

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 Z means the talk by using a Zoom Video Webinar.
- The mark ★ means emeritus professor.
- The number on the right side of the title implies the time of talk (minutes). There are some talks whose limited time is shortened due to various reasons. Your kind understanding is appreciated.

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Algebra	4
Geometry	8
Complex Analysis	10
Functional Equations	12
Real Analysis	18
Functional Analysis	20
Statistics and Probability	22
Applied Mathematics	25
Topology	29
Infinite Analysis	31

Foundation of Mathematics and History of Mathematics

September 16th (Thu)

10:15–12:00

- [01-01-0020](#)
1 Kohtaro Tadaki (Chubu Univ.)^Z A refinement of quantum information theory by algorithmic randomness
V 15
- [01-01-0016](#)
2 Takahiro Seki (Niigata Univ.)^Z A classification of a family of associativity associated with exchange
..... 15
- [01-01-0003](#)
3 Yuya Okawa (Chiba Univ.)^Z Unary interpretability logics for sublogics of the interpretability logic **IL**
..... 15
- [01-01-0006](#)
4 Taishi Kurahashi (Kobe Univ.)^Z On inclusions between quantified provability logics 15
- [01-01-0012](#)
5 Sohei Iwata (Kobe Univ.)^Z Topological semantics of extensions of the conservativity logic CL 15
Taishi Kurahashi (Kobe Univ.)
- [01-01-0015](#)
6 Taishi Kurahashi (Kobe Univ.)^Z Disjunction and existence properties in modal arithmetic 15

14:40–15:30

- [01-01-0011](#)
7 Daniel Găină (Kyushu Univ.)^Z Omitting Types Theorem in hybrid-dynamic first-order logic with rigid
Guillermo Badia (Univ. of Queensland/Johannes Kepler Univ. Linz) symbols 15
Tomasz Kowalski (La Trobe Univ.)
- [01-01-0018](#)
8 Akito Tsuboi (Univ. of Tsukuba*)^Z Torsion-free groups and model completeness 10
- [01-01-0019](#)
9 Koichiro Ikeda (Hosei Univ.)^Z Groups in generic structures 15

September 17th (Fri)

9:20–10:15

- [01-01-0017](#)
10 Ryosuke Maki (Osaka Pref. Univ.)^Z Sierpiński–Zygmund number and Suslin forcing 15
Masaru Kada (Osaka Pref. Univ.)
- [01-01-0008](#)
11 Toshimichi Usuba (Waseda Univ.)^Z Generically extendible cardinals 15
- [01-01-0010](#)
12 Sakaé Fuchino (Kobe Univ.)^Z First-order definability of generic and Laver-generic large cardinals ... 15

10:30–10:45 Research Section Assembly

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

- [01-02-0001](#)
Takayuki Kihara (Nagoya Univ.)^Z Hierarchies of computability and definability

Afternoon

- [01-01-0001](#)
13 Shigeru Masuda (Res. Workshop of Classical Fluid Dynamics) Theory of the Eulerian integrals by Legendre *
- [01-01-0002](#)
14 Shigeru Masuda (Res. Workshop of Classical Fluid Dynamics) Legendre's theory of elliptic functions and Abel's theories *
- [01-01-0005](#)
15 Shigeru Masuda (Res. Workshop of Classical Fluid Dynamics) Jacobi's papers to Abel and Legendre on the theory of the elliptic functions *

01-01-0004

- 16 Saburo Saitoh Division by zero and division by zero calculus *
- (Gunma Univ./Inst. of Reproducing Kernels)

01-01-0007

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

01-01-0009

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

01-01-0013

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

01-01-0014

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

14:45–15:00 Mathematics History Team Meeting

Algebra

September 14th (Tue)

10:00–11:45

02-01-0027

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

02-01-0062

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

02-01-0070

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

02-01-0051

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

02-01-0044

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

02-01-0034

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

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

02-02-0001

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

15:40–16:50

02-01-0015

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

02-01-0026

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

02-01-0018

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

02-01-0064

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

02-01-0038

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

02-01-0011

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

September 15th (Wed)

9:30–12:00

02-01-0035

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

02-01-0012

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

- [02-01-0013](#)
 15 [Shigeo Koshitani](#) (Chiba Univ.)^Z Splendid Morita equivalences for principal blocks with semidihedral defect groups 10
 Caroline Lassueur (TU Kaiserslautern)
 Benjamin Sambale
 (Leibniz Univ. Hannover)
- [02-01-0040](#)
 16 [Taro Sakurai](#) (Chiba Univ.)^Z Principal blocks with four irreducible characters 10
 Shigeo Koshitani (Chiba Univ.)
- [02-01-0030](#)
 17 Yuto Moriwaki (Kyoto Univ.)^Z Construction of new conformal field theories with codes 15
- [02-01-0053](#)
 18 Naoki Genra (Univ. of Tokyo)^Z On Adamović path in type A 10
- [02-01-0068](#)
 19 [Mawo Ito](#) (Kyoto Univ.)^Z A generalized hook-content formula derived from the Askey–Wilson polynomials 10
 Shuhei Kamioka (Kyoto Univ.)
- [02-01-0045](#)
 20 [Masahiko Yoshinaga](#) (Hokkaido Univ.)^Z The Ehrhart quasi-polynomials of rationally translated lattice polytopes 15
 Christopher de Vries
 (Bremen Univ./Hokkaido Univ.)
- [02-01-0006](#)
 21 Toshiya Yurikusa (Tohoku Univ.) Cluster algebras with dense g -vector fans *
- [02-01-0017](#)
 22 Mamoru Ueda (Kyoto Univ.) Affine twisted Yangians and rectangular W -algebras of type D *
- [02-01-0041](#)
 23 Yuanqing Cai (Kanazawa Univ.) Twisted doubling integrals for Brylinski–Deligne extensions of classical groups *
- [02-01-0016](#)
 24 Yugen Takegahara p -adic properties of the numbers of representations in wreath products *
 (Muroran Inst. of Tech.)
- [02-01-0019](#)
 25 Shigeto Kawata (Nagoya City Univ.) On tensor products and Scott lattices over group rings *

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

- [02-02-0002](#)
 Sven Möller (Kyoto Univ.)^Z A geometric classification of the holomorphic vertex operator algebras of central charge 24

September 16th (Thu)

9:15–11:15

- [02-01-0059](#)
 26 Shingo Yashiro (Japan Univ. of Econ.)^Z ACM curves on Del Pezzo surfaces 15
- [02-01-0024](#)
 27 Riku Kudou (Waseda Univ.)^Z An affine criterion for affine bundles over quasi-affine varieties 15
- [02-01-0066](#)
 28 Akiyoshi Tsuchiya (Univ. of Tokyo)^Z Castelnovo polytopes 15
- [02-01-0067](#)
 29 Selvi Kara (Univ. South Alabama)^Z Rigidity of Gorenstein toric Fano varieties arising from graphs 15
 Irem Portakal
 (Otto-von-Guericke-Univ. Magdeburg)
 Akiyoshi Tsuchiya (Univ. of Tokyo)
- [02-01-0003](#)
 30 Kaori Suzuki (Yokohama Nat. Univ.)^Z On Fano-3folds of codim 5 with large Fano index 15
- [02-01-0072](#)
 31 Norihiko Minami^Z Relations among higheries originating from lower rationality = higher uniruledness —separably (-i) rationally connectedness— 15
 (Nagoya Inst. of Tech.)

11:30–12:00 Research Section Assembly**14:25–15:25 Talk Invited by Algebra Section**

- [02-02-0003](#)
 Atsushi Kanazawa (Keio Univ.)^Z Attractor mechanisms of Calabi–Yau manifolds and around

15:40–16:50

- [02-01-0042](#)
32 Makoto Sakurai (Kaichi Gakuen)^Z Factorization algebras and the quasi-modular form conjecture of mirror symmetry 15
- [02-01-0023](#)
33 Kotaro Kawatani^Z Stability conditions on morphisms on a category 15
(Osaka Pref. Univ./Yamato Univ.)
- [02-01-0047](#)
34 Yoshimune Koreeda (Hiroshima Univ.)^Z On the configuration of the singular fibers of jet schemes of rational double points 15
- [02-01-0037](#)
35 Kenta Sato (Kyushu Univ.)^Z Deformation of klt/lc singularities 15
Shunsuke Takagi (Univ. of Tokyo)
- [02-01-0008](#)
36 Tomohiro Iwami (Kyushu Inst. of Tech.) Threefolds whose numerical Kodaira dimensions 1 or 2 and three-dimensional Miyaoka–Yau type inequality with the 3rd Chern classes driven by symmetric 2-forms *
- [02-01-0009](#)
37 Tetsuya Ando (Chiba Univ.) Test set —as an application of characteristic varieties of inequalities— *
- [02-01-0033](#)
38 Michio Amano (Meisei Univ.) On the Cartier duality of certain finite group schemes over $\mathbb{Z}_{(p)}$ -algebra containing some nilpotent elements *
- [02-01-0043](#)
39 Mariko Ohara On Algebraic K -theory of duoidal category *
(Oshima Nat. Coll. of Maritime Tech.)
- [02-01-0046](#)
40 Momonari Kudo (Univ. of Tokyo) Parameterizing generic curves of genus five and its application to finding curves with many rational points *
Shushi Harashita
(Yokohama Nat. Univ.)
- [02-01-0004](#)
41 Yusuke Suyama (Osaka City Univ.) 2-Fano Bott manifolds *
- [02-01-0050](#)
42 Taku Suzuki (Utsunomiya Univ.) Slope stability of Fano manifolds *

September 17th (Fri)

9:00–12:00

- [02-01-0063](#)
43 Yoshiaki Okumura (Toyo Univ.)^Z On congruence of Galois representations attached to A -motives 12
- [02-01-0049](#)
44 Hiroto Horiba^Z Galois theoretic study on simultaneous representation of primes by binary quadratic forms 12
Masanari Kida (Tokyo Univ. of Sci.)
Genki Koda (Tokyo Univ. of Sci.)
- [02-01-0036](#)
45 Akinari Hoshi (Niigata Univ.)^Z Davenport and Hasse’s theorems and lifts of multiplication matrices of Gaussian periods 10
Kazuki Kanai (Niigata Univ.)
- [02-01-0071](#)
46 Norihiko Minami^Z Relations among higheries originating from lower rationality = higher uniruledness —applications to Noether’s problem for finite groups— 12
(Nagoya Inst. of Tech.)
- [02-01-0022](#)
47 Yasuhiro Terakado (NCTS)^Z Mass formulas on the basic loci of unitary Shimura varieties 12
- [02-01-0048](#)
48 Yasuhiro Oki (Univ. of Tokyo)^Z A question on the weak approximation on tori over the rational number field 12
- [02-01-0065](#)
49 Masahiro Mine (Sophia Univ.)^Z Large deviations for values of automorphic L -functions 12
- [02-01-0025](#)
50 Yasufumi Hashimoto^Z Square integral of Selberg’s zeta function in the critical strip 12
(Univ. of Ryukyus)

- 02-01-0032
51 Kohichi Ohki (OK Lab. Co. Ltd.)^Z The determinant representation of the entire Riemann's Zeta function and proof of it's matrix is Hermitian 12
- 02-01-0052
52 Masato Kobayashi (Kanagawa Univ.)^Z Some infinite series analogous to Riemann's zeta function 12
Shunji Sasaki
(Kamiaoki Junior High School)
- 02-01-0014
53 Wataru Takeda (Tokyo Univ. of Sci.)^Z Extended Jacobi–Trudi formula for Schur multiple zeta functions and its applications 12
Maki Nakasuji (Sophia Univ.)
- 02-01-0054
54 Daichi Matsuzuki (Nagoya Univ.)^Z Finite multiple zeta values with non-all-positive indices in positive characteristic 12
- 14:25–15:25 Talk Invited by Algebra Section**
- 02-02-0004
Daichi Takeuchi (RIKEN)^Z Characteristic epsilon cycles of ℓ -adic sheaves on varieties
- 15:40–16:50**
- 02-01-0055
55 Kota Saito (Nagoya Univ.)^Z Prime-representing functions and Hausdorff dimension 12
- 02-01-0010
56 Daniel Tsai (Nagoya Univ.)^Z A recurring pattern in natural numbers of a certain property 12
- 02-01-0007
57 Takafumi Miyazaki (Gunma Univ.)^Z Number of solutions to the exponential Diophantine equation $a^x + b^y = c^z$ 12
- 02-01-0005
58 Daniel Duverney^Z Three irregular continued fractions of finite sums 10
(Baggio Engineering School)
Takeshi Kurosawa (Tokyo Univ. of Sci.)
Iekata Shiokawa (Keio Univ.)
- 02-01-0002
59 Shigeru Iitaka (Gakushuin Univ.*)^Z Variants of Mersenne primes 12
- 02-01-0028
60 Makoto Minamide (Yamaguchi Univ.) On an error term for the mean of the sum of congruent divisors *
Yoshikatsu Yashiro (Chubu Univ.)
Yoshio Tanigawa
- 02-01-0020
61 Isao Kiuchi (Yamaguchi Univ.) On sums of sums involving squarefull numbers *
- 02-01-0021
62 Isao Kiuchi (Yamaguchi Univ.) On sums involving the Euler totient function *
Yuki Tsuruta (Yamaguchi Univ.)
- 02-01-0001
63 Shin-ya Koyama (Toyo Univ.) Variations of Ramanujan's Euler product *
Nobushige Kurokawa (Tokyo Tech*)
- 02-01-0039
64 Hiroataka Kobayashi (Nagoya Univ.) On the discrete mean of the higher derivative of Hardy's Z -function *
- 02-01-0069
65 Kenta Endo (Nagoya Univ.) Effective estimate for approximation theorem by zeta-functions *
- 02-01-0029
66 Humihiko Watanabe The number of critical points of a product of powers of theta functions in two variables *
(Nat. Defense Acad. of Japan)

Geometry

September 14th (Tue)

10:00–12:00

03-01-0010

- 1 Natsuo Miyatake (Osaka Univ.)^Z Kobayashi–Hitchin correspondence of harmonic bundles with diagonal harmonic metrics 15

03-01-0012

- 2 Soma Ohno (Waseda Univ.)^Z Rarita–Schwinger fields on nearly Kähler manifolds 15
Takuma Tomihisa (Waseda Univ.)

03-01-0017

- 3 Tadashi Fujioka (Kyoto Univ.)^Z Collapsing to Alexandrov spaces with isolated mild singularities 15

03-01-0023

- 4 Tomohiro Fukaya (Tokyo Metro. Univ.)^Z Induced maps between boundaries of coarsely convex spaces 15

03-01-0021

- 5 Ken Sumi (Kyoto Univ.)^Z Riemann–Roch inequality for smooth compact tropical toric surfaces 15

03-01-0019

- 6 Xiaodan Zhou^Z Quasiconformal and Sobolev mappings in non-Ahlfors regular metric spaces 15
(Okinawa Inst. of Sci. and Tech. Grad. Univ.)

14:25–15:25

03-01-0014

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

03-01-0015

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

03-01-0009

- 9 Tatsuki Kuwagaki (Osaka Univ.)^Z Symplectic geometry and exact WKB analysis 15

03-01-0002

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

03-01-0007

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

03-01-0008

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

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

03-02-0002

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

September 15th (Wed)

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

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

10-02-0002

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

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

10-02-0003

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

September 16th (Thu)

10:00–12:00

03-01-0001

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

03-01-0004

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

03-01-0005

- 15 Yoshiaki Jikumaru (Kyushu Univ.)^Z On the stability problem of discrete planar curves 15

03-01-0011

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

03-01-0013

- 17 Johannes Jaerisch (Nagoya Univ.)^Z Cusp winding spectra for some hyperbolic surfaces 15
Hiroki Takahashi (Keio Univ.)

03-01-0018

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

14:25–15:25

03-01-0006

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

03-01-0022

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

03-01-0020

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

03-01-0003

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

03-01-0016

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

03-01-0024

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

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

03-02-0001

- Hitoshi Furuhata (Hokkaido Univ.)^Z Submanifold theory in statistical manifolds

Complex Analysis

September 14th (Tue)

10:00–12:00

04-01-0011

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

04-01-0012

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

04-01-0014

- 3 Shun Kumagai (Tohoku Univ.)^Z Veech groups of general origamis 15

04-01-0015

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

04-01-0016

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

04-01-0017

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

04-01-0002

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

04-01-0003

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

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

04-02-0001

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

September 15th (Wed)

10:00–10:30

04-01-0009

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

04-01-0010

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

04-01-0004

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

04-01-0005

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

04-01-0008

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

04-01-0001

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

04-01-0006

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

04-01-0013

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

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

04-02-0002

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

Functional Equations

September 14th (Tue)

9:00–12:00

- [05-01-0018](#)
1 Saiei-Jaeyeong Matsubara-Heo^Z Localization formulas of cohomology intersection numbers 14
(Kobe Univ.)
- [05-01-0066](#)
2 Sunao Ōuchi (Sophia Univ.*)^Z Transformation and construction of solutions of a system of nonlinear ordinary differential equations by Borel summable functions 14
- [05-01-0078](#)
3 Mika Tanda (Kwansei Gakuin Univ.)^Z Exact WKB analysis of the hypergeometric differential equation with a simple pole 14
- [05-01-0073](#)
4 Kanam Park (Kwansei Gakuin Univ.)^Z A 3×3 Lax form for q -Painlevé equations of type E_6 14
- [05-01-0028](#)
5 Masakazu Onitsuka^Z Ulam stability for Cayley quantum equations 14
(Okayama Univ. of Sci.)
- [05-01-0052](#)
6 Kotaro Watanabe^Z Multiple existence of positive even function solutions for a two point boundary value problem on some very narrow possible parameter set 14
(Nat. Defense Acad. of Japan)
Satoshi Tanaka (Tohoku Univ.)
Naoki Shioji
- [05-01-0053](#)
7 Kodai Fujimoto (Osaka Pref. Univ.)^Z Singular solutions of ordinary differential equations with $p(t)$ -Laplacian 14
Miroslav Bartušek (Masaryk Univ.)
- [05-01-0007](#)
8 Kazuki Ishibashi^Z Oscillation problem for modified Mathieu differential equation 10
(Hiroshima Nat. Coll. of Maritime Tech.)
- [05-01-0008](#)
9 Tetsutaro Shibata (Hiroshima Univ.)^Z Global structure of bifurcation curves related to inverse bifurcation problems 14
- [05-01-0049](#)
10 Ryuji Kajikiya (Saga Univ.)^Z Bifurcation of nodal solutions for the Moore–Nehari differential equation 14
- [05-01-0017](#)
11 Yasuhito Miyamoto (Univ. of Tokyo)^Z Stable standing waves of nonlinear Schrödinger equations with potentials and general nonlinearities 10
Norihisa Ikoma (Keio Univ.)
- [05-01-0044](#)
12 Shinji Adachi (Shizuoka Univ.)^Z G -invariant positive solutions for a class of locally superlinear Schrödinger equations 14
Tatsuya Watanabe
(Kyoto Sangyo Univ.)

14:25–15:30

- [05-01-0045](#)
13 Tatsuki Mori (Musashino Univ.)^Z Representation formulas for stationary solutions of a cell polarization model 14
Tohru Tsujikawa (Univ. of Miyazaki*)
Shoji Yotsutani (Ryukoku Univ.*)
- [05-01-0036](#)
14 Eita Tomimatsu (Tokyo Tech)^Z Some Allard type regularity theorem for one-dimensional integral varifolds 10
- [05-01-0080](#)
15 Kensuke Yoshizawa (Tohoku Univ.)^Z The critical points of the elastic energy among curves pinned at end-points 14
- [05-01-0059](#)
16 Erika Ushikoshi^Z Asymptotic behavior of the eigenfrequencies of a thin elastic rod with non-uniform cross-section for non-isotropic shrinking 14
(Yokohama Nat. Univ./Osaka Univ.)
Shuichi Jimbo (Hokkaido Univ.)
Hiromasa Yoshihara
(Yokohama Nat. Univ.)

05-01-0034	17	Hidetoshi Tahara (Sophia Univ.*)	Uniqueness of the solution of some nonlinear singular partial differential equations	*
05-01-0004	18	Humihiko Watanabe (Nat. Defense Acad. of Japan) Yasuhiro Mizutani (Nat. Defense Acad. of Japan)	On integrals of hypergeometric type of genus 2	*
05-01-0013	19	Hiroyuki Usami (Gifu Univ.) Sokea Luey (Gifu Univ.)	Asymptotic forms of solutions of perturbed half-linear ordinary differential equations	*
05-01-0016	20	Akari Ishida (Osaka Univ.)	A depth-dependent stability estimate in an iterative method for solving a Cauchy problem for the Laplace equation	*
05-01-0060	21	Kazuhiro Takimoto (Hiroshima Univ.)	Exact blowup rate near the boundary of boundary blowup solutions to k -Hessian equation	*
05-01-0012	22	Saburo Saitoh (Gunma Univ.*/Inst. of Reproducing Kernels)	Many problems in differential equations from the viewpoint of division by zero calculus	*
15:45–16:45 Talk Invited by Functional Equations Section				
05-02-0002		Kohei Iwaki (Univ. of Tokyo) ^Z	Exact WKB analysis and related topics	

September 15th (Wed)

9:00–12:00

05-01-0081	23	Masato Hashizume (Hiroshima Univ.) ^Z	Asymptotic behavior of critical points for subcritical Trudinger–Moser functional	14
05-01-0015	24	Takashi Suzuki (Osaka Univ.) ^Z	Blowup of solutions to nonlinear elliptic eigenvalue problems	5
05-01-0027	25	Evan William Chandra (Osaka Univ.) ^Z Michinori Ishiwata (Osaka Univ.) Rolando Magnanini (Univ. of Florence) Hidemitsu Wadade (Kanazawa Univ.)	Variational p -harmonious functions: existence and convergence to p -harmonic functions	14
05-01-0001	26	Yuya Tanaka (Tokyo Univ. of Sci.) ^Z	Boundedness and blow-up in a quasilinear parabolic-elliptic chemotaxis system with logistic source and nonlinear production	14
05-01-0002	27	Yutaro Chiyo (Tokyo Univ. of Sci.) ^Z Tomomi Yokota (Tokyo Univ. of Sci.)	Boundedness in an attraction-repulsion chemotaxis system with nonlinear diffusion and singular sensitivity	14
05-01-0054	28	Taiki Takeuchi (Waseda Univ.) ^Z	On the Keller–Segel system of parabolic-parabolic type in homogeneous Besov spaces framework	12
05-01-0032	29	Yūki Naito (Hiroshima Univ.) ^Z	Blow-up criteria for the classical Keller–Segel system in higher dimensions	10
05-01-0050	30	Tatsuya Hosono (Tohoku Univ.) ^Z Takayoshi Ogawa (Tohoku Univ.)	Finite time blow-up of solutions to an attraction-repulsion chemotaxis system in higher dimensions	14
05-01-0019	31	Ryu Fujiwara (Meiji Univ.) ^Z	Discontinuous steady states of the nonlocal prey-predator system	14
05-01-0024	32	Yuta Ishii (Ibaraki Nat. Coll. of Tech.) ^Z	On one-peak stationary solutions for the Gierer–Meinhardt model with heterogeneity on Y -shaped metric graph	14
05-01-0068	33	Ken-Ichi Nakamura (Kanazawa Univ.) ^Z Yoshihisa Morita (Ryukoku Univ.) Toshiko Ogiwara (Josai Univ.)	Front propagation and blocking of the competition-diffusion system in a domain of half-lines with a junction	14

- 05-01-0079
34 Ken-Ichi Nakamura (Kanazawa Univ.)^Z Toshiko Ogiwara (Josai Univ.) A classification of strong competition conditions by the speed of traveling waves for Lotka–Volterra competition–diffusion systems 14
- 05-01-0067
35 Kenta Nakamura (Kumamoto Univ.) Masashi Misawa (Kumamoto Univ.) Intrinsic scaling method for fast diffusive type doubly nonlinear equations *
- 05-01-0029
36 Yasuhito Miyamoto (Univ. of Tokyo) Masamitsu Suzuki (Univ. of Tokyo) Thresholds on growth of nonlinearities and singularity of initial functions for semilinear heat equations *
- 05-01-0010
37 Tomoyuki Tanaka (Nagoya Univ.) Luc Molinet (Univ. de Tours) Unconditional well-posedness for some nonlinear periodic one-dimensional dispersive equations *
- 05-01-0082
38 Noboru Chikami (Nagoya Inst. of Tech.) Masahiro Ikeda (RIKEN/Keio Univ.) Koichi Taniguchi (Tohoku Univ.) Optimal well-posedness of Hardy–Hénon parabolic equation *
- 05-01-0071
39 Atsushi Nakayasu (Kyoto Univ.) Homogenization of Hamilton–Jacobi equations on the Sierpinski gasket *
- 05-01-0058
40 Isamu Ohnishi (Hiroshima Univ.) Characterization of a long-term behavior of solutions to nonlinear parabolic PDEs with a jumping effect *
- 05-01-0055
41 Kota Ikeda (Meiji Univ.) Center manifold theory for a mathematical model of camphor boats *
- 05-01-0038
42 Yikan Liu (Hokkaido Univ.) Uniqueness for the simultaneous determination of multiple coefficients in a fractional evolution equation by a single measurement *

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

- 05-02-0004
Masahiko Shimojo (Tokyo Metro. Univ.)^Z Spreading and extinction of solutions to the logarithmic diffusion equation with a logistic reaction

September 16th (Thu)

9:00–12:00

- 05-01-0072
43 Nao Hamamuki (Hokkaido Univ.)^Z Kuniyasu Misu (Hokkaido Univ.) Asymptotic shape of solutions to the mean curvature flow equation with discontinuous source terms 14
- 05-01-0048
44 Takashi Kagaya (Kyushu Univ.)^Z Qing Liu (Fukuoka Univ.) Singular Neumann boundary problems for a class of fully nonlinear parabolic equations 14
- 05-01-0077
45 Takeshi Suguro (Tohoku Univ.)^Z Takayoshi Ogawa (Tohoku Univ.) Asymptotic behavior of a solution to the drift-diffusion equation for a fast-diffusion case via a generalized entropy 14
- 05-01-0085
46 Kotaro Sato (Tohoku Univ.)^Z Goro Akagi (Tohoku Univ.) On some quasistatic evolution equation with irreversibility and energy-conservation 14
- 05-01-0006
47 Naoki Hamamoto (Osaka Pref. Univ.)^Z Sharp uncertainty principle inequality for solenoidal fields 12
- 05-01-0056
48 Kenta Higuchi (Ritsumeikan Univ.)^Z Semiclassical resonances for systems near a non-trapping energy for scalar Schrödinger operators 14
- 05-01-0030
49 Naoki Matsui (Tokyo Univ. of Sci.)^Z Minimal-mass blow-up solutions for nonlinear Schrödinger equations with potentials 14
- 05-01-0035
50 Yuki Osada (Tokyo Metro. Univ.)^Z Asymptotic expansion of the ground state energy for nonlinear Schrödinger system with three wave interaction 14

05-01-0033

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

05-01-0003

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

05-01-0064

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

14:25–15:30

05-01-0040

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

05-01-0041

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

05-01-0084

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

05-01-0043

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

05-01-0031

- 58 Sojiro Murai Strichartz estimates for magnetic Schrödinger equation in exterior domain and its application *

(Tokyo Metropolitan Coll. of Indus. Tech.)

05-01-0020

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

05-01-0070

- 60 Gen Nakamura (Hokkaido Univ.) Inverse initial boundary value problem for a non-linear hyperbolic partial differential equation *

Manmohan Vashisth

(Indian Inst. of Tech., Jammu)

Michiyuki Watanabe

(Okayama Univ. of Sci.)

05-01-0042

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

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

05-02-0003

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

September 17th (Fri)

9:00–12:00

05-01-0057

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

05-01-0039

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

05-01-0046

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

05-01-0005

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

- 05-01-0069
66 Yusuke Ishigaki (Tokyo Tech)^Z On L^1 estimates of solutions of compressible viscoelastic system 14
- 05-01-0086
67 Kenta Oishi (Waseda Univ.)^Z Local well-posedness for free boundary problem of viscous incompressible magnetohydrodynamics 12
Yoshihiro Shibata (Waseda Univ.)
- 05-01-0076
68 Souhei Sugizaki (Tokyo Tech)^Z Asymptotic stability of radially symmetric stationary solutions for the compressible Navier–Stokes equations 14
Shinya Nishibata (Tokyo Tech)
Itsuko Hashimoto (Kanazawa Univ.)
- 05-01-0037
69 Hiroki Ohyama (Kyushu Univ.)^Z Asymptotic limit of fast rotation for the incompressible Navier–Stokes equations in a 3D layer 14
Ryo Takada (Kyushu Univ.)
- 05-01-0063
70 Ryo Kanamaru (Photon Sansu Club)^Z Logarithmically improved extension criteria involving the pressure for the Navier–Stokes equations in \mathbb{R}^3 14
Tatsuki Yamamoto (Waseda Univ.)
- 05-01-0083
71 Fumitaka Wakabayashi (Waseda Univ.)^Z Removability of time-dependent singularities of the Navier–Stokes equations 14
Hideo Kozono (Waseda Univ.)
Erika Ushikoshi (Yokohama Nat. Univ./Osaka Univ.)
- 05-01-0047
72 Kazuyuki Tsuda ^Z The Fujita–Kato approach for the Navier–Stokes equations with moving boundary and its application 14
(Kyushu Sangyo Univ.)
Reinhard Farwig (TU Darmstadt)
- 05-01-0014
73 Tsukasa Iwabuchi (Tohoku Univ.)^Z Ill-posedness for two dimensional compressible Navier–Stokes equations with scaling critical regularity 14
Takayoshi Ogawa (Tohoku Univ.)
- 14:25–15:30**
- 05-01-0075
74 Ryosuke Nakasato (Tohoku Univ.)^Z Global well-posedness for the Hall-magnetohydrodynamic system in critical Fourier–Besov spaces 14
- 05-01-0025
75 Tatsu-Hiko Miura (Kyoto Univ.)^Z Linear stability and enhanced dissipation for the two-jet Kolmogorov type flow on the unit sphere 14
- 05-01-0026
76 Tatsu-Hiko Miura (Kyoto Univ.)^Z Rate of the enhanced dissipation for the two-jet Kolmogorov type flow on the unit sphere 14
Yasunori Maekawa (Kyoto Univ.)
- 05-01-0011
77 Zhongyang Gu (Univ. of Tokyo)^Z On the Helmholtz decomposition of a space of vector fields with bounded mean oscillation in a curved domain 10
Yoshikazu Giga (Univ. of Tokyo)
- 05-01-0061
78 Natsumi Yoshida (Univ. of Yamanashi) Asymptotics toward the rarefaction waves to the Cauchy problem for the scalar non-viscous diffusive dispersive conservation laws *
- 05-01-0062
79 Natsumi Yoshida (Univ. of Yamanashi) Global asymptotic stability of a multiwave pattern for the generalized Korteweg–de Vries–Burgers–Kuramoto equation *
- 05-01-0009
80 Masashi Ohnawa Asymptotic stability of shock waves in expanding nozzles *
(Tokyo Univ. of Marine Sci. and Tech.)
Masahiro Suzuki (Nagoya Inst. of Tech.)
- 05-01-0021
81 Yoshihiro Shibata (Waseda Univ.) Matsumura–Nishida theory in the L_p - L_q framework *
- 05-01-0022
82 Yoshihiro Shibata (Waseda Univ.) On the Navier–Stokes equations in a periodically moving exterior domain *
- 05-01-0051
83 Ken Furukawa (RIKEN) Mathematical justification of the hydrostatic approximation in the primitive equations under the Dirichlet boundary conditions *
Yoshikazu Giga (Univ. of Tokyo)
Takahito Kashiwabara (Univ. of Tokyo)

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

[05-02-0001](#)

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

Real Analysis

September 16th (Thu)

10:45–12:00

- [06-01-0010](#)
1 Koji Aoyama (Chiba Univ.)^Z Characterizations of a Meir–Keeler type mapping 15
- [06-01-0021](#)
2 Shin-ya Matsushita (Akita Pref. Univ.)^Z On modified primal-dual splitting algorithms 15
- [06-01-0020](#)
3 Ryoji Fukuda (Oita Univ.)^Z On strong zero-set with respect to a k -additive measure 15
Aoi Honda (Kyushu Inst. of Tech.)
Yoshiaki Okazaki
(Fuzzy Logic Systems Inst.)
- [06-01-0012](#)
4 Keiji Yoneda (Kyushu Univ.)^Z Higher-order interpolation inequalities with weights for radial functions
Ryo Takada (Kyushu Univ.) 15

14:25–15:00

- [06-01-0004](#)
5 Satoshi Yamaguchi (Ibaraki Univ.)^Z An extension of the $VMO-H^1$ duality and the Riesz transforms 15
- [06-01-0008](#)
6 Ryota Kawasumi ^Z Weighted boundedness of the Hardy–Littlewood maximal operator on
Eiichi Nakai (Ibaraki Univ.) Orlicz–Morrey and weak Orlicz–Morrey spaces 15
- [06-01-0007](#)
7 Kohei Amagai Generalized fractional integral operators based on symmetric Markovian
Eiichi Nakai (Ibaraki Univ.) semigroups *
Gaku Sadasue (Osaka Kyoiku Univ.)
- [06-01-0016](#)
8 Sachiko Atsushiba Attractive points and convergence theorems for generic 2-generalized
(Tokyo Woman’s Christian Univ.) hybrid mappings *
- [06-01-0018](#)
9 Hiroko Manaka (Nihon Univ.) The projection methods with Bregman distance in Banach spaces *

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

- [06-02-0001](#)
Shohei Nakamura (Osaka Univ.)^Z A study of the Fourier extension operator via X-ray tomography principle

September 17th (Fri)

9:45–12:00

- [06-01-0019](#)
10 Shodai Kubota (Chiba Univ.)^Z Decomposition Theorem of the subdifferential of 1D-regularized total
variation with nonhomogeneous coefficients 15
- [06-01-0006](#)
11 Hiroaki Naito (Kyoto Univ. of Edu.)^Z Long time behavior of single obstacle problems 15
Takeshi Fukao (Kyoto Univ. of Edu.)
- [06-01-0001](#)
12 Yutaro Chiyo (Tokyo Univ. of Sci.)^Z Global existence and boundedness in an attraction-repulsion chemotaxis
Masaaki Mizukami system with signal-dependent sensitivities without logistic source 15
(Kyoto Univ. of Edu.)
Tomomi Yokota (Tokyo Univ. of Sci.)
- [06-01-0002](#)
13 Shunsuke Kurima (Tokyo Univ. of Sci.)^Z A singular nonlocal phase field system with inertial term 15
- [06-01-0011](#)
14 Chiharu Kosugi (Japan Women’s Univ.)^Z Uniqueness of weak solutions for the model representing motions of
Toyohiko Aiki (Japan Women’s Univ.) compressible elastic materials on plane 15

06-01-0022

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

06-01-0009

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

14:25–15:00

06-01-0015

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

06-01-0005

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

06-01-0014

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

06-01-0017

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

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

06-02-0002

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

Functional Analysis

September 14th (Tue)

9:30–10:45

07-01-0012

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

07-01-0005

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

07-01-0013

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

07-01-0003

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

07-01-0007

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

07-01-0001

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

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

07-02-0002

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

September 15th (Wed)

9:00–10:45

07-01-0023

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

07-01-0017

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

07-01-0021

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

07-01-0022

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

07-01-0024

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

07-01-0016

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

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

07-02-0003

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

September 16th (Thu)

9:00–10:45

07-01-0004

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

07-01-0006

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

07-01-0009

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

07-01-0010

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

07-01-0011

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

07-01-0018

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

07-01-0002

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

07-01-0008

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

07-01-0014

21 Yasuo Iida (Kanazawa Med. Univ.) Isometries of the Zygmund F -algebra on the upper half plane ***11:00–12:00 Talk Invited by Functional Analysis Section**

07-02-0004

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

Statistics and Probability

September 14th (Tue)

9:15–11:40

- 08-01-0025
1 Yuki Hirai (Osaka Univ.)^Z Itô–Föllmer calculus in infinite dimensions 15
- 08-01-0031
2 Kiyoi Hoshino (Osaka Pref. Univ.)^Z Identification of random functions from the stochastic Fourier coefficients by the process with quadratic variation 15
- 08-01-0032
3 Ryosuke Shimizu (Kyoto Univ.)^Z Construction of nonlinear potential theory on fractals 15
- 08-01-0008
4 Yuichi Shiozawa (Osaka Univ.)^Z Compactness of semigroups generated by symmetric non-local Dirichlet forms with unbounded coefficients 15
Jian Wang (Fujian Normal Univ.)
- 08-01-0016
5 Takuya Murayama (Chuo Univ.)^Z On the continuity of half-plane capacity with respect to Carathéodory convergence 15
- 08-01-0007
6 Takashi Imamura (Chiba Univ.)^Z A relation between KPZ models and the determinantal point process associated with fermions at positive temperature 15
Matteo Mucciconi (Univ. Warwick)
Tomohiro Sasamoto (Tokyo Tech)
- 08-01-0005
7 Kouji Yano (Kyoto Univ.)^Z Arcsine law for a piecewise linear random interval map 15
- 08-01-0004
8 Hiroki Takahashi (Keio Univ.)^Z Distribution of random cycles for random uniformly expanding interval maps 15
Shintaro Suzuki (Keio Univ.)
- 08-01-0019
9 Masanori Hino (Kyoto Univ.) Singularity of energy measures on a class of inhomogeneous Sierpinski gaskets *
Madoka Yasui
- 08-01-0033
10 Yuto Nakajima (Kyoto Univ.) The Hausdorff dimension of some planar sets with unbounded digits *
- 08-01-0014
11 Kenichiro Yamamoto Large deviation principle for piecewise monotonic maps *
(Nagaoka Univ. of Tech.)
Yong Moo Chung (Hiroshima Univ.)

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

- 08-02-0004
Syota Esaki (Fukuoka Univ.)^Z Stochastic analysis for long range interacting particle systems with jumps

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

- 08-02-0001
Daehong Kim (Kumamoto Univ.)^Z Scattering lengths for positive additive functionals and their related problems

September 15th (Wed)

10:00–11:40

- 08-01-0012
12 Masatake Hirao (Aichi Pref. Univ.)^Z On random point configurations on Q -polynomial schemes 15
- 08-01-0017
13 Kazuki Matsubara (Saitama Univ.)^Z Some constructions of ordered multi-designs 15
Sanpei Kageyama (Hiroshima Univ.)*
- 08-01-0024
14 Yuzo Maruyama (Kobe Univ.)^Z On admissible estimation of a mean vector when the scale is unknown 15

- 08-01-0026
15 Koshiro Yonenaga (Hokkaido Univ.)^Z Exact distribution of the product of a Wishart matrix and a normal vector with uncommon covariance matrices 15
Akio Suzukawa (Hokkaido Univ.)
- 08-01-0028
16 Eri Kurita (Tokyo Univ. of Sci.)^Z Multivariate normality test statistic based on multivariate kurtosis with two-step monotone type of missing data 15
Takashi Seo (Tokyo Univ. of Sci.)
- 08-01-0021
17 Koichi Yamagata (Univ. of Electro-Comm.)^Z Monotone metrics induced from trace non-increasing maps 10

September 16th (Thu)

9:45–11:45

- 08-01-0013
18 Yan Liu (Waseda Univ.)^Z Detection of relevant change in frequency domain 15
Yuichi Goto (Waseda Univ.)
Masanobu Taniguchi (Waseda Univ.)
- 08-01-0022
19 Yuichi Goto (Waseda Univ.)^Z Homogeneity tests for one-way models with dependent errors 15
Koichi Arakaki (Waseda Univ.)
Yan Liu (Waseda Univ.)
Masanobu Taniguchi (Waseda Univ.)
- 08-01-0023
20 Yuichi Goto (Waseda Univ.)^Z Test for conditional variance of integer-valued time series 15
Kou Fujimori (Shinshu Univ.)
- 08-01-0010
21 Nakahiro Yoshida (Univ. of Tokyo)^Z Adaptive estimation for a degenerate diffusion process 15
- 08-01-0011
22 Nakahiro Yoshida (Univ. of Tokyo)^Z Edgeworth expansion for the Euler–Maruyama approximation 15
- 08-01-0009
23 Xiaofei Xu (Waseda Univ.)^Z Higher order asymptotics of minimax estimators for time series 15
Yan Liu (Waseda Univ.)
Masanobu Taniguchi (Waseda Univ.)
- 08-01-0018
24 Yuta Koike (Univ. of Tokyo)^Z Gaussian approximation to high-dimensional Wishart matrices under a moment assumption 15
Xiao Fang (Chinese Univ. of Hong Kong)

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

- 08-02-0002
Yugo Nakayama (Kyoto Univ.)^Z High-dimensional data classification based on Gaussian kernel

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

- 08-02-0003
Keisuke Yano (Inst. of Stat. Math.)^Z Recent development of predictive densities

September 17th (Fri)

Morning

- 08-01-0006
25 Toshiharu Fujita (Kyushu Inst. of Tech.) Decision process with converging branch system—Multiplicative reward system— *
- 08-01-0001
26 Satoshi Suzuki (Shimane Univ.) KKT optimality condition for quasiconvex programming *
- 08-01-0027
27 Shoko Chisaki (Osaka Inst. of Tech.) A construction for spanning bipartite block designs *
Nobuko Miyamoto (Tokyo Univ. of Sci.)
Ryoh Fuji-Hara (Univ. of Tsukuba*)

- 08-01-0030
28 Takao Namiki (Hokkaido Univ.) Discrete dynamical system for high frequency oscillation in epileptic seizures *
- Ichiro Tsuda
(Chubu Univ./Chubu Univ.)
Shunsuke Kajikawa (Kyoto Univ.)
Masao Matsuhashi (Kyoto Univ.)
Akio Ikeda (Kyoto Univ.)
- 08-01-0029
29 Yoshihide Kakizawa (Hokkaido Univ.) On asymmetric kernel density estimation for biased data *
- 08-01-0003
30 Koji Tsukuda (Kyushu Univ.) High-dimensional testing for common principal components hypothesis on two covariance matrices *
- Shun Matsuura (Keio Univ.)
- 08-01-0020
31 Kento Egashira (Univ. of Tsukuba) Asymptotic properties of multicategory support vector machine under high dimensional settings *
- 08-01-0002
32 Shintaro Hashimoto (Hiroshima Univ.) Predictive probability matching priors for non-regular models *
- 08-01-0015
33 Ken-ichi Koike (Nihon Univ.) Improvement of Bobrovsky–Mayor–Wolf–Zakai bound *
- Shintaro Hashimoto (Hiroshima Univ.)

Applied Mathematics

September 14th (Tue)

Morning

- [09-01-0011](#)
1 Shinya Fujita (Yokohama City Univ.) Recent results and open problems on safe sets in graphs *
- [09-01-0013](#)
2 Kazuhide Hirohata (Ibaraki Nat. Coll. of Tech.) Vertex-disjoint chorded cycles and degree sum conditions *
Ronald J. Gould (Emory Univ.)
Ariel Keller Rorabaugh (Univ. of Tennessee)
- [09-01-0021](#)
3 Robert E. L. Aldred (Univ. of Otago) Generalization of the distance restricted matching extension problem in
Jun Fujisawa (Keio Univ.) graphs on surfaces *
- [09-01-0037](#)
4 Xiao-Nan Lu (Univ. of Yamanashi) Searching for edges in a multi-partite graph *
- [09-01-0033](#)
5 Ayaka Ishikawa (Yokohama Nat. Univ.) The Sato zeta function corresponding to the Szegedy walk *
- [09-01-0017](#)
6 Chusei Kiumi (Yokohama Nat. Univ.) Strongly trapped space-inhomogeneous quantum walks in one dimension
Kei Saito (Kanagawa Univ.) *
- [09-01-0002](#)
7 Yasuo Nishii (Univ. of Tsukuba) Approximation of Frankl's conjecture in the complement family *

14:25–15:30

- [09-01-0010](#)
8 Yuuya Yoshida (Nagoya Univ.)^Z Mathematical aspects of classical-quantum differential privacy 15
- [09-01-0012](#)
9 Chie Nara (Meiji Univ.)^Z Continuous flattening: the 2-skeleton of a regular 24-cell 15
Jin-ichi Itoh (Sugiyama Jogakuen Univ.)
- [09-01-0030](#)
10 Masahiro Hachimori^Z Hierarchy of partitions on nonpure simplicial complexes 15
(Univ. of Tsukuba)
- [09-01-0023](#)
11 Yuya Ikeda (Hiroshima Univ.)^Z Designs on vector bundles 10

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

- [09-02-0002](#)
Keisuke Shiromoto (Kumamoto Univ.)^Z Critical Problem for matroids

September 15th (Wed)

10:00–12:00

- [09-01-0022](#)
12 Iwao Sato (Oyama Nat. Coll. of Tech.)^Z Grover/Zeta correspondence 15
Norio Konno (Yokohama Nat. Univ.)
Takashi Komatsu (Math. Res. Inst. Calc for Industry/Hiroshima Univ.)
- [09-01-0034](#)
13 Takashi Komatsu^Z Walk/Zeta correspondence 15
(Math. Res. Inst. Calc for Industry/Hiroshima Univ.)
Norio Konno (Yokohama Nat. Univ.)
Iwao Sato (Oyama Nat. Coll. of Tech.)

- 09-01-0040
14 Kazuyuki Wada ^Z The Witten index of the non-Fredholm split-step quantum walks 15
(Nat. Inst. of Tech., Hachinohe Coll.)
Akito Suzuki (Shinshu Univ.)
Yohei Tanaka (Shinshu Univ.)
Noriaki Teranishi (Hokkaido Univ.)
Yasumichi Matsuzawa (Shinshu Univ.)
- 09-01-0007
15 Kiyoshi Ando (Nat. Inst. of Informatics) ^Z A constructive characterization of 4-connected graphs 15
- 09-01-0020
16 Kenta Noguchi (Tokyo Univ. of Sci.) ^Z Cubic graphs having only k -cycles in each 2-factor 15
Naoki Matsumoto (Keio Univ.)
Takamasa Yashima (Seikei Univ.)
- 09-01-0003
17 Sho Kubota (Yokohama Nat. Univ.) ^Z Combinatorial necessary conditions for regular graphs to induce periodic quantum walks 15

September 16th (Thu)

9:30–10:45

- 09-01-0039
18 Toshiyuki Ogawa (Meiji Univ.) ^Z Geometrical structures of a four-scroll attractor model 15
Ayuki Sekisaka (Meiji Univ.)
- 09-01-0035
19 Hiroshi Kokubu (Kyoto Univ.) ^Z Learning dynamics by reservoir computing: A mathematical framework
Masato Hara (Kyoto Univ.) 15
- 09-01-0005
20 Hiroshi Kokubu (Kyoto Univ.) ^Z Learning dynamics by reservoir computing: Case of the logistic maps
Masato Hara (Kyoto Univ.) 15
- 09-01-0036
21 Koya Sakakibara ^Z Asymptotic behavior of solutions of the bidomain model 15
(Okayama Univ. of Sci.)
Mitsunori Nara (Iwate Univ.)
Hiroshi Matano (Meiji Univ.)
Yoichiro Mori (Univ. of Pennsylvania)

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

- 09-02-0001
Tomoo Yokoyama (Gifu Univ.) ^Z Topological flow analysis and its application

14:25–15:35

- 09-01-0006
22 Hirofumi Notsu (Kanazawa Univ.) ^Z A second-order approximation in time of the upper-convected time
Débora O. Medeiros derivative based on the generalized Lie derivative 15
(Univ. of São Paulo)
Cassio M. Oishi (São Paulo State Univ.)
- 09-01-0018
23 Shin-ichiro Ei (Hokkaido Univ.) ^Z Method of fundamental solutions for Neumann problems of the modified
Hiroyuki Ochiai (Kyushu Univ.) Helmholtz equation in disk domains 15
Yoshitaro Tanaka
(Future Univ.-Hakodate)
- 09-01-0019
24 Tatsuki Mori (Musashino Univ.) ^Z Semi-analytical methods of obtaining bifurcation diagrams for a cell
Tohru Tsujikawa (Univ. of Miyazaki*) polarization model 15
Shoji Yotsutani (Ryukoku Univ.*)
- 09-01-0026
25 Yasushi Ota (St. Andrew's Univ.) ^Z Inverse parabolic problem with the Heaviside function arising in finance
Shunsuke Kaji (Meijo Univ.) 15

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

09-02-0003

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

September 17th (Fri)

10:30–12:00

09-01-0008

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

09-01-0015

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

09-01-0016

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

09-01-0025

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

09-01-0027

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

Afternoon

09-01-0009

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

09-01-0038

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

09-01-0028

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

09-01-0029

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

09-01-0031

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

09-01-0014

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

09-01-0001

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

09-01-0032

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

[09-01-0004](#)

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

Topology

September 14th (Tue)

9:30–12:00

10-01-0003

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

10-01-0019

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

10-01-0014

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

10-01-0026

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

10-01-0025

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

10-01-0015

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

10-01-0004

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

10-01-0013

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

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

10-02-0001

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

15:50–16:45

10-01-0008

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

10-01-0012

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

10-01-0027

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

September 15th (Wed)

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

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

10-02-0002

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

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

10-02-0003

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

September 16th (Thu)

9:30–12:00[10-01-0001](#)12 Naoki Kitazawa (Kyushu Univ.)^Z On special generic maps and Massey products of manifolds ····· 15[10-01-0028](#)13 Kentaro Saji (Kobe Univ.)^Z Geometry of bifurcation sets of generic unfoldings of corank two functions ····· 10
Samuel Paulino Santos
(São Paulo State Univ.)[10-01-0010](#)14 Ippei Ishii^Z Positive flow-spines and contact 3-manifolds ····· 15
Masaharu Ishikawa (Keio Univ.)
Yuya Koda (Hiroshima Univ.)
Hironobu Naoe (Chuo Univ.)[10-01-0018](#)15 Ramón Barral Lijó (Ritsumeikan Univ.)^Z Inverse symbolic coding of geodesics in hyperbolic surfaces ····· 15
Hiraku Nozawa (Ritsumeikan Univ.)[10-01-0022](#)16 Ramón Barral Lijó (Ritsumeikan Univ.)^Z Chaos in the universal space of pointed colored graphs ····· 15
Hiraku Nozawa (Ritsumeikan Univ.)[10-01-0029](#)17 Tetsuya Abe (Ritsumeikan Univ.)^Z The construction of slice knots and amphicheiral knots via annulus twists ····· 15[10-01-0006](#)18 Tatsumasa Suzuki (Tokyo Tech)^Z Constructions of homotopy 4-spheres by pochette surgery ····· 10[10-01-0016](#)19 Sakumi Sugawara (Hokkaido Univ.)^Z Divides with cusps and Kirby diagrams for line arrangements ····· 15
Masahiko Yoshinaga (Hokkaido Univ.)[10-01-0009](#)20 Masaki Ogawa (Saitama Univ.)^Z A stably equivalence of a multibranching handlebody decomposition of a 3-manifold ····· 10[10-01-0002](#)

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

[10-01-0005](#)22 Tomoyuki Yasuda Amphicheirality of ribbon 2-knots. ····· *
(Nara Nat. Coll. of Tech.)**14:25–15:25 Talk Invited by Topology Section**[10-02-0004](#)Yasushi Yamashita^Z Computer experiments on Möbius transformations and random Kleinian groups
(Nara Women's Univ.)**15:50–16:50**[10-01-0011](#)23 Sonia Mahmoudi (Tohoku Univ.)^Z Study of weaves using weaving diagrams ····· 15[10-01-0020](#)24 Taketo Sano (Univ. of Tokyo)^Z A Bar-Natan homotopy type ····· 15[10-01-0023](#)25 Takefumi Nosaka (Tokyo Tech)^Z Meta-nilpotent knot invariants and symplectic automorphism groups of free nilpotent groups ····· 15[10-01-0017](#)26 Kazuhiro Ichihara (Nihon Univ.) Knots in homology lens spaces determined by their complements ····· *
Toshio Saito (Joetsu Univ. of Edu.)[10-01-0021](#)

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

Infinite Analysis

September 14th (Tue)

10:00–12:00

11-01-0012

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

11-01-0001

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

11-01-0002

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

11-01-0010

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

11-01-0004

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

11-01-0013

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

11-01-0014

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

11-01-0005

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

11-01-0008

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

11-01-0009

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

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

11-02-0001

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

September 15th (Wed)

10:00–11:00

11-01-0006

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

11-01-0007

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

11-01-0011

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

11-01-0003

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

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

11-02-0002

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