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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 $\flat$ 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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Foundation of Mathematics and History of Mathematics

March 18th (Tue)

9:00–10:45

01-01-0015	1	Haruka Kogure (Kobe Univ.)	Arithmetical completeness for some extensions of the pure logic of necessitation	15
01-01-0016	2	Kaito Ichikura (Tohoku Univ.)	The existence of continua of logics around intuitionistic logic, minimal logic and co-minimal logic	15
01-01-0011	3	Leonardo Pacheco (Sci. Tokyo)	Collapsing constructive and intuitionistic modal logics	15
01-01-0012	4	Taishi Kurahashi (Kobe Univ.)	Lyndon interpolation property in modal logic and intermediate logic	15
01-01-0014	5	Taishi Kurahashi (Kobe Univ.) Kohei Tominaga (Kobe Univ.)	Smullyan's truth and provability	15
01-01-0024	6	Kohtaro Tadaki (Chubu Univ.)	A generation of a Martin-Löf random sequence with respect to a computable Bernoulli measure, relative to a Martin-Löf random sequence	15

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

01-02-0002	Tomoaki Kawano (Kanagawa Univ.)	About quantum logic in mathematical logic

14:15–14:30 Research Section Assembly

14:45–17:00

01-01-0013	7	Masahiro Kumabe (Open Univ. of Japan) Toshio Suzuki (Tokyo Metro. Univ.) Kenshi Miyabe (Meiji Univ.)	Quantifier variations in Solovay reducibility	15
01-01-0005	8	Kenetsu Fujita (Gunma Univ.) Toshihiko Kurata (Hosei Univ.)	On Reynolds–Hurkens–Coquand paradox	15
01-01-0018	9	Katsushi Waki (Yamagata Univ.)	Progress report on the construction of the Sakuma collection database	15
01-01-0003	10	Koichi Hirata (Matsuyama Univ./Ehime Univ.*)	Casey's theorem: From the viewpoint of inversive coordinates of circles	15
01-01-0008	11	Noriko Tanaka (Naragakuen Univ.) Tsukane Ogawa (Yokkaichi Univ.)	On the mathematics of the "Shikiki-jyutsu" written by Yukitada Oka	15
01-01-0020	12	Makoto Tamura (Osaka Sangyo Univ.)	Area and volume calculations in the Qin dynasty in the mathematical books of Qin bamboo slips housed at Peking University	15
01-01-0023	13	Hideyuki Majima (Ochanomizu Univ.*)	On the number 3.16 as Pi in the 'Jinkok' by YOSHIDA Mitsuyoshi (continued)	15
01-01-0009	14	Michiyo Nakane	The Hamilton principle derived by Jacobi	15

17:15–17:30 Mathematics History Team Meeting

March 19th (Wed)

9:00–12:00

01-01-0001	15	Takashi Yamazoe	(Kobe Univ.)	Cichoń's maximum with cardinals of the closed null ideal	15
01-01-0002	16	Toshimasa Tanno	(Kobe Univ.)	Generalized Tukey relation in Solovay model	15
01-01-0007	17	Kenta Tsukuura	(Nat. Fisheries Univ.)	Study of Ramseyness for edge colorings of complete bipartite graphs	15
01-01-0006	18	Katsuya Eda	(Waseda Univ.)	What are multisets?	15
01-01-0004	19	Koki Okura	(Univ. of Tsukuba)	On monotonicity theorems and dp-rank	15
01-01-0019	20	Akihiko Arai	(Chiba Univ.)	On continuous model theory and isomorphism problems for ultraproducts of operator algebras	15
01-01-0010	21	Koichiro Ikeda	(Hosei Univ.)	A note on generic structures with infinite weight	15
01-01-0017	22	Hirotaka Kikyo	(Kobe Univ.)	On Hrushovski's construction and SOP3	15
01-01-0022	23	Koitaro Nakaura Akito Tsuboi	(Univ. of Tokyo) (Univ. of Tsukuba*)	A simple construction of an indiscernible tree	15
01-01-0021	24	Akito Tsuboi	(Univ. of Tsukuba*)	On the spectrum of finite models	10

13:00–14:00 Talk Invited by Section on Foundation and History of Mathematics

01-02-0001		Yoshihiro Maruyama	(Nagoya Univ.)	Universal topos theory and applications to quantum physics and machine learning	

Algebra

March 18th (Tue)

9:00–12:00

02-01-0005	1	Tomohiro Iwami (Kyushu Inst. of Tech.)	Confluent variant of S. Mukai's degenerations of $\mathbb{P}^n \times \mathbb{P}^n$ or $\mathbb{P}^n \times \mathbb{P}^n \times \mathbb{P}^n$ and associated del Pezzo fibrations totally defined over distinct primes	13
02-01-0006	2	Kiwamu Watanabe (Chuo Univ.)	Fano varieties with large pseudoindex	13
02-01-0009	3	John Ashley Navarro Capellan (Nagoya Univ.)	The McKay correspondence for dihedral groups: The moduli space and the tautological bundles	13
02-01-0010	4	John Ashley Navarro Capellan (Nagoya Univ.)	Towards the McKay correspondence for dimer models: The arrow contraction algorithm and the tilting condition	13
02-01-0013	5	Ken Sato (Sci. Tokyo)	On higher Chow cycles on $K3$ surfaces with non-symplectic automorphisms	13
02-01-0017	6	Yu Hiraoka (Kochi Univ.)	On the dimension of the global sections of generalized adjoint bundles for quasi-polarized surfaces	13
02-01-0022	7	Satoru Fukasawa (Yamagata Univ.)	New examples of tangentially degenerate curves	13
02-01-0025	8	Taku Suzuki (Utsunomiya Univ.)	Positivity of Chern characters and higher order minimal families of rational curves on Fano manifolds	13
02-01-0026	9	Masayuki Sukenaga (Hiroshima Univ.)	Minimum volumes of tropical rational functions	13
02-01-0031	10	Katsuhisa Furukawa (Josai Univ.)	Singular loci of higher secant varieties of Veronese embeddings and equations on the space of symmetric tensors	13

14:15–18:00

02-01-0042	11	Fumiya Okamura (Nagoya Univ.)	Rational curves on coindex 3 Fano varieties	13
02-01-0045	12	Kohsuke Shibata (Tokyo Denki Univ.)	A counterexample to the PIA conjecture for minimal log discrepancies	13
02-01-0047	13	Ryo Okawa (Kyoto Univ.)	Residue formula for flag bundles from wall-crossing	13
02-01-0048	14	Daiki Kawabe	Grothendieck's period conjecture for Kummer surfaces of self-product CM type	13
02-01-0059	15	Masatomo Sawahara (Hirosaki Univ.)	Log canonical del Pezzo surfaces of rank one with unique singular points over nonclosed fields	13
02-01-0063	16	Yoshimune Koreeda (Hiroshima Univ.)	The singular fiber of jet schemes of D_{2^l}-type singular surfaces in characteristic 2	13
02-01-0067	17	Ryo Kawaguchi (Nara Medical Univ.)	The formulae for the ith sectional invariants using the h^*-vector and their applications	13
02-01-0053	18	Yuki Kato (Ube Nat. Coll. of Tech.)	Goodwillie calculus of the category of non-unital algebras, and its applications	13
02-01-0038	19	Asuka Shiga (Tohoku Univ.)	Behaviors of the Tate–Shafarevich group of elliptic curves under quadratic field extensions	13
02-01-0014	20	Yukako Kezuka (Kanazawa Univ.) ♭	Iwasawa theory at the prime 2 and the conjecture of Birch and Swinnerton-Dyer	13

02-01-0062	21	Nozomu Suzuki (Tokyo Univ. of Sci.)	Calculating the index of equation orders using Newton polygons	13
02-01-0066	22	Kohei Takehira (Tohoku Univ.)	Arithmetic properties of parabolic parameters in polynomial dynamics	13
02-01-0030	23	Yasushi Mizusawa (Rikkyo Univ.) Ali Mouhib (Sidi Mohamed Ben Abdellah Univ.)	Metacyclic 2-class field towers over $\mathbb{Z}_2$-extensions of real quadratic fields	10

March 19th (Wed)

9:00–12:00

02-01-0008	24	Makoto Sakurai (Kaichi Gakuen)	Chiral categories and Whittaker categories	13
02-01-0068	25	Masatoshi Nakano (Kesennuma Coll. of Tech.)	The large gap between primes	10
02-01-0012	26	Kirk Hahn	Application of Collatz conjecture rules: derivation of equalities suggest a solution	13
02-01-0019	27	Genki Shibukawa (Kobe Univ.)	Some remarks on Faulhaber-type formulas	10
02-01-0041	28	Yuto Tsuruta (Tohoku Univ.)	Multiple zeta values and q-analogues via discretization	13
02-01-0057	29	Takashi Miyagawa (Onomichi City Univ.)	The Laurent series expansion of the Barnes double zeta-function	13
02-01-0055	30	Keita Nakai (Nagoya Univ.)	Joint universality theorem for the Riemann zeta-function with general shifts	13
02-01-0040	31	Kenta Endo (Suzuka Nat. Coll. of Tech.)	Proof of the hybrid universality theorem based on the probability theory	13
02-01-0050	32	Yasufumi Hashimoto (Univ. of Ryukyus)	Length spectra for maximal arithmetic Fuchsian groups	13
02-01-0056	33	Yuichi Sakai (Kurume Inst. of Tech.) Kiyokazu Nagatomo	On characters of fermionic log-CFT and modular forms	13
02-01-0065	34	Iwao Kimura (Univ. of Toyama)	On a generalization of the Perrin sequence	13

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

02-02-0002	Yugen Takegahara (Muroran Inst. of Tech.)	On the generalization of Burnside rings

March 20th (Thu)

9:00–12:00

02-01-0064	35	Taro Sakurai (Chiba Univ.)	Finite groups with very few character values	10
02-01-0061	36	Taro Sakurai (Chiba Univ.)	Some recent progress on the modular isomorphism problem	13
02-01-0018	37	Yuta Kozakai (Tokyo Univ. of Sci.) Yuta Kimura (Hiroshima Inst. of Tech.) Ryotaro Koshio (Tokyo Univ. of Sci.) Hiroyuki Minamoto (Osaka Metro. Univ.) Yuya Mizuno (Osaka Metro. Univ.)	On induction/restriction of support τ-tilting modules over skew group algebras	10

02-01-0016	38	Sin Yi Tsang	(Ochanomizu Univ.)	A generalization of Grün's lemma to skew braces	13
02-01-0044	39	Yuto Nogata Takara Kondo	(Hirosaki Univ.) (Hirosaki Univ.)	Simple 3-designs of $\mathrm{PSL}(2, 2^n)$ with block size 9	10
02-01-0060	40	Takara Kondo	(Hirosaki Univ.)	Automorphism groups of orbifold VOAs arising from coinvariant lattices of the Leech lattice	13
02-01-0021	41	Masahiko Miyamoto	(Univ. of Tsukuba⋆)	1-point functions on a VOA of moonshine type	10
02-01-0001	42	Mamoru Ueda	(Univ. of Alberta)	Affine Yangians and non-rectangular W-algebras	10
02-01-0028	43	Kohei Yahiro Yasuaki Hiraoka	(Kyoto Univ.) (Kyoto Univ.)	A crystal structure on 2-parameter persistence modules	13
02-01-0034	44	Yoshiteru Kurosawa	(Numazu Nat. Coll. of Tech.)	Relative invariants of prehomogeneous vector spaces for valued Dynkin quivers	13
02-01-0046	45	Ryo Uchiumi	(Osaka Univ.)	Permutation representations of classical Weyl groups on mod q lattices	13
02-01-0051	46	Haru Negami	(Chiba Univ.)	Construction of unitary representations of braid groups	13

14:15–14:30 Presentation Ceremony for the 2025 MSJ Algebra Prize

14:40–15:40 Award Lecture for the 2025 MSJ Algebra Prize

02-02-0004
Noriyuki Abe (Univ. of Tokyo)♭ On Hecke categories

16:00–17:00 Award Lecture for the 2025 MSJ Algebra Prize

02-02-0001
Hiromu Tanaka (Univ. of Tokyo)♭ On Fano threefolds in positive characteristic

March 21st (Fri)

9:00–10:45

02-01-0032	47	Momonari Kudo Kazuhiro Yokoyama	(Fukuoka Inst. of Tech.) (Rikkyo Univ.)	On maximal Gröbner basis degree for semi-regular sequences and a variant of Fröberg's conjecture	13
02-01-0007	48	Ryuji Tanimoto	(Shizuoka Univ.)	Triangular involutions of the four-dimensional polynomial ring in characteristic two	13
02-01-0037	49	Akihiro Higashitani	(Osaka Univ.)	On binomial edge rings of complete bipartite graphs	13
02-01-0033	50	Akihiro Higashitani Koji Matsushita Koichiro Tani	(Osaka Univ.) (Osaka Univ.) (Osaka Univ.)	SAGBI bases of algebras arising from finite distributive lattices	13
02-01-0043	51	Yuta Hatasa Nobukazu Kowaki Koji Matsushita	(Sci. Tokyo) (Osaka Univ.) (Osaka Univ.)	Pseudo-Gorenstein edge rings	13
02-01-0024	52	Sora Miyashita Matteo Varbaro	(Osaka Univ.) (Genova Univ.)	The canonical trace of Stanley–Reisner rings that are Gorenstein on the punctured spectrum	13

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

02-02-0003
Kenta Sato (Chiba Univ.) Singularities on hyperplane sections

14:15–18:00

02-01-0054
53 Davide Dal Martello (Rikkyo Univ.)♭ A cluster monodromic realization for Okamoto's symmetry of Painlevé VI · · · · · 13

02-01-0039
54 Toshiya Yurikusa (Tohoku Univ.) Dimension vectors of τ-rigid modules and intersection numbers on triangulated surfaces · · · · · 13

02-01-0027
55 Yasuaki Ogawa (Kansai Univ.), Amit Shah (Aarhus Univ.) Waldhausen structures arising from algebraic extriangulated categories · · · · · 13

02-01-0020
56 Shuhei Tsujie (Hokkaido Univ. of Edu.), Masamichi Kuroda (Nippon Bunri Univ.), Norihiro Nakashima (Nagoya Inst. of Tech.) Coboundary quasi-polynomials of hyperplane arrangements over the ring of integers of an algebraic field · · · · · 10

02-01-0003
57 Shigeo Koshitani (Chiba Univ.*), İpek Tuvay (Mimar Sinan Fine Arts Univ.) Brauer indecomposability of the Scott module for a finite group with a wreath Sylow 2-subgroup · · · · · 13

02-01-0004
58 Shigeo Koshitani (Chiba Univ.*), Calorine Lassueur (RPTU), Benjamin Sambale (Leibniz Univ. Hannover) Donovan's conjecture, especially for the principal block of a finite group with a wreathed Sylow 2-subgroup · · · · · 13

02-01-0058
59 Takahiro Honma (Nat. Inst. of Tech., Yuge Coll.), Satoshi Usui (Tokyo Metro. Coll. of Ind. Tech.) The stable category of Gorenstein-projective modules over monomial algebras · · · · · 13

02-01-0029
60 Yuki Mizuno (Waseda Univ.) Bondal–Orlov's reconstruction theorem in noncommutative projective geometry · · · · · 13

02-01-0052
61 Ryo Kanda (Osaka Metro. Univ.) Module-theoretic approach to dualizable Grothendieck categories · · · · · 13

02-01-0035
62 Yuya Otake (Nagoya Univ.), Kaito Kimura (Nagoya Univ.) On local rings of finite syzygy representation type · · · · · 13

02-01-0023
63 Yuki Mifune (Nagoya Univ.) On a generalization of dimensions and radii of subcategories of modules and their divergence · · · · · 13

02-01-0011
64 Kaito Kimura (Nagoya Univ.) Quasi-compactness of the Alexandrov topology of stable categories · · · 13

02-01-0036
65 Ryo Ishizuka (Sci. Tokyo) On the vanishing of Ext and liftings of modules on derived quotients using higher algebras · · · · · 13

02-01-0049
66 Naoki Endo (Meiji Univ.) Almost Gorenstein determinantal rings of symmetric matrices · · · · · 13

Geometry

March 18th (Tue)

9:30–11:45

	No.	Speaker	Title	Page
03-01-0033	1	Ryu Ueno (Hokkaido Univ.)	Geodesic connectedness on statistical manifolds	15
03-01-0040	2	Yusei Aoki (Nagoya Inst. of Tech.) Toshiaki Adachi (Nagoya Inst. of Tech.)	Comparison theorem on string-elevations of trajectory-harps	15
03-01-0012	3	Taika Okuda (Tokyo Univ. of Sci.)	Deformation quantization of products for one-dimensional locally symmetric Kähler manifolds	15
03-01-0032	4	Kazuhiro Ishige (Univ. of Tokyo) ♭ Asuka Takatsu (Tokyo Metro. Univ.) Haruto Tokunaga (KADOKAWA DWANGO Edu. Inst.)	Non-preservation of concavity properties by the Dirichlet heat flow on Riemannian manifolds	15
03-01-0021	5	Yasukatsu Tada (Kanagawa Gakuen Junior & Senior Highschool)	$\mathbb{Z}_2$ graded parity non-preserving Poisson brackets	15
03-01-0047	6	Shuhei Yonehara (Osaka Univ.)	Godbillon–Vey classes of regular Jacobi manifolds	15
03-01-0024	7	Masaya Kawamura (Sugiyama Jogakuen Univ.)	On a parabolic Monge Ampere type equation on compact almost Hermitian manifolds	15

14:15–16:15

	No.	Speaker	Title	Page
03-01-0030	8	Ken Kuwata (Kagawa Nat. Coll. of Tech.) Masao Jinzenji (Okayama Univ.)	Weighted projective spaces and elliptic virtual structure constants	15
03-01-0020	9	Kentaro Yamaguchi (Tokyo Metro. Univ.)	Delzant type theorem for torus-equivariant hypersurfaces in symplectic toric manifolds	15
03-01-0010	10	Masakazu Takakura (Tokyo Metro. Univ.)	Division theorem with sharp L^2 estimate and characterization of plurisubharmonic functions	15
03-01-0011	11	Masakazu Takakura (Tokyo Metro. Univ.)	L^2 division theorem on the Hilbert bundles	15
03-01-0034	12	Shunsuke Saito (Tokyo Univ. of Sci.)	K-instability of hyperplane sections of Segre varieties	15
03-01-0003	13	Tomoyuki Hisamoto (Tokyo Metro. Univ.) Satoshi Nakamura (Sci. Tokyo)	Continuity method for the Mabuchi soliton on the extremal Fano manifolds	15

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

	Speaker	Title
03-02-0003	Eiji Inoue (Kyoto Univ.)	On Perelman entropy in Kähler geometry

March 19th (Wed)

9:30–11:45

	No.	Speaker	Title	Page
03-01-0007	14	Homare Tadano (Yamaguchi Univ.)	An improvement of the Myers theorem via m-Bakry–Émery Ricci curvature with ε-range	15

03-01-0008 15	Homare Tadano (Yamaguchi Univ.)	A Calabi-type theorem via m-Bakry–Émery Ricci curvature with ε-range	15
03-01-0005 16	Naoya Ando (Kumamoto Univ.)	The topological holonomy groups in vector bundles on tori	15
03-01-0025 17	Masataka Shibata (Meijo Univ.) Hiroshi Iriyeh (Ibaraki Univ.)	Minimizing problem of the volume product of D_2 or S_4-invariant three dimensional convex bodies	15
03-01-0023 18	Hidemasa Suzuki (Chiba Univ.)	Explicit correspondences between gradient trees in $\mathbb{R}$ and pseudo-holomorphic disks in $T^*\mathbb{R}$	10
03-01-0028 19	Tomoya Nakatani (Chiba Univ.)	The category of graded matrix factorizations for a deformation of A_μ-singularities associated to universal unfolding	10
03-01-0016 20	Tadashi Udagawa (Waseda Univ.)	Solutions of the tt*-equation constructed from the SU(2)k-fusion ring and its DPW description	15

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

03-02-0001	Kenji Fukaya (Tsinghua Univ.) ♭	A infinity functor and its geometric application	

March 20th (Thu)

9:30–11:30

03-01-0009 21	Fumika Mizoguchi (Osaka Metro. Univ.)	Two-step nilpotent Lie algebras obtained by quivers and geometric structures	15
03-01-0026 22	Hiroyuki Tasaki (Tokyo Metro. Univ./Univ. of Tsukuba)	Polars of Pin^c groups and related compact Lie groups	15
03-01-0035 23	Yuichiro Sato (Waseda Univ.) Takanao Tsuyuki (Hokkaido Information Univ.)	Ricci-flat left-invariant Lorentzian metrics on almost abelian Lie groups	15
03-01-0037 24	Yuta Yamauchi (Yokohama Nat. Univ.)	The total absolute curvature of submanifolds with singularities	15
03-01-0039 25	Kurando Baba (Tokyo Univ. of Sci.) Osamu Ikawa (Kyoto Inst. Tech.)	Symmetric triads with multiplicities and double Satake diagrams, II	15
03-01-0041 26	Yusuke Sakane (Osaka Univ.*) Andreas Arvanitoyeorgos (Univ. of Patras) Marina Statha (Univ. of Thessaly)	Einstein-like metrics on compact homogeneous spaces	15

14:15–17:15

03-01-0022 27	Shin Nayatani (Nagoya Univ.)	Eigenvalue maximization and inflated maps for the Berger spheres	15
03-01-0044 28	Takumi Gomyou (Osaka Univ.) Shin Nayatani (Nagoya Univ.)	Divergence of the first eigenvalue of the Laplacian of a graph containing a cycle	15
03-01-0046 29	Kazumasa Narita (Nagoya Univ.)	Remark on Laplacians and Riemannian submersions with totally geodesic fibers	15
03-01-0029 30	Masaro Takahashi (Kurume Nat. Coll. of Tech.) Yasuyuki Nagatomo (Meiji Univ.) Isami Koga (Kyushu Int. Univ.)	The classification of special unitary group or symplectic group equivariant harmonic maps of spheres to spheres	15

03-01-0027
31 Shimpei Kobayashi (Hokkaido Univ.)
Yuhei Kogo (Hokkaido Univ.)
Nozomu Matsuura (Fukuoka Univ.)
The evolution of a curve induced by the Pohlmeyer–Lund–Regge equation · · · 15

03-01-0031
32 Keita Kunikawa (Tokushima Univ.)
Toru Kajigaya (Tokyo Univ. of Sci.)
Index estimate by first Betti number of minimal hypersurfaces in compact symmetric spaces · · · 15

03-01-0014
33 Akifumi Sako (Tokyo Univ. of Sci.)
Jumpei Gohara (Tokyo Univ. of Sci.)
Quantization and matrix regularization of Lie–Poisson algebra · · · 15

03-01-0036
34 Tomoki Fujii (Tokyo Univ. of Sci.)
Naoyuki Koike (Tokyo Univ. of Sci.)
Graphical solitons for the mean curvature flow invariant under hyperpolar actions · · · 15

03-01-0042
35 Naotoshi Fujihara (Tokyo Univ. of Sci.)
Curve shortening flow on surfaces with warped product metrics · · · 15

March 21st (Fri)

9:30–11:45

03-01-0017
36 Nikita Evseev
(Okinawa Inst. of Sci. and Tech. Grad. Univ.)
Rellich–Kondrachov theorem for mappings in metric spaces · · · 15

03-01-0002
37 Yoshito Ishiki (Tokyo Metro. Univ.)
An isometric extensor of metrics · · · 15

03-01-0013
38 Katsuhisa Koshino (Kanagawa Univ.)
Yoshito Ishiki (Tokyo Metro. Univ.)
Isometric embeddings and universality of spaces of metrics · · · 15

03-01-0004
39 Yuya Kodama (Kagoshima Univ.)
Divergence functions of higher-dimensional Thompson's groups · · · 15

03-01-0015
40 Takumi Matsuka (Tokyo Metro. Univ.)
Tomohiro Fukaya (Tokyo Metro. Univ.)
Ikkei Sato (Tokyo Metro. Univ.)
On geometrically finite groups acting on coarsely convex spaces · · · 15

03-01-0018
41 Samuël Borza (Univ. Vienna)
Mattia Magnabosco (Univ. Oxford)
Tommaso Rossi (Sorbonne Univ.)
Kenshiro Tashiro
(Okinawa Inst. of Sci. and Tech. Grad. Univ.)
MCP of the sub-Finsler Heisenberg groups · · · 15

03-01-0019
42 Ikkei Sato (Tokyo Metro. Univ.)
Horoboundary of coarsely convex space · · · 15

14:15–15:15

03-01-0043
43 Tomoshige Yukita
(Int. Affairs Ashikaga Univ.)
10-dimensional hyperbolic Coxeter group with the smallest growth rate · · · 15

03-01-0045
44 Ryoya Arimoto (Kyoto Univ.)
Simplicity of crossed products of actions of totally disconnected locally compact groups on compac spaces · · · 15

03-01-0048
45 Tetsu Toyoda (Kogakuin Univ.)
Inequalities on six points in a CAT(0) space · · · 15

15:30–16:30 Talk Invited by Geometry Section

03-02-0002
Masato Mimura (Tohoku Univ.) ♭ Invariant quasimorphisms and geometry

Complex Analysis

March 18th (Tue)

9:30–11:40

04-01-0014 1	Toshiyuki Sugawa (Tohoku Univ.) Li-Mei Wang (Univ. of Int. Business and Econ.)	Hypergeometric functions and Hausdorff moment sequences	15
04-01-0015 2	Keisuke Soma (Waseda Univ.) Yohei Komori (Waseda Univ.)	On the Dirichlet fundamental domains for n-gon groups	15
04-01-0002 3	Ryo Matsuda (Kyoto Univ.) ♭	David maps and Teichmüller theory	15
04-01-0003 4	Hideki Miyachi (Kanazawa Univ.)	Boounded pluriharmonic functions and holomorphic functions on Teichmüller space and non-ergodicity of the action of the torelli group on the space of projective measured laminations	15
04-01-0004 5	Hideki Miyachi (Kanazawa Univ.)	Second order infinitesimal spaces on Teichmüller space and duality between the Teichmüller metric and the L^1-norm for holomorphic quadratic differentials	15
04-01-0020 6	Katsuhiko Matsuzaki (Waseda Univ.)	Teichmüller space of diffeomorphisms on the real line with bi-Lipschitz continuity	15
04-01-0005 7	Hiroshige Shiga (Kyoto Sangyo Univ./Sci. Tokyo⋆)	On moduli spaces of Cantor sets	10
04-01-0018 8	Yoshihiko Mitsumatsu (Chuo Univ.) Teruaki Kitano (Soka Univ.) Shigeyuki Morita (Univ. of Tokyo⋆/Sci. Tokyo⋆)	On the structure around fixed points of one dimensional real analytic diffeomorphisms	15

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

04-02-0002	Shun Kumagai (Hachinohe Inst. of Tech.)	Galois action on Teichmüller curves and related combinatorial objects

15:40–16:30

04-01-0008 9	Takanori Ayano (Osaka Metro. Univ.) Victor M. Buchstaber (Steklov Math. Inst.)	A solution of the KP equation in terms of the abelian function of a real hyperelliptic curve	15
04-01-0017 10	Tomoki Kawahira (Hitotsubashi Univ.)	Zalcman's lemma in higher dimensions and applications in two-dimensional complex dynamics	15
04-01-0007 11	Tatsuhiro Honda (Senshu Univ.) Hidetaka Hamada (Kyushu Sangyo Univ.)	Bohr's phenomena in several complex variables	15

March 19th (Wed)

9:30–11:40

04-01-0009 12	Shaolin Chen (Hengyang Normal Univ.) Hidetaka Hamada (Kyushu Sangyo Univ.) Dou Xie (Hengyang Normal Univ.)	Hardy–Littlewood type theorems for the Dirichlet solution of a differential operator	15

04-01-0011	13	Shaolin Chen (Hengyang Normal Univ.) Hidetaka Hamada (Kyushu Sangyo Univ.) Dou Xie (Hengyang Normal Univ.)	A Hopf type lemma for the Dirichlet solution of a differential operator	10
04-01-0012	14	Shaolin Chen (Hengyang Normal Univ.) Hidetaka Hamada (Kyushu Sangyo Univ.)	Characterizations of pluriharmonic Bloch functions in bounded symmetric domains	15
04-01-0013	15	Ian Graham (Univ. of Toronto) Hidetaka Hamada (Kyushu Sangyo Univ.) Gabriela Kohr (Babeş-Bolyai Univ.) Mirela Kohr (Babeş-Bolyai Univ.)	Subordination chains in infinite dimensions	15
04-01-0019	16	Shota Kikuchi (Suzuka Nat. Coll. of Tech.)	On the Ohsawa–Takegoshi L^2-extension theorem by using Azukawa pseudometrics	15
04-01-0010	17	Shun Sugiyama (Nat. Inst. of Tech., Kitakyushu Coll.)	q-complete with corners open sets and vanishing cohomology groups	15
04-01-0006	18	Takeo Ohsawa (Nagoya Univ.) ♭	Hyperconvex submanifolds have hyperconvex neighborhoods	15
04-01-0016	19	Takeo Ohsawa (Nagoya Univ.) ♭	Solving a generalized Levi problem on weakly 1-complete manifolds	15

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

04-02-0001

Masataka Iwai (Osaka Univ.) ♭ On the inequalities of Chern classes and the structure theorem

Functional Equations

March 18th (Tue)

9:00–12:00

05-01-0055	1	Hiroshi Ogawara (Josai Univ.)	Differential transcendence of general solutions to Mahler-type difference Riccati equations	12
05-01-0046	2	Toshio Oshima (Josai Univ.)	Resolution of singularities and middle convolutions of KZ-type equations	12
05-01-0064	3	Kosuke Shibuya (Tohoku Univ.) ♭	Brezis–Van Schaftingen–Yung formula on balls and its applications	12
05-01-0007	4	Takashi Suzuki (Osaka Univ.)	Hodge decomposition on bounded domains in Euclidean space	5
05-01-0002	5	Ryuji Kajikiya (Osaka Electro-Comm. Univ.)	Sobolev compact embeddings in unbounded domains	12
05-01-0003	6	Ryuji Kajikiya (Osaka Electro-Comm. Univ.)	The Poincaré inequality and its applications.	12
05-01-0031	7	Aya Ishizeki (Saitama Univ.) Takeyuki Nagasawa (Saitama Univ.)	Direct expressions of Möbius energies and their decomposition via the Gauss map	10
05-01-0032	8	Aya Ishizeki (Saitama Univ.) Takeyuki Nagasawa (Saitama Univ.)	The variational formulas of Möbius energies via the Gauss map	10
05-01-0029	9	Taiga Morita (Tohoku Univ.) Satoshi Tanaka (Tohoku Univ.)	Existence and multiplicity of positive entire solutions to the scalar field equation on a sphere	12
05-01-0027	10	Riku Nagai (Tohoku Univ.) Satoshi Tanaka (Tohoku Univ.)	Uniqueness and nonuniqueness of positive solutions to the Emden equation on a sphere	12
05-01-0040	11	Keita Suzuki (Tohoku Univ.) Satoshi Tanaka (Tohoku Univ.)	Energy estimates for least energy solutions of the generalized Hénon equation	12
05-01-0039	12	Daowen Lin (Okinawa Inst. of Sci. and Tech. Grad. Univ.) Xinan Ma (Univ. of Sci. and Tech. of China)	Liouville type theorem for a class quasilinear p-Laplace type equation on the sphere	12

14:15–16:45

05-01-0010	13	Yoshihito Oshita (Okayama Univ.)	Segregation pattern in a four-component reaction-diffusion system with mass conservation	12
05-01-0059	14	Kenichiro Umezu (Ibaraki Univ.)	Positive solutions of a diffusive logistic equation with a non Lipschitz boundary condition arising in coastal fishery harvesting	12
05-01-0018	15	Pablo Álvarez-Caudevilla (Univ. Carlos III de Madrid) Tatsuya Watanabe (Kyoto Sangyo Univ.)	Existence and characterization of ground states for fourth order nonlinear elliptic systems	12
05-01-0019	16	Mathieu Colin (Univ. de Bordeaux) Tatsuya Watanabe (Kyoto Sangyo Univ.)	Ground state solutions for nonlocal nonlinear elliptic equation with a doping profile	12

05-01-0020 17	Alessio Pomponio (Politecnico di Bari) Tatsuya Watanabe (Kyoto Sangyo Univ.)	Nonlinear scalar field equation with point interaction	12
05-01-0017 18	Tomoharu Kinoshita (Waseda Univ.) Yuki Osada (Saitama Univ.)	Multiplicity of solutions for a nonlinear Schrödinger system with three wave interaction	10
05-01-0044 19	Hiroko Sekisaka-Yamamoto (RIKEN) Ayuki Sekisaka (Meiji Univ.)	Stability problem for modulated traveling wave solutions connecting wave trains in reaction-diffusion systems	12
05-01-0072 20	Ayuki Sekisaka (Meiji Univ.)	Existence problem of a modulated traveling wave between two modulated traveling waves	12
05-01-0034 21	Tatsuki Mori (Musashino Univ.) Yasuhito Miyamoto (Univ. of Tokyo) Tohru Tsujikawa (Univ. of Miyazaki⋆/Meiji Univ.) Shoji Yotsutani (Ryukoku Univ.⋆)	Symmetry breaking bifurcation and the stability of stationary solutions of nonlocal Allen–Cahn equation	12
05-01-0022 22	Masaharu Taniguchi (Okayama Univ.)	Polyhedral entire solutions in reaction-diffusion equations	12

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

05-02-0003	Michiaki Inaba (Nara Women's Univ.)	Moduli space of rational connections and the geometry of Painlevé equations	

March 19th (Wed)

9:00–12:00

05-01-0050 23	Shingo Takeuchi (Shibaura Inst. of Tech.) Nagi Suzuki (Shibaura Inst. of Tech.)	Generalization of the complete elliptic integrals and the Legendre relation by the eigenfunctions of p-Laplacian	12
05-01-0011 24	Hiroshi Wakui (Univ. of Fukui) Tetsuya Yamada (Fukui Nat. Coll. of Tech.)	Stability of constant steady states of a drift-diffusion equation with an attraction-repulsion drift term	12
05-01-0008 25	Shohei Kohatsu (Tokyo Univ. of Sci.) Takasi Senba (Fukuoka Univ.)	Forward self-similar solutions and stationary solutions to flux-limited Keller–Segel systems	12
05-01-0009 26	Shohei Kohatsu (Tokyo Univ. of Sci.) Takasi Senba (Fukuoka Univ.)	Critical mass and stability of stationary solutions to flux-limited Keller–Segel systems	12
05-01-0043 27	Masahiko Shimojo (Tokyo Metro. Univ.) Jong-Shenq Guo (Tamkang Univ.) Karen Guo (Providence Univ.)	Convergence to forced waves for the Fisher-KPP equation in a shifting environment	12
05-01-0056 28	Mario Fuest (Leibniz Univ. Hannover) Yuya Tanaka (Kwansei Gakuin Univ.)	Finite-time blow-up for a three-dimensional chemotaxis-May–Nowak model in the supercritical case	12
05-01-0004 29	Hayato Nakamura (Univ. of Tokyo) Keisuke Nishigaki (EY Japan) Yasuhito Miyamoto (Univ. of Tokyo)	Exact periods and exact critical values for Hopf bifurcations from multi-peak solutions of the shadow Gierer–Meinhardt model	10
05-01-0042 30	Kazuya Hirose (Hokkaido Univ.)	Lower gradient estimates for viscosity solutions to first-order Hamilton–Jacobi equations depending on the unknown function	10

05-01-0049	31	Tapio Kurkinen (Okinawa Inst. of Sci. and Tech. Grad. Univ.)	Harnack's inequalities for a nonlinear parabolic equation in non-divergence form	10
05-01-0057	32	Ye Zhang (Okinawa Inst. of Sci. and Tech. Grad. Univ.)	The heat flow approach to the horizontal Prékopa-Leindler type inequality on Heisenberg group	12
05-01-0001	33	Junichi Harada (Akita Univ.)	Dynamics near the ground states for the Sobolev critical Fujita type heat equation in 6D	8
05-01-0006	34	Marius Ghergu (UCD) Yasuhito Miyamoto (Univ. of Tokyo)	The Gel'fand problem on expanding tubular domains in $\mathbb{R}^2$: Existence and the Morse index of solutions	10

13:00–14:00 Award Lecture for the 2024 MSJ Analysis Prize

05-02-0002
Yūki Naito (Hiroshima Univ.) Structure of radially symmetric solutions to nonlinear elliptic equations

March 20th (Thu)

9:30–12:00

05-01-0053	35	Shota Fukushima (Chiba Inst. of Tech.) Yong-Gwan Ji (Korea Inst. for Adv. Stud.) Hyeonbae Kang (Inha Univ.) Xiaofei Li (Zhejiang Univ. of Tech.)	Estimate of electric field around perfect conductors with interface resistance	12
05-01-0066	36	Naoto Kajiwara (Gifu Univ.) Ken Furukawa (Univ. of Toyama) Yoshikazu Giga (Univ. of Tokyo)	No formulation of a new phase for a free boundary problem in combustion theory	10
05-01-0014	37	Shigeru Sakaguchi (Tohoku Univ.)	Temperature and the mean curvature of the interface	12
05-01-0058	38	Hiroyuki Hirayama (Univ. of Miyazaki) Shinya Kinoshita (Sci. Tokyo) Mamoru Okamoto (Osaka Univ.)	Well-posedness for the system of derivative nonlinear Schödinger equations with periodic initial data	12
05-01-0060	39	Hiroyuki Hirayama (Univ. of Miyazaki) Shinya Kinoshita (Sci. Tokyo) Mamoru Okamoto (Osaka Univ.)	Ill-posedness for the system of derivative nonlinear Schrödinger equations with periodic initial data	12
05-01-0063	40	Jumpei Kawakami (Kyoto Univ.) Jason Murphy (Univ. of Oregon)	Small and large data scattering for the dispersion-managed NLS	12
05-01-0065	41	Shun Tsuhara (Kanagawa Univ.)♭ Takayoshi Ogawa (Waseda Univ.)	On the well-posedness of nonlinear Schrödinger equation on the half space with a nonlinear Neumann boundary condition	12
05-01-0054	42	Norisuke Ioku (Tohoku Univ.) Shuji Yoshikawa (Oita Univ.)	The discrete Brezis–Gallouet inequality and finite difference method for 2D nonlinear Schrödinger equation	12
05-01-0048	43	Ryo Muramatsu (Tokyo Univ. of Sci.)	Well-posedness on modulation spaces for Schrödinger equation with rough magnetic fields	12
05-01-0073	44	Ryo Muramatsu (Tokyo Univ. of Sci.) Fumihito Abe (J Institute Co., Ltd.)	Characterization of the wave front set for the solutions of the Schrödinger equations with magnetic fields	12

14:15–16:45

05-01-0037 45	Shunya Hashimoto Masaru Hamano Shuji Machihara	(Saitama Univ.) (Waseda Univ.) (Saitama Univ.)	Global solution for the stochastic nonlinear Schrödinger system in four dimensions	10
05-01-0026 46	Mamoru Okamoto Toshiki Kondo	(Osaka Univ.) (Osaka Univ.)	Ill-posedness for a higher-order nonlinear Schrödinger equation with a derivative on the circle	12
05-01-0047 47	Koichi Komada	(Ritsumeikan Univ.)	Scattering problem for group-symmetric solutions of the nonlinear fourth-order Schrödinger equation	12
05-01-0023 48	Haruya Mizutani Luca Fanelli Luz Roncal Nico Michele Schiavone	(Osaka Univ.) (UPV/EHU) (BCAM) (TU of Madrid)	Local smoothing effects for the Schrödinger equation with the Heisenberg sub-Laplacian	12
05-01-0069 49	Ikki Fukuda	(Shinshu Univ.)	Optimal decay estimate and asymptotic profile for solutions to the generalized KP equation with an anisotropic dissipation term	12
05-01-0015 50	Kenjiro Ishizuka	(Kyoto Univ.)	2-solitary waves of the complex-valued nonlinear damped Klein–Gordon equation	10
05-01-0068 51	Shun Takizawa	(Tokyo Univ. of Sci.)	Boundedness of propagators for Dirac equations with potentials on Wiener amalgam spaces	12
05-01-0035 52	Yuki Kurokawa	(Hokkaido Univ. of Edu.)	The effects of two nonlinearities on the critical decay for systems of wave equations	10
05-01-0062 53	Kimitoshi Tsutaya Yuta Wakasugi	(Hirosaki Univ.) (Hiroshima Univ.)	Global existence and blow up of solutions of time derivative nonlinear wave equations	12
05-01-0013 54	Motohiro Sobajima Kimitoshi Tsutaya Yuta Wakasugi	(Tokyo Univ. of Sci.) (Hirosaki Univ.) (Hiroshima Univ.)	Appearance of Strauss-type exponent in semilinear wave equations with time-dependent speed of propagation	12

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

05-02-0004

Tatsuya Miura (Kyoto Univ.) ♭ Escher–Ito's problem for area-preserving curvature flows

March 21st (Fri)

9:30–12:00

05-01-0033 55	Masahiro Takayama Tatsuo Iguchi	(Keio Univ.) (Keio Univ.)	Well-posedness of the initial boundary value problem for the motion of an inextensible hanging string	12
05-01-0024 56	Yoshihiro Ueda	(Kobe Univ.)	Linear stability for the scalar viscous conservation laws with delay effect	12
05-01-0025 57	Yoshihiro Ueda	(Kobe Univ.)	Nonlinear stability for the scalar viscous conservation laws with delay effect	12
05-01-0071 58	Ken Furukawa	(Univ. of Toyama)	Well-posedness for drift-diffusion equations under the dynamic boundary condition describing filtration	10
05-01-0052 59	Ken Furukawa	(Univ. of Toyama)	Data assimilation to the primitive equations in H^2	10
05-01-0051 60	Morimichi Umehara	(Univ. of Miyazaki)	A steady and spherically symmetric flow of the viscous heat-conducting and self-gravitating gas	12

05-01-0030	61	Yusuke Ishigaki Takayuki Kobayashi	(Osaka Univ.) (Osaka Univ.)	Local energy decay estimates of solutions to linearized compressible viscoelastic system in three dimensional exterior domain	12
05-01-0041	62	Masakazu Yamamoto	(Niigata Univ.)	Parabolic-scalings on large-time behavior of the incompressible Navier–Stokes flow	12
05-01-0012	63	Yuta Koizumi	(Waseda Univ.)	Gevrey type error estimates of solutions to the Navier–Stokes equations	12

14:15–16:30

05-01-0036	64	Hiroyuki Tsurumi Mikihiro Fujii	(Tokushima Univ.) (Nagoya City Univ.)	Solutions of the 2D stationary Navier–Stokes equations on the whole plane around a uniform flow	12
05-01-0016	65	Shozo Ogino	(Tohoku Univ.) ♭	Strong convergence of the low Mach number limit in the scaling critical space for the compressible Navier–Stokes equations	12
05-01-0045	66	Zhongyang Gu Xin Hu Pritpal Matharu Bartosz Protas Makiko Sasada Tsuyoshi Yoneda	(Univ. of Tokyo) (Wuhan Univ.) (KTH Royal Inst. of Tech.) (McMaster Univ.) (Univ. of Tokyo) (Hitotsubashi Univ.)	The incompressible Navier–Stokes limit from the lattice BGK Boltzmann equation	10
05-01-0061	67	Taichi Eguchi	(Waseda Univ.)	Energy equality and inviscid limit of the fractional Navier–Stokes equations	12
05-01-0070	68	Mitsuo Higaki Yulong Lu Jinping Zhuge	(Kobe Univ.) (Univ. of Minnesota) (Morningside Center of Math.)	Wall laws for viscous flows in 3D randomly rough pipes	10
05-01-0028	69	Mikihiro Fujii	(Nagoya City Univ.)	Stationary Navier–Stokes equations on the half space in the scaling critical framework	12
05-01-0038	70	Jou-chun Kuo Yoshihiro Shibata	(Waseda Univ.) (Waseda Univ.*)	L_1 approach to the compressible viscous fluid flows in general domains	12
05-01-0005	71	Yuko Enomoto Yoshihiro Shibata	(Shibaura Inst. of Tech.) (Waseda Univ.*)	About Stokes equation with free boundary condition	12
05-01-0021	72	Yoshihiro Shibata	(Waseda Univ.)	Free boundary problem in the half-space	12

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

05-02-0001	Erika Ushikoshi	(Yokohama Nat. Univ.)	Helmholtz–Weyl decomposition on a time dependent domain with an application to time periodic Navier–Stokes flows with large flux	

Real Analysis

March 20th (Thu)

9:00–12:00

06-01-0004	1	Takeshi Iida (Fukushima Nat. Coll. of Tech.)	On commutators generated by BMO-function and the fractional integral operator in Orlicz–Morrey spaces	15
06-01-0028	2	Kotaro Inami (Nagoya Univ.)	Randomized Strichartz estimates in modulation spaces	15
06-01-0002	3	Naoya Hatano (Chuo Univ.)	Characterization for BMO norm via quasi-Banach lattices	15
06-01-0006	4	Satoshi Yamaguchi (Ibaraki Univ.) Eiichi Nakai (Ibaraki Univ.) Katsunori Shimomura (Ibaraki Univ.)	Generalized Campanato spaces with $p = 1$ and the duals of atomic Hardy spaces	15
06-01-0032	5	Motofumi Aoki (Kyoto Univ.) Tsukasa Iwabuchi (Tohoku Univ.)	On the fractional Leibniz rule in bounded domains	15
06-01-0010	6	Koji Aoyama (Chiba Univ.) Shigeru Iemoto (Chuo Univ.)	Parallel methods for strongly quasinonexpansive mappings in a Hilbert space	15
06-01-0025	7	Sachiko Atsushiba (Tokyo Woman's Christian Univ.)	Weak and strong convergence theorems for monotone nonexpansive mappings and α-nonexpansive mappings	15
06-01-0035	8	Takashi Honda (Iwate Univ.)	Convergence theorems of conditional expectations by using contractive projections on a Banach space	15
06-01-0034	9	Hiroko Manaka (Nihon Univ.)	Relation between an averaged mapping in a Hilbert space and a nonlinear mapping in Banach spaces	15
06-01-0037	10	Shin-ya Matsushita (Akita Pref. Univ.)	On fixed point algorithms using metric projections	15
06-01-0018	11	Aqib Saghir (Saitama Univ.) Shunya Hashimoto (Saitama Univ.)	A fixed point result of Kannan-type for multi-valued mapping on fuzzy metric spaces	10

14:15–15:30

06-01-0024	12	Yukino Tomizawa (Niigata Inst. of Tech.)	A geometric constant of complete Busemann spaces	15
06-01-0012	13	Toshiharu Kawasaki (Tamagawa Univ.) ♭	Some properties of the extended integral, II	15
06-01-0017	14	Fukuda Ryoji (Oita Univ.) Honda Aoi (Kyushu Inst. of Tech.) Yoshiaki Okazaki (Fuzzy Logic Systems Inst.)	Linear topological structure of a function space determined by a nonadditive measure	15
06-01-0029	15	Jun Kawabe (Shinshu Univ.)	Generalized monotone convergence theorems for nonlinear integrals	15

15:45–16:45 Award Lecture for the 2024 MSJ Analysis Prize

06-02-0004	Hitoshi Tanaka (Tsukuba Univ. of Tech.)	Rectangular fractional integral operator, Carleson-type embedding theorems, Fefferman–Phong-type condition

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

06-02-0001	Yoshihiro Sawano (Tokyo Metro. Univ.)	Morrey spaces

March 21st (Fri)

9:00–12:00

06-01-0019	16	Naotaka Ukai (Chiba Univ.) Daiki Mizuno (Chiba Univ.) Ken Shirakawa (Chiba Univ.) Harbir Antil (George Mason Univ.)	Coupling system of elliptic and pseudo-parabolic PDEs arising from anisotropic image-denoising	14
06-01-0033	17	Makoto Okumura (Konan Univ.)	A linear structure-preserving scheme for the two-dimensional Cahn–Hilliard equation with a dynamic boundary condition	14
06-01-0005	18	Yutaro Chiyo (Tokyo Univ. of Sci.) ♭ Hisashi Terasaki (Tokyo Univ. of Sci.) Yutaka Tsuzuki (Hiroshima Shudo Univ.) Tomomi Yokota (Tokyo Univ. of Sci.)	Solvability in a special case of a moisture transport model for porous materials	14
06-01-0007	19	Akiko Morimura (Japan Women's Univ.) Toyohiko Aiki (Japan Women's Univ.)	Error estimates of approximate solutions for a nonlinear parabolic equation with a non-monotone boundary condition by the finite volume method	14
06-01-0036	20	Yusuke Murase (Meijo Univ.)	Numerical simulations for moisture transport model in 1-dimensional spacial domain	14
06-01-0003	21	Shohei Kohatsu (Tokyo Univ. of Sci.)	Global smooth solutions for measure-valued initial data in a Keller–Segel system with nonlinear diffusion and flux limitation	14
06-01-0026	22	Yuya Tanaka (Kwansei Gakuin Univ.) Silvia Frass (Univ. of Cagliari) Giuseppe Viglialoro (Univ. of Cagliari)	Boundedness in a chemotaxis system involving gradient-dependent source with Robin boundary condition	14
06-01-0038	23	Mario Fuest (Leibniz Univ. Hannover) Johannes Lankeit (Leibniz Univ. Hannover) Masaaki Mizukami (Kyoto Univ. of Edu.)	Global solvability of a model for the formation of granuloma during tuberculosis infections	14
06-01-0001	24	Hana Kakiuchi (Japan Women's Univ.) Toyohiko Aiki (Japan Women's Univ.)	On uniqueness of solutions to a free boundary problem representing the baking process	14
06-01-0014	25	Kota Kumazaki (Kyoto Univ. of Edu.)	Maximum estimates of derivatives for the solution to a one-dimensional free boundary problem	14
06-01-0011	26	Pierluigi Colli (Univ. of Pavia) Shunsuke Kurima (Tokyo Univ. of Sci.)	Existence for a phase field system in the case that the equation regarding the order parameter is a hyperbolic Cahn–Hilliard equation	14
06-01-0013	27	Takeshi Fukao (Ryukoku Univ.) Pierluigi Colli (Univ. of Pavia)	Second order parabolic equations with higher order dynamic boundary conditions	14

14:15–16:45

06-01-0023	28	Takuma Yoshizumi (Osaka Univ.) Makoto Nakamura (Osaka Univ.)	Blowing-up solutions for semi-linear Klein–Gordon equations with the blowing-up space in FLRW spacetimes	14
06-01-0021	29	Sho Watabe (Niigata Univ.) Hiroki Ohwa (Niigata Univ.)	L^1 contractive solutions to the Cauchy problem of conservation laws with a discontinuous flux	14
06-01-0030	30	Takanori Ebata (Niigata Univ.) Hiroki Ohwa (Niigata Univ.)	A uniqueness condition for weak solutions of conservation laws	14

06-01-0016	31	Hiroyoshi Mitake (Univ. of Tokyo) Hiroshi Watanabe (Oita Univ.)	Equivalence of entropy solutions and viscosity solutions to degenerate parabolic equations and its applications	14
06-01-0027	32	Daiki Mizuno (Chiba Univ.) Ken Shirakawa (Chiba Univ.)	A constrained optimal control problem associated with a parabolic KWC system with a relaxation term	14
06-01-0031	33	Nobuyuki Kato (Kanazawa Univ.)	Existence of measure-valued solutions in optimal harvesting problems	14
06-01-0008	34	Ken Shirakawa (Chiba Univ.) Hiroshi Watanabe (Oita Univ.) J. Salvador Moll (Univ. Valencia)	Uniqueness of nonlinear parabolic systems involving regularized 1-harmonic type flows	14
06-01-0015	35	Yoshihito Nakajima (Tohoku Univ.)	Solvability of nonlinear evolution equations governed by time-dependent subdifferential operators involving time-fractional derivatives and applications	14
06-01-0020	36	Noriaki Yamazaki (Kanagawa Univ.) Masahiro Kubo (Wakayama Univ.)	Periodic solutions to a class of quasi-variational evolution equations	14
06-01-0009	37	Akio Ito	Existence of strong solutions to mass-conserved tumor invasion model with quasi-variational structures	14

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

06-02-0003		Chiharu Kosugi (Yamaguchi Univ.)	Mathematical analysis of models representing motions for the elastic curve with the compressible stress function	

Functional Analysis

March 18th (Tue)

9:30–10:55

07-01-0006	1	Hisashi Morioka (Ehime Univ.) Kazunori Ando (Ehime Univ.) Hiroshi Isozaki (Univ. of Tsukuba⋆)	Unique continuation theorem for discrete Schrödinger operators on lattices	15
07-01-0007	2	Hiroki Sako (Niigata Univ.)	existence of a continuous time quantum walk which realizes a given discrete time quantum walk	15
07-01-0015	3	Yoritaka Iwata (Osaka Univ. of Economics Law)	Recurrence formula for infinitesimal generators	15
07-01-0020	4	Itaru Sasaki (Shinshu Univ.) Yasumichi Matsuzawa (Shinshu Univ.) Shinnosuke Izumi (Shinshu Univ.) Kouta Imura (Nagano Pref. Fujimi High School)	On the holomorphy of the ground state of the Pauli–Fierz model in the dipole approximation	15
07-01-0023	5	Fumio Hiroshima (Kyushu Univ.)	Analysis of ground state and renormalized spectral zeta function of Rabi model	15

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

07-02-0002	Yukihide Tadano (Univ. of Hyogo)	Long-range scattering theory of discrete quantum systems

March 19th (Wed)

9:30–10:50

07-01-0009	6	Takashi Satomi (RIKEN)	Relation of the optimal constant of Young's convolution inequality between locally compact groups and their closed subgroups	15
07-01-0010	7	Ryosuke Nakahama (NTT Inst. for Funda. Math.)	Holographic operators for the tensor products of holomorphic functions on bounded symmetric domains	15
07-01-0012	8	Toshihisa Kubo (Ryukoku Univ.)	The branching law of a scalar generalized Verma module for $(\mathfrak{sl}(n+1,\mathbb{C}),\mathfrak{p}_{1,n})$ to $\mathfrak{sl}(n,\mathbb{C})$	15
07-01-0021	9	Víctor Pérez-Valdés (Ryukoku Univ.)	On symmetry breaking operators between S^3 and S^2	15

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

07-02-0001	Takuma Hayashi (Osaka Metro. Univ.)	Rationality problems in representation theory

March 20th (Thu)

9:30–10:55

07-01-0011	10	Yuki Seo (Osaka Kyoiku Univ.)	Estimates of the operator geometric mean by the Hadamard product	15
07-01-0018	11	Kenta Kojin (Nagoya Univ.)	Some relations between Schwarz–Pick inequality and von Neumann's inequality	15
07-01-0002	12	Hikaru Awazu (Univ. of Tokyo)	Amenability of group actions and Banach algebras	15

07-01-0003	13	Boo Rim Choe (Korea Univ.)♭ Xin Guo (Zhongnan Univ. of Econ. and Law) Takuya Hosokawa (Ibaraki Univ.) Hyungwoon Koo (Korea Univ.) Shûichi Ohno Maofa Wang (Wuhan Univ.)	Hilbert–Schmidt double differences of composition operators	15
07-01-0013	14	Takeshi Miura (Niigata Univ.) M. G. Cabrera-Padilla (Almería Univ.) Antonio Jimenéz-Vargas (Almería Univ.) Moisés Villegas-Vallecillos (Cádiz Univ.)	Function spaces formed by differentiable functions and surjective isometries on them	15

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

07-02-0003

Kouhei Izuchi (Yamaguchi Univ.) Invariant subspaces in Hardy space on the bidisk

14:30–17:00

07-01-0014	15	Takehiko Mori (Chiba Univ.)	Application of operator theory for the Collatz conjecture	15
07-01-0001	16	Hyuga Ito (Nagoya Univ.)	B-valued semi-circular system and free Poincaré inequality	15
07-01-0017	17	Hajime Moriya (Kanazawa Univ.)	Thermal area law for infinite quantum systems	10
07-01-0016	18	Yuhei Suzuki (Hokkaido Univ.)	Amenable actions on ill-behaved simple C*-algebras	15
07-01-0022	19	Taro Sogabe (Kyoto Univ.)♭ Kengo Matsumoto (Joetsu Univ. of Edu.)	The reciprocality for Cuntz–Krieger algebras	15
07-01-0019	20	Miho Mukohara (Univ. of Tokyo)	On Galois correspondence for compact group actions on C*-algebras	15
07-01-0008	21	Toshihiko Masuda (Kyushu Univ.)	Relative center construction for G-graded C*-fusion categories and Longo–Rehren inclusions	15
07-01-0005	22	Fuyuta Komura (RIKEN)	Weyl groups of groupoid C*-algebras	15
07-01-0004	23	Yusuke Isono (Kyoto Univ.)	Weak Dixmier property for dense subalgebras and application to type III factors	15

Statistics and Probability

March 18th (Tue)

9:30–11:20

08-01-0001	1	Yuuya Yoshida (Nagoya Inst. of Tech.)	A simple proof of the formula of Solov’ev–Nielsen–Blom for the expected waiting time	15
08-01-0023	2	Katsunori Fujie (Kyoto Univ.) Octavio Arizmendi (CIMAT) Daniel Perales (Texas A&M) Yuki Ueda (Hokkaido Univ. of Edu.)	S-transform in finite free probability	15
08-01-0015	3	Noriyoshi Sakuma (Osaka Univ.) Yuki Ueda (Hokkaido Univ. of Edu.)	On generalized Meixner-type free gamma distributions	10
08-01-0003	4	Masanori Hino (Kyoto Univ.) Ryuya Namba (Kyoto Sangyo Univ.)	Fractional order binomial distributions and their properties	15
08-01-0013	5	Ryoji Takano (Osaka Univ.) Masato Hoshino (Osaka Univ.)	A semigroup approach to the reconstruction theorem for singular modelled distributions and its applications	15
08-01-0012	6	Hirotatsu Nagoji (Kyoto Univ.) Seiichiro Kusuoka (Kyoto Univ.) Martin Hairer (EPFL)	Singularity of solutions to singular SPDEs	15
08-01-0024	7	Seiichiro Kusuoka (Kyoto Univ.) Yuichi Shiozawa (Doshisha Univ.)	Berry–Esseen bounds for large-time asymptotics of one-dimensional diffusion processes via Malliavin–Stein method	15

14:15–15:15 Award Lecture for the 2024 MSJ Analysis Prize

08-02-0001	Ryoki Fukushima (Univ. of Tsukuba)	Random walk among random obstacles

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

08-02-0004	Takahiro Mori (Kyoto Inst. Tech.)	L^p-extension of Kato class measures and its application to the analysis of multiple points of the trajectories of Markov processes

March 19th (Wed)

9:30–11:20

08-01-0021	8	Toru Sera (Osaka Univ.)	Higher order approximations in arcsine laws for subordinators	15
08-01-0002	9	Soma Nishino (Tokyo Metro. Univ.) Kensuke Ishitani (Tokyo Metro. Univ.)	Construction of diffusion house-moving	15
08-01-0006	10	Yuji Hamana (Univ. of Tsukuba) Hiroyuki Matsumoto (Aoyama Gakuin Univ.)	Joint distribution of the hitting time and site for Ornstein–Uhlenbeck process	10
08-01-0004	11	Yuki Suzuki (Keio Univ.)	Diffusion processes with random potentials consisting of three selfsimilar processes	15

08-01-0022 12	Rikuki Okamoto (Ritsumeikan Univ.) Jiro Akahori (Ritsumeikan Univ.) Norio Konno (Ritsumeikan Univ./Yokohama Nat. Univ.*) Shohei Koyama (Ritsumeikan Univ.) Iwao Sato (Oyama Nat. Coll. of Tech.)	Carr–Nadtochiy's weak reflection principle for quantum walk	15
08-01-0030 13	Ryoichi Suzuki (Ritsumeikan Univ.) Noriyoshi Sakuma (Osaka Univ.) Masahiro Handa (Ritsumeikan Univ.)	A Clark–Ocone–Haussmann type formula under change of measure for L^1-canonical additive processes and its applications	15
08-01-0018 14	Yuji Shinozaki (Musashino Univ.) Kohei Hayashi (RIKEN)	Numerical methods for the rough volatility model: High-order discretization using Markovian approximation and KLNV scheme	15

11:20–11:50 Research Section Assembly

March 20th (Thu)

9:30–11:30

08-01-0011 15	Teruo Tanaka (Hiroshima City Univ.)	Bellman equations associated with optimal stopping problems for discrete time N-parameter Markov processes	10
08-01-0005 16	Hayato Takahashi (Random Data Lab.)	Exact distributions of p-values of Kolmogorov–Smirnov tests and tests of random numbers	15
08-01-0020 17	Masatake Hirao (Aichi Pref. Univ.)	On Sobolev statistics from the perspective of the quasi-Monte Carlo method on the sphere	15
08-01-0014 18	Tomoki Tamaru (Kobe Univ.) Kenji Tanino (Kobe Univ.) Masatake Hirao (Aichi Pref. Univ.) Masanori Sawa (Kobe Univ.)	More on the corner-vector construction for spherical designs	15
08-01-0028 19	Ayaka Yagi (Tokyo Univ. of Sci.) Hiroto Kozawa (Tokyo Univ. of Sci.) Takashi Seo (Tokyo Univ. of Sci.)	The null distribution of simplified T^2-type test statistic for two-sample problem with two-step monotone missing data	15
08-01-0010 20	Hitoshi Motoyama (Aoyama Gakuin Univ.)	A simple derivation of the asymptotic normality of quantile estimators in unequal probability sampling	15
08-01-0007 21	Ken-ichi Koike (Nihon Univ.) Soshi Banno (Dai-ichi Life Techno Cross Co., Ltd.)	Attainment conditions of the Bayesian information inequalities for the escort distribution	10
08-01-0019 22	Hirai Mukasa (Kyushu Univ.)	Research on Bayes linear estimators in a general linear model	15

March 21st (Fri)

9:30–11:30

08-01-0025 23	Rinka Sagawa (Waseda Univ.) Kazuki Koizumi (Waseda Univ.) Yan Liu (Waseda Univ.)	Asymptptic theory for exponential smoothings	10
08-01-0027 24	Rinka Sagawa (Waseda Univ.)	Prediction error under model misspecification for multivariate harmonic time series regression models	15

08-01-0008
25 Yosei Yoshida (Waseda Univ.)
Yan Liu (Waseda Univ.)
V-statistic for high-dimensional time series · · · 10

08-01-0029
26 Xiaofei Xu (Wuhan Univ.)
Yan Liu (Waseda Univ.)
Masanobu Taniguchi (Waseda Univ.)
Second-order robustness for time series inference · · · 15

08-01-0026
27 Junichi Hirukawa (Niigata Univ.)
Kou Fujimori (Shinshu Univ.)
Innovation algorithm of fractionally integrated $(I(d))$ process and applications on the estimation of parameters · · · 15

08-01-0009
28 Hiroki Masuda (Univ. of Tokyo / JST CREST)
Alexei Kulik (Wroclaw Univ. of Sci. and Tech.)
Explicit LAD estimator of locally stable nonlinear SDE · · · 15

08-01-0016
29 Sho Sakai (Univ. of Tsukuba)
Kazuyoshi Yata (Univ. of Tsukuba)
Makoto Aoshima (Univ. of Tsukuba)
Hypothesis testing for PCR coefficients in high-dimensional settings · · · 15

08-01-0017
30 Kento Egashira (Tokyo Univ. of Sci.)
Kazuyoshi Yata (Univ. of Tsukuba)
Makoto Aoshima (Univ. of Tsukuba)
Asymptotic properties of change-point detection based on Euclidean distance in high-dimensional settings · · · 15

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

08-02-0003
Ryoya Oda (Hiroshima Univ.)
Selection consistency of KOO method in high-dimensional and large-sample multivariate linear regression models

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

08-02-0002
Sumito Kurata (Kyushu Univ.)
Model evaluation criteria with robustness in selection based on statistical divergence measures

Applied Mathematics

March 18th (Tue)

9:30–11:50

09-01-0036	1	Yusaku Nishimura (Waseda Univ.)	Kneser chromatic function and complete invariants for trees	15
09-01-0009	2	Yuta Watanabe (Aichi Univ. of Edu.)	Representations of ordered Hamming schemes	15
09-01-0044	3	Hirotake Kurihara (Yamaguchi Univ.)	Wirtinger inequalities and the Euclidean distortions for association schemes	15
09-01-0054	4	Tomohiro Kamiyoshi (Matsue Coll. of Tech.) Makoto Nagura (Osaka Electro-Comm. Univ.) Shin-ichi Otani (Kanto Gakuin Univ.)	On the principal part of production matricies for the exponential recursive matrix of unified Stirling numbers	15
09-01-0053	5	Diogo Kendy Matsumoto (Teikyo Univ. of Sci.)	3-self-centered unique eccentric point graphs	15
09-01-0030	6	Akihiro Higashitani (Osaka Univ.) Kenta Ueyama (Shinshu Univ.)	Switching equivalence classes of skew-symmetric matrices and modular Eulerian matrices	15
09-01-0034	7	Yuho Tanaka (Waseda Univ.)	The directed spanning trees of the directed square cycles	15
09-01-0041	8	Xiao-Nan Lu (Gifu Univ.)	Existentially closed critical Cayley graphs	15

14:15–15:55

09-01-0002	9	Hirotake Yaguchi (Mie Univ.*)	Generation of nonrecursive n-bit pseudorandom numbers based on β-transformation on $[1, 2)$ $(n = 64, 128, 192, ..., 8192)$	15
09-01-0012	10	Yoshinori Kametaka (Osaka Univ.*) 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.)	The best constant of discrete Sobolev inequality on $\mathrm{C}_{20} \sim \mathrm{C}_{60}$ fullerene	15
09-01-0013	11	Hideaki Morita (Muroran Inst. of Tech.)	On Negami–Sato's lemma for finite digraphs	15
09-01-0037	12	Xinmiao Zhang (Ritsumeikan Univ.) Jiro Akahori (Ritsumeikan Univ.) Norio Konno (Ritsumeikan Univ. / Yokohama Nat. Univ.*) Iwao Sato (Oyama Nat. Coll. of Tech.) Yuma Tamura (Ritsumeikan Univ.)	The exponential expression for Konno–Sato theorem	15
09-01-0042	13	Jirô Akahori (Ritsumeikan Univ.) Norio Konno (Ritsumeikan Univ. / Yokohama Nat. Univ.*) Iwao Sato (Oyama Nat. Coll. of Tech.) Yuma Tamura (Ritsumeikan Univ.) Xinmiao Zhang (Ritsumeikan Univ.)	Absolute zeta functions with respect to bipartite walks on bipartite graphs	15

09-01-0031 14	Iwao Sato (Oyama Nat. Coll. of Tech.) Takashi Kmatsu (Univ. of Yamanashi) Norio Konno (Ritsumeikan Univ./Yokohama Nat. Univ.*) Sho Kubota (Aichi Univ. of Edu.)	The trace formula with respect to the twisted Grover matrix of a graph	15

16:10–17:10 Talk Invited by Applied Mathematics Section

09-02-0002	Ayaka Ishikawa (Yamagata Univ.)	The Ihara expression of the graph zeta function	

March 19th (Wed)

10:00–11:50

09-01-0043 15	Toranosuke Omura (Hokkaido Univ.)	Constructing an $m \times (n+1)$ trianguloid from an $m \times n$ trianguloid	15
09-01-0048 16	Aki Mori (Setsunan Univ.)	Triangular faces of the order and chain polytope of a maximal ranked poset	15
09-01-0032 17	Masahiro Hachimori (Univ. of Tsukuba)	Partitionability of nonpure simplicial complexes and h-triangles	15
09-01-0016 18	Shinya Fujita (Yokohama City Univ.)	The domination number of a central graph and the vertex cover of a graph	10
09-01-0023 19	Tomoki Yamashita (Kindai Univ.) Katsuhiro Ota (Keio Univ.)	An Ore-type condition for 2-edge-connected $[2,k]$-factors in 2-connected graphs	15
09-01-0028 20	Kuniharu Yokomura (Tokai Univ.)	On degree conditions of balanced 3-partite panconnected graphs	15
09-01-0017 21	Kazunori Matsuda (Kitami Inst. of Tech.) Yuichi Yoshida (City Office of Kitami)	The minimum value of vertices and edges of connected simple graphs with three invariants associated with the matching having specific values	15

13:15–14:00

09-01-0003 22	Kohei Tanaka (Shinshu Univ.)	Lefschetz calculus in finite spaces and its applications	15
09-01-0039 23	Kengo Enami (Tsuda Coll.) Shun-ichi Maezawa (Nihon Univ.) Yusuke Suzuki (Niigata Univ.)	3-Linkedness of optimal 1-planar graphs	15
09-01-0026 24	Kenta Noguchi (Tokyo Univ. of Sci.)	Embedding of complete graphs so that the dual has a 1-cut II	15

March 20th (Thu)

9:25–12:00

09-01-0008 25	Yoshihito Ogasawara (Waseda Univ./Shibaura Inst. of Tech./Miyoshigokinkogyo Co. Ltd.)	Epistemology as applied topology	15
09-01-0029 26	Yuuya Yoshida (Nagoya Inst. of Tech.)	Mathematical comparison of classical and quantum mechanisms in optimization under local differential privacy	15
09-01-0024 27	Matthieu Cadiot (McGill Univ.) Jonathan Jaquette (New Jersey Inst. of Tech.) Jean-Philippe Lessard (McGill Univ.) Akitoshi Takayasu (Univ. of Tsukuba)	Computer-assisted proofs using Zernike polynomials: A proof of Banach algebra in a weighted sequence space	15

09-01-0027 28	Atsushi Nakayasu (Univ. of Tokyo) Takayuki Yamada (Univ. of Tokyo)	Mathematical analysis of a partial differential equation system on the thickness	15
09-01-0001 29	Keita Iida (Osaka Univ.)	Analyzing a probabilistic generative model for Markov jump process using generalized hypergeometric series	15
09-01-0050 30	Kosuke Suzuki (Yamagata Univ.)	On median quasi-Monte Carlo integration	15
09-01-0020 31	Harunori Monobe (Osaka Metro. Univ.) Yoshihisa Morita (Ryukoku Univ.*)	Construction of stable non-constant solutions to the bistable reaction-diffusion equation on metric graphs	15
09-01-0015 32	Sungrim Seirin Lee (Kyoto Univ./Kyoto Univ.) Takahiro Hiraga (Kyoto Univ.) Hiroshi Ishii (Hokkaido Univ.)	Mathematical dermatology: Inference of pathological state from skin eruption shape for personalized treatment in chronic spontaneous urticaria	15
09-01-0021 33	Junyong Eom (Hokkaido Univ.) Nagayama Masaharu (Hokkaido Univ.) Ueda Yuki (Hokkaido Univ.) Uchiumi Sinya (Hokkaido Univ.) Nakaoka Sinji (Hokkaido Univ.) Kume Sinya (Shiga Univ. of Medical Sci.) Suito Hiroshi (Tohoku Univ.) Katagiri Hideki (Tohoku Univ.)	A mathematical model of glucose-insulin dynamics and parameter estimation	15

14:15–14:40 Presentation Ceremony for the 2024 Applied Mathematics Prize

14:50–16:30

09-01-0046 34	Kazuyuki Yagasaki (Kyoto Univ.)	Kuramoto model with natural frequencies on a uniform graph and its continuum limit	15
09-01-0049 35	Donggeon Kim (Kyoto Univ.) Kazuyuki Yagasaki (Kyoto Univ.)	Feedback control of the Kuramoto model defined on uniform graphs	15
09-01-0033 36	Kazunori Matsui (Tokyo Univ. of Marine Sci. and Tech.) Yoshiho Akagawa (Gifu Nat. Coll. of Tech.)	A numerical method for an elastoplastic model with nonlinear strain hardening	15
09-01-0006 37	Takashi Suzuki (Osaka Univ.)	Mathematical modeling of mixed therapy using radiation and drug	15
09-01-0007 38	Kyoko Tomoeda (Setsunan Univ.) Kaname Matsue (Kyushu Univ./Kyushu Univ.)	Particle-laden flows on non-flat inclines in the settled regime: Mathematical modeling and numerical investigations	15
09-01-0051 39	Natsume Motohashi (Hokkaido Univ.)	Reaction-diffusion model of a self-propelled system	15

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

09-02-0001
Kazuyuki Yagasaki (Kyoto Univ.) On the development of the theory of nonintegrability of dynamical systems after Poincaré

March 21st (Fri)

9:25–12:00

09-01-0018 40	Ken Nakashima (Shimane Univ.) Ippei Obayashi (Okayama Univ./Tohoku Univ.)	On fast algorithm for connected persistence diagrams	15

09-01-0019	41	Ippei Obayashi (Okayama Univ./Tohoku Univ.) Ken Nakashima (Shimane Univ.)	RuCPD: Software for connected persistence diagrams	15
09-01-0040	42	Takehiko Kinoshita (Saga Univ.) Yoshitaka Watanabe (Kyushu Univ.) Mitsuhiro T. Nakao (Waseda Univ.)	Some quantitative lower bound estimates for the norm of resolvent and its applications	15
09-01-0045	43	Shinya Uchiumi (Hokkaido Univ.)	A mixed Galerkin method for the Stokes problem using higher order approximation spaces on coarse meshes for the pressure	15
09-01-0011	44	Keiichiro Kagawa (Hokkaido Univ.) Takeshi Watanabe (Nagano Univ.) Yasumasa Nishiura (Hokkaido Univ.*)	Global exploration of the free energy landscape of a coupled Cahn–Hilliard system	15
09-01-0025	45	Takuya Tsuchiya (Meiji Gakuin Univ.) Makoto Nakamura (Osaka Univ.)	On convergece and solutions of semi-linear Klein–Gordon equation in de Sitter spacetime	15
09-01-0022	46	Takeshi Ohtsuka (Gunma Univ.) Yen-Hsi Richard Tsai (Univ. Texas at Austin)	A minimizing movement approach for crystalline eikonal-curvature flow of spirals	15
09-01-0047	47	Kei Nishi (Kyoto Sangyo Univ.) Yasuaki Kobayashi (Josai Univ.)	Synchronization of oscillatory pulses in a three-component FitzHugh–Nagumo system	15
09-01-0052	48	Kaname Matsue (Kyushu Univ./Kyushu Univ.)	A simple criterion of the existence of monotonous blow-up solutions in nonautonomous systems of ordinary differential equations	15

14:15–15:15

09-01-0038	49	Tetsuya Nagano (Univ. of Nagasaki)	Digital signature system based on Finsler encryption	15
09-01-0004	50	Tsuyoshi Yoneda (Hitotsubashi Univ.) Takuya Jinno (Univ. of Toyama) Takahito Mitsui (Juntendo Univ.) Kengo Nakai (Okayama Univ.) Yoshitaka Saiki (Hitotsubashi Univ.)	Implementation of machine learning based on the mathematical theory of Littlewood–Paley decomposition	15
09-01-0005	51	Tsuyoshi Yoneda (Hitotsubashi Univ.) Chikara Nakayama (Hitotsubashi Univ.)	Explicit construction of recurrent neural networks effectively approximating discrete dynamical systems	15
09-01-0035	52	Baige Xu (Kobe Univ.) Takaharu Yaguchi (Kobe Univ.)	Error analysis of numerical solutions of PINNs for the Navier–Stokes equations	15

15:30–16:30 Talk Invited by Applied Mathematics Section

09-02-0003	Takaharu Yaguchi (Kobe Univ.)	Geometric deep scientific computing

Topology

March 18th (Tue)

9:30–11:40

10-01-0008	1	Dror Bar-Natan (Univ. of Toronto) Yusuke Kuno (Tsuda Coll.)	Emergent version of Drinfeld's associator equations	15
10-01-0027	2	Sonia Mahmoudi (Tohoku Univ.)	From toroidal pseudo links to pseudo DP tangles	15
10-01-0028	3	Sonia Mahmoudi (Tohoku Univ.)	On invariants of pseudo DP tangles	15
10-01-0026	4	Noboru Ito (Shinshu Univ.)	Commutator and higher Arnold strangeness	15
10-01-0005	5	Kazuhiro Ichihara (Nihon Univ.) Sayo Horigome (Caritas Girls' Junior & Senior High School)	On two-bridge ribbon knots	10
10-01-0019	6	Jun Murakami (Waseda Univ.)	On the colored Jones polynomial of double twist knots	10
10-01-0032	7	Atsuhiko Mizusawa (Waseda Univ.) Yuka Kotorii (Hiroshima Univ./Hiroshima Univ./RIKEN)	A classification of link-homotopy classes with vanishing short Milnor invariants	15
10-01-0038	8	Jun Ueki (Ochanomizu Univ./Ochanomizu Univ.) Honami Sakamoto (Ochanomizu Univ.) Ryoto Tange (Waseda Univ.)	Liminal $\mathrm{SL}_2\mathbb{Z}_p$-representations and cyclic covers of twist knots	15

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

10-02-0002	Kokoro Tanaka (Tokyo Gakugei Univ.)	Surface knot theory and quandle theory

15:40–17:30

10-01-0021	9	Jumpei Yasuda (Osaka Univ.)	A formula for Alexander polynomials of 2-plat 2-knots	15
10-01-0022	10	Mizuki Fukuda (AIST–Tohoku Univ.) Masaharu Ishikawa (Keio Univ.)	Twist spun knots of twist spun knots	10
10-01-0016	11	Chihaya Jibiki (Sci. Tokyo)	Understanding quandle orders through quandle actions	15
10-01-0017	12	Katsunori Arai (Osaka Univ.)	A construction of multiple group racks	15
10-01-0035	13	Atsushi Ishii (Univ. of Tsukuba)	Determinant state sum formulas for Alexander-type invariants	10
10-01-0012	14	Takuya Sakasai (Univ. of Tokyo) Yuuki Tadokoro (Kisarazu Nat. Coll. of Tech.) Kokoro Tanaka (Tokyo Gakugei Univ.)	On structures of groups of Kim–Manturov	10
10-01-0013	15	Yuta Nozaki (Yokohama Nat. Univ.) Masatoshi Sato (Tokyo Denki Univ.) Masaaki Suzuki (Meiji Univ.)	Torsion elements in the associated graded modules of filtrations over the Torelli group and the homology cylinders	15

March 19th (Wed)

9:30–11:35

10-01-0033 16	Ryuichi Nakahara (Okayama Univ.) Naoyuki Monden (Okayama Univ.)	An attempt and report on the collaboration of medical, mathematical and engineering sciences	10
10-01-0018 17	Teruaki Kitano (Soka Univ.) Yuta Nozaki (Yokohama Nat. Univ.) Michel Boileau (Aix-Marseille Univ.)	An order on the set of prime knots via π-orbifold groups	10
10-01-0023 18	Yuichi Yamada (Univ. of Electro-Comm.) Motoo Tange (Univ. of Tsukuba)	Seifert manifolds that have two Dehn surgery descriptions along torus knots	10
10-01-0031 19	Motoo Tange (Univ. of Tsukuba) Yuichi Yamada (Univ. of Electro-Comm.)	L-space embedding in negative definite closed 4-manifold constructed by a pair of Dehn surgeries along knots	15
10-01-0001 20	Tatsumasa Suzuki (Meiji Univ.)	On the d-invariants of Brieskorn homology 3-spheres with almost simple linear graphs	15
10-01-0029 21	Keisuke Teramoto (Yamaguchi Univ.)	Height functions on generalized cuspidal edges	15
10-01-0034 22	Koki Iwakura (Kyushu Univ.)	Non-singular extensions of horizontal stable fold maps from surfaces into the plane	15
10-01-0036 23	Kentaro Saji (Kobe Univ.)	Geometry on D_4 singularities of fronts	15

March 20th (Thu)

9:30–11:55

10-01-0020 24	Haruka Takeuchi (Nara Women's Univ.)	Minimal self-intersections of filling curve on surfaces	15
10-01-0041 25	Takuya Katayama (Osaka Metro. Univ.) Erika Kuno (Osaka Univ.)	Hempel–Lickorish theorem and its applications	10
10-01-0006 26	Shuhei Maruyama (Kanazawa Univ.)	McDuff's secondary class and the Euler class of foliated sphere bundles	15
10-01-0007 27	Tatsuhiko Yagasaki (Kyoto Inst. Tech.*) Kazuhiko Fukui (Kyoto Sangyo Univ.*)	Boundedness of bundle diffeomorphism groups over a circle	15
10-01-0030 28	Yoshihiko Mitsumatsu (Chuo Univ.) Teruaki Kitano (Soka Univ.) Shigeyuki Morita (Univ. of Tokyo*/Sci. Tokyo*)	The Mather–Thurston map for real analytic flat circle bundles	15
10-01-0003 29	Yoshikazu Yamagishi (Ryukoku Univ.)	Farthest point map on the 4-cube	15
10-01-0004 30	Yoshiyuki Oshima (Shimane Univ.)	A generalization of Markov set-valued functions	10
10-01-0010 31	Hiroki Matui (Chiba Univ.)	Classifying Stein's groups	15
10-01-0024 32	Kodai Yamamoto (Kyushu Univ.)	Homoclinic tangency of the largest codimension and statistical irregularity	15

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

10-02-0001		Yuji Terashima	(Tohoku Univ.)	Quiver mutation and topology	

15:40–17:35

10-01-0025	33	Kanon Yashiro Kanta Koeda Ryuma Orita	(Niigata Univ.) (Niigata Univ.)	Morse bipersistence modules and rectangle barcodes	15
10-01-0037	34	Tomoki Uda	(Univ. of Toyama)	Ellipse tangency analysis for anisotropic persistent homology	15
10-01-0009	35	So Yamagata	(Fukuoka Univ.)	On mapping fiber graphs in discrete homotopy theory	10
10-01-0014	36	Soichiro Fujii Yuni Iwamasa Kei Kimura Yuta Nozaki Akira Suzuki	(Masaryk Univ.) (Kyoto Univ.) (Kyushu Univ.) (Yokohama Nat. Univ.) (Tohoku Univ.)	Homotopy types of Hom complexes of graph homomorphisms whose codomains are cycles	10
10-01-0011	37	Taketo Shirane	(Tokushima Univ.)	Combinatorial type and splitting invariants of plane curves	15
10-01-0015	38	Takuma Okura	(Univ. of Tokyo)	A topological proof of Terao's generalized Arrow's impossibility theorem	15
10-01-0040	39	Norihiko Minami	(Yamato Univ./Nagoya Inst. of Tech.*/Osaka Metro. Univ.)	Algebro-geometric invariants defined purely in the realm of topology	15

Infinite Analysis

March 20th (Thu)

10:00–11:40

11-01-0003	1	Nobutaka Nakazono (Tokyo Univ. of Agri. and Tech.)	Higher-order Painlevé-type difference equations obtained from a system of partial difference equations having the CAC property	15
11-01-0005	2	Chihiro Sato (Ochanomizu Univ.) Kouichi Takemura (Ochanomizu Univ.)	Degeneration of q-Heun equations	15
11-01-0006	3	Yumi Arai (Ochanomizu Univ.) Kouichi Takemura (Ochanomizu Univ.)	On q-convolution and convergence	15
11-01-0004	4	Takahiko Nobukawa (Kobe Univ.)	Jackson integral representation for Kajihara's q-hypergeometric series $W^{M,2}$ and related q-difference system	15
11-01-0008	5	Satoshi Tsuchimi (Kobe Univ.) Genki Shibukawa (Kobe Univ.)	A multivariate analogue of the generalized μ-function	15
11-01-0009	6	Kazuya Matsugashita (Kindai Univ.) Takao Suzuki (Kindai Univ.)	A continuous limit of the q-Garnier system	15

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

11-02-0002	Hiroshi Kawakami (Aoyama Gakuin Univ.)	Toward a comprehensive theory of Painlevé-type equations with a focus on spectral types

March 21st (Fri)

9:30–10:35

11-01-0007	7	Yosuke Kawamoto (Okayama Univ.) Genki Shibukawa (Kobe Univ.)	Integral operators for Jack polynomials and the intertwining property for the β-Laguerre processes	15
11-01-0011	8	Ryota Akagi (Nagoya Univ.)	Cluster-cyclicity of skew-symmetrizable matrices of rank 3	15
11-01-0010	9	Yusuke Ohkubo (Setsunan Univ.)	The quantum toroidal $\mathfrak{gl}_2$ algebra and the $N = 1$ superconformal algebra	15
11-01-0002	10	Taichiro Takagi (Nat. Defense Acad. of Japan)	A bosonic formula for one-dimensional configuration sums and the minimal excludant in integer partitions	15

10:50–11:50 Talk Invited by Infinite Analysis Special Session

11-02-0001	Masato Okado (Osaka Metro. Univ.)	On the fermionic formula conjecture for branching functions of affine Lie algebras