

Remark

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

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Real Analysis	16
Functional Analysis	18
Statistics and Probability	20
Applied Mathematics	24
Topology	28
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Foundation of Mathematics and History of Mathematics

March 28th (Mon)

9:50–11:20

01-01-0004

- 1 Noriko Tanaka (Aichi Prefectural Asahigaoka High School) The Experimental Class for Science Education in Kyoto in the near end of the World War II 15

01-01-0016

- 2 Makoto Tamura (Osaka Sangyo Univ.) On the solution of cubic equations in China 15

01-01-0008

- 3 Tsukane Ogawa (Yokkaichi Univ.) Mathemacical thought of Oka Yukitada (1791–?) 15

01-01-0017

- 4 Hideyuki Majima (Ochanomizu Univ.*) The year 2022, the memorial 314th year of Seki Takakazu and the 300th anniversary of Tetsujjutsu-Sankei 15

01-01-0007

- 5 Mitsuo Morimoto (Yokkaichi Univ./Sophia Univ.*) On the *Sekisan Shidensho* 15

11:30–11:45 Mathematics History Team Meeting

14:30–15:30 Talk Invited by Section on Foundation and History of Mathematics

01-02-0002

- Naoki Osada (Tokyo Woman's Christian Univ.) The works of Seki Takakazu and their propagation

15:45–17:15

01-01-0005

- 6 Takahiro Seki (Niigata Univ.) Commutativity of non-associative substructural logics with restricted weakening and contraction 15

01-01-0012

- 7 Toshihiko Kurata (Hosei Univ.) Spectral spaces for models of intuitionistic logic 15
Ken-etsu Fujita (Gunma Univ.)

01-01-0010

- 8 Hisashi Aratake (Kyoto Univ.) Limits, colimits, and spectra of modelled spaces 15

01-01-0006

- 9 Kenshi Miyabe (Meiji Univ.) The rate of convergence of computable inductions 15

01-01-0015

- 10 Kohtaro Tadaki (Chubu Univ.) A refinement of quantum information theory by algorithmic randomness VI 15

March 29th (Tue)

9:45–11:25

01-01-0002

- 11 Kenta Tsukuura (Univ. of Tsukuba) The extent of saturation of induced ideals 15

01-01-0003

- 12 Daisuke Ikegami (Shibaura Inst. of Tech.) I -regularity, determinacy, and Solovay models 15

01-01-0001

- 13 Teruyuki Yorioka (Shizuoka Univ.) σ -uniformizations of ladder system colorings and Todorcevic's fragments of Martin's Axiom 15

01-01-0013

- 14 Koichiro Ikeda (Hosei Univ.) Imaginaries in generic structures 15

01-01-0011

- 15 Hirotaka Kikyo (Kobe Univ.) On model completeness of certain generic structures 15

01-01-0014

- 16 Akito Tsuboi (Univ. of Tsukuba*) Instability, CH and Keisler's isomorphism theorem 10

11:30–11:45 Research Section Assembly

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

01-02-0001

- Ryoma Sin'ya (Akita Univ.) Separation and measurability problems on an infinite hierarchy of regular languages

Algebra

March 28th (Mon)

9:30–11:45

02-01-0052	1	<u>Kana Ito</u> (Tokyo Tech)	The relation between level 2 standard modules of type $A_{\text{odd}}^{(2)}$ and Z -operators	15
02-01-0008	2	<u>Yutaka Yoshii</u> (Ibaraki Univ.)	Structure of certain modules for the hyperalgebra $\text{Dist}((\text{SL}_2)_r)$	10
02-01-0056	3	<u>Ryotaro Kawago</u> (Waseda Univ.) <u>Takeshi Ikeda</u> (Waseda Univ.)	Multiplicities of Schubert varieties in the flag varieties of classical types	15
02-01-0040	4	<u>Tomohiro Itagaki</u> (Takasaki City Univ. of Econ.) <u>Takeshi Torii</u> (Okayama Univ.) <u>Kazunori Nakamoto</u> (Univ. of Yamanashi)	Hochschild cohomology of N_m	15
02-01-0005	5	<u>Yuichiro Goto</u> (Osaka Univ.)	Generalizations of the relationship between quasi-hereditary algebras and directed bocses	10
02-01-0033	6	<u>Yasuaki Gyoda</u> (Nagoya Univ.)	Generalization of Gabriel's theorem in τ -tilting theory and its cluster algebraic approach	15
02-01-0036	7	<u>Toshiya Yurikusa</u> (Tohoku Univ.) <u>Yasuaki Gyoda</u> (Nagoya Univ.)	Bongartz completion via c-vectors	10
02-01-0025	8	<u>Ryotaro Koshio</u> (Tokyo Univ. of Sci.) <u>Yuta Kozakai</u> (Tokyo Univ. of Sci.)	Support τ -tilting modules and semibricks over blocks under vanishing conditions of Schur multipliers of factor groups	10
02-01-0023	9	<u>Fumihito Oda</u> (Kinki Univ.) <u>Yugen Takegahara</u> (Muroran Inst. of Tech.)	Crossed Burnside rings and cohomological Mackey 2-motives	10
02-01-0038	10	<u>Hirotake Kurihara</u> (Yamaguchi Univ.) <u>Akihiro Higashitani</u> (Osaka Univ.)	Homogeneous quandles arising from finite groups	15

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

02-02-0003		<u>Tatsuyuki Hikita</u> (Kyoto Univ.)	K-theoretic canonical bases and their elliptic analogues	
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15:30–17:40

02-01-0054	11	<u>Kohsuke Shibata</u> (Nihon Univ.)	F -rationality of two-dimensional graded rings with a rational singularity	15
02-01-0032	12	<u>Shinnosuke Ishiro</u> (Nihon Univ.) <u>Kazuma Shimomoto</u> (Nihon Univ.) <u>Mohsen Asgharzadeh</u>	Surjectivity of some scalar maps on local cohomology modules and an application to the second vanishing theorem	15
02-01-0051	13	<u>Shinnosuke Ishiro</u> (Nihon Univ.) <u>Kazuma Shimomoto</u> (Nihon Univ.) <u>Kei Nakazato</u> (Nagoya Univ.)	Perfectoid towers and its small tilts	15
02-01-0053	14	<u>Jun Horiuchi</u> (Nippon Inst. of Tech.) <u>Kazuma Shimomoto</u> (Nihon Univ.) <u>Kazufumi Eto</u> (Nippon Inst. of Tech.)	On integrality of rings and the monoidal map	15

02-01-0041		
15	Mitsuhiro Miyazaki (Kyoto Univ. of Edu.)	On the non-Gorenstein locus of the Ehrhart ring of the stable set polytope of an odd cycle graph 15
02-01-0055		
16	Yuki Ishihara (Tokyo Univ. of Sci.)	On double ideal quotient and primary decomposition 15
02-01-0042		
17	Shinya Kumashiro (Oyama Nat. Coll. of Tech.)	Graded filtrations and ideals of reduction number two 15
02-01-0050		
18	Kazuho Ozeki (Yamaguchi Univ.)	The first Hilbert coefficient of stretched ideals 15

March 29th (Tue)

9:00–12:00

02-01-0018		
19	Makoto Sakurai (Kaichi Gakuen)	Topological chiral algebras and characteristic classes 15
02-01-0028		
20	Akio Nakagawa (Chiba Univ.)	Appell–Lauricella hypergeometric functions over finite fields 15
02-01-0004		
21	So Yamagata (Hokkaido Univ.) Simona Settepanella	On the non very genericity of hyperplane arrangements. 15
02-01-0026		
22	Norihiro Nakashima (Nagoya Inst. of Tech.) Shuhei Tsujie (Hokkaido Univ. of Edu.)	The conditions for the extended Shi and Catalan arrangements of type A to be hereditarily free 15
02-01-0002		
23	Tetsuya Ando (Chiba Univ.)	Extremal positive semidefinite forms of cubic homogeneous polynomials of three variables 15
02-01-0006		
24	Tomohiro Iwami (Kyushu Inst. of Tech.)	Intermediate Jacobian of an extended three-dimensional extremal neighborhood. Part I 15
02-01-0013		
25	Makoto Miura (Kyoto Univ.)	Geometric transitions for Calabi–Yau hypersurfaces 15
02-01-0034		
26	Takeshi Usa (Univ. of Hyogo)	The adjacent concurrence on infinitesimally unstable Betti syzygy classes 15
02-01-0035		
27	Ryo Ohashi (Yokohama Nat. Univ.) Momonari Kudo (Univ. of Tokyo) Shushi Harashita (Yokohama Nat. Univ.)	The a -numbers of non-hyperelliptic curves of genus three with large cyclic automorphism group 15
02-01-0039		
28	Ryo Ohashi (Yokohama Nat. Univ.)	On the maximality or minimality of Howe curves of genus 3 15

13:00–14:00

02-01-0048		
29	Kohei Sato (Oyama Nat. Coll. of Tech.) Yusuke Sato (Univ. of Tokyo)	Hilb-desingularizations for three-dimensional canonical cyclic quotient singularities 15
02-01-0007		
30	Yuki Mizuno (Waseda Univ.)	An explicit construction of derived moduli stacks of Harder–Narasimhan filtrations 15
02-01-0057		
31	Norihiko Minami (Nagoya Inst. of Tech.)	Two applications of the birational motive to the retract $(-i)$ -rationality 15

March 30th (Wed)

9:30–10:30

02-01-0037

- 32 Hiroki Matsui (Tokushima Univ.) Paraphrasing Huneke–Wiegand conjecture 10
 Olgur Celikbas (West Virginia Univ.)
 Uyen Le (West Virginia Univ.)

02-01-0015

- 33 Kaito Kimura (Nagoya Univ.) Auslander–Reiten conjecture over Cohen–Macaulay rings 15
 Yuuya Otake (Nagoya Univ.)
 Ryo Takahashi (Nagoya Univ.)

02-01-0003

- 34 Masahisa Sato On generalized Nakayama(Azumaya)’s lemma 10
 (Aichi Univ./Univ. of Yamanashi*)

02-01-0029

- 35 Masaki Matsuno (Shizuoka Univ.) Noncommutative smooth conics in Calabi–Yau quantum projective
 Haigang Hu (Shizuoka Univ.) planes 15
 Izuru Mori (Shizuoka Univ.)

11:00–12:00 Presentation Ceremony for the 2021 & 2022 MSJ Algebra Prize**14:15–15:15 Award Lecture for the 2022 MSJ Algebra Prize**

02-02-0001

- Osamu Fujino (Kyoto Univ.) Generalization of the Kodaira vanishing theorem and its application to
 birational geometry

15:25–16:25 Award Lecture for the 2022 MSJ Algebra Prize

02-02-0004

- Masaaki Furusawa (Osaka City Univ.) On the Gross–Prasad conjecture with its refinement for $(SO(5), SO(2))$
 and the generalized Boecherer conjecture

16:35–17:35 Award Lecture for the 2022 MSJ Algebra Prize

02-02-0002

- Izuru Mori (Shizuoka Univ.) Classification of noncommutative projective surfaces (focusing on AS-
 regular algebras)

March 31st (Thu)

9:30–12:00

02-01-0011

- 36 Shigeru Iitaka (Gakushuin Univ.*) Ultra 2 perfect numbers of Mersenne type 10

02-01-0019

- 37 Shigeru Iitaka (Gakushuin Univ.*) Ultra perfect numbers of twin primes type 10
 Hikaru Kajita
 (Crimson Global Academy)

02-01-0020

- 38 Daniel Tsai (Nagoya Univ.) The fundamental period of a periodic phenomenon pertaining to v -
 palindromes 15

02-01-0001

- 39 Daniel Duverney Irrationality exponents of generalized Hone series 10
 (Baggio Engineering School)

Takeshi Kurosawa (Tokyo Univ. of Sci.)

Iekata Shiokawa (Keio Univ.)

02-01-0022

- 40 Shin-ya Koyama (Toyo Univ.) Chebyshev’s bias and the deep Riemann hypothesis 10

02-01-0044

- 41 Kohei Takehira (Tohoku Univ.) On the dynamical zeta function associated with a dynamical system on
 the projective line 10

02-01-0016

- 42 Hideto Iwata (Nagoya Univ.) The consideration using by the Volterra integral equation for the re-
 mainder term in the asymptotic formula on the associated Euler totient
 function 15

02-01-0024	43 Yuichiro Toma (Nagoya Univ.)	The mean square values of the Apostol–Vu double zeta-function	10
02-01-0017	44 <u>Wataru Takeda</u> (Tokyo Univ. of Sci.) Maki Nakasuji (Sophia Univ.)	Shuffle product formula for the Schur multiple zeta values of hook type	15
02-01-0030	45 <u>Maki Nakasuji</u> (Sophia Univ.) Yasuo Ohno (Tohoku Univ.)	Duality formula and its generalization for Schur multiple zeta values	15
02-01-0045	46 <u>Yuna Baba</u> (Sophia Univ.) Maki Nakasuji (Sophia Univ.)	Schur type multi-poly-Bernoulli numbers	10
14:15–16:00			
02-01-0046	47 <u>Masato Kobayashi</u> (Kanagawa Univ.) Sarath Chavan (Euler Circle)	An integral representation of Apery number and its applications to multiple values	15
02-01-0047	48 Ryojun Ito (Chiba Univ.)	Hypergeometric expressions of L -values for a Borweins theta product of weight 3	10
02-01-0049	49 Yusuke Nemoto (Chiba Univ.)	On the K_2 -regulator of the Hesse cubic curve and hypergeometric functions	10
02-01-0012	50 Ryosuke Shimada (Univ. of Tokyo)	Geometric structure of affine Deligne–Lusztig varieties for GL_3	15
02-01-0009	51 Yasushi Mizusawa (Nagoya Inst. of Tech.)	Metabelian 2-class field towers over \mathbb{Z}_2 -extensions of real quadratic fields	10
02-01-0014	52 Daisuke Shiomi (Yamagata Univ.)	The divisibility of class numbers of cyclotomic function fields	10
02-01-0031	53 Fumitake Hyodo (Kawasaki Univ. of Med. Welfare)	A note on a Hecke ring associated with the Heisenberg Lie algebra	15

Geometry

March 28th (Mon)

9:20–12:00

- 03-01-0002
1 Yoshito Ishiki (RIKEN) On dense subsets of spaces of metrics 15
- 03-01-0003
2 Yoshito Ishiki (RIKEN) Branching geodesics of the Gromov–Hausdorff distance 15
- 03-01-0014
3 Daisuke Kazukawa (Osaka Univ.) Boundedness of precompact sets of metric measure spaces 15
Takumi Yokota (Tohoku Univ.)
- 03-01-0022
4 Kenshiro Tashiro (Tohoku Univ.) On the systolic inequality on compact quotients of Carnot groups 15
- 03-01-0024
5 Hiroki Nakajima (Tohoku Univ.) A natural compactification of the Gromov–Hausdorff space 15
Takashi Shioya (Tohoku Univ.)
- 03-01-0037
6 Homare Tadano (Yamaguchi Univ.) Radial m -Bakry–Émery Ricci curvatures, Riccati inequalities, and Myers-type theorems 10
- 03-01-0039
7 Homare Tadano (Yamaguchi Univ.) Ambrose and Calabi type theorems via m -Bakry–Émery Ricci curvature 15
- 03-01-0040
8 Homare Tadano (Yamaguchi Univ.) New compactness criteria via m -Bakry–Émery Ricci curvature of exponential decay 10
- 03-01-0042
9 Homare Tadano (Yamaguchi Univ.) Integral radial m -Bakry–Émery Ricci curvatures and Myers–Ambrose type theorems 10
- 03-01-0043
10 Homare Tadano (Yamaguchi Univ.) Cheeger–Gromov–Taylor type compactness theorems via integral radial m -Bakry–Émery Ricci curvatures 10

14:15–16:00

- 03-01-0004
11 Masaya Kawamura On estimates for a function on almost Hermitian manifolds and its application to the Monge–Ampère equation 15
(Kagawa Nat. Coll. of Tech.)
- 03-01-0006
12 Satoshi Nakamura Calabi type functionals for coupled Kähler–Einstein metrics 15
(Numazu Nat. Coll. of Tech.)
- 03-01-0007
13 Naoto Yotsutani (Kagawa Univ.) Diffeomorphism classes of the doubling Calabi–Yau threefolds 15
- 03-01-0018
14 Yuta Watanabe (Univ. of Tokyo) Cohomology on neighborhoods of non-pluriharmonic loci in pseudoconvex Kähler manifolds 15
- 03-01-0019
15 Takayuki Moriyama (Mie Univ.) Graded algebra structure on the space of quaternionic k -vector fields 15
Takashi Nitta (Mie Univ.)
- 03-01-0032
16 Isami Koga (Meiji Univ.) Equivariant harmonic immersions of complex projective line into the complex Grassmannian manifolds of rank two 15
Yasuyuki Nagatomo (Meiji Univ.)

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

- 03-02-0001
Yoshinori Hashimoto (Tokyo Tech.) Recent progress on constant scalar curvature Kähler metrics with cone singularities along a divisor

March 29th (Tue)

9:45–11:45

03-01-0001

- 17 Noriaki Ikeda (Ritsumeikan Univ.) Homotopy momentum sections on pre-multisymplectic manifold 15
Yuji Hirota (Azabu Univ.)

03-01-0010

- 18 Taika Okuda (Tokyo Univ. of Sci.) Deformation quantization with separation of variables for 2-complex
Akifumi Sako (Tokyo Univ. of Sci.) dimensional locally symmetric Kähler manifold 15

03-01-0023

- 19 Yuya Takahashi (Nagoya Univ.)^b The moduli space of spatial polygons and geometric quantization 15

03-01-0027

- 20 Yuji Hirota (Azabu Univ.) On the existence of (twisted) Dirac structures over the space of connec-
Tosiaki Kori (Waseda Univ.) tions on 3 and 4 dimensional manifolds 15

03-01-0028

- 21 Takeru Asaka (Univ. of Tokyo)^b Earthquake maps and cluster algebras 15
Tsukasa Ishibashi (Kyoto Univ.)
Shunsuke Kano (Tohoku Univ.)

03-01-0034

- 22 Takashi Otofujii (Nihon Univ.) Stokes matrices of tt^* -Toda equations and positive energy representa-
Martin Guest (Waseda Univ.) tions of affine Lie algebras 10

03-01-0035

- 23 Masahiro Futaki (Chiba Univ.) Equivariant homological mirror symmetry for CP^1 15
Fumihiko Sanda (Kyoto Univ.)

13:15–14:15 Talk Invited by Geometry Section

03-02-0002

- Daisuke Tarama (Ritsumeikan Univ.) On integrable geodesic flows of a semi-simple Lie group

March 30th (Wed)

9:10–11:45

03-01-0005

- 24 Yuuki Sasaki (Tokyo Nat. Coll. of Tech.) Maximal antipodal sets of E_6 and some compact symmetric spaces . . . 15

03-01-0008

- 25 Shoichi Fujimori (Hiroshima Univ.) Higher genus nonorientable maximal surfaces 15
Shin Kaneda (Hiroshima Univ.)

03-01-0009

- 26 Hiroshi Sawai On the inverse of the structure theorem for Vaisman solvmanifolds . . . 15
(Numazu Nat. Coll. of Tech.)

03-01-0013

- 27 Kazuhiko Takano (Shinshu Univ.) On trajectory of mass points inertially moving in the Minkowski space
. 10

03-01-0016

- 28 Rika Akiyama (Tokyo Metro. Univ.) The first variational formulae for integral invariants of the second fun-
Takashi Sakai (Tokyo Metro. Univ.) damental form of a map between Riemannian manifolds 15
Yuichiro Sato
(Kogakuin Univ./Tokyo Metro. Univ.)

03-01-0021

- 29 Yuya Kodama (Tokyo Metro. Univ.) Generalizations of the Lodha–Moore group 15

03-01-0025

- 30 Taro Kimura Biharmonic Cartan embeddings defined by inner automorphism 15
(Nat. Inst. of Tech., Tsuruoka Coll.)
Katsuya Mashimo (Hosei Univ.)

03-01-0029

- 31 Nobutaka Boumuki (Oita Univ.) On the dimensions of linear spaces concerning holomorphic vector bun-
dles over elliptic orbits 15

03-01-0033

- 32 Kazuhiro Okumura Real hypersurfaces in a nonflat complex space form whose star-Ricci
tensor is \mathbb{D} -parallel 10
(Asahikawa Nat. Coll. of Tech.)

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

03-02-0004

Takefumi Kondo (Kagoshima Univ.) Nonlinear spectral gaps of Coxeter groups with respect to CAT(0) spaces

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

03-02-0003

Masatoshi Kokubu (Tokyo Denki Univ.) Flat fronts in hyperbolic three-space and related topics

March 31st (Thu)

9:15–12:00

03-01-0012

33 Natsuo Miyatake (Osaka Univ.)^b Generalized Kazdan–Warner equations on foliated manifolds 15

03-01-0015

34 Keita Kunikawa (Utsunomiya Univ.) Liouville type theorem for harmonic maps of controlled growth 15
Yohei Sakurai (Saitama Univ.)

03-01-0017

35 Junya Takahashi (Tohoku Univ.) Small eigenvalues of the rough and Hodge Laplacians under fixed volume
Colette Anné (Univ. de Nantes) 15

03-01-0020

36 Tomoya Nakamura (Kogakuin Univ.) The compatibility of Jacobi structures and pseudo-Riemannian metrics 15
Naoki Kimura (Waseda Univ.)

03-01-0026

37 Asuka Takatsu (Tokyo Metro. Univ.)^b Concavity preserved by heat flow 15
Kazuhiro Ishige (Univ. of Tokyo)
Paolo Salani (Univ. Firenze)

03-01-0030

38 Shin Nayatani (Nagoya Univ.) Laplacian first-eigenvalue maximization and embedding optimization 15

03-01-0031

39 Takumi Gomyou (Nagoya Univ.) Maximization of the first eigenvalue and embedding of a finite graph 15
Shin Nayatani (Nagoya Univ.)

03-01-0036

40 Norihiko Minami Cohomological characterization of the hierarchical structures interpolating the uniruledness and the rationally connectedness 15
(Nagoya Inst. of Tech.)

03-01-0038

41 Masayuki Aino (RIKEN)^b Convergence of the Laplacian Eigenmaps and its rate for submanifolds that are not necessarily smooth 15

Complex Analysis

March 28th (Mon)

9:30–11:50

04-01-0009	1	Shun Kumagai (Tohoku Univ.)	Family of flat surfaces with a parallelogram decomposition	15
04-01-0005	2	Yūsuke Okuyama (Kyoto Inst. Tech.)	Uniform perfectness in non-archimedean dynamics	15
04-01-0012	3	<u>Katsuhiko Matsuzaki</u> (Waseda Univ.) Huaying Wei (Waseda Univ.)	BMO embeddings, chord-arc curves, and Riemann mapping parametrization	15
04-01-0013	4	Katsunori Shimomura (Ibaraki Univ.)	Real rational function and time transformation of caloric morphism on semi-euclidean spaces	15
04-01-0004	5	<u>Ryoya Fukasaku</u> (Kyushu Univ.) Shinichi Tajima (Niigata Univ.*)	Efficient algorithms for computing univariate residues	10
04-01-0016	6	Yoshihiko Shinomiya (Shizuoka Univ.)	Period matrices of some hyperelliptic Riemann surfaces	15
04-01-0015	7	<u>Sachiko Hamano</u> (Osaka City Univ.) Masakazu Shiba (Hiroshima Univ.*)	The period matrices of an open Riemann surface and its closings in the Siegel upper half space	15
04-01-0002	8	Joe Kamimoto (Kyushu Univ.)	Resolution of singularities for C^∞ functions and meromorphy of local zeta functions	15
04-01-0011	9	Rikio Yoneda (Kanazawa Univ.)	Weighted composition operators between H^p and L_a^q	10

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

04-02-0002		Kazuya Tohge (Kanazawa Univ.)	Revisiting the Stothers–Mason theorem with Nevanlinna	
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March 29th (Tue)

9:30–11:30

04-01-0014	10	Satoshi Ogawa (Osaka City Univ.)	Linearization of transition functions along some Levi-flat hypersurfaces with the structure of S^1 -bundle	15
04-01-0008	11	Shota Kikuchi (Nagoya Univ.)	On sharper estimates of Ohsawa–Takegoshi L^2 -extension theorem in higher dimensional case	15
04-01-0006	12	Takeo Ohsawa (Nagoya Univ.*) ^b	On the cohomology vanishing with polynomial growth on complex manifolds with pseudoconvex boundary	15
04-01-0003	13	<u>Takanori Ayano</u> (Osaka City Univ.) Victor M. Buchstaber (Steklov Inst. of Math.)	Reduction of hyperelliptic functions of genus 2 to elliptic functions	15
04-01-0007	14	Takayuki Koike (Osaka City Univ.)	Holomorphic foliation associated with a semi-positive class of numerical dimension one	15
04-01-0010	15	Yoshihiko Matsumoto (Osaka Univ.)	The CR Killing operator and the Bernstein–Gelfand–Gelfand construction	15
04-01-0001	16	Yusaku Tiba (Ochanomizu Univ.)	Asymptotic estimates of holomorphic sections on Bohr–Sommerfeld Lagrangian submanifolds	15

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

04-02-0001		Shinichi Tajima (Niigata Univ.*)	Complex analysis, algebraic analysis and algorithms in singularity theory	
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Functional Equations

March 28th (Mon)

9:00–12:00

05-01-0005

- 1 Daichi Komori (Hokkaido Univ.) The equivalence of the sheaf of pseudodifferential operator and its symbol class 12

05-01-0006

- 2 Shunya Adachi (Kumamoto Univ.) Monodromy invariant Hermitian forms for second order Fuchsian differential equations with four singularities 12

05-01-0007

- 3 Genki Shibukawa (Kobe Univ.) Artin-style characterizations for multiple gamma and sine functions .. 10

05-01-0018

- 4 Hiroshi Ogawara (Kumamoto Univ.) Differential transcendence of solutions for q -difference equation of Ramanujan function 12

05-01-0034

- 5 Takashi Aoki (Kinki Univ.*)
Takao Suzuki (Kinki Univ.)
Shofu Uchida (Kinki Univ.) Exact WKB analysis for the Pearcey system with a large parameter 12

05-01-0010

- 6 Kazuki Ishibashi (Hiroshima Nat. Coll. of Maritime Tech.) Nonoscillation theorems for half-linear dynamic equations with mixed derivatives on a time scale 12

05-01-0014

- 7 Hiroyuki Usami (Gifu Univ.)
Manabu Naito (Ehime Univ.*) On the existence and asymptotic behavior of solutions of perturbed half-linear ordinary differential equations 12

05-01-0002

- 8 Tetsutaro Shibata (Hiroshima Univ.) Asymptotic behavior of solution to semilinear eigenvalue problem 12

05-01-0003

- 9 Marius Ghergu (Univ. College Dublin)
Yasuhito Miyamoto (Univ. of Tokyo)
Vitaly Moroz (Swansea Univ.) Polyharmonic inequalities with nonlocal terms 10

05-01-0019

- 10 Takeyuki Nagasawa (Saitama Univ.)
Aya Ishizeki (Saitama Univ.) The Möbius energies of knots and links: Decomposition, the cosine formula, and their Möbius invariance 10

05-01-0020

- 11 Takeyuki Nagasawa (Saitama Univ.)
Aya Ishizeki (Saitama Univ.) The Möbius energy of knots as a limit of the Möbius energy of links 10

14:15–16:15

05-01-0009

- 12 Toshio Horiuchi (Ibaraki Univ.) The CKN type inequalities involving non-doubling weights 12

05-01-0062

- 13 Hiroshi Ando (Ibaraki Univ.)
Toshio Horiuchi (Ibaraki Univ.*) Variational problems relating the generalized weighted Hardy's inequalities with compact perturbations 12

05-01-0067

- 14 Naoki Hamamoto (Osaka Pref. Univ.) Sharp Rellich–Hardy inequality for constrained vector fields 10

05-01-0030

- 15 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.) Positivity and hierarchical structure of Green functions and the best constant of Sobolev inequality corresponding to a bending problem of a beam on a half line 10

05-01-0056

- 16 Tatsuki Mori (Musashino Univ.)
Sohei Tasaki (Hokkaido Univ.)
Tohru Tsujikawa (Univ. of Miyazaki*)
Shoji Yotsutani (Ryukoku Univ.*) Global structure of stationary solutions for the 1-dimension Fix–Caginalp equation 12

- 05-01-0026
17 Kengo Terai (Univ. of Tokyo) On weak solutions to first-order discount mean field games 10
Hiro Yoshi Mitake (Univ. of Tokyo)
- 05-01-0054
18 Ryunosuke Mori (Meiji Univ.) On a strong solution to a generalized mean curvature flow with a
Eita Tomimatsu (Tokyo Tech) transport term in the sense of Brakke's formulation 12
Yoshihiro Tonegawa (Tokyo Tech)
- 16:30–17:30 Award Lecture for the 2021 MSJ Analysis Prize**
05-02-0003
Futoshi Takahashi (Osaka City Univ.)^b Mathematical analysis related with Hardy inequalities

March 29th (Tue)

9:00–12:00

- 05-01-0058
19 Tomoyuki Oka (Tohoku Univ.) Space-time periodic homogenization for the porous medium equation
Goro Akagi (Tohoku Univ.) with nonnegative initial data 12
- 05-01-0027
20 Ryuichi Sato (Fukuoka Univ.) On existence of solutions to a system of fully nonlinear parabolic equa-
Takahiro Kosugi tions 12
(Tottori Univ. of Environ. Stud.)
- 05-01-0035
21 Yu Yoshimi (Kyoto Univ.) Maximal L^1 -regularity of the heat equation under the oblique boundary
Takayoshi Ogawa (Tohoku Univ.) condition 10
Senjo Shimizu (Kyoto Univ.)
- 05-01-0065
22 Hiroshi Wakui (Tokyo Univ. of Sci.) Stability of constant steady states of a drift-diffusion equation 12
Szymon Cygan (Univ. of Wrocław)
Grzegorz Karch (Univ. of Wrocław)
Krzysztof Krawczyk (Univ. of Wrocław)
- 05-01-0042
23 Yekaterina Epshteyn (Univ. of Utah) Long-time asymptotic behavior for solutions to the Fokker–Planck equa-
Chun Liu (Illinois Inst. of Tech.) tion related to the evolution of grain boundaries 12
Masashi Mizuno (Nihon Univ.)
- 05-01-0048
24 Yuki Tsukamoto (Meiji Univ.) Convergence of the Allen–Cahn equation with transport term in a
bounded domain 10
- 05-01-0032
25 Tsukasa Iwabuchi (Tohoku Univ.) A spectral localization applied to the critical surface quasi-geostrophic
equation on a ball 12
- 05-01-0038
26 Dáithí Ó hAodha (Tohoku Univ.) The optimal decay estimate of solutions to the surface quasi-geostrophic
Tsukasa Iwabuchi (Tohoku Univ.) equation 12
- 05-01-0043
27 Masahiko Shimojo A Liouville type theorem of reaction diffusion system and its application
(Tokyo Metro. Univ.) to spreading problem 12
Jong-Shenq Guo (Tamkang Univ.)
- 05-01-0044
28 Masahiko Shimojo Spreading problem and traveling wave of a singular predator-prey sys-
(Tokyo Metro. Univ.) tem 10
Jong-Shenq Guo (Tamkang Univ.)
Yu-Shuo Chen (Tamkang Univ.)
- 05-01-0021
29 Kousuke Kuto (Waseda Univ.) Global bifurcation structure of segregated steady-states for a cross-
diffusion limit in the Shigesada–Kawasaki–Teramoto model 12
- 13:00–14:00 Talk Invited by Functional Equations Section**
05-02-0002
Hiroshi Matsuzawa (Kanagawa Univ.) A free boundary problem of reaction-diffusion equation with a multi-
stable type nonlinearity in high space dimensions

March 30th (Wed)

9:00–12:00

05-01-0059

30 Takeshi Suguro (Tohoku Univ.)^b Well-posedness of the Cauchy problem of the parabolic-elliptic Keller–Segel system in uniformly local spaces 12

05-01-0060

31 Tatsuya Hosono (Tohoku Univ.)^b Finite time blow-up of solutions to an attraction–repulsion chemotaxis system in four dimensional case 12

05-01-0001

32 Yuya Tanaka (Tokyo Univ. of Sci.)
Tomomi Yokota (Tokyo Univ. of Sci.) Blow-up in a degenerate parabolic-elliptic chemotaxis system with logistic source and nonlinear production 12

05-01-0004

33 Yutaka Kamimura (Tokyo Univ. of Marine Sci. and Tech.)^b Soliton solutions of the Boussinesq system 12

05-01-0051

34 Masafumi Yoneda (Chiba Univ.) Asymptotic stability of soliton for discrete nonlinear Schrödinger equation on one-dimensional lattice 10

05-01-0008

35 Masafumi Yoshino (Hiroshima Univ.) Movable singular point of non autonomous Hamiltonian system of degree of freedom one 12

05-01-0055

36 Noriyoshi Fukaya (Tokyo Univ. of Sci.)
Vladimir Georgiev (Pisa Univ.)
Masahiro Ikeda (RIKEN/Keio Univ.) On stability and instability of standing waves for 2d-nonlinear Schrödinger equations with point interaction 12

05-01-0063

37 Yuki Osada (Tokyo Metro. Univ.) Existence of a minimizer for a nonlinear Schrödinger system with three wave interaction under non-symmetric potentials 12

05-01-0064

38 Masaru Hamano (Saitama Univ.)
Masahiro Ikeda (RIKEN/Keio Univ.)
Shuji Machihara (Saitama Univ.) Blow-up solutions to nonlinear Schrödinger equation with an inverse power potential 10

05-01-0041

39 Takuya Sato (Tohoku Univ.)^b Lower bound estimates of solutions to the dissipative nonlinear Schrödinger equation 12

05-01-0036

40 Sonae Hadama (Kyoto Univ.) Well-posedness of the Hartree equation for infinitely many particles with the Riesz potential 12

14:15–16:15

05-01-0050

41 Shunya Hashimoto (Saitama Univ.)
Isamu Dôku (Saitama Univ.*)
Shuji Machihara (Saitama Univ.) The local well-posedness of the stochastic nonlinear Schrödinger equations in H^2 10

05-01-0017

42 Isao Kato (Kyoto Univ.) Ill-posedness for the half wave Schrödinger equation 10

05-01-0052

43 Satoshi Masaki (Osaka Univ.)
Jun-ichi Segata (Kyushu Univ.)
Kota Uriya (Okayama Univ. of Sci.) On classification of cubic nonlinear systems 12

05-01-0053

44 Satoshi Masaki (Osaka Univ.)
Jun-ichi Segata (Kyushu Univ.)
Kota Uriya (Okayama Univ. of Sci.) On asymptotic behavior of solutions to a nonlinear Klein–Gordon system 10

05-01-0057

45 Shunsuke Kitamura (Tohoku Univ.)^b
Hiroyuki Takamura (Tohoku Univ.)
Kyouhei Wakasa (Kushiro Nat. Coll. of Tech.) The lifespan estimates of classical solutions of one dimensional semilinear wave equations with characteristic weights 12

- 05-01-0023
46 Hiroyuki Takamura (Tohoku Univ.) b Semilinear wave equations of derivative type with spatial weights in one space dimension 12
Shunsuke Kitamura (Tohoku Univ.)
Katsuaki Morisawa (Tohoku Univ.)
- 05-01-0024
47 Hiroyuki Takamura (Tohoku Univ.) b The combined effect in one space dimension beyond the general theory for nonlinear wave equations 12
Takiko Sasaki
(Musashino Univ./Tohoku Univ.)
Katsuaki Morisawa (Tohoku Univ.)

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

- 05-02-0001
Motohiro Sobajima b Weighted energy estimates for wave equations with space-dependent damping
(Tokyo Univ. of Sci.)

March 31st (Thu)

9:00–12:00

- 05-01-0029
48 Takahito Kashiwabara (Univ. of Tokyo) Unique solvability of a crack problem with Signorini-type and Tresca friction conditions in a linearized elastodynamic body 12
Hiromichi Ito (Tokyo Univ. of Sci.)
- 05-01-0047
49 Ikki Fukuda (Shinshu Univ.) Higher-order asymptotic profiles of the solutions to the viscous Fornberg–Whitham equation 10
Kenta Itasaka
- 05-01-0033
50 Souhei Sugizaki (Tokyo Tech) Asymptotic stability of a radially symmetric stationary solution for the compressible Navier–Stokes equation with an inflow boundary condition 12
Shinya Nishibata (Tokyo Tech)
Itsuko Hashimoto (Kanazawa Univ.)
- 05-01-0037
51 Motofumi Aoki (Tohoku Univ.) On the energy conservation law for the full system of compressible Navier–Stokes equations 12
Tsukasa Iwabuchi (Tohoku Univ.)
- 05-01-0028
52 Masashi Ohnawa Asymptotic stability of air flow over mountains with wave breaking 12
(Tokyo Univ. of Marine Sci. and Tech.)
Masahiro Suzuki (Nagoya Inst. of Tech.)
- 05-01-0031
53 Kota Ikeda (Meiji Univ.) Stability analysis of a uniform flow in a mathematical model of camphor boats 12
- 05-01-0025
54 Ken Furukawa (RIKEN) Singular limit problems on the primitive equations and Navier–Stokes equations in anisotropic spaces 10
Takahito Kashiwabara (Univ. of Tokyo)
- 05-01-0016
55 Takeshi Gotoda (Tokyo Tech) Energy conservation in 2D incompressible inviscid flows 10
- 05-01-0013
56 Hiroyuki Tsurumi (Kyoto Univ.) Existence of the 2D stationary Navier–Stokes flow on the whole plane around a radial flow 12
Yasunori Maekawa (Kyoto Univ.)
- 05-01-0046
57 Tomoyuki Nakatsuka (Nagoya Univ.) b On the existence of time-periodic solutions to the Navier–Stokes equation in the whole space 12
- 05-01-0045
58 Tomoyuki Nakatsuka (Nagoya Univ.) b On pointwise decay rates of time-periodic solutions to the Navier–Stokes equation 12
- 14:15–16:15**
05-01-0022
59 Hideo Kozono Asymptotic behavior and Liouville-type theorems for axisymmetric stationary Navier–Stokes equations outside of an infinite cylinder with a periodic boundary condition 10
(Waseda Univ./Tohoku Univ.)
Yutaka Terasawa (Nagoya Univ.)
Yuta Wakasugi (Hiroshima Univ.)

05-01-0066	60	Lorenzo Brandolese (Univ. Lyon 1) <u>Takahiro Okabe</u> (Osaka Univ.)	Control of weak solutions of the Navier–Stokes equation by external forcing	10
05-01-0039	61	Keiichi Watanabe (Waseda Univ.)	Stability of stationary solutions to a free boundary problem of the Navier–Stokes equations	12
05-01-0040	62	<u>Miho Murata</u> (Shizuoka Univ.) Yoshihiro Shibata (Waseda Univ.)	Global well posedness for a Q-tensor model of nematic liquid crystals	10
05-01-0049	63	Mikihiro Fujii (Kyushu Univ.)	Large time behavior of solutions to the 3D anisotropic Navier–Stokes equation	12
05-01-0011	64	Yoshihiro Shibata (Waseda Univ.)	Global solution of the 3D compressible Navier–Stokes equations with free surface in the maximal regularity class	10
05-01-0012	65	Yoshihiro Shibata (Waseda Univ.)	The L_p - L_q decay estimate for the multidimensional compressible flow with free surface in the exterior domain	10
16:30–17:30 Talk Invited by Functional Equations Section				
05-02-0004		Yoshihiro Ueda (Kobe Univ.)	Mathematical analysis of the dissipative structure for the symmetric hyperbolic system with relaxation	

Real Analysis

March 30th (Wed)

9:30–11:45

- 06-01-0009
1 Yukino Tomizawa (Niigata Inst. of Tech.) Geometric properties of complete geodesic space 15
- 06-01-0018
2 Shin-ya Matsushita (Akita Pref. Univ.) On the Douglas–Rachford algorithm 15
- 06-01-0019
3 Sachiko Atsushiba (Tokyo Woman’s Christian Univ.) Convergence theorems for monotone nonexpansive mappings 15
- 06-01-0014
4 Koji Aoyama (Chiba Univ.) A quasinonexpansive extension of a mapping with an attractive point 15
- 06-01-0004
5 Ryotaro Tanaka (Tokyo Univ. of Sci.) Nonlinear classification of Banach spaces based on Birkhoff–James orthogonality 15
- 06-01-0013
6 Kenichi Mitani (Okayama Pref. Univ.) Some recent results on skewness of Banach spaces 15
Kichi-Suke Saito (Niigata Univ.*)
- 06-01-0012
7 Toshiharu Kawasaki (Tamagawa Univ.) Notes on the extended indefinite integral 15

14:30–16:00

- 06-01-0005
8 Jun Kawabe (Shinshu Univ.) A topology on the space of measurable functions on a nonadditive measure space 15
- 06-01-0020
9 Ryoji Fukuda (Oita Univ.) Completion of a monotone measure space and completeness of a measure algebra and L_0 space 15
Aoi Honda (Kyushu Inst. of Tech.)
Yoshiaki Okazaki (Fuzzy Logic Systems Inst.)
- 06-01-0011
10 Satoshi Yamaguchi (Ibaraki Univ.) Generalized fractional integral operators on Campanato spaces and their bi-preduals 15
Eiichi Nakai (Ibaraki Univ.)
- 06-01-0007
11 Ryota Kawasumi Pointwise multipliers on weak Orlicz–Morrey spaces 15
- 06-01-0016
12 Naoya Hatano (Chuo Univ.) Weak-type boundedness of commutators with respect to singular integral operators on Orlicz–Morrey spaces 15

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

- 06-02-0001
Yasunori Kimura (Toho Univ.) Resolvent operators on complete geodesic spaces

March 31st (Thu)

9:30–12:00

- 06-01-0021
13 Shodai Kubota (Chiba Univ.) Optimal controls in 1D-time-discrete Warren–Kobayashi–Lobkovsky–Carter system 15
Ken Shirakawa (Chiba Univ.)
- 06-01-0001
14 Yutaro Chiyo (Tokyo Univ. of Sci.) A simplified quasilinear attraction-repulsion chemotaxis system: boundedness 15
Tomomi Yokota (Tokyo Univ. of Sci.)
- 06-01-0002
15 Yutaro Chiyo (Tokyo Univ. of Sci.) A simplified quasilinear attraction-repulsion chemotaxis system: stabilization 15

06-01-0006

- 16 Chiharu Kosugi (Japan Women's Univ.) Existence of strong solutions for the model representing motions of
Toyohiko Aiki (Japan Women's Univ.) compressible elastic materials on the plane 15

06-01-0023

- 17 Kota Kumazaki (Nagasaki Univ.) A one-dimensional free boundary problem describing migration into
Toyohiko Aiki (Japan Women's Univ.) rubber with a non-monotone boundary condition 15
Adrian Muntean (Karlstad Univ.)

06-01-0015

- 18 Takeshi Fukao (Kyoto Univ. of Edu.) A quasi ill-posed problem on the boundary 15

06-01-0010

- 19 Noriaki Yamazaki (Kanagawa Univ.) Singular optimal control problems for doubly nonlinear evolution inclu-
Nobuyuki Kenmochi (Chiba Univ.*) sions with quasi-variational structure 15
Ken Shirakawa (Chiba Univ.)

14:15–15:15

06-01-0008

- 20 Shunsuke Kurima (Tokyo Univ. of Sci.) A nonlocal Penrose–Fife type phase field system with inertial term ... 15

06-01-0017

- 21 Hiroshi Watanabe (Oita Univ.) Oleinik type estimates for entropy solutions to scalar parabolic-hyperbolic
conservation laws and their applications 15

06-01-0022

- 22 Goro Akagi (Tohoku Univ.) Gradient flow theory for time-dependent energies and applications to
Naoki Tanaka (Shizuoka Univ.) nonlinear PDEs 15

15:30–16:30 Talk Invited by Real Analysis Section

06-02-0002

- Shuji Yoshikawa (Oita Univ.) Mathematical analysis for the problems related to dynamic deformation
of CRFP

Functional Analysis

March 28th (Mon)

10:00–11:30

07-01-0001

- 1 Shunji Sasaki (Kamiaoki Junior High School) Homage of Riemann zeta function “Zeta one function” 15

07-01-0003

- 2 Michio Seto (Nat. Defense Acad. of Japan) On construction of strictly positive definite kernels 10
 Shuhei Kuwahara (Sapporoseishu High School)

07-01-0004

- 3 Kazuki Kannaka (RIKEN)^b Multiplicities of stable eigenvalues on compact anti-de Sitter 3-manifolds 15

07-01-0011

- 4 Toshimitsu Takaesu (Gunma Univ.) On the first order expansion of a ground state energy of the ϕ^4 model with cutoffs 15

07-01-0015

- 5 Yoritaka Iwata (Kansai Univ.) Generation of nonlinear semigroup by the logarithm of operators 15

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

07-02-0002

- Megumi Sano (Hiroshima Univ.) Harmonic transplantation and its application to functional inequalities

March 29th (Tue)

10:00–12:00

07-01-0005

- 6 Nobukazu Shimeno (Kwansei Gakuin Univ.) Zonal spherical function on a real symplectic group 15
 Yamato Taniguchi (Kwansei Gakuin Univ.)
 Mugiho Nakamura (Kwansei Gakuin Univ.)

07-01-0007

- 7 Junko Inoue (Tottori Univ.) The norm of the L^p -Fourier transform on compact extensions of locally compact groups 15
 Ali Baklouti (Univ. of Sfax)

07-01-0012

- 8 Víctor Pérez Valdés (Univ. of Tokyo) Construction of vector-valued differential symmetry breaking operators for the group $SO(4, 1)$ 15

07-01-0014

- 9 Ryosuke Nakahama (Kyushu Univ.) Computation of weighted Bergman norms on block diagonal matrices in bounded symmetric domains for $Sp(r, \mathbb{R})$ 15

07-01-0016

- 10 Hideyuki Ishi (Osaka City Univ.) Continuous wavelet transforms for vector-valued functions 15
 Kazuhide Oshiro (HOSEI Inc.)

07-01-0017

- 11 Atsumu Sasaki (Tokai Univ.) A realization of the restriction of quasi-regular representations of the Heisenberg group 15

07-01-0018

- 12 Koichi Arashi (Nagoya Univ.) Coherent state representation and multiplicity-free representation of a generalized Heisenberg group 15

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

07-02-0003

- Takeshi Ikeda (Waseda Univ.)^b K-theoretic Schubert calculus

March 30th (Wed)

10:00–11:30

07-01-0002

13 Yuki Seo (Osaka Kyoiku Univ.) Matrix trace inequalities related to the Tsallis relative entropies of real order 15

07-01-0010

14 Mitsuru Uchiyama (Shimane Univ.*/Ritsumeikan Univ.) Operator means and matrix quadratic equations 15

07-01-0006

15 Masaru Nagisa (Chiba Univ./Ritsumeikan Univ.) Non-linear positive maps on C*-algebras 15
Yasuo Watatani (Kyushu Univ.)

07-01-0013

16 Hiroyuki Osaka (Ritsumeikan Univ.) Stable rank for inclusions of Banach algebras 15
 Masaru Nagisa (Chiba Univ.*)
 Raisei Tomita
 (Atsugi-Commercial Senior High School)

07-01-0008

17 Takuya Hosokawa (Ibaraki Univ.) Weighted composition operators from the Lipschitz space to the space of bounded functions on a tree 15

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

07-02-0001

Shūichi Ohno Weighted composition operators and their differences

Statistics and Probability

March 28th (Mon)

9:00–11:50

- 08-01-0041
1 Takaaki Toyoshima (Tokyo Tech) Fractional stochastic Navier–Stokes equation driven by space-time white noise 15
- 08-01-0039
2 Yu Ito (Kyoto Sangyo Univ.) Backward representation of rough integral: an approach via fractional calculus 15
- 08-01-0018
3 Ryoji Takano (Osaka Univ.)
Masaaki Fukasawa (Osaka Univ.) A partial rough path space for rough volatility 15
- 08-01-0009
4 Takuto Ugai (Osaka Univ.)
Masaaki Fukasawa (Osaka Univ.) Limit distributions for the discretization error of stochastic Volterra equations 15
- 08-01-0005
5 Yushi Hamaguchi (Osaka Univ.) On general solutions of linear stochastic Volterra integral equations .. 15
- 08-01-0021
6 Yuji Shinozaki
(Bank of Japan/Tokyo Tech) Application of high-order recombination to weak approximations of stochastic differential equations 15
Syoiti Ninomiya (Tokyo Tech)
- 08-01-0017
7 Isamu Dōku (Saitama Univ.) On a solution for random equations with Lévy noise 10
- 08-01-0020
8 Shigeyoshi Ogawa (Ritsumeikan Univ.) Noncausal integrals and mean value theorems 10
- 08-01-0003
9 Kensuke Ishitani (Tokyo Metro. Univ.) On the construction of Brownian house-moving and its properties 15
- 08-01-0008
10 Shun Yanashima (Tokyo Metro. Univ.) On the construction of Bessel house-moving and its properties 15
Kensuke Ishitani (Tokyo Metro. Univ.)

14:15–15:05

- 08-01-0027
11 Tetsuo Kurosawa (Tokyo Metro. Univ.) Loop erased random walk on a random branched Koch curve 15
Shunsuke Nishijima
(Tokyo Metro. Univ.)
Kumiko Hattori (Tokyo Metro. Univ.)
- 08-01-0043
12 Kohei Sasaya (Kyoto Univ.) Some relation between spectral dimension and Ahlfors regular conformal dimension of resistance metrics 15
- 08-01-0015
13 Naotaka Kajino (Kyoto Univ.) On singularity of energy measures for symmetric diffusions with full off-diagonal heat kernel estimates II: Some borderline examples 15

15:15–16:15 Award Lecture for the 2021 MSJ Analysis Prize

- 08-02-0003
Makoto Katori (Chuo Univ.) Multiple Schramm–Loewner evolution and Dyson’s Brownian motion model

16:30–17:30 Talk Invited by Statistics and Probability Section

- 08-02-0002
Takahiro Hasebe (Hokkaido Univ.) Loewner chains, Markov processes and non-commutative stochastic processes

March 29th (Tue)

9:00–11:30

08-01-0025

- 14 Katsunori Fujie (Hokkaido Univ.)
Takahiro Hasebe (Hokkaido Univ.) The spectra of principal submatrices in unitarily invariant random matrices 15

08-01-0026

- 15 Makoto Maejima (Keio Univ.*)
Noriyoshi Sakuma (Nagoya City Univ.) On free selfsimilar additive processes and free selfdecomposable distributions 10

08-01-0006

- 16 Kei Noba (Inst. of Stat. Math.)
Noriyoshi Sakuma (Nagoya City Univ.)
Yuki Ueda (Hokkaido Univ. of Edu.) On Boolean selfdecomposability 10

08-01-0044

- 17 Ryoichi Suzuki (Keio Univ.)
Noriyoshi Sakuma (Nagoya City Univ.) A modified Φ -Sobolev inequality for canonical Lévy processes and its applications 10

08-01-0010

- 18 Kei Noba (Inst. of Stat. Math.) On the optimality of the refraction–reflection strategies for Lévy processes 10

08-01-0013

- 19 Toshihiro Uemura (Kansai Univ.)
Masayoshi Takeda (Kansai Univ.) On symmetric stable-type processes with singular Lévy densities 15

08-01-0030

- 20 Nobuaki Naganuma (Kumamoto Univ.) On generalization of the fourth moment theorem 15

08-01-0029

- 21 Masafumi Hayashi (Univ. of Ryukyus)
So Oshiro (Univ. of Ryukyus)
Masato Takei (Yokohama Nat. Univ.) Rate of moment convergence in the central limit theorem for elephant random walks 15

08-01-0024

- 22 Hiroki Takahashi (Keio Univ.)
Shintaro Suzuki (Keio Univ.) Almost-sure weighted equidistribution of cycles for the random Gauss map 15

08-01-0014

- 23 Johannes Jaerisch (Nagoya Univ.)
Hiroki Takahasi (Keio Univ.) Multifractal analysis of homological growth rates for hyperbolic surfaces 15

11:30–12:00 Research Section Assembly

March 30th (Wed)

9:50–11:40

08-01-0032

- 24 Teruo Tanaka (Hiroshima City Univ.) Markov decision processes with fractional rewards 10

08-01-0036

- 25 Toshiharu Fujita
(Kyushu Inst. of Tech.) Decision process model with feedforward loop system 15

08-01-0035

- 26 Shoko Chisaki (Osaka Inst. of Tech.)
Shinji Kuriki (Osaka Pref. Univ.*)
Ryoh Fuji-Hara (Univ. of Tsukuba*)
Nobuko Miyamoto (Tokyo Univ. of Sci.) Optimality of spanning bipartite block designs 10

08-01-0034

- 27 Satoru Kadowaki
(Matsue Coll. of Tech.)
Sanpei Kageyama (Hiroshima Univ.*) Two existence results between an affine resolvable SRGD design and a difference scheme 15

08-01-0002

- 28 Masatake Hirao (Aichi Pref. Univ.) On p -frame potential of the Beltrán and Etayo point processes on the sphere 15

08-01-0016

- 29 Hayato Takahashi (Random Data Lab.) Posterior distributions weakly converge to Martin-Löf random parameters 15

08-01-0022

- 30 Kengo Fujisawa (Tokyo Univ. of Sci.) Asymmetry plus association model for square contingency tables with
Kouji Tahata (Tokyo Univ. of Sci.) ordinal categories 15

12:15–12:45 Presentation Ceremony for the 2021 MSJ Analysis Prize**14:25–15:25 Talk Invited by Statistics and Probability Section**

08-02-0001

- Masayo Hirose (Kyushu Univ.) Small area inference under area level model and its application

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

08-02-0004

- Takeshi Emura (Kurume Univ.) Estimating the difference of survival distributions; a copula-based approach to dependent censoring

March 31st (Thu)

9:50–11:40

08-01-0007

- 31 Kou Fujimori (Shinshu Univ.) Sparse principal component analysis for high-dimensional stationary
Yuichi Goto (Waseda Univ.) time series 15
Yan Liu (Waseda Univ.)
Masanobu Taniguchi (Waseda Univ.)

08-01-0011

- 32 Yujie Xue (Waseda Univ.) Hellinger distance estimation for non-regular spectra 15
Masanobu Taniguchi (Waseda Univ.)

08-01-0012

- 33 Xiaofei Xu (Waseda Univ.) Comparison between the exact likelihood and Whittle likelihood for
Zhengze Li (Waseda Univ.) moving average processes 10
Masanobu Taniguchi (Waseda Univ.)

08-01-0037

- 34 Yan Liu (Waseda Univ.) On the model selection of symmetric α -stable processes 15

08-01-0042

- 35 Yuichi Goto (Waseda Univ.) Tests for the existence of group effects and interactions for two-way
Kotone Suzuki (Waseda Univ.) models with dependent error 15
Xiaofei Xu (Waseda Univ.)
Masanobu Taniguchi (Waseda Univ.)

08-01-0033

- 36 Jin Hatamoto Poisson limit distributions for diffeomorphisms with weak hyperbolic
(Tokyo Nat. Coll. of Tech.) product structure 12

08-01-0028

- 37 Takao Namiki (Hokkaido Univ.) Evaluation of permutation entropy by time-series transition graph anal-
Satoru Tadokoro (Hokkaido Univ.) ysis and its application to epilepsy 10
Shunsuke Kajikawa (Kyoto Univ.)
Masao Matsuhashi (Kyoto Univ.)
Akio Ikeda (Kyoto Univ.)
Ichiro Tsuda
(Chubu Univ./Chubu Univ.)

14:20–16:25

08-01-0019

- 38 Eri Kurita (Tokyo Univ. of Sci.) A sample measure of Mardia's multivariate kurtosis with three-step
Takashi Seo (Tokyo Univ. of Sci.) monotone missing data 15

08-01-0004

- 39 Nobuhiro Taneichi On an approximation of the distribution of test statistics for conditional
(Hokkaido Univ. of Edu.) independence of 3-way contingency tables. 15
Yuri Sekiya (Hokkaido Univ. of Edu.)
Jun Toyama
(Inst. for Pract. Appl. of Math.)

08-01-0038

- 40 Takuma Bando (Univ. of Tokyo) Consistency of the objective general index in high-dimensional settings
Tomonari Sei (Univ. of Tokyo) 15
Kazuyoshi Yata (Univ. of Tsukuba)

08-01-0023

- 41 Yoshihiko Maesono (Chuo Univ.) Improved confidence intervals for expectiles in risk management 15
Spiridon Penev
(Univ. of New South Wales)

08-01-0045

- 42 Hiroki Masuda (Kyushu Univ.) On model selection of Lévy driven SDE models 15
Shoichi Eguchi (Osaka Inst. of Tech.)

08-01-0040

- 43 Yuta Koike (Univ. of Tokyo) Asymptotic mixed normality of realized covariance in high-dimensions
..... 15

08-01-0031

- 44 Yugo Nakayama (Kyoto Univ.) Outlier detection based on high-dimensional principal component scores
Kazuyoshi Yata (Univ. of Tsukuba) 15
Makoto Aoshima (Univ. of Tsukuba)

Applied Mathematics

March 28th (Mon)

10:00–12:00

09-01-0029

- 1 Xiao-Nan Lu (Univ. of Yamanashi) Almost external difference families via cyclotomy 15
 Shota Kawaguchi
 (Nippon-Engineer Co. Ltd.)
 Miwako Mishima (Gifu Univ.)

09-01-0043

- 2 Norifumi Ojio (Toyota Tech. Inst.) Reversible error-correcting codes over rational integer residue rings ... 15
 Hajime Matsui (Toyota Tech. Inst.)

09-01-0024

- 3 Tomohiro Kamiyoshi On exponential extended Riordan array and unified Stirling numbers 10
 (Matsue Coll. of Tech.)
 Makoto Nagura
 (Osaka Electro-Comm. Univ.)
 Shinichi Otani (Kanto Gakuin Univ.)

09-01-0015

- 4 Kazuhide Hirohata Degree sum conditions for the existence of vertex-disjoint chorded cycles in a graph 15
 (Ibaraki Nat. Coll. of Tech.)
 Bradley Elliott (Univ. of Kentucky)
 Ronald J. Gould (Emory Univ.)

09-01-0028

- 5 Kiyoshi Ando (Nat. Inst. of Informatics) Properly 3-contractible edges in a minimally 3-connected graph 15

09-01-0005

- 6 Shinya Fujita (Yokohama City Univ.) Extremal problems on rainbow connectivity in edge-colored graphs ... 10

09-01-0034

- 7 Naoki Matsumoto (Keio Univ.) Chromatic number of triangle-free and broom-free graphs in terms of their order 15

14:15–16:00

09-01-0026

- 8 Kazuki Matsubara (Saitama Univ.) Continuous flattening of multi-layered pyramids with rigid radial edges 15
 Chie Nara (Meiji Univ.)

09-01-0027

- 9 Masashi Shinohara (Shiga Univ.) Uniqueness of optimal two-distance sets in \mathbb{R}^8 15
 Sho Suda (Nat. Defense Acad. of Japan)
 Hiroshi Nozaki (Aichi Univ. of Edu.)

09-01-0006

- 10 Sho Kubota (Yokohama Nat. Univ.) Perfect state transfer in Grover walks between states associated to vertices of a graph 15
 Etsuo Segawa (Yokohama Nat. Univ.)

09-01-0012

- 11 Hiromichi Ohno (Shinshu Univ.) Unitary equivalence classes of quantum walks on cycles and split-step quantum walks 15
 Akihiro Narimatsu
 (Yokohama Nat. Univ.)
 Md Sams Afif Nirjhor (Tokyo Tech)
 Kazuyuki Wada
 (Nat. Inst. of Tech., Hachinohe Coll.)

09-01-0002

- 12 Chusei Kiumi (Yokohama Nat. Univ.) Eigenvalues of multi-state quantum walks 10

09-01-0010

- 13 Ken'ichi Yoshida (Saitama Univ.) A mathematical model of network elastoplasticity 15
 Hiroki Kodama (Tohoku Univ.)

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

09-02-0003

- Tetsuji Taniguchi A smallest eigenvalues of graphs and a generalization of line graphs
 (Hiroshima Inst. of Tech.)

March 29th (Tue)

10:00–11:45

09-01-0016

- 14 Norio Konno (Yokohama Nat. Univ.) IPS/Zeta Correspondence for the Domany–Kinzel model 10
Yuki Oshima (Yokohama Nat. Univ.)

09-01-0020

- 15 Norio Konno (Yokohama Nat. Univ.) Walk/Zeta Correspondence for quantum and correlated random walks
Shunya Tamura (Yokohama Nat. Univ.) 10

09-01-0007

- 16 Iwao Sato (Oyama Nat. Coll. of Tech.) Vertex-face/Zeta correspondence 15
Norio Konno (Yokohama Nat. Univ.)
Takashi Komatsu
(Math. Res. Inst. Calc for Industry/Hiroshima Univ.)

09-01-0031

- 17 Ayaka Ishikawa (Yokohama Nat. Univ.) A family of quantum walks on a finite graph corresponding to the
generalized weighted zeta function 15

09-01-0019

- 18 Hideaki Morita (Muroan Inst. of Tech.) On an alternating graph zeta function 15

09-01-0018

- 19 Osamu Kada (Hosei Univ.) Characteristic polynomials and zeta functions of equitably partitioned
graphs 15

09-01-0009

- 20 Seiken Saito (Kogakuin Univ.) The distribution of the error terms of the number of non-backtracking
cycles for a regular graph 15

11:50–12:10 Presentation Ceremony for the 2021 MSJ Prize for Excellent Young Applied Mathematicians

13:15–14:15

09-01-0013

- 21 Tomoya Machide
(Nat. Inst. of Informatics) An application of systems of Boolean polynomial equations to list color
problems 10

09-01-0044

- 22 Yumiko Ohno (Yokohama Nat. Univ.) The achromatic number and the pseudoachromatic number of caterpil-
Naoki Matsumoto (Keio Univ.) lars 15

09-01-0004

- 23 Kengo Enami (Seikei Univ.) Proper colorings of plane quadrangulations without rainbow faces 15
Kenta Ozeki (Yokohama Nat. Univ.)
Tomoki Yamaguchi

09-01-0042

- 24 Atsuhiko Nakamoto
(Yokohama Nat. Univ.) Chromatic number of quadrangulations of the projective space 15
Kenta Ozeki (Yokohama Nat. Univ.)

March 30th (Wed)

9:00–10:45

09-01-0001

- 25 Yoshiki Jikumaru (Kyushu Univ.) On the differential geometric formulation of hanging membranes 15
Yohei Yokosuka (Kagoshima Univ.)

09-01-0014

- 26 Tomoharu Suda (Keio Univ.) Equivalence of topological dynamics without well-posedness 15

09-01-0038

- 27 Itsuki Watanabe (Waseda Univ.) Deterministic limit of the stochastic model of nonlocal cross-diffusion
..... 15

09-01-0033

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

- 09-01-0035
29 Satoru Iwasaki (Osaka Univ.) Number of stationary solutions of the Allen–Cahn equation in compact
Yutaro Yamaguchi (Osaka Univ.) metric graphs 15
- 09-01-0039
30 Toshikazu Kuniya (Kobe Univ.) Global dynamics of a class of bistable reaction-diffusion equations with
Tarik Mohammed Touaoula time delay 15
(Univ. Aboubekr Belkaïd)
- 11:00–12:00 Talk Invited by Applied Mathematics Section**
09-02-0001
Yusuke Imoto (Kyoto Univ.) Invitation to single-cell data science
- 14:15–17:00**
09-01-0003
31 Jumpei Nagase (Shibaura Inst. of Tech.) Representation of the Choquet integral by deep neural networks 15
Aoi Honda (Kyushu Inst. of Tech.)
Tetsuya Ishiwata
(Shibaura Inst. of Tech.)
- 09-01-0047
32 Kengo Nakai Reconstruction of invariant sets of dynamical systems by machine learn-
(Tokyo Univ. of Marine Sci. and Tech.) ing models 15
Miki U. Kobayashi (Rissho Univ.)
Yoshitaka Saiki (Hitotsubashi Univ.)
Natsuki Tsutsumi (Hitotsubashi Univ.)
- 09-01-0023
33 Qiwen Sun (Nagoya Univ./RIKEN) Control simulation experiments of extreme events with the Lorenz-96
Takemasa Miyoshi (RIKEN) model 15
Serge Richard (Nagoya Univ./RIKEN)
- 09-01-0025
34 Naoto Yamaoka (Osaka Pref. Univ.) Asymptotic behavior of solutions of discrete replicator equations with
the core-periphery model 15
- 09-01-0041
35 Kaname Matsue Multiple-order asymptotic expansion of blow-up solutions for ODEs .. 15
(Kyushu Univ./Kyushu Univ.)
Hiroyuki Ochiai (Kyushu Univ.)
Hisatoshi Kodani (Tohoku Univ.)
Takiko Sasaki
(Musashino Univ./Tohoku Univ.)
Taisei Asai (Waseda Univ.)
- 09-01-0046
36 Takaaki Nishida (Kyoto Univ.*) An example of heat convection in the horizontal layer with non-uniform
heat source 15
- 09-01-0036
37 Koya Sakakibara Numerical computation of an interface model for deformable self-
(Okayama Univ. of Sci.) propelled systems 15
Masaharu Nagayama (Hokkaido Univ.)
Harunori Monobe (Okayama Univ.)
- 09-01-0045
38 Kei Nishi (Kyoto Sangyo Univ.) Transient behaviors of traveling multiple-pulse solutions in a three-
Yasumasa Nishiura (Hokkaido Univ.) component FitzHugh–Nagumo system 15
- 09-01-0037
39 Masaharu Nagayama (Hokkaido Univ.) On a numerical bifurcation analysis of a particle reaction-diffusion
Yusuke Yasugahira (Hokkaido Univ.) model for a motion of two self-propelled disks 15

March 31st (Thu)

9:00–10:45

- 09-01-0008
40 Fuminori Sakaguchi (Univ. of Fukui) A reverse application of ‘ill-posedness’ —an advantage of multiple pre-
cision in a integer-type algorithm for solving ODEs— 15

09-01-0017

- 41 Takuya Tsuchiya (Hachinohe Inst. of Tech.) Numerical integration of Einstein equations in gravitational collapse spacetime considering mass conservation 15
 Ryosuke Urakawa
 Gen Yoneda (Waseda Univ.)

09-01-0030

- 42 Hirotsada Honda (Toyo Univ.) Revisiting the stability of GAN 10

09-01-0040

- 43 Shinya Uchiumi (Gakushuin Univ.) A pressure error estimate for a projection Lagrange–Galerkin scheme of Guermond–Mineev type for the Oseen problem 15

09-01-0011

- 44 Yoshitaka Watanabe (Kyushu Univ.) A computer-assisted proof of critical Reynolds number for Orr–Sommerfeld equation 15
 Kaori Nagatou (Karlsruhe Inst. of Tech.)
 Michael Plum (Karlsruhe Inst. of Tech.)
 Takehiko Kinoshita (Saga Univ.)
 Mitsuhiro T. Nakao (Waseda Univ.)

09-01-0032

- 45 Makoto Okumura (Hokkaido Univ.) A mathematical study of the mechanism of hair follicle formation using a mathematical model for large deformation of basement membrane 15
 Yasuaki Kobayashi (Hokkaido Univ.)
 Masaharu Nagayama (Hokkaido Univ.)
 Hironobu Fujiwara (RIKEN)
 Yasugahira Yusuke (Hokkaido Univ.)

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

09-02-0002

- Keita Iida (Osaka Univ.) Single-cell gene expression data analysis

Topology

March 28th (Mon)

9:30–12:00

10-01-0003

- 1 Shunsuke Kano (Tohoku Univ.) A characterization of pseudo-Anosov mapping classes by tropical cluster transformations 15
 Tsukasa Ishibashi (Kyoto Univ.)

10-01-0029

- 2 Ramón Barral Lijó (Ritsumeikan Univ.) Realization of manifolds as leaves of foliated spaces 15
 Jesús Antonio Álvarez López
 (Univ. of Santiago de Compostela)

10-01-0013

- 3 Hiroki Kodama Torus fibrations from S^5 to S^3 found from Milnor fibrations of certain complex surface singularities 15
 (Tohoku Univ./RIKEN)
 Naohiko Kasuya (Hokkaido Univ.)
 Yoshihiko Mitsumatsu (Chuo Univ.)
 Atsuhide Mori (Osaka Dent. Univ.)

10-01-0008

- 4 Yoshihiko Mitsumatsu (Chuo Univ.) Lefschetz fibration on Milnor fibers of cusp singularities and topological decomposition of K3 surfaces 15
 Naohiko Kasuya (Hokkaido Univ.)
 Hiroki Kodama
 (Tohoku Univ./RIKEN)
 Atsuhide Mori (Osaka Dent. Univ.)

10-01-0004

- 5 Yasushi Hirata (Kanagawa Univ.) Undecidability for the extent of products of monotonically normal spaces 10
 Yukinobu Yajima
 (Kanagawa Univ.*/Math Art Laboratory)

10-01-0006

- 6 Hirokazu Nishinobu An example of non-coformal classifying space with rational $H(2)$ -structure 10
 (Nagano Nat. Coll. of Tech.)
 Toshihiro Yamaguchi (Kochi Univ.)

10-01-0022

- 7 Kaori Yamazaki Exchange economy from viewpoints of general topology 15
 (Takasaki City Univ. of Econ.)

10-01-0023

- 8 Sachiko Saito (Hokkaido Univ. of Edu.) Newton non-degeneracy and strongly Newton non-degeneracy of mixed weighted homogeneous polynomials 10
 Kosei Takashimizu
 (Seiryō Junior High School)

10-01-0027

- 9 Yusuke Mizota (Kyushu Sangyo Univ.) All unconstrained strongly convex problems are weakly simplicial 15
 Shunsuke Ichiki (Tokyo Tech)
 Naoki Hamada (KLab Inc.)

14:15–15:05

10-01-0005

- 10 Kazuhiro Ichihara (Nihon Univ.) Purely cosmetic surgeries on alternating Montesinos knots 10
 In Dae Jong (Kinki Univ.)

10-01-0010

- 11 Masaki Ogawa (Saitama Univ.) A characterization of a 3-manifold with a multibranch handlebody decomposition 15

10-01-0025

- 12 Teruaki Kitano (Soka Univ.) Algebraic integrality of Reidemeister torsion 10
 Yuta Nozaki (Hiroshima Univ.)

15:20–16:20 Talk Invited by Topology Section

10-02-0001

- Yuya Koda (Hiroshima Univ.) Mapping class groups of Heegaard splittings

March 29th (Tue)

9:30–11:50

- [10-01-0007](#)
13 Akihito Mori (Tohoku Univ.) The Witten–Reshetikhin–Turaev invariant for plumbed manifolds 15
Yuya Murakami (Tohoku Univ.)
- [10-01-0015](#)
14 Yuta Taniguchi (Osaka Univ.) A knot invariant obtained from an f -twisted Alexander matrix 15
- [10-01-0017](#)
15 Akihiro Takano (Univ. of Tokyo) The Long–Moody construction and twisted Alexander invariants 15
- [10-01-0018](#)
16 Shuichi Harako (Univ. of Tokyo) Computational results for the symplectic derivation Lie algebras 15
- [10-01-0019](#)
17 Atsuhiko Mizusawa (Waseda Univ.) A classification of 5-component link-homotopy classes through the
Yuka Kotorii clasper theory 15
(Hiroshima Univ./RIKEN)
- [10-01-0021](#)
18 Takefumi Nosaka (Tokyo Tech) Fox pairings of Poincaré duality groups 10
- [10-01-0030](#)
19 Kentaro Yonemura (Kyushu Univ.) Quandles over a one-sheet hyperboloid and longitudinal map 15
- [10-01-0032](#)
20 Tsukasa Ishibashi (Kyoto Univ.) Stated and marked skein algebras 10
Wataru Yuasa (Kyoto Univ.)

12:15–12:25 Presentation Ceremony for the 2021 MSJ Geometry Prize**13:15–14:15 Talk Invited by Topology Section**

- [10-02-0003](#)
Takefumi Nosaka (Tokyo Tech) Nilpotent knot-invariants and Johnson homomorphisms of the mapping
class group

March 30th (Wed)

9:30–12:00

- [10-01-0001](#)
21 Erika Kuno (Osaka Univ.) Uniform hyperbolicity of nonseparating curve graphs of nonorientable
surfaces 10
- [10-01-0002](#)
22 Erika Kuno (Osaka Univ.) Uniform hyperbolicity of fine curve graphs of nonorientable surfaces
Mitsuaki Kimura (Kyoto Univ.) 10
- [10-01-0012](#)
23 Hirotaka Akiyoshi (Osaka City Univ.) Dirichlet domains for some one-cone torus bundles 10
- [10-01-0014](#)
24 Naoki Kimura (Waseda Univ.) Bi-Legendrian rack coloring numbers of Legendrian knots 10
- [10-01-0016](#)
25 Jumpei Yasuda (Osaka Univ.) A plat form presentation for surface-links 15
- [10-01-0024](#)
26 Takahiro Oba (Osaka Univ.) A four-dimensional mapping class relation 15
- [10-01-0031](#)
27 Tatsumasa Suzuki (Tokyo Tech) Pochette surgery on S^4 15
Motoo Tange (Univ. of Tsukuba)
- [10-01-0009](#)
28 Sakumi Sugawara (Hokkaido Univ.) Link diagrams of divides with cusps 15
- [10-01-0011](#)
29 Yu Tajima (Hokkaido Univ.) Magnitude homology of graphs and discrete Morse theory on Asao–
Masahiko Yoshinaga (Hokkaido Univ.) Izumihara complexes 15

14:15–15:15[10-01-0020](#)

30 Koji Yamazaki (Tokyo Tech) Sheaf theoretic characterization of étale groupoids 15

[10-01-0028](#)

31 Shuhei Maruyama (Nagoya Univ.) The Dixmier–Douady class, the action homomorphism, and cocycles on the group of symplectomorphisms 15

[10-01-0026](#)32 Hitoshi Moriyoshi (Nagoya Univ.) Quantum walk on the integer lattice and the Nöther index theorem 15
Toshikazu Natsume
(Nagoya Inst. of Tech.)**15:30–16:30 Talk Invited by Topology Section**[10-02-0002](#)Takahiro Matsushita Invariant quasimorphisms and mixed commutator lengths
(Univ. of Ryukyus)

Infinite Analysis

March 30th (Wed)

10:00–12:00

11-01-0002

- 1 Kohei Motegi (Tokyo Univ. of Marine Sci. and Tech.) An extension of an identity for Grothendieck polynomials to skew version using Yang–Baxter algebra 15

11-01-0012

- 2 Yusuke Ohkubo (Daiichi Univ. of Pharm.) Deformed Koornwinder operators and Macdonald polynomials of type C I 15

Ayumu Hoshino

(Hiroshima Inst. of Tech.)

Jun'ichi Shiraishi (Univ. of Tokyo)

11-01-0010

- 3 Ayumu Hoshino (Hiroshima Inst. of Tech.) Deformed Koornwinder operators and Macdonald polynomials of type C II 15

Yusuke Ohkubo

(Daiichi Univ. of Pharm.)

Jun'ichi Shiraishi (Univ. of Tokyo)

11-01-0004

- 4 Toshiki Nakashima (Sophia Univ.) Decomposition theorem for product of fundamental crystals in monomial realization of type C_n 15

Manal I. Alshuqayr (Sophia Univ.)

11-01-0005

- 5 Yuki Kanakubo (Univ. of Tsukuba) An algorithm for Berenstein–Kazhdan decoration functions for minuscule representations 15

Gleb Koshevoy (IITP RAS)

Toshiki Nakashima (Sophia Univ.)

11-01-0007

- 6 Travis Scrimshaw (Osaka City Univ.) Quasi-solvable colored lattice models for types B and C 15

14:15–14:50

11-01-0008

- 7 Ryo Takenaka (Osaka City Univ.) Vertex operator algebras and fermionic character formulas of affine Lie algebras 15

Masato Okado (Osaka City Univ.)

11-01-0015

- 8 Hiromu Nakano (Tohoku Univ.) On logarithmic modules of the $N = 1$ triplet vertex operator superalgebras 15

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

11-02-0001

- Takeo Kojima (Yamagata Univ.) Quadratic relations of the deformed W -algebra $\mathcal{W}_{q,t}(\mathfrak{g})$

March 31st (Thu)

10:00–12:00

11-01-0001

- 9 Aomoto Kazuhiko (Nagoya Univ.) Product of Hessians on critical points of level function F attached to hypergeometric integral associated with sphere arrangement 15

Masahiko Ito (Univ. of Ryukyus)

11-01-0006

- 10 Taichiro Takagi Lax equations using the loop elementary symmetric functions 15

(Nat. Defense Acad. of Japan)

11-01-0009

- 11 Shota Shigetomi (Kyushu Univ.) Explicit formula of isoperimetric deformation of discrete space curve with constant torsion angle in terms of elliptic theta function 15

Kenji Kajiwara (Kyushu Univ.)

11-01-0003

- 12 Tomoki Nakanishi (Nagoya Univ.) Cluster scattering diagrams, dilogarithm elements, and pentagon relation 15

[11-01-0011](#)

13 Kodai Matsushita (Nagoya Univ.) Consistency relation of rank 2 cluster scattering diagrams of affine type and pentagon relation 15

[11-01-0014](#)

14 Yuma Mizuno (Chiba Univ.) Mutations of blowups of toric surfaces and q -Painlevé systems 15

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

[11-02-0002](#)

Tomohiro Sasamoto (Tokyo Tech) Skew RSK, affine crystal and KPZ