness of the Cauchy problem for the viscous nonlinear wave Pierre de Roubin (Univ. of Edinburgh) equation 15

05-01-0005

37 Mohamed Ali Hamza Asymptotic profiles for the Cauchy problem of damped beam equation (Imam Abdulrahman Bin Faisal Univ.) with two variable coefficients and derivative nonlinearity 10
Yuta Wakasugi (Hiroshima Univ.)
Shuji Yoshikawa (Oita Univ.)

16:15–17:15 Award Lecture for the 2023 MSJ Analysis Prize

05-02-0003

Masahito Ohta (Tokyo Univ. of Sci.) Strong instability analysis of standing waves for nonlinear Schrödinger equations

March 20th (Wed)

10:00–12:00

05-01-0007

38 Masahiro Takayama (Keio Univ.) A priori estimates for solutions to the motion of an inextensible hanging Tatsuo Iguchi (Keio Univ.) string 15

05-01-0035

39 Taichi Eguchi (Waseda Univ.) The energy equality of the magnetohydrodynamic system in the frame- work of Lorentz–Besov spaces 15

05-01-0033

40 Tim Binz (TU Darmstadt) Uniqueness of weak solutions to the primitive equations in some anisotropic Yoshiki Iida (Waseda Univ.) spaces 15

05-01-0031

41 Zhongyang Gu (Univ. of Tokyo) Anomalous smoothing effect on the incompressible Navier–Stokes– Xin Hu (Univ. of Tokyo) Fourier limit from Boltzmann with periodic velocity 10
Tsuyoshi Yoneda (Hitotsubashi Univ.)

05-01-0008

42 Yuta Koizumi (Waseda Univ.) Convergence of approximating solutions of the Navier–Stokes equations in higher ordered Sobolev norms 15

05-01-0026

43 Tomoyuki Nakatsuka Existence of time-periodic strong solutions to the Navier–Stokes equa- (Matsuyama Univ.) tion in the whole space 15

14:15–15:15

05-01-0018

44 Erika Ushikoshi Helmholtz–Weyl decomposition on a time dependent domain for time (Yokohama Nat. Univ./Osaka Univ.) periodic Navier–Stokes flow 12
Takahiro Okabe (Osaka Univ.)
Haru Kanno (Yokohama Nat. Univ.)

05-01-0009

45 Yoshiaki Teramoto Decay of solutions to the initial boundary value problem of the Stokes Takaaki Nishida (Kyoto Univ.) system in the halfspace 15

05-01-0041

46 Jou-chun Kuo (Waseda Univ.) L_1 approach to the compressible viscous fluid flows in the half-space
Yoshihiro Shibata (Waseda Univ.*) 15

15:30–16:30 Talk Invited by Functional Equations Section

05-02-0004

Itsuko Hashimoto Inflow and outflow problem on radially symmetric solution for fluid
(Kanazawa Univ./Osaka Metro. Univ.) equation

Real Analysis

March 19th (Tue)

9:30–12:00

06-01-0019

1 Yoshifumi Ito Definition and existence theorem of the axiomatic set theory I 15

06-01-0020

2 Yoshifumi Ito Definition and existence theorem of Euclidean geometry 10

06-01-0007

3 Toshiharu Kawasaki On the structure of space of all extended integrable functions, II 15
(Tamagawa Univ./Chiba Univ./Chiba Univ.)

06-01-0027

4 Ryoji Fukuda (Oita Univ.) Uniform topologies on \mathcal{L}_0 with respect to a non-additive measure 15
Aoi Honda (Kyushu Inst. of Tech.)
Yoshiaki Okazaki
(Fuzzy Logic Systems Inst.)

06-01-0011

5 Satoshi Yamaguchi (Ibaraki Univ.) Bi-preduals of generalized Morrey spaces with variable growth condition
..... 15

06-01-0023

6 Ryota Kawasumi A characterization of boundedness of composition operators on Orlicz–
Morrey spaces 15
Masahiro Ikeda (RIKEN)
Isao Ishikawa (Ehime Univ.)

06-01-0021

7 Hiroyasu Mizuguchi (Kansai Univ.) generalized relation of Pythagorean orthogonality by two-dimensional
norms 15

06-01-0026

8 Sachiko Atsushiba Approximation of fixed points of monotone nonexpansive-type map-
pings 15
(Tokyo Woman's Christian Univ.)

14:15–16:15

06-01-0002

9 Tsuyoshi Yoneda (Hitotsubashi Univ.) Fourier uncertainty principle and mathematical analysis on machine
learning 15

06-01-0029

10 Emu Kondo (Nara Women's Univ.) Weighted Hardy's inequality for nonincreasing functions and the dou-
bling condition for weights 15
Shinya Moritoh (Nara Women's Univ.)

06-01-0004

11 Mai Harada (Kanagawa Univ.) On the existence of time periodic solutions for the SIRS model with the
seasonally-dependent transmission rate 15
Noriaki Yamazaki (Kanagawa Univ.)

06-01-0008

12 Naotaka Ukai (Chiba Univ.) Anisotropic energy gradient system associated with image denoising
process with orientation adjustment 15
Daiki Mizuno (Chiba Univ.)
Ken Shirakawa (Chiba Univ.)
Harbir Antil (George Mason Univ.)

06-01-0016

13 Daiki Mizuno (Chiba Univ.) Pseudo-parabolic phase-field model of grain boundary motion with
solidification effect 15
Ken Shirakawa (Chiba Univ.)

06-01-0012

14 Noriaki Yamazaki (Kanagawa Univ.) Approximate methods for optimal control problems of the Frémond
model for shape memory alloys 15
Pierluigi Colli (Univ. of Pavia)
M. Hassan Farshbaf-Shaker (WIAS)
Ken Shirakawa (Chiba Univ.)

16:30–17:30 Talk Invited by Real Analysis Section

06-02-0002

Shin-ya Matsushita (Akita Pref. Univ.) Fixed point algorithms and their applications

March 20th (Wed)

9:30–12:00

06-01-0017

15 Yoshiho Akagawa
(Gifu Nat. Coll. of Tech.)
Kazunori Matsui (Seikei Univ.)

Nonnegativity of the threshold function in an elastoplasticity model based on quasi-variational inequality 10

06-01-0018

16 Hana Kakiuchi (Japan Women's Univ.)
Toyohiko Aiki (Japan Women's Univ.)

Solvability of free boundary problems for the parabolic equation system 15

06-01-0022

17 Akiko Morimura
(Japan Women's Univ.)
Toyohiko Aiki (Japan Women's Univ.)

Convergence of approximation solutions obtained by the finite volume method in moisture transport model 15

06-01-0003

18 Chiharu Kosugi (Yamaguchi Univ.)
Toyohiko Aiki (Japan Women's Univ.)

Existence of strong solutions for the energy conservation system representing motions of incompressible elastic curve on the plane 15

06-01-0001

19 Yuya Sugawara (Tokyo Univ. of Sci.)
Yuya Tanaka (Tokyo Univ. of Sci.)
Tomomi Yokota (Tokyo Univ. of Sci.)

Regularizing property of a Keller–Segel system with density-dependent sensitivity 15

06-01-0015

20 Shohei Kohatsu (Tokyo Univ. of Sci.)

Boundedness and blow-up of weak solutions to a chemotaxis system with flux limitation 15

06-01-0024

21 Yutaro Chiyo (Tokyo Univ. of Sci.)
Fatma Gamze Düzgün
(Hecettepe Univ.)
Silvia Frassu (Cagliari Univ.)
Giuseppe Viglialoro (Cagliari Univ.)

Global existence and boundedness in a fully parabolic chemotaxis system with nonlocal source 15

06-01-0005

22 Pierluigi Colli (Univ. of Pavia)
Shunsuke Kurima (Tokyo Univ. of Sci.)
Luca Scarpa (Politecnico di Milano)

Convergence of a nonlocal phase field system with inertial term 15

06-01-0014

23 Akio Ito

Quasi-variational structural evolution inclusion with perturbation on a real Hilbert space 15

14:15–15:40

06-01-0013

24 Ken Shirakawa (Chiba Univ.)
Daiki Mizuno (Chiba Univ.)
Harbir Antil (George Mason Univ.)

Optimal control problems governed by pseudo-parabolic gradient systems for KWC type energies 15

06-01-0010

25 Masahiro Ikeda (RIKEN/Keio Univ.)
Shun Uchida (Oita Univ.)
Takeshi Fukao (Ryukoku Univ.)

An approximation of evolution equation with clique expansion of hypergraph Laplacian 15

06-01-0025

26 Takanori Ebata (Niigata Univ.)
Hiroki Ohwa (Niigata Univ.)

Continuous dependence on the initial and flux functions for entropy solutions of general balance laws 15

06-01-0028

27 Kota Kumazaki (Kyoto Univ. of Edu.)
Adrian Muntean (Karlstad Univ.)

Large-time behavior of a solution to a multiscale model 15

06-01-0006

28 Takeshi Fukao (Ryukoku Univ.)
Pierluigi Colli (Univ. of Pavia)

Allen–Cahn equations with dynamic boundary conditions of fourth-order 15

15:45–16:45 Award Lecture for the 2023 MSJ Analysis Prize

06-02-0001

Naoki Tanaka (Shizuoka Univ.)

Abstract theory for evolution equations

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

06-02-0003

Hirotohi Kuroda (Hokkaido Univ.) On the behaviour of solutions to the fourth order total variation flow equation

Functional Analysis

March 17th (Sun)

9:30–11:00

07-01-0006

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

07-01-0018

- 2 Itaru Sasaki (Shinshu Univ.) On the radius of convergence of the ground state in a pair interaction model 15
 Yasumichi Matsuzawa (Shinshu Univ.)
 Shinnosuke Izumi (Shinshu Univ.)
 Kouta Imura
 (Nagano Pref. Fujimi High School)

07-01-0019

- 3 Yukihide Tadano (Tokyo Univ. of Sci.) Continuum limit for Laplace operators on lattices 15
 Shu Nakamura (Gakushuin Univ.)
 Keita Mikami (RIKEN)

07-01-0021

- 4 Fumio Hiroshima (Kyushu Univ.) Positivity improving for the Nelson model with nonzero total momenta 15

07-01-0022

- 5 Kazuyuki Wada Exponential decay for eigenfunctions associated with discrete spectra of quantum walks 15
 (Hokkaido Univ. of Edu.)

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

07-02-0003

- Artbazar Galtbayar The L^p -boundedness of the wave operators for bi-Schrödinger operators on \mathbb{R}^4
 (National Univ. of Mongolia)

March 18th (Mon)

9:30–11:00

07-01-0005

- 6 Temma Aoyama (Univ. of Tokyo) Deformation of heat kernels and Wiener measures from the viewpoint of BenSaïd–Kobayashi–Ørsted’s Laguerre semigroup theory 15

07-01-0001

- 7 Toshihisa Kubo (Ryukoku Univ.) The classification and construction of projectively covariant differential operators on $\mathbb{R}P^2$ 15
 Bent Ørsted (Aarhus Univ.)

07-01-0002

- 8 Kazuki Kannaka (RIKEN) Proper actions of semisimple Lie groups and the Hurwitz–Radon number I 15

07-01-0003

- 9 Koichi Tojo (RIKEN) Proper actions of semisimple Lie groups and the Hurwitz–Radon number II 15

07-01-0013

- 10 Atsumu Sasaki (Tokai Univ.) Weyl group of pseudo-Riemannian symmetric space 15

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

07-02-0004

- Taito Tauchi (Aoyama Gakuin Univ.) Relationship between multiplicities of induced representations and orbit decomposition on real and complex flag varieties

March 19th (Tue)

9:30–11:30

07-01-0024

11 Keiichi Watanabe (Niigata Univ.) On gyro operations in open balls of complex inner product spaces 15

07-01-0017

12 Osamu Hatori (Niigata Univ.*)
Toshikazu Abe (Ibaraki Univ.) A Mazur–Ulam theorem on a GGK and its application 15

07-01-0010

13 Michiya Mori (Univ. of Tokyo) On the Scottish Book Problem 155 by Mazur and Sternbach 15

07-01-0014

14 Yuki Seo (Osaka Kyoiku Univ.) On numerical radius inequalities related to geometric means 15

07-01-0016

15 Masatoshi Ito (Maebashi Inst. of Tech.) Inequalities among the weighted Heinz mean and related ones 15

07-01-0004

16 Hiroyuki Osaka (Ritsumeikan Univ.)
Mohsen Kian (Univ. of Bojnord)
Mohammad Sal Moslehian
(Ferdowsi Univ. of Mashhad) On characterization of matrix monotone decreasing functions 15

07-01-0011

17 Takeaki Yamazaki (Toyo Univ.)
Hiroyuki Osaka (Ritsumeikan Univ.) The induced Aluthge sequence of compact operators 15**14:15–15:45**

07-01-0007

18 Yusuke Isono (Kyoto Univ.) Haagerup and Størmer’s conjecture for pointwise inner automorphisms
. 15

07-01-0020

19 Satoshi Goto (Sophia Univ.) A generalization of Ocneanu’s ADE inter-Dynkin connection systems
. 15

07-01-0009

20 Taro Sogabe (Kyoto Univ.)^b A duality of KK-theory and its application to the extensions of C^* -
algebras 15

07-01-0012

21 Norio Nawata (Osaka Univ.) \mathcal{W} -absorbing actions of finite abelian groups 15

07-01-0015

22 Narutaka Ozawa (Kyoto Univ.) Quasi-local operators and finite-propagation operators 15

16:00–17:00 Talk Invited by Functional Analysis Section

07-02-0001

Takuya Takeishi (Kyoto Inst. Tech.) C^* -algebras constructed from number fields and related complete in-
variants of number fields

Statistics and Probability

March 17th (Sun)

9:30–11:40

- 08-01-0020
1 Kiyooki Hoshino (Osaka Metro. Univ.) Characterization of the stochastic integral by the Riemann sum 15
- 08-01-0012
2 Kosuke Yamato (Univ. of Tsukuba) Existence of quasi-stationary distributions of standard processes with
Kei Noba (Inst. of Stat. Math.) no negative jumps 15
- 08-01-0021
3 Hirotaka Kai (Kyoto Univ.) Long time behavior of Lévy processes on manifolds 15
- 08-01-0002
4 Yasuhito Nishimori Limiting distributions for particles near the frontier of spatially inho-
(Nat. Inst. of Tech., Anan Coll.) mogeneous branching symmetric stable processes 15
- 08-01-0005
5 Yuji Hamana (Univ. of Tsukuba) Asymptotic expansion for the tail probability of the hitting time and
site of Brownian motion 10
- 08-01-0009
6 Shun Yanashima (Tokyo Metro. Univ.) An invariance principle for random walk bridges conditioned to stay
Kensuke Ishitani (Tokyo Metro. Univ.) between two curves 15
- 08-01-0025
7 Soma Nishino (Tokyo Metro. Univ.) Higher order integration by parts formulae for Wiener measures on a
Kensuke Ishitani (Tokyo Metro. Univ.) path space between two curves 15
- 08-01-0010
8 Masato Hoshino (Osaka Univ.) Random models on regularity-integrability structures 15
Ismaël Bailleul
(Univ. Bretagne Occidentale)

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

- 08-02-0003
Yushi Hamaguchi (Osaka Univ.) Infinite dimensional Markovian lifts of stochastic Volterra equations

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

- 08-02-0007
Nobuaki Naganuma (Kumamoto Univ.) Approximation theory of SDEs driven by fractional Brownian motion

March 18th (Mon)

9:30–11:40

- 08-01-0019
9 Misaki Tabata (Ritsumeikan Univ.) An infinite-dimensional Hawkes process 15
- 08-01-0014
10 Makoto Nakashima (Nagoya Univ.) Feynman–Kac representation for three-dimensional heat equation with
one-center point interaction 15
- 08-01-0015
11 Makoto Nakashima (Nagoya Univ.) Stochastic quantization of the three-dimensional Edwards measure . . . 15
Seiichiro Kusuoka (Kyoto Univ.)
Song Liang (Waseda Univ.)
Sergio Albeverio (Univ. of Bonn)
- 08-01-0003
12 Naomasa Ueki (Kyoto Univ.) Positivity of small ball probabilities of a Gaussian random field, and its
applications to random Schrödinger operators 15
- 08-01-0011
13 Haruyoshi Tanaka Higher-order asymptotic behaviours of pressure functionals and statisti-
(Naruto Univ. of Edu.) cal representations of the coefficients 15
- 08-01-0004
14 Takumu Ooi (Kyoto Univ.) Dynkin games for Markov processes 15
Toshihiro Uemura (Kansai Univ.)

08-01-0024	15	<u>Yuji Shinozaki</u> (Bank of Japan/Tokyo Tech) Syoiti Ninomiya (Tokyo Tech)	Error estimation of high-order recombination and its application	15
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08-01-0001	16	Yuki Ueda (Hokkaido Univ. of Edu.)	Uniform convergence towards extreme value distributions in free probability	15
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11:40–12:10 Research Section Assembly

March 19th (Tue)

10:00–11:20

08-01-0022	17	Teruo Tanaka (Hiroshima City Univ.)	Certain fractional optimal stopping problems —continuous time case—	10
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08-01-0006	18	Hayato Takahashi (Random Data Lab.)	Test of randomness with exact distributions of runs	15
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08-01-0028	19	Toshiharu Fujita (Kyushu Inst. of Tech.)	Stochastic decision process with feedforward loop system —Minimum reward system—	15
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08-01-0026	20	<u>Kenji Tanino</u> (Kobe Univ.) Masatake Hirao (Aichi Pref. Univ.) Masanori Sawa (Kobe Univ.)	Research on the strength of B_d -invariant weighted spherical design using simplicial characterization and Hilbert's identity	15
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08-01-0016	21	<u>Hisaya Okahara</u> (Tokyo Univ. of Sci.) Kengo Fujisawa (Tokyo Univ. of Sci., Yamaguchi) Kouji Tahata (Tokyo Univ. of Sci.)	Separable models related to symmetry for multi-way contingency tables	15
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March 20th (Wed)

10:00–11:40

08-01-0023	22	<u>Eri Kurita</u> (Tokyo Univ. of Sci.) Takashi Seo (Tokyo Univ. of Sci.)	A test statistic for Mardia's multivariate skewness	15
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08-01-0008	23	<u>Koji Tsukuda</u> (Kyushu Univ.) Shun Matsuura (Keio Univ.)	Estimation of the leading principal component in the multivariate allometric regression model	15
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08-01-0017	24	<u>Kou Fujimori</u> (Shinshu Univ.) Koji Tsukuda (Kyushu Univ.)	Two step estimations via the Dantzig selector for ergodic time series models	15
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08-01-0013	25	<u>Kento Egashira</u> (Tokyo Univ. of Sci.) Kazuyoshi Yata (Univ. of Tsukuba) Makoto Aoshima (Univ. of Tsukuba)	Asymptotic properties of kernel k-means for high-dimension, low-sample-size data	15
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08-01-0007	26	<u>Kazuyoshi Yata</u> (Univ. of Tsukuba) Makoto Aoshima (Univ. of Tsukuba)	Reconstruction of a low-rank matrix by singular value decompositions	15
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08-01-0018	27	Yoshihide Kakizawa (Hokkaido Univ.)	Density estimation for cylinder data	15
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14:15–15:15 Award Lecture for the 2023 MSJ Analysis Prize

08-02-0005		Yasunori Fujikoshi (Hiroshima Univ.*)	Model selection based on information criteria in high-dimensional statistical analysis	
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15:30–16:30 Talk Invited by Statistics and Probability Section

08-02-0006		Tomoyuki Nakagawa (Meisei Univ.)	Robust Bayesian inference using the divergences and its applications	
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Applied Mathematics

March 17th (Sun)

9:00–12:00

09-01-0057

- 1 Jiro Akahori (Ritsumeikan Univ.) Absolute zeta functions and periodicity of quantum walks on cycles
 Norio Konno (Ritsumeikan Univ.*) 15
Rikuki Okamoto (Ritsumeikan Univ.)
 Iwao Sato (Oyama Nat. Coll. of Tech.)
Yuma Tamura (Ritsumeikan Univ.)

09-01-0027

- 2 Rikuki Okamoto (Ritsumeikan Univ.) Absolute zeta functions of zeta functions of quantum walks 15
 Konno Norio (Ritsumeikan Univ.*)
 Sato Iwao (Oyama Nat. Coll. of Tech.)
 Akahori Jiro (Ritsumeikan Univ.)

09-01-0051

- 3 Taisuke Hosaka (Yokohama Nat. Univ.) QW-search/Zeta correspondence 10
 Etsuo Segawa (Yokohama Nat. Univ.)
 Norio Konno (Ritsumeikan Univ.*)

09-01-0035

- 4 Iwao Sato (Oyama Nat. Coll. of Tech.) Weighted alternating Walk/Zeta correspondence 15
Takako Endo (Tohoku Univ.)
Takashi Komatsu (Univ. of Yamanashi)
 Norio Konno (Ritsumeikan Univ.*)

09-01-0003

- 5 Hiroyuki Yamagishi The best constants of two types of discrete ℓ^p Sobolev inequalities on a
 (Tokyo Metropolitan Coll. of Indus. Tech.) complete graph 15
 Kohtaro Watanabe
 (Nat. Defense Acad. of Japan)
 Atsushi Nagai (Tsuda Coll.)

09-01-0033

- 6 Sho Fujimura (Fukuoka Univ.) On the generation of all Euler trails in an Eulerian graph 10
 Shuji SHIRAIISHI (Fukuoka Univ.)

09-01-0022

- 7 Bill Jackson Spanning even trees of graphs 15
 (Queen Mary Univ. of London)
Kiyoshi Yoshimoto (Nihon Univ.)

09-01-0011

- 8 Shun-ichi Maezawa On a preorder induced by rainbow forbidden subgraphs 15
 (Tokyo Univ. of Sci.)
Akira Saito (Nihon Univ.)

09-01-0001

- 9 Makoto Ozawa (Komazawa Univ.) Characterization of critical complexes which have a form $(G \times S^1) \cup H$
 Mario Eudave-Muñoz 10
 (Univ. Nacional Autónoma de México)

09-01-0002

- 10 Makoto Ozawa (Komazawa Univ.) Partially ordered set of complexes by embeddings and the existence of
 Mario Eudave-Muñoz critical subcomplexes 10
 (Univ. Nacional Autónoma de México)

09-01-0058

- 11 Kohei Tanaka (Shinshu Univ.) Directed topological complexity for CW complexes 15

09-01-0020

- 12 Akihiro Higashitani (Osaka Univ.) Reflexive polytopes arising from regular matroids and γ -nonnegativity
 15

14:15–16:50

09-01-0034

- 13 Kengo Enami (Seikei Univ.) Difference of facial achromatic numbers between two triangular embed-
Yumiko Ohno (Yokohama Nat. Univ.) dings of a graph 15

09-01-0060

- 14 Daiki Takahashi (Yokohama Nat. Univ.) Quadrangulations of a polygon with outer Steiner points 15
Atsuhiro Nakamoto
 (Yokohama Nat. Univ.)

09-01-0046

- 15 Kenta Noguchi (Tokyo Univ. of Sci.) Embedding of complete graphs so that the dual has a 1-cut 15
Gunnar Brinkmann (Ghent Univ.)
Heidi Van den Camp (Ghent Univ.)

09-01-0028

- 16 Hideki Matsumura (Keio Univ.) On a complex analogue of central symmetry of weighted designs 15
Masanori Sawa (Kobe Univ.)

09-01-0064

- 17 Teruyuki Mishima (Kobe Univ.) Explicit construction of rational interval design and Hilbert–Kamke
Masanori Sawa (Kobe Univ.) problem 15
Yukihiro Uchida (Tokyo Metro. Univ.)
Xiao-Nan Lu (Gifu Univ.)

09-01-0052

- 18 Eiichi Bannai (Kyushu Univ.*) On the bivariate Q -polynomiality of certain association schemes. 15
Hirotake Kurihara (Yamaguchi Univ.)
Da Zhao (Kyoto Univ.)
Yan Zhu
 (Univ. of Shanghai for Sci. Tech.)

09-01-0037

- 19 Madoka Awada (Waseda Univ.) 3-designs constructed by using quadratic residue codes 15

09-01-0059

- 20 Reina Ishikawa (Waseda Univ.) Exceptional designs in some extended quadratic residue codes 15

09-01-0029

- 21 Hiroaki Taniguchi On quadratic APN functions $F(x) + Tr(x)L(x)$ 15
 (Yamato Univ./Kagawa Nat. Coll. of Tech.*)

17:00–18:00 Talk Invited by Applied Mathematics Section

09-02-0002

- Xiao-Nan Lu (Gifu Univ.) Combinatorial structures for group testing and combinatorial testing

March 18th (Mon)

9:00–12:00

09-01-0048

- 22 Jun Sato (Tokyo Polytechnic Univ.) Exact stationary state of the inhomogeneous ASEP 15
Yuki Ishiguro (Univ. of Tokyo)
Katsuhiro Nishinari (Univ. of Tokyo)

09-01-0047

- 23 Shuhei Kamioka (Osaka Seikei Univ.) An integrable algorithm for randomly sampling plane partitions 15

09-01-0050

- 24 Toshitaka Aoki (Kobe Univ.) Computing bipath persistent homology 15
Emerson Gaw Escobar (Kobe Univ.)
Shunsuke Tada (Kobe Univ.)

09-01-0061

- 25 Hideaki Morita (Muroran Inst. of Tech.) On the regular covering of a finite digraph 15

09-01-0042

- 26 Ayaka Ishikawa (Yamagata Univ.) A graph zeta function of periodic paths and its determinant expression
 15

09-01-0062

- 27 Tatsuya Tsurii (Tokyo Univ. of Information Sci.)
Naoharu Ito (Nara Univ. of Edu.)
Toyoki Matsuyama (Nara Univ. of Edu.)
- A study on periodicity of Grover walk using group structures obtained from its evolution matrix 15

09-01-0056

- 28 Daiju Funakawa (Hokkai-Gakuen Univ.)
Kei Saito (Kanagawa Univ.)
- The existence of eigenvalues in one-dimensional two-state open quantum walks 15

09-01-0055

- 29 Masahiro Sanka (Keio Univ.)
Katsuhiko Ota (Keio Univ.)
- Toughness, forbidden induced paths and hamiltonicity of graphs 15

09-01-0041

- 30 Kuniharu Yokomura (Tokai Univ.)
- On degree conditions of balanced 3-partite Hamiltonian-connected graphs 15

09-01-0016

- 31 Shinya Fujita (Yokohama City Univ.)
- On monochromatic connectivity in edge-colored graphs 10

09-01-0025

- 32 Kiyoshi Ando (Nat. Inst. of Informatics)
- A constructive characterization of 5-edge-connected 5-regular multi-graphs 15

13:00–14:00

09-01-0026

- 33 Satoru Fukasawa (Yamagata Univ.)
Tsuyoshi Miezeki (Waseda Univ.)
- Galois points for a graph 15

09-01-0036

- 34 Tsuyoshi Miezeki (Waseda Univ.)
Yuusaku Nishimura (Waseda Univ.)
Akihiro Munemasa (Tohoku Univ.)
Tadashi Sakuma (Yamagata Univ.)
Shuhei Tsujie (Hokkaido Univ. of Edu.)
- A generalization of the chromatic symmetric function 15

09-01-0045

- 35 Yusaku Nishimura (Waseda Univ.)
- A simple random walk and equitable partition 15

09-01-0024

- 36 Yuho Tanaka (Waseda Univ.)
- On the average hitting times of directed Cayley graphs 15

March 19th (Tue)

9:50–12:00

09-01-0017

- 37 Koji Nuida (Kyushu Univ.)
- A proof of Zorn's Lemma from elementary properties of partially ordered sets 10

09-01-0031

- 38 Tetsuya Nagano (Univ. of Nagasaki)
- Finsler encryption 15

09-01-0067

- 39 Ryoko Tomiyasu (Kyushu Univ.)
- Packing theory derived from phyllotaxis and products of linear forms 15

09-01-0032

- 40 Tomoharu Suda (RIKEN)
- A categorical perspective on the relationship between discrete and continuous time dynamical systems 15

09-01-0010

- 41 Tomoyuki Miyaji (Kyoto Univ.)
Kazuya Okamoto (Waseda Univ.)
Akiyasu Tomoeda (Kansai Univ.)
- Neimark–Sacker bifurcation with discrete rotational symmetry and traveling waves 15

09-01-0014

- 42 Mikio Murata (Tokyo Univ. of Agri. and Tech.)
- Turing patterns appearing in Gray–Scott cellular automaton 15

09-01-0039

- 43 Itsuki Watanabe (Waseda Univ.)
- High density limit for nonlocal cross-diffusion model with self-diffusion 15

09-01-0040

- 44 Ken Furukawa (RIKEN)
Hiroyuki Kitahata (Chiba Univ.)
- Drift-diffusion equations under dynamic boundary conditions for filtration phenomena 15

14:15–14:40 Presentation Ceremony for the 2023 Applied Mathematics Prize**14:50–16:30**

09-01-0015

- 45 Yoshihisa Morita (Ryukoku Univ.*) Front propagation and blocking for the bistable reaction-diffusion equation on tree-like metric graphs 15
Shuichi Jimbo (Hokkaido Univ.)

09-01-0023

- 46 Koichi Anada A Remark on the blow-up rates of curvatures in the area-preserving curvature flow in the plane 15
 (Waseda Univ. Senior High School)
Tetsuya Ishiwata
 (Shibaura Inst. of Tech.)
Takeo Ushijima (Tokyo Univ. of Sci.)

09-01-0008

- 47 Masato Kimura (Kanazawa Univ.) Unique existence of weak solution and asymptotic behavior of Zener-type viscoelastic wave equation 15
Jingtong Li (Kanazawa Univ.)
Yikan Liu (Kyoto Univ.)
Gen Nakamura
 (Hokkaido Univ./Hokkaido Univ.)
Hirofumi Notsu (Kanazawa Univ.)
Yoshihiro Ueda (Kobe Univ.)

09-01-0063

- 48 Kota Ohno (Chuo Univ.) Process to reach consensus in Deffuant model 15
Toshiyuki Ogawa (Meiji Univ.)

09-01-0054

- 49 Keiichiro Kagawa (Hokkaido Univ.) Numerical simulation to reproduce morphogenesis of hair follicles 15
Makoto Okumura (Konan Univ.)
Yasuaki Kobayashi (Hokkaido Univ.)
Duligengaowa Wuergenzhen (RIKEN)
Ritsuko Morita (Osaka Univ.)
Hironobu Fujiwara (RIKEN)
Masaharu Nagayama (Hokkaido Univ.)

09-01-0049

- 50 Sungrim Seirin Lee Mathematical dermatology linking eruption morphology and in vivo pathology 15
 (Kyoto Univ./Kyoto Univ.)

16:45–17:45 Talk Invited by Applied Mathematics Section

09-02-0001

- Yoshitaro Tanaka Nonlocal evolution equations and approximations by system of partial differential equations
 (Future Univ.-Hakodate)

March 20th (Wed)

9:50–12:00

09-01-0012

- 51 Takashi Furuya (Shimane Univ.) Globally injective and bijective neural operators 10

09-01-0066

- 52 Jumpei Nagase ReLU function representability by piecewise nonlinear functions 15
 (Univ. of Electro-Comm.)

09-01-0006

- 53 Takeshi Gotoda (Tokyo Tech) Numerical study of enstrophy variation on filtered-Euler flows 15

09-01-0018

- 54 Yuuki Shimizu (Univ. of Tokyo) Impact of curvature on a point vortex 15

09-01-0043

- 55 Takehiko Kinoshita (Saga Univ.) Regarding the matrix 2-norm of real 2×2 matrices and improved convergence order of norm for approximate inverse operators 15
Yoshitaka Watanabe (Kyushu Univ.)
Mitsuhiro T. Nakao (Waseda Univ.)

09-01-0019

- 56 Takeshi Terao (Kyushu Univ.) Numerical verification method of the approximate inverse operator norm for infinite-dimensional linear operators 15
 Yoshitaka Watanabe (Kyushu Univ.)
 Katsuhisa Ozaki
 (Shibaura Inst. of Tech.)

09-01-0038

- 57 Makoto Okumura (Konan Univ.) On the regularity of a matrix appearing in the proof of the solvability of a structure-preserving scheme under dynamic boundary conditions 15

09-01-0044

- 58 Tetsuya Ishiwata Monotonicity-preserving numerical scheme for fractional advection equation 15
 (Shibaura Inst. of Tech.)
 Daisuke Ito (Shibaura Inst. of Tech.)
 Taichi Shiga

14:15–15:25

09-01-0005

- 59 Fumio Kikuchi (Univ. of Tokyo*) Techniques for hypercircle-based error estimation of finite element solutions 15
 Xuefeng Liu
 (Tokyo Woman's Christian Univ.)

09-01-0007

- 60 Aufa Numan Fadhillah Rudiawan A finite element scheme for a multiphase flow model 15
 (Kanazawa Univ.)
 Alexandr Žák
 (Czech Tech. Univ. in Prague)
 Michal Beneš
 (Czech Tech. Univ. in Prague)
 Masato Kimura (Kanazawa Univ.)
 Hirofumi Notsu (Kanazawa Univ.)

09-01-0021

- 61 Tokuhiro Eto (Univ. of Tokyo) A structure-preserving parametric finite element method for the multiphase Mullins–Sekerka problem with triple junctions 15
 Harald Garcke (Univ. of Regensburg)
 Robert Nürnberg (Univ. of Trento)

09-01-0013

- 62 Karel Svadlenka (Tokyo Metro. Univ.) On an approximation scheme for anisotropic interfacial motion on obstacle 15

15:40–16:40 Talk Invited by Applied Mathematics Section

09-02-0003

- Yikan Liu (Kyoto Univ.) On solution dynamics of coupled systems and semilinear problems of time-fractional diffusion equations

Topology

March 17th (Sun)

9:30–11:10

- [10-01-0027](#)
1 Takahiro Oba (Osaka Univ.) Symplectic fillings of unit cotangent bundles of spheres 15
Myeonggi Kwon
(Jeonbuk National Univ.)
- [10-01-0009](#)
2 Naoyuki Monden (Okayama Univ.) Geography of symplectic 4-manifolds admitting Lefschetz fibrations .. 15
Anar Akhmedov (Univ. of Minnesota)
- [10-01-0010](#)
3 Naoyuki Monden (Okayama Univ.) Ruled surfaces and indecomposable Lefschetz fibrations 15
Anar Akhmedov (Univ. of Minnesota)
- [10-01-0005](#)
4 Tatsumasa Suzuki (Tokyo Tech) $P_{a,b}$ -surgery on 4-manifolds 15
Motoo Tange (Univ. of Tsukuba)
- [10-01-0020](#)
5 Tsukasa Isoshima (Tokyo Tech) Trisections of the doubles of some Mazur type 4-manifolds 15
- [10-01-0003](#)
6 Masaki Ogawa (Tohoku Univ.) Weinstein trisections of trivial surface bundles 10

11:20–12:00 Research Section Assembly

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

- [10-02-0002](#)
Masaaki Ue (Kyoto Univ.*) Constraints on intersection forms of 4-manifolds with given boundary
in terms of Gauge theoretical invariants

15:40–17:30

- [10-01-0023](#)
7 Atsuhide Mori (Osaka Dent. Univ.) A model of linguistic minimalism 15
- [10-01-0021](#)
8 Teruaki Kitano (Soka Univ.) On linear representations of a surface group of genus 2 into $SL(2; \mathbb{Z}[1/2])$
Marina Shibata (Soka Univ.) with a nontrivial real Euler class 10
- [10-01-0008](#)
9 Ryoma Kobayashi
(Ishikawa Nat. Coll. of Tech.) Generating sets for the level d mapping class group of a compact non-orientable surface 15
- [10-01-0001](#)
10 So Yamagata (Fukuoka Univ.) Presentation of the pure braid group and section of the braid arrangement 15
- [10-01-0016](#)
11 Xiaobing Sheng
(Okinawa Inst. of Sci. and Tech. Grad. Univ.) Some experimental results on knots and links constructed from Thompson's group F a la Jones 15
- [10-01-0017](#)
12 Haru Negami (Chiba Univ.) Generalization of the twisted Long–Moody construction 15

March 18th (Mon)

9:30–10:00

- [10-01-0012](#)
13 Toshiyuki Akita (Hokkaido Univ.) Groups having Wirtinger presentations and the second group homology
Sota Takase (Hokkaido Univ.) 10
- [10-01-0018](#)
14 Masahiko Yoshinaga (Osaka Univ.) Causal order complex and magnitude homotopy type 15
Yu Tajima (Hokkaido Univ.)

March 18th (Mon)

10:10–10:25 Presentation Ceremony for the 2023 MSJ Geometry Prize

10:30–11:30 Award Lecture for the 2023 MSJ Geometry Prize

03-02-0003

Kento Fujita (Osaka Univ.)^b On criteria for the K-stability of Fano varieties

March 18th (Mon)

13:00–14:00

10-01-0002

15 Naotsugu Chinen (Nat. Defense Acad. of Japan) Equivariant asymptotic dimension, asymptotic dimension and covering dimension 15
Takamitsu Yamauchi (Ehime Univ.)

10-01-0006

16 Yasushi Hirata (Kanagawa Univ.) Weak D-space properties on products with metric spaces 15
Yukinobu Yajima (Kanagawa Univ.*)

10-01-0007

17 Yasushi Hirata (Kanagawa Univ.) Weak D-space properties on infinite products 15
Yukinobu Yajima (Kanagawa Univ.*)

March 19th (Tue)

9:30–12:00

10-01-0022

18 Katsumi Ishikawa (Kyoto Univ.) Twisted Alexander vanishing order of knots 10
Takayuki Morifuji (Keio Univ.)
Masaaki Suzuki (Meiji Univ.)

10-01-0013

19 Hiroshi Goda (Tokyo Univ. of Agri. and Tech.) Chirality of hyperbolic knots and twisted Alexander polynomials 10
Takayuki Morifuji (Keio Univ.)

10-01-0014

20 Shun Sawabe (Waseda Univ.) On the annihilating polynomial of the colored Jones polynomial for the Whitehead link 10

10-01-0024

21 Kokoro Tanaka (Tokyo Gakugei Univ.) The second quandle homology group of the knot n -quandle 10
Yuta Taniguchi (Osaka Univ.)

10-01-0004

22 Keisuke Himeno (Hiroshima Univ.) Hyperbolic knots whose knot Floer complex is stably equivalent to that of a $(3, q)$ -torus knot 10

10-01-0019

23 Han Yoshida (Gunma Nat. Coll. of Tech.) Commensurators of Löbell polyhedra 15

10-01-0029

24 Kengo Kawamura (Osaka Sangyo Univ.) Solvability of an integral region choice problem for a link projection 15

10-01-0025

25 Mahito Kobayashi (Akita Univ.) Panorama views of closed piecewise linear curves in \mathbf{R}^2 for shape study 15
Takashi Sano (Hokkai-Gakuen Univ.)
Minoru Yamamoto (Hirosaki Univ.)

10-01-0011

26 Sachiko Saito (Hokkaido Univ. of Edu.) Strongly mixed weighted homogeneous polynomials of type J_{10}^- 10

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

10-02-0001

Mayuko Yamashita (Kyoto Univ.)^b Topological Modular Forms and supersymmetric quantum field theories

Infinite Analysis

March 19th (Tue)

9:30–11:30

- [11-01-0001](#)
1 Mizuki Mori (Ochanomizu Univ.) Three-term recurrence relations and Heun equations 15
Kouichi Takemura (Ochanomizu Univ.)
- [11-01-0003](#)
2 Yumi Arai (Ochanomizu Univ.) Solutions to q -hypergeometric equations associated with q -middle convolution 15
- [11-01-0008](#)
3 Takahiko Nobukawa (Kobe Univ.) Connection problem for the variant of q -hypergeometric equation of degree three 15
Taikei Fujii (Kobe Univ.)
- [11-01-0010](#)
4 Sanefumi Moriyama ABJM matrix models and q -Painlevé equations 15
(Osaka Metro. Univ.)
- [11-01-0011](#)
5 Yousuke Ohyama (Tokushima Univ.) Mano's decomposition and q -Painlevé equations 15
- [11-01-0012](#)
6 Tetsu Masuda (Aoyama Gakuin Univ.) An explicit formula for the discriminants of the Umemura polynomials of the Painlevé V equation 15

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

- [11-02-0001](#)
Ryo Okawa Non-stationary difference equation and affine Laumon space
(Osaka Metro. Univ./Kyoto Univ.)

March 20th (Wed)

9:30–11:30

- [11-01-0007](#)
7 Masahiko Yoshinaga (Osaka Univ.) Integral expressions of logarithmic vector fields for multiarrangements
Misha Feigin (Univ. of Glasgow) 15
Zixuan Wang (Hokkaido Univ.)
- [11-01-0009](#)
8 Saburo Kakei (Rikkyo Univ.) Solutions to the KP hierarchy with an elliptic background 15
- [11-01-0005](#)
9 Genki Shibukawa (Kobe Univ.) Ruijsenaars-type identities and their applications 15
Masatoshi Noumi (Rikkyo Univ.)
- [11-01-0002](#)
10 Ryo Takenaka (Osaka Metro. Univ.) On exponents associated with Y-systems 15
- [11-01-0006](#)
11 Ryota Akagi (Nagoya Univ.) Ordered product expressions of rank 2 cluster scattering diagrams 15
- [11-01-0004](#)
12 Rei Inoue (Chiba Univ.) Quantum cluster algebras and 3D integrability 15
Atsuo Kuniba (Univ. of Tokyo)
Yuji Terashima (Tohoku Univ.)

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

- [11-02-0002](#)
Katsushi Ito (Tokyo Tech) ODE/IM correspondence and exact WKB analysis in quantum mechanics