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 $*$ means the presentation by using the document camera, and the mark $\flat$ means the presentation by using only the blackboard. If you talk by using your PC/tablet, no mark is written.
- The mark $\star$ means emeritus professor.
- The number on the right side of the title implies the time of talk (minutes). There are some talks whose limited time is shortened due to various reasons. Your kind understanding is appreciated.

Contents

Foundation of Mathematics and History of Mathematics

September 13th (Wed)

9:45–11:20

01-01-0001
1 Shigeru Masuda (Kyoto Univ.)   The solubilities in the mathematical physics by poisson · · · · · · · · · · · · 15

01-01-0002
2 Shigeru Masuda (Kyoto Univ.)   The hydrostatics and the hydrodynamics in a study of mechanics by poisson · 15

01-01-0012
3 Makoto Tamura (Osaka Sangyo Univ.)   On the term "Suan," the amount of calculations, in the chapter "Fangcheng" of "Nine Chapters" · 15

01-01-0016
4 Katsushi Waki (Yamagata Univ.)   Towards an automatic tagging system for image databases of Japanese
   Takuma Tsuchihashi (Meiji Univ.)   mathematics (wasan) · 15

01-01-0015
5 Ken Saito (Osaka Pref. Univ.)   Editing diagrams of Book XII of Euclid's *Elements* · · · · · · · · · · · · · · · · 15

11:30–12:00   Mathematics History Team Meeting

14:15–16:15

01-01-0006
6 Teruyuki Yorioka (Shizuoka Univ.)   A combinatorial relationship between Aronszajn trees and other Ramsey theoretic structures · 15

01-01-0023
7 Teruyuki Yorioka (Shizuoka Univ.)   Galvin's non-productive ccc posets and Suslin tree · · · · · · · · · · · · · · · · 15

01-01-0024
8 Hiroshi Sakai   (Kobe Univ.)   Indescribable cardinals and reflection of indescribable sets · · · · · · · · · · · 10

01-01-0021
9 Makoto Kikuchi   (Kobe Univ.)   On the inclusion relations defined on countable models of ZFC · · · · · · · 15
   Joel David Hamkins   (CUNY)

01-01-0022
10 Hirotaka Kikyo   (Kobe Univ.)   On class $\mathbf{K}_f$ · 15

01-01-0025
11 Akito Tsuboi (Univ. of Tsukuba)   Graphs and automorphism groups · 10

01-01-0027
12 Koichiro Ikeda   (Hosei Univ.)   A remark on Ehrenfeucht theories · 15

16:30–17:30   Talk Invited by Section on Foundation and History of Mathematics

01-02-0002
Kota Takeuchi (Univ. of Tsukuba)   Recent interaction between model theory and finite combinatorics

September 14th (Thu)

9:30–11:20

01-99-0001
13 Takashi Oyabu   ♭ $ZF;: S ========> \mathbb{R}$, and other 5 talks · 5

01-01-0003
14 Saburou Saitoh   * History, logic, results and impacts of the division by zero 1/0=0 · · · · · 15
   (Gunma Univ.*/Inst. of Reproducing Kernels)

01-01-0004
15 Saburou Saitoh   ♭ Relations of 0 and ∞ · 15
   (Gunma Univ.*/Inst. of Reproducing Kernels)
   Okumura Hiroshi (Yamato Univ.)
   Tsutomu Matsuura (Gunma Univ.)

01-01-0007
16 Takahiro Seki   (Niigata Univ.)   A semilattice semantics in relevant logics · 15

3   Foundation of Mathematics and History of Mathematics

01-01-0011
17   Kyohei Yokomizo (Nihon Univ.) — Reducts of a hypersequent calculus characterized by the class of all totally ordered Kripke frames · 15

01-01-0017
18   Kenetsu Fujita (Gunma Univ.) — A formal system of reduction paths · 15

01-01-0018
19   <u>Ryo Kashima</u>   (Tokyo Tech) — On first order predicate logic with second order function symbols · · · · 15
Kazuki Nakamura (Tokyo Tech)

11:30–12:00   Research Section Assembly

13:00–14:00   Talk Invited by Section on Foundation and History of Mathematics
01-02-0001
Yosuke Sato (Tokyo Univ. of Sci.) — On quantifier elimination algorithm and current situation of its computation

14:15–16:00
01-01-0008
20   Taishi Kurahashi — On extensions and generalizations of the first incompleteness theorem
     (Kisarazu Nat. Coll. of Tech.) — · 15

01-01-0009
21   Taishi Kurahashi — Arithmetical soundness and completeness for Sacchetti's logics · · · · · · · 15
     (Kisarazu Nat. Coll. of Tech.)

01-01-0013
22   Satoru Kuroda — Bounded arithmetic and forcing · 15
     (Gunma Pref. Women's Univ.)

01-01-0019
23   <u>Kazuyuki Tanaka</u> (Tohoku Univ.) — Infinite games and pushdown ω-languages · 15
Wenjuan Li   (Tohoku Univ.)

01-01-0014
24   Hayato Takahashi (Random Data Lab.) — Bayesian definition of random sequences with respect to conditional probabilities · 15

01-01-0026
25   Kohtaro Tadaki (Chubu Univ.) — An application of the principle of typicality to quantum information processing: A refinement of the BB84 QKD protocol · · · · · · · · · · · · · · · 15

Algebra

September 11th (Mon)

9:15–11:45

02-01-0045
1 <u>Hirotsugu Wayama</u> (Tohoku Univ.)   Interpolation of Arakawa–Kaneko-type multiple zeta functions $\cdots\cdots$ 10
   Yasuo Ohno   (Tohoku Univ.)

02-01-0046
2 Hirotsugu Wayama (Tohoku Univ.)   On a family of relations among t-MZVs $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0065
3 Ryota Umezawa (Nagoya Univ.)   On an analog of Arakawa–Kaneko zeta function and a certain relation
   of related multiple zeta values $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0064
4 <u>Kenta Endo</u>   (Nagoya Univ.)   Real zeros of Hurwitz zeta-functions in the interval $(0,1)$ $\cdots\cdots\cdots$ 10
   Yuta Suzuki   (Nagoya Univ.)

02-01-0037
5 Satoshi Kawamura (Tohoku Univ.)   Analytic properties of higher Mahler measures and zeta Mahler measures $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0057
6 Yohei Tachiya (Hirosaki Univ.)   Algebraic independence results for the values of the theta function $\cdots$ 10

02-01-0067
7 Iwao Kimura (Univ. of Toyama)   Note of zeros of modular forms on Fricke groups $\cdots\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0061
8 <u>Yuichi Sakai</u>   (Kyushu Univ.)   Modular forms of certain fractional weights and modular linear differ-
   Kiyokazu Nagatomo (Osaka Univ.)   ential equations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0019
9 Hirotaka Kodama (Kogakuin Univ.)   On certain vector valued Siegel modular forms of type $(k,2)$ over $\mathbb{Z}_{(p)}$
   $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0025
10 Yumiko Hironaka (Waseda Univ.)   Spherical functions on the space of quaternion hermitian forms $\cdots\cdots$ 10

02-01-0029
11 Takehiro Hasegawa (Shiga Univ.)   Explicit formula of a supersingular polynomial for rank-2 Drinfeld mod-
    ules $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0036
12 Tabane Yashiro (Tokyo Denki Univ.)   Discrete tomography for the point sequence generated by the adjacent
    terms of a sequence $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0002
13 Shigeru Iitaka (Gakushuin Univ.*)   On subperfect numbers $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

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

02-02-0002
   Hajime Kaneko (Univ. of Tsukuba)   Recent developments in uniform distribution theory: digital expansion
   of integers and real numbers

15:30–16:50

02-01-0007
14 Wataru Takeda (Kyoto Univ.)   The subconvexity problem for relatively r-prime lattice points $\cdots\cdots$ 10

02-01-0011
15 Genki Shibukawa (Osaka Univ.)   Cubic Pell's equations associated with the simplest cubic fields $\cdots\cdots$ 10

02-01-0031
16 Masamitsu Shimakura   Ramification in Kummer extensions arising from algebraic tori $\cdots\cdots$ 10
         (Tokyo Univ. of Sci.)

02-01-0040
17 Toru Komatsu (Tokyo Univ. of Sci.)   On an infinite family of pairs of imaginary quadratic fields with divisi-
    bility of class numbers $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0052
18 Akiko Ito * On the indivisibility of the class numbers and the Iwasawa λ-invariants
   (Tokyo Univ. of Information Sci.)   of real quadratic fields (II) $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0042
19 Kazuhito Kozuka * On power sums attached to Dirichlet characters for the integer points
   (Miyakonojo Nat. Coll. of Tech.)   in certain rational polytopes and multiple Dedekind sums $\cdots\cdots\cdots$ 10

5   Algebra

02-01-0028
20   Makoto Minamide (Yamaguchi Univ.) *   On representations for error terms related to the derivatives for some
     Jun Furuya   Dirichlet series · 10
     (Hamamatsu Univ. School of Medicine)
     Yoshio Tanigawa

September 12th (Tue)

9:15–12:00
02-01-0027
21   Mitsuhiro Miyazaki   *   On the almost Gorenstein property of Hibi rings · · · · · · · · · · · · · · · · · · 15
               (Kyoto Univ. of Edu.)

02-01-0066
22   Kazunori Matsuda (Osaka Univ.) *   Normality of twinned order polytopes · 15

02-01-0014
23   Akiyoshi Tsuchiya (Osaka Univ.)   Gorenstein simplices with a given δ-polynomial · · · · · · · · · · · · · · · · · · 15
     Takayuki Hibi   (Osaka Univ.)
     Koutarou Yoshida (Osaka Univ.)

02-01-0058
24   Hirotaka Higashidaira (Meiji Univ.)   On sequentially generalized Cohen–Macaulay simplicial complexes and
                                            bipartite graphs · 15

02-01-0009
25   Yuta Kambe   (Saitama Univ.)   Construction of the moduli space of reduced Gröbner bases · · · · · · · · · 15

02-01-0017
26   Ken-ichi Yoshida (Nihon Univ.)   Strong Rees property for powers of the maximal ideal · · · · · · · · · · · · · · 15
     Kei-ichi Watanabe (Nihon Univ.)

02-01-0062
27   Tsutomu Nakamura (Okayama Univ.)   Localization and colocalization in derived categories of commutative
     Yuji Yoshino (Okayama Univ.)   Noetherian rings · 15

02-01-0059
28   Hiroki Matsui   (Nagoya Univ.)   Some topological structures of the Balmer spectra of right bounded
                                        derived categories of commutative noetherian rings · · · · · · · · · · · · · · · · 15

02-01-0054
29   Haruhisa Nakajima   *   Liftings of pseudo-reflection groups on invariant subrings of Krull do-
               (J. F. Oberlin Univ.)   mains of algebraic subtori under actions of reductive groups · · · · · · · · · 10

13:00–14:00   Talk Invited by Algebra Section
02-02-0001
     Satoshi Murai   (Osaka Univ.)   Algebraic and combinatorial duality of triangulated manifolds

September 13th (Wed)

9:15–11:15
02-01-0010
30   Ayako Itaba (Tokyo Univ. of Sci.)   Finiteness condition (Fg) for a self-injective special biserial algebra
                                           obtained by a circular quiver with double arrows · · · · · · · · · · · · · · · · · · 10

02-01-0018
31   Mayu Tsukamoto (Osaka City Univ.)   Strongly quasi-hereditary algebras and rejective subcategories · · · · · · · 10

02-01-0020
32   Michio Yoshiwaki   On isomorphisms of generalized multifold extensions of algebras without
     (Shizuoka Univ. / Osaka City Univ.)   nonzero oriented cycles · 10
     Hideto Asashiba (Shizuoka Univ.)
     Mayumi Kimura
     Ken Nakashima (Shizuoka Univ.)

02-01-0024
33   Yasuaki Ogawa (Nagoya Univ.)   Auslander–Reiten duality and recollements · 10

02-01-0056
34   Tomohiro Itagaki (Tokyo Univ. of Sci.)   Symmetric Hochschild extension algebras and normalized 2-cocycles · · 10

02-01-0032
35 Hideyuki Koie (Tokyo Univ. of Sci.)   The ordinary quivers of Hochschild extension algebras $\cdots\cdots\cdots\cdots$ 10
    Tomohiro Itagaki (Tokyo Univ. of Sci.)
    Katsunori Sanada (Tokyo Univ. of Sci.)

02-01-0063
36 Tsunekazu Nishinaka (Univ. of Hyogo)   On primitivity of group algebras $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0041
37 Shigeto Kawata (Nagoya City Univ.)   On vertices of indecomposable modules over group rings $\cdots\cdots\cdots\cdots$ 10

02-01-0043
38 Takao Hayami (Hokkai-Gakuen Univ.) *   Hochschild cohomology ring of the integral group ring of a split meta-
    cyclic group $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0012
39 Fuminori Tasaka   ♭   The number of simple modules in a block with Klein four hyperfocal
    (Nat. Inst. of Tech., Tsuruoka Coll.)   subgroup $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

11:30–12:00   Research Section Assembly

14:15–16:45

02-01-0001
40 Takao Komatsu (Wuhan Univ.)   Incomplete Fubini numbers associated with determinants $\cdots\cdots\cdots\cdots$ 10

02-01-0047
41 Mitsushi Fujimoto   Loop generators and factorization problem in $mn-1$ puzzle groups
    (Fukuoka Univ. of Edu.) $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0013
42 Hiroyasu Takeda (Hokkaido Univ.)   Confluent hypergeometric systems associated with principal nilpotent
    Mutsumi Saito (Hokkaido Univ.) p-tuples $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0055
43 Hidetaka Kitayama (Wakayama Univ.)   Rationality problem for purely monomial group actions $\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0039
44 Daisuke Suyama (Hokkaido Univ.)   The freeness of the Weyl subarrangements of type B and signed graphs
    Michele Torielli (Hokkaido Univ.) $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
    Shuhei Tsujie (Hokkaido Univ.)

02-01-0053
45 Yugen Takegahara   Lefschetz invariants and Young characters for representations of the
    (Muroran Inst. of Tech.)   Coxeter groups of type B $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
    Fumihito Oda   (Kinki Univ.)
    Tomoyuki Yoshida
    (Hokusei Gakuen Univ.)

02-01-0033
46 Ken Saito   (Tohoku Univ.)   A classification of codes constructed from simple graphs $\cdots\cdots\cdots\cdots$ 10

02-01-0021
47 Koji Chinen   (Kinki Univ.)   Construction of divisible formal weight enumerators $\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0022
48 Koji Chinen   (Kinki Univ.)   Construction of an extremal polynomial not satisfying the Riemann
    hypothesis $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

02-01-0051
49 Toshiyuki Abe   (Ehime Univ.) $\mathbb{Z}_p$-orbifold constructions of the Moonshine vertex operator algebra $\cdots$ 10
    Ching Hung Lam (Academia Sinica)
    Hiromichi Yamada
    (Hitotsubashi Univ./Academia Sinica)

02-01-0060
50 Taiki Shibata (Okayama Univ. of Sci.)   On twisted algebraic loop groups and affine Kac–Moody groups $\cdots\cdots$ 10

17:00–18:00   Talk Invited by Algebra Section
02-02-0004
    Ryosuke Kodera (Kyoto Univ.)   Quantized Coulomb branches of Jordan quiver gauge theories and cy-
    clotomic rational Cherednik algebras

September 14th (Thu)

9:15–12:00

02-01-0034
51   Tomohiro Iwami (Kyushu Inst. of Tech.) *   Compactification of ceratin Picard-torsors as a variant of Boot-Strap type theorem · 15

02-01-0044
52   Takanori Nagamine (Niigata Univ.)   On automorphisms and coordinates in polynomial rings · · · · · · · · · · · · 15

02-01-0049
53   Shigeru Kuroda (Tokyo Metro. Univ.)   Non-finitely generated polynomial subrings and birational modifications of $\mathbf{G}_a$-actions · 15

02-01-0005
54   Shusuke Otabe (Tohoku Univ.)   On a purely inseparable analogue of the Abhyankar Conjecture for affine curves · 15

02-01-0006
55   Takahiko Furuya (Meikai Univ.)   Maximal rigid objects in an orbit category arising from a tube · · · · · · · 15
     Masashi Yamauchi (Meikai Univ.)

02-01-0038
56   Takayuki Uchiba (Waseda Univ.)   Gluing stability conditions on derived category of coherent sheaves on geometric ruled surfaces · 15

02-01-0048
57   Kotaro Kawatani (Osaka Univ.)   Pure sheaves and Kleinian singularities · 15

02-01-0026
58   Ryou Nishimura (Saitama Univ.)   A smooth projective plane curve of degree d whose automorphism group has order d^2 · 15

02-01-0008
59   Takanori Ayano (Osaka City Univ.)   The field of meromorphic functions on sigma divisor of genus 3 hyper-elliptic curve and its application to dynamical system · · · · · · · · · · · · · · · 15
     Victor Matveevich Buchstaber
        (Steklov Inst. of Math.)

14:15–16:15

02-01-0003
60   Makoto Enokizono (Osaka Univ.)   Slope equality for plane curve fibrations · 15

02-01-0004
61   Makoto Enokizono (Osaka Univ.)   Durfee-type inequality for hypersurface surface singularities · · · · · · · · · 10

02-01-0030
62   Hirokazu Nasu   (Tokai Univ.)   Obstructions to deforming curves on a prime Fano threefold · · · · · · · · · 15

02-01-0015
63   Taku Suzuki   (Waseda Univ.)   Higher order minimal families of rational curves on Fano manifolds · 15

02-01-0016
64   Katsuhiko Okumura (Waseda Univ.)   The Classification of SNC log symplectic structures on blow-up of projective spaces · 15

02-01-0023
65   Yohosuke Matsuzawa (Univ. of Tokyo)   On the dynamical and arithmetic degrees of self-maps of algebraic varieties · 15

02-01-0050
66   Nobuhiro Higuchi   Classification of boundary components of central streams in the two slopes case · 15
        (Yokohama Nat. Univ.)

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

02-02-0003
     Shigeki Matsutani   Elastica of Euler–Bernoulli and its generalization: from sprout of elliptic functions to reconstruction of Abelian function theory
        (Sasebo Nat. Coll. of Tech.)

Geometry

September 11th (Mon)

9:30–11:40

03-01-0007
1   Hokuto Konno (Univ. of Tokyo)   Positive scalar curvature and Seiberg–Witten invariants of tuples of diffeomorphisms · 15

03-01-0016
2   Masayuki Aino (Nagoya Univ.)♭   Riemannian invariants that characterize rotational symmetries of the standard sphere · 15

03-01-0013
3   Masahiro Morimoto (Osaka City Univ.)   The heat operator of a transversally elliptic operator · · · · · · · · · · · · · · 15

03-01-0020
4   Tatsuki Seto   (Nagoya Univ.)   A cyclic cocycle and relative index theorems on partitioned manifolds · 15

03-01-0018
5   Shinya Akagawa (Osaka Univ.)♭   Vanishing theorems of L^2-cohomology groups on regular convex cones with the Cheng–Yau metrics · 15

03-01-0021
6   Masato Arai (Yamagata Univ.)   Special Lagrangian submanifolds and cohomogeneity one actions on the
     Kurando Baba (Tokyo Univ. of Sci.)   complex projective space · 15

03-01-0005
7   Kotaro Kawai (Gakushuin Univ.)   Frölicher–Nijenhuis cohomology on G_2- and Spin(7)-manifolds · · · · · · · 15
     Hông Vân Lê   (CAS)
     Lorenz Schwachhöfer (TU Dortmund)

03-01-0008
8   Masaya Kawamura   Parabolic flows on almost complex manifolds · 15
     (Nat. Inst. of Tech., Kochi Coll.)

14:20–15:45

03-01-0010
9   Hikaru Yamamoto (Tokyo Univ. of Sci.)   Mirror correspondence between special Lagrangian submanifolds and deformed Hermitian Yang–Mills connections · 15

03-01-0019
10   Satoshi Nakamura (Tohoku Univ.)   Generalized Kähler Einstein metrics and uniform stability for toric Fano manifolds · 15

03-01-0023
11   Ryosuke Nomura (Univ. of Tokyo)   Miyaoka–Yau inequality for compact Kähler manifolds with semipositive canonical bundles · 15

03-01-0001
12   Ryosuke Takahashi (Tohoku Univ.)   Stability of anti-canonically balanced metrics · 15
      Shunsuke Saito (Tohoku Univ.)

03-01-0002
13   Ryosuke Takahashi (Tohoku Univ.)   Smooth approximation of the modified conical Kähler–Ricci flow · · · · · 15

16:00–17:00   Talk Invited by Geometry Section
03-02-0004
      Yasufumi Nitta   (Tokyo Tech)   On the existence of canonical Kähler metrics and stability

September 12th (Tue)

10:10–10:25   Presentation Ceremony for the 2017 MSJ Geometry Prize

10:30–11:30   Award Lecture for the 2017 MSJ Geometry Prize
03-02-0002
      Kobayashi Osamu   ♭   Weyl's gauge theory, the Schwarzian derivative and a sphere theorem

13:00–14:00   Award Lecture for the 2017 MSJ Geometry Prize
10-02-0002
      Makoto Sakuma (Hiroshima Univ.)   Fiber surfaces vs Heegaard surfaces of 3-manifolds

September 13th (Wed)

10:00–11:40

03-01-0014
14   Kohei Yamamoto (Tohoku Univ.)   Cheeger constant and percolation process $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

03-01-0017
15   Kenzi Satô   (Tamagawa Univ.)   The existence and uniqueness of orthocenters of simplices of high-dimensional spheres $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

03-01-0009
16   Homare Tadano (Tokyo Univ. of Sci.)   Some compactness theorems via m-Bakry–Émery and m-Modified Ricci curvatures with negative m $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

03-01-0024
17   Junichi Mukuno (Nagoya Univ.)   On the fundamental group of semi-Riemannian manifolds with positive curvature operator $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

03-01-0022
18   Nobuhiro Innami (Niigata Univ.)   Projective Randers change and cut locus $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

03-01-0004
19   Chen Tao   (Tohoku Univ.)   A convergence theory of discrete surface on graphs $\cdots\cdots\cdots\cdots\cdots$ 15

14:20–15:45

03-01-0025
20   <u>Kouhei Miura</u>   (Miyagi Univ.)   On the moduli of isotropic and helical minimal immersions between
     Gabor Toth (Rutgers Univ., Camden)   spheres $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

03-01-0011
21   Yuichiro Sato (Tokyo Metro. Univ.)   On the classification of ruled minimal surfaces in pseudo-Euclidean space $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

03-01-0003
22   Masahiro Ooguri (Chuo Univ.) *   Three-dimensional locally homogeneous nondegenerate centroaffine hypersurfaces with nondiagonalizable Tchebychev operator $\cdots\cdots\cdots\cdots$ 10

03-01-0015
23   Masashi Yasumoto (Osaka City Univ.)   Discrete timelike minimal surfaces and discrete wave equations $\cdots\cdots$ 15

03-01-0006
24   <u>Kazuyuki Enomoto</u>
              (Tokyo Univ. of Sci.)   Total mixed curvature of curves in Euclidean space $\cdots\cdots\cdots\cdots\cdots$ 15
     Jin-ichi Itoh (Kumamoto Univ.)

03-01-0012
25   <u>Takashi Kurose</u> (Kwansei Gakuin Univ.)   Certain transformations from curves on a Minkowski plane and on a
     Nozomu Matsuura (Fukuoka Univ.)   two-dimensional de Sitter space to equicentroaffine plane curves $\cdots\cdots$ 15

16:00–17:00   Talk Invited by Geometry Section

03-02-0001
     Kota Hattori   (Keio Univ.) ♭   The nonuniqueness of the tangent cones at infinity of Ricci-flat manifolds

Complex Analysis

September 11th (Mon)

9:00–12:00

04-01-0026
1 <u>Toshiyuki Sugawa</u> (Tohoku Univ.)   On geometric properties of hypergeometric functions $\cdots\cdots\cdots\cdots\cdots$ 10
   Li-Mei Wang
   (Univ. of Int. Business and Econ.)

04-01-0025
2 Toshiyuki Sugawa (Tohoku Univ.)   Characterizations of convexity of a domain in terms of the hyperbolic
   metric $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

04-01-0018
3 <u>Masakazu Shiba</u> (Hiroshima Univ.⋆)   Conformal embeddings of an open Riemann surface into closed ones of
   Hiroshi Yamaguchi (Shiga Univ.⋆)   the same genus —closings and hydrodynamic period matrices $\cdots\cdots\cdots$ 15

04-01-0001
4 Hideki Miyachi   (Osaka Univ.)   Harmonic differentials for infinitesimal deformations of singular Eu-
   clidean structures $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0005
5 Hideki Miyachi   (Osaka Univ.)   A formula of the Levi form of Teichmüller distance $\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0010
6 <u>Yohei Komori</u> (Waseda Univ.)   On Schwarz automorphic functions $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
   Shota Kubo
   (Waseda Univ. Senior High School)

04-01-0020
7 Katsuhiko Matsuzaki (Waseda Univ.)   Injectivity of the quotient Bers embedding of Teichmüller space $\cdots\cdots$ 15

04-01-0015
8 <u>Gou Nakamura</u> (Aichi Inst. of Tech.)   Polynomial solution to Dirichlet problems for the heat equation $\cdots\cdots$ 15
   Noriaki Suzuki   (Meijo Univ.)

04-01-0003
9 Hiroaki Aikawa (Hokkaido Univ.)   Dichotomy of global capacity density $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0013
10 <u>Masaharu Nishio</u> (Osaka City Univ.)   Weighted polyharmonic and polyparabolic Bergman spaces on the upper
   Katsunori Shimomura (Ibaraki Univ.)   half space $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0016
11 Katsunori Shimomura (Ibaraki Univ.)   Caloric morphism with Bateman space mapping for radial metrics $\cdots\cdot$ 15

14:15–15:00

04-01-0008
12 Koh Katagata   Entire functions whose Julia sets include any finitely many copies of
   (Ichinoseki Nat. Coll. of Tech.)   quadratic Julia sets $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0024
13 <u>Tomoki Kawahira</u> (Tokyo Tech)   Almost conformal copies of the Julia sets in the Mandelbrot set $\cdots\cdots$ 15
   Masashi Kisaka (Kyoto Univ.)

04-01-0009
14 Kohei Ueno   (Daido Univ.)⋆ Böttcher coordinates for holomorphic skew products $\cdots\cdots\cdots\cdots\cdots$ 15

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

04-02-0001
Risto Korhonen   Delay differential Painlevé equations and difference Nevanlinna theory
   (Univ. of Eastern Finland)

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

04-02-0003
Masaharu Nishio (Osaka City Univ.)   Potential theory and function spaces for parabolic equations

September 12th (Tue)

9:00–12:00

04-01-0007
15 Shizuo Nakane
      (Tokyo Polytechnic Univ.)

On formal normal forms of holomorphic germs at super-saddle fixed points $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0011
16 Shinichi Tajima (Univ. of Tsukuba)
    Mitsuo Kato (Univ. of Ryukyus)
    Katsusuke Nabeshima
      (Tokushima Univ.)

B-functions of semi-quasihomogeneous hypersurface singularities and integral dependence relations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0012
17 Katsusuke Nabeshima
      (Tokushima Univ.)
    Shinichi Tajima (Univ. of Tsukuba)

Algorithms for computing integral numbers in a ring of convergent power series —Gröbner bases vs Local cohomology— $\cdots\cdots\cdots\cdots\cdots$ 10

04-01-0014
18 Shinichi Tajima (Univ. of Tsukuba)
    Katsusuke Nabeshima
      (Tokushima Univ.)

Computing Grothendieck local residues via transformation law $\cdots\cdots\cdots$ 15

04-01-0017
19 Takashi Umeno (Kyushu Sangyo Univ.)

Toroidal groups defined by algebraic number fields $\cdots\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0027
20 Takayuki Koike (Kyoto Univ.) [*]

Complex $K3$ surfaces containing Levi-flat hypersurfaces $\cdots\cdots\cdots\cdots$ 10

04-01-0019
21 Yusaku Tiba (Ochanomizu Univ.)

The extension of holomorphic functions on a non-pluriharmonic locus $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0021
22 Hidetaka Hamada
      (Kyushu Sangyo Univ.)

Bounded support points for the Carathéodory families in several complex variables $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

04-01-0022
23 Hidetaka Hamada
      (Kyushu Sangyo Univ.)

Bounded support points for the families with parametric representation in several complex variables $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

04-01-0023
24 Hidetaka Hamada
      (Kyushu Sangyo Univ.)

The reachable families and the support points in several complex variables $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

04-01-0004
25 Satoru Shimizu (Tohoku Univ.) [*]

Tube domains with solvable groups of automorphisms $\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0006
26 Junjiro Noguchi (Univ. of Tokyo[*]) [♭]

A remark on Oka's coherence without Weierstrass' preparation theorem and the Oka theory $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

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

04-02-0002
    Tatsuhiro Honda
      (Hiroshima Inst. of Tech.)

Distortion theorems for holomorphic mappings on bounded symmetric domains

Functional Equations

September 11th (Mon)

9:00–12:00

05-01-0017
1   Keiji Matsumoto (Hokkaido Univ.)   Relative twisted (co)homology groups associated with Lauricella's F_D 12

05-01-0066
2   Hideaki Izumi (Chiba Inst. of Tech.)   Solving Abel equation by using recurrence relations ················ 12

05-01-0036
3   Toru Tsutsui   (Chiba Univ.)   Propagation of regular singularities in a complex analytic characteristic initial value problem ··· 12

05-01-0084
4   Katsuyoshi Ohara (Kanazawa Univ.)   Numerical evaluation of the distribution function of the largest root of
     Takayama Nobuki (Kobe Univ.)   complex non-central Wishart matrices ···························· 9
     Fadil Danufane (Kanazawa Univ.)

05-01-0047
5   Kohei Iwaki   (Nagoya Univ.)   On the expression of Voros coefficients for (confluent) hypergeomet-
     Tatsuya Koike   (Kobe Univ.)   ric differential equations in terms of the topological recursion and its
     Yumiko Takei   (Kobe Univ.)   applications ··· 12

05-01-0029
6   Hikaru Igarashi   On solutions of ultradiscrete Painlevé II equation with parity variables
     Kouichi Takemura (Chuo Univ.) 12

05-01-0001
7   Daisuke Kawagoe (Kyoto Univ.)   Propagation of boundary-induced discontinuity in stationary radiative
     I-Kun Chen   (Taiwan Univ.)   transfer ··· 9

05-01-0016
8   Wataru Ichinose (Shinshu Univ.)   On the relativistic covariance of the Feynman path integral for the Dirac equation ··· 12

05-01-0021
9   Mitsuru Shibayama (Kyoto Univ.)   Periodic solutions for a prescribed-energy problem of Keplerian-type potential systems ··· 12

05-01-0078
10   Hiroyuki Usami   (Gifu Univ.) *   Decay of solutions to generalized pendulum equations ·············· 12

05-01-0039
11   Kazuyuki Yagasaki (Kyoto Univ.)   Nonintegrability of the normal form of the fold-Hopf bifurcation ····· 12

05-01-0018
12   Yutaka Kamimura   A bursting 2-soliton ··· 12
     (Tokyo Univ. of Marine Sci. and Tech.)

05-01-0023
13   Kohji Ohtsuka   ♭   Relation of shape optimization of singular points in boundary value
     (Hiroshima Kokusai Gakuin Univ.)   problems and trace theorem in Sobolev space ····················· 12

05-01-0090
14   Masato Hashizume (Osaka City Univ.)   Embedding on the Strauss's radial compactness lemma ············· 9
     Megumi Sano (Osaka City Univ.)

14:15–16:15

05-01-0028
15   Lorenzo Cavallina (Tohoku Univ.)   On the spherically symmetric solutions to the two-phase torsional rigid-ity optimization problem ··· 12

05-01-0050
16   Kazuhiro Oeda (Waseda Univ.)   Coexistence steady states of a prey-predator model with population
     Kousuke Kuto   flux by attractive transition ······································ 12
          (Univ. of Electro-Comm.)

05-01-0005
17   Tetsutaro Shibata (Hiroshima Univ.)   Oscillatory structures of bifurcation curves for semilinear eigenvalue problems ··· 12

13   Functional Equations

05-01-0022
18   Yasuhito Miyamoto (Univ. of Tokyo)   On the existence of infinitely many nonradial solutions of a semilinear elliptic equation $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 9

05-01-0013
19   Alessio Pomponio (Politecnico di Bari)   Quasilinear elliptic equations of Born–Infeld type $\cdots\cdots\cdots\cdots\cdots\cdots$ 12
      Tatsuya Watanabe
            (Kyoto Sangyo Univ.)

05-01-0052
20   Kotaro Watanabe   Bifurcation and symmetry breaking for Brezis–Nirenberg problem on
         (Nat. Defense Acad. of Japan)   the thin annulus of the n-dimensional sphere $\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 9
      Naoki Sioji (Yokohama Nat. Univ.)

05-01-0037
21   Futoshi Takahashi (Osaka City Univ.)   Critical and subcritical fractional Trudinger–Moser type inequalities on
      $\mathbb{R}$ $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 9

05-01-0038
22   Futoshi Takahashi (Osaka City Univ.)   On a weighted Trudinger–Moser type inequality on the whole space and
      Van Hoang Nguyen   related maximizing problem $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 9
            (Inst. de Math. de Toulouse)

05-01-0002
23   Ryuji Kajikiya   (Saga Univ.)   Symmetric solutions of p-Laplace equations in hollow domains $\cdots\cdots\cdots$ 12

05-01-0006
24   Shigeru Sakaguchi (Tohoku Univ.) *   Two-phase heat conductors with a stationary isothermic surface and
      their related elliptic overdetermined problems $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12

16:30–17:30   Talk Invited by Functional Equations Section
05-02-0002
      Oleg Lisovyi   (Univ. de Tours)   Painlevé functions, Fredholm determinants and combinatorics

September 12th (Tue)

9:15–12:00
05-01-0041
25   Shoya Kawakami (Saitama Univ.)   A discretization of the knot energies $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12

05-01-0007
26   Katsunori Gunji (Saitama Univ.)   The Łojasiewicz inequalities for decomposed Möbius energies $\cdots\cdots\cdots$ 12

05-01-0042
27   Simon Blatt   Alternative representation of the decomposed Möbius energies with the
         (Paris Lodron Univ. Salzburg)   Möbius invariant densities $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 9
      Takeyuki Nagasawa (Saitama Univ.)

05-01-0044
28   Simon Blatt   A Möbius invariant discretization and decomposition of the Möbius
         (Paris Lodron Univ. Salzburg)   energy $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 9
      Takeyuki Nagasawa (Saitama Univ.)

05-01-0074
29   Kouta Takano (Saitama Univ.)   A geometric representation of the generalized mean curvature vector
      using a limit of integral means $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 9

05-01-0077
30   Ryuichi Sato   (Tohoku Univ.)   The Cauchy problem for the Finsler heat equation $\cdots\cdots\cdots\cdots\cdots\cdots$ 12
      Goro Akagi   (Tohoku Univ.)
      Kazuhiro Ishige (Tohoku Univ.)

05-01-0060
31   Yukihiro Seki   (Kyushu Univ.)   Type II blow-up mechanisms in a semilinear heat equation with critical
      Joseph–Lundgren exponent, Part II: neutral case $\cdots\cdots\cdots\cdots\cdots\cdots$ 12

05-01-0011
32   Hiroko Yamamoto (Meiji Univ.)   Reaction-diffuion approximation of a semilinear wave equation $\cdots\cdots\cdots$ 12
      Hirokazu Ninomiya (Meiji Univ.)

05-01-0056
33   Masaharu Taniguchi (Okayama Univ.)   The uniqueness and stability of pyramidal traveling fronts in the Allen–
      Cahn equations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12

05-01-0080
34 <u>Kentarou Fujie</u> (Tokyo Univ. of Sci.)[♭]   No critical nonlinear diffusion in 1D quasilinear Keller–Segel system
    Tomasz Cieślak   (IMPAN) $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12

05-01-0020
35 Toshitaka Nagai (Hiroshima Univ.[⋆])   Boundedness of solutions to a parabolic-elliptic chemotaxis model in $\mathbb{R}^2$
    <u>Tetsuya Yamada</u>   with critical mass $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12
            (Fukui Nat. Coll. of Tech.)

05-01-0004
36 Xinru Cao   (Paderborn Univ.)   Global existence and stabilization in a 3D two-species chemotaxis-Stokes
    <u>Shunsuke Kurima</u> (Tokyo Univ. of Sci.)   system with competitive kinetics $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12
    Masaaki Mizukami
            (Tokyo Univ. of Sci.)

05-01-0003
37 Masaaki Mizukami   Improvement of conditions for asymptotic stability in a fully parabolic
            (Tokyo Univ. of Sci.)   two-species chemotaxis-competition model $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12

13:00–14:00   Talk Invited by Functional Equations Section
05-02-0001
    Shinji Adachi (Shizuoka Univ.)   On the uniqueness and the non-degeneracy of positive solutions for a
    class of semilinear elliptic equations in $\mathbb{R}^N$ and its applications

September 13th (Wed)

9:15–12:00
05-01-0058
38 Taiga Kumagai (Waseda Univ.)   Asymptotics of the solutions of Hamilton–Jacobi equations with large
    drift term $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 9

05-01-0079
39 Takahiro Kosugi (Tohoku Univ.)[♭]   Equivalence of viscosity solutions between obstacle problems and gra-
    dient constraint problems $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12

05-01-0076
40 Haruya Mizutani (Osaka Univ.)   Resolvent estimates for scaling-critical Schrödinger operators and ap-
    plications II $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12

05-01-0043
41 Masahito Ohta (Tokyo Univ. of Sci.)   Strong instability of standing waves for nonlinear Schrödinger equations
    with a partial confinement $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12

05-01-0015
42 Gaku Hoshino   (Osaka Univ.)   Analyticity of solutions to the nonlinear Schrödinger equations without
    gauge invariance $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 9

05-01-0026
43 Gaku Hoshino   (Osaka Univ.)   Analytic smoothing effect for global solutions to a system of Schrödinger
    equations with large data $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 9

05-01-0059
44 <u>Ryosuke Hyakuna</u> (Waseda Univ.)[*]   A well-posedness result for the Hartree equation $\cdots\cdots\cdots\cdots\cdots$ 9
    Gaku Hoshino   (Osaka Univ.)

05-01-0061
45 Shinya Kinoshita (Nagoya Univ.)   Local well-posedness for the Cauchy problem of the Klein–Gordon–
    Zakharov system in two and three dimensions $\cdots\cdots\cdots\cdots\cdots\cdots$ 12

05-01-0024
46 <u>Yuji Sagawa</u>   (Osaka Univ.)   A sharp lower bound for the lifespan of small solutions to the Schrödinger
    Hideaki Sunagawa (Osaka Univ.)   equation with a subcritical power nonlinearity $\cdots\cdots\cdots\cdots\cdots$ 12
    Shunsuke Yasuda

05-01-0087
47 <u>Nobu Kishimoto</u> (Kyoto Univ.)   Ill-posedness of the third order NLS equation with Raman scattering
    Yoshio Tsutsumi (Kyoto Univ.)   term $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12

05-01-0051
48 <u>Mamoru Okamoto</u> (Shinshu Univ.)   Probabilistic Cauchy problem for the energy critical nonlinear Schrödinger
    Tadahiro Oh (Univ. of Edinburgh)   equations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12
    Oana Pocovnicu (Heriot-Watt Univ.)

15   Functional Equations

05-01-0014
49 Kazuki Aoki   (Osaka Univ.)   Global existence of solutions for fourth-order nonlinear Schrödinger equations · 12

05-01-0073
50 Kota Uriya (Okayama Univ. of Sci.)*   Long range scattering for nonlinear Schrödinger equations with critical
    Satoshi Masaki   (Osaka Univ.)   homogeneous nonlinearity in three dimensions · 12
    Hayato Miyazaki
        (Tsuyama Nat. Coll. of Tech.)

05-01-0025
51 Itsuko Hashimoto   Asymototic behavior toward nonlinear waves for radially symmetric
    (Kansai Univ. / Osaka City Univ.)   solutions of multi-dimensional Burgers equation · 9
    Akitaka Matsumura (Osaka Univ.)

12:15–12:30   Presentation Ceremony for the 2017 MSJ Analysis Prize

14:15–16:15
05-01-0064
52 Motohiro Sobajima   *   Diffusion phenomena for the wave equation with space-dependent damp-
        (Tokyo Univ. of Sci.)   ing term growing at infinity · 9
    Yuta Wakasugi   (Ehime Univ.)

05-01-0069
53 Motohiro Sobajima   Weighted energy estimates for wave equation with space-dependent
        (Tokyo Univ. of Sci.)   damping term for slowly decaying initial data · 9
    Yuta Wakasugi   (Ehime Univ.)

05-01-0063
54 Soichiro Katayama (Osaka Univ.)   A note on the decay property for dissipative nonlinear wave equations
    Kyouhei Wakasa   in one space dimension · 9
        (Muroran Inst. of Tech.)
    Borislav Yordanov (Hokkaido Univ.)

05-01-0048
55 Natsumi Yoshida (Ritsumeikan Univ.)   Decay properties of solutions toward a multiwave pattern for the scalar
    conservation law with the Ostwald–de Waele-type viscosity · · · · · · · · · · 12

05-01-0049
56 Natsumi Yoshida (Ritsumeikan Univ.)   Large time behavior of solutions toward viscous shock waves to the
    Cauchy problem for the scalar conservation law with nonlinear flux and
    viscosity · 12

05-01-0086
57 Yusuke Sugiyama (Tokyo Univ. of Sci.)   On the global existence of weak solutions to 1D degenerate quasilinear
    Yunguang Lu (Hangzhou Normal Univ.)   wave equations · 12

05-01-0075
58 Kunio Hidano   (Mie Univ.)*   Global existence for a system of quasi-linear wave equations in 3D
    Kazuyoshi Yokoyama   satisfying the weak null condition · 12
        (Hokkaido Univ. of Sci.)

05-01-0035
59 Akira Hoshiga (Shizuoka Univ.)*   Lower bound of the lifespan of solutions to systems of quasi-linear wave
    equations with multiple propagation speeds · 9

05-01-0045
60 Takiko Sasaki   (Meiji Univ.)   The blow-up curve for a system of nonlinear wave equations · · · · · · · · · 9

05-01-0068
61 Kai Koike (Keio Univ. / RIKEN)   Wall effect on the motion of a body immersed in a free molecular flow
    · 12

16:30–17:30   Talk Invited by Functional Equations Section
05-02-0004
    Hiromichi Itou (Tokyo Univ. of Sci.)   On analysis for partial differential equations in a cracked domain

September 14th (Thu)

9:00–12:00

05-01-0040
62 Hiroyuki Takamura
        (Future Univ. Hakodate)
    Lai Ning-An   (Lishui Univ.)
Blow-up and lifespan estimate of solutions of semilinear damped wave equations with sub-Strauss exponent · 12

05-01-0088
63 Masakazu Kato
        (Muroran Inst. of Tech.)
    Miku Sakuraba
Global existence and blow-up for wave equations with weighted nonlinear term in 3D · 12

05-01-0083
64 Takuto Imai (Future Univ. Hakodate)
    Hiroyuki Takamura
        (Future Univ. Hakodate)
    Masakazu Katou
        (Muroran Inst. of Tech.)
    Kyouhei Wakasa
        (Muroran Inst. of Tech.)
The lifespan of solutions to semilinear damped wave equations with scale invariant in two space dimension · 12

05-01-0057
65 Yuka Teramoto (Kyushu Univ.)
    Yoshiyuki Kagei (Kyushu Univ.)
    Takaaki Nishida (Kyoto Univ.)
Bifurcation of the compressible Taylor vortex · 12

05-01-0019
66 Masashi Aiki (Tokyo Univ. of Sci.)
Motion of a vortex filament on a slanted plane · 12

05-01-0046
67 Huanyuan Li (Univ. of Tokyo)
Global strong solutions to the three dimensional density-dependent MHD equations · 12

05-01-0085
68 Yusuke Sugiyama (Tokyo Univ. of Sci.)
Blow-up of solutions to the 1D Euler equation with valuable damping coefficient · 12

05-01-0053
69 Jan Březina   (Tokyo Tech)
    Eduard Feireisl (Czech Acad. of Sci.)
On measure-valued solutions to the complete Euler system · · · · · · · · · · 12

05-01-0009
70 Keiichi Watanabe (Waseda Univ.)
Compressible-incompressible two phase flow of Korteweg type with phase transition: model problem · 9

05-01-0072
71 Naoto Kajiwara (Univ. of Tokyo)
Solvability and stability for the phase-field Navier–Stokes equations via maximal regularity · 12

05-01-0055
72 Kenji Nakamura (Univ. of Tsukuba)
    Takayuki Kobayashi (Osaka Univ.)
    Takayuki Kubo (Univ. of Tsukuba)
Local energy decay estimate of solutions to the hyperbolic type Stokes equations · 9

05-01-0030
73 Hirokazu Saito (Waseda Univ.)
Maximal L_p-L_q regularity for a compressible fluid model of Korteweg type on general domains · 9

05-01-0062
74 Ken Furukawa (Univ. of Tokyo)♭
On asymptotic stability of the three dimensional Oseen type Navier–Stokes flow · 9

05-01-0012
75 Hiroyuki Tsurumi (Waseda Univ.)
Extension criterion via partial components of vorticity on strong solutions to the Navier–Stokes equations in higher dimensions · · · · · · · · · · · 12

05-01-0008
76 Okihiro Sawada   (Gifu Univ.)
Locally-in-time well-posedness of the primitive equations with linearly growing initial data · 12

14:15–16:15

05-01-0070
77 <u>Youhei Tsutsui</u> (Shinshu Univ.)   Asymptotic stability of stationary solutions to the Navier–Stokes equa-
    Takahiro Okabe (Hirosaki Univ.)   tions in Besov spaces $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 9
    Jayson Mesitas Cunanan
                (Saitama Univ.)

05-01-0065
78 Hideo Kozono (Waseda Univ.) [*]   Finite energy of generalized suitable weak solutions to the Navier–Stokes
    Yutaka Terasawa (Nagoya Univ.)   equations and the Liouville type theorem $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 9
    <u>Yuta Wakasugi</u> (Ehime Univ.)

05-01-0081
79 Toshiaki Hishida (Nagoya Univ.) [♭]   Large time behavior of a generalized Oseen evolution operator, with
                    applications to the Navier–Stokes flow past a rotating obstacle $\cdots\cdots\cdots$ 12

05-01-0082
80 <u>Toshiaki Hishida</u> (Nagoya Univ.) [♭]   Navier–Stokes flow past a rigid body: attainability of steady solutions
    Paolo Maremonti   as limits of unsteady weak solutions $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12
    (Univ. degli Studi della Campania)

05-01-0031
81 Yoshihiro Shibata (Waseda Univ.)   Local well-posedness for the Magnetohydrodynamics in the different
                    two liquids case $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 9

05-01-0032
82 Yoshihiro Shibata (Waseda Univ.)   Maximal L_p-L_q regularity theorem for the linearized electro-magnetic
                    field equations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 9

05-01-0033
83 Yoshihiro Shibata (Waseda Univ.)   Local well-posedness for the two component flow $\cdots\cdots\cdots\cdots\cdots$ 9

05-01-0034
84 Yoshihiro Shibata (Waseda Univ.)   Global well-posedness for the two component flow $\cdots\cdots\cdots\cdots\cdots$ 9

05-01-0054
85 <u>Akira Okada</u>   (Kyoto Univ.) C^∞ regularity of strong solutions to the Navier–Stokes equations and
    Hideo Kozono   (Waseda Univ.)   its decay property $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12
    Senjo Shimizu   (Kyoto Univ.)

05-01-0027
86 Kenta Kaneko (Waseda Univ.)   Stationary solution to the Navier–Stokes equations in the scaling in-
    <u>Hideo Kozono</u> (Waseda Univ.)   variant Besov space $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12
    Senjo Shimizu   (Kyoto Univ.)

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

05-02-0003
    Ryo Takada   (Kyushu Univ.)   Dispersive estimates for rotating fluids and stably stratified fluids

Real Analysis

September 13th (Wed)

9:30–12:00

06-01-0019
1   Takanobu Hara   Interpolation properties of reverse Hölder inequalities and their appli-
(Hokkaido Univ./Tokyo Metro. Univ.)   cations to Harnack inequalities $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0027
2   Aoi Honda (Kyushu Inst. of Tech.)   Linear subspace of L_0 generated by integrable step functions $\cdots\cdots\cdots$ 15
Yoshiaki Okazaki
(Fuzzy Logic Systems Inst.)

06-01-0012
3   Jun Kawabe   (Shinshu Univ.)   The Vitali convergence theorem for Choquet integrals $\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0023
4   Fumiaki Kohsaka (Tokai Univ.)   Fixed points of spherically nonspreading mappings in complete geodesic
metric spaces with curvature bounded above $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0032
5   Shin-ya Matsushita (Akita Pref. Univ.)   On the convergence of the proximal point algorithm $\cdots\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0024
6   Takayuki Tamura (Chiba Univ.)   On uniform non-squareness of direct sums of Banach spaces $\cdots\cdots\cdots$ 15
Mikio KATO   (Shinshu Univ.)

06-01-0016
7   Tomonari Suzuki   Redefinition of τ-distance $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
(Kyushu Inst. of Tech.)

06-01-0022
8   Sachiko Atsushiba   Attractive point theorems and convergence theorems for some classes
(Univ. of Yamanashi)   of nonlinear mappings in Hilbert spaces $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0026
9   Toshikazu Watanabe   ♭   Fixed point theorems in ordered metric spaces and applications to
(Tokyo Univ. of Information Sci.)   nonlinear boundary value problems $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

14:15–15:45

06-01-0013
10 Ryutaro Arai   (Ibaraki Univ.)   Commutators of Calderón–Zygmund and generalized fractional integral
Eiichi Nakai   (Ibaraki Univ.)   operators on generalized Morrey spaces with variable growth condition
$\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0006
11 Nao Takemoto (Nara Women's Univ.)   Some variations on wavelet reconstruction formulae $\cdots\cdots\cdots\cdots\cdots\cdots$ 15
Shinya Moritoh (Nara Women's Univ.)

06-01-0011
12 Takeshi Iida   On sufficient conditions for the boundedness of the fractional maximal
(Fukushima Nat. Coll. of Tech.)   operator between weighted L^p-spaces with different weights $\cdots\cdots\cdots$ 15

06-01-0020
13 Hiroki Saito   (Nihon Univ.)   Maximal operators with the weighted Hausdorff content $\cdots\cdots\cdots\cdots$ 15
Hitoshi Tanaka
(Tsukuba Univ. of Tech.)
Toshikazu Watanabe
(Tokyo Univ. of Information Sci.)

06-01-0005
14 Akihiko Miyachi   ♭   Boundedness of bilinear pseudo-differential operators with exotic sym-
(Tokyo Woman's Christian Univ.)   bols $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
Naohito Tomita (Osaka Univ.)

16:00–17:00   Talk Invited by Real Analysis Section
06-02-0001
Akihiro Nakamura (Tokai Univ.)   Nonharmonic Fourier series and Riesz bases

September 14th (Thu)

9:30–12:00

06-01-0001
15   Johannes Lankeit (Paderborn Univ.)
      <u>Masaaki Mizukami</u>
              (Tokyo Univ. of Sci.)

How far does small chemotactic interaction perturb the Fisher–KPP dynamics on bounded convex domains? · 15

06-01-0002
16   Tobias Black (Paderborn Univ.)
      Johannes Lankeit (Paderborn Univ.)
      <u>Masaaki Mizukami</u>
              (Tokyo Univ. of Sci.)

Global existence in a Keller–Segel–(Navier–)Stokes system with singular sensitivity · 15

06-01-0010
17   <u>Taishi Motoda</u> (Kyoto Univ. of Edu.)
      Takeshi Fukao (Kyoto Univ. of Edu.)

Abstract approach to degenerate parabolic equations with dynamic boundary conditions · 15

06-01-0015
18   <u>Risei Kano</u>   (Kochi Univ.)
      Takeshi Fukao (Kyoto Univ. of Edu.)

The existence of solutions for the one-demential hardening model · 15

06-01-0003
19   Takeshi Fukao (Kyoto Univ. of Edu.)
      <u>Shunsuke Kurima</u> (Tokyo Univ. of Sci.)
      Tomomi Yokota (Tokyo Univ. of Sci.)

Cahn–Hilliard approach to nonlinear diffusion equations on unbounded domains · 15

06-01-0014
20   <u>Takeshi Fukao</u> (Kyoto Univ. of Edu.)
      Pierluigi Colli   (Pavia Univ.)

Cahn–Hilliard equation on the boundary with bulk condition · · · · · · · · 15

06-01-0004
21   <u>Noriaki Yamazaki</u> (Kanagawa Univ.)
      Nobuyuki Kenmochi (Univ. of Warsaw)
      Ken Shirakawa   (Chiba Univ.)

New class of doubly nonlinear evolution equations governed by double time-dependent subdifferentials · 15

06-01-0017
22   <u>Ryota Nakayashiki</u> (Chiba Univ.)
      Ken Shirakawa   (Chiba Univ.)

Qualitative properties of the solution to Allen–Cahn type equations with singularities subject to dynamic boundary condition · · · · · · · · · · · 15

06-01-0018
23   <u>Ken Shirakawa</u>   (Chiba Univ.)
      Hiroshi Watanabe (Oita Univ.)
      Ryota Nakayashiki (Chiba Univ.)
      Salvador Moll (Univ. Valencia)

Structures of steady-state solutions to a one-dimensional mathematical model of grain boundary motion · 15

14:15–16:00

06-01-0009
24   <u>Toyohiko Aiki</u> (Japan Women's Univ.)
      Sergey A. Timoshin
      (Siberian Branch Russian Acad. Sci.)

Control problem for the one-dimensional moisture transport equation appearing in concrete carbonation process · 15

06-01-0021
25   <u>Kosuke Kita</u>   (Waseda Univ.)
      Mitsuharu Ôtani (Waseda Univ.)
      Hiroki Sakamoto
      (Hitachi-GE Nuclear Energy, Ltd.)

On some elliptic systems arising from a nuclear reactor model · · · · · · · 15

06-01-0030
26   <u>Takanori Kuroda</u> (Waseda Univ.)
      Mitsuharu Ôtani (Waseda Univ.)

Solvability of complex Ginzburg–Landau equations with non-dissipative terms in general domains · 15

06-01-0025
27   Hiroshi Watanabe (Oita Univ.)

Solvability of degenerate parabolic-elliptic systems · · · · · · · · · · · · · · · · 15

06-01-0031
28   Kota Kumazaki
      (Tomakomai Nat. Coll. of Tech.)

On a free boundary problem for moisture swelling process in porous materials · 15

06-01-0029
29   Yutaka Tsuzuki
              (Hiroshima Shudo Univ.)

Initial-boundary value problems for Vlasov–Poisson systems with angle error in magnetic field · 15

16:15–17:15   Talk Invited by Real Analysis Section
06-02-0002

Yutaka Tsuzuki   Global existence of solutions to Vlasov–Poisson equations with external
(Hiroshima Shudo Univ.)   magnetic field in a half space

Functional Analysis

September 11th (Mon)

14:15–16:45

07-01-0014
1 Yoritaka Iwata   (Tokyo Tech)   Nonlinearity as for the logarithmic representation of infinitesimal generators $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0018
2 Kazuyuki Wada   ♭ Spectrum of N-body Stark Hamiltonians $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
(Nat. Inst. of Tech., Hachinohe Coll.)

07-01-0011
3 Sohei Ashida   (Kyoto Univ.)   Absence of singular continuous spectrum and propagation estimates of multistate Schrödinger operators $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0003
4 Hisashi Morioka (Doshisha Univ.)   Interior transmission eigenvalue problems on compact manifolds with
Naotaka Shoji (Univ. of Tsukuba)   smooth boundary $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0032
5 Masaki Kawamoto (Tokyo Univ. of Sci.)   Strichartz estimates for harmonic potential with time-decaying coefficient $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
Taisuke Yoneyama (Tokyo Univ. of Sci.)

07-01-0002
6 Hiroaki Niikuni   Spectra of periodic Schrödinger operators on zigzag nanotubes with
(Maebashi Inst. of Tech.)   multiple chemical bonds $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0026
7 Hiroyuki Yamagishi   The best constant of Sobolev inequality corresponding to a bending
(Tokyo Metropolitan Coll. of Indus. Tech.)   problem of a beam under tension on an elastic foundation 3 $\cdots\cdots\cdots$ 15

07-01-0023
8 Hiroshi Ito   (Ehime Univ.) * On the square root of the Pauli operator with a diverging potential $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0030
9 Hiroshi Ito   (Ehime Univ.) * Resonances of Dirac operators with a diverging potential $\cdots\cdots\cdots\cdots$ 10

17:00–18:00   Talk Invited by Functional Analysis Section
07-02-0001
Masaki Kawamoto (Tokyo Univ. of Sci.)   Scattering theory for periodically pulsed magnetic field

September 12th (Tue)

9:45–12:00

07-01-0004
10 Rumi Togashi   Characterization of maps by peripheral spectra and multiplication $\cdots$ 15
(Nagaoka Nat. Coll. of Tech.)

07-01-0029
11 Takeshi Miura (Niigata Univ.)   Isometries on $C^1([0,1])$ $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
Hiroyuki Takagi (Shinshu Univ.)

07-01-0031
12 Keiichi Watanabe (Niigata Univ.)   On the Möbius gyrovector spaces by A. A. Ungar $\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0008
13 Osamu Hatori   (Niigata Univ.)   Peculiar homomorphisms on admissible quadruples $\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0016
14 Ryo Tabata (Ariake Nat. Coll. of Tech.)   Schur's immanant inequalities and Littlewood–Richardson's correspondence $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0028
15 Cid Reyes-Bustos (Kyushu Univ.)   Spectral degeneracies in the asymmetric quantum Rabi model $\cdots\cdots\cdots$ 15
Kazufumi Kimoto (Univ. of Ryukyus)
Masato Wakayama (Kyushu Univ.)

07-01-0010
16 Nobukazu Shimeno   Harish-Chandra's $\boldsymbol{c}$-functions for small K-types $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
(Kwansei Gakuin Univ.)
Hiroshi Oda (Takushoku Univ.)

07-01-0024
17   Ryosuke Nakahama (Univ. of Tokyo)   Intertwining operators between holomorphic discrete series representations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

13:00–14:00   Talk Invited by Functional Analysis Section
07-02-0003
Toshihisa Kubo (Ryukoku Univ.)   Differential symmetry breaking operators of $O(n,1)$ for differential forms

September 13th (Wed)

9:00–12:00
07-01-0005
18   <u>Masayuki Fujimoto</u>
            (Osaka Kyoiku Univ.)
     Yuki Seo (Osaka Kyoiku Univ.)   Matrix Wielandt inequality via the matrix geometric mean $\cdots\cdots\cdots\cdots$ 15

07-01-0007
19   Junichi Fujii (Osaka Kyoiku Univ.)   Tsallis relative operator entropy with negative parameters $\cdots\cdots\cdots\cdots$ 15
     <u>Yuki Seo</u> (Osaka Kyoiku Univ.)

07-01-0012
20   <u>Hiroaki Tohyama</u>
            (Maebashi Inst. of Tech.)
     Hiroshi Isa (Maebashi Inst. of Tech.)
     Masatoshi Ito (Maebashi Inst. of Tech.)
     Eizaburou Kamei
     Masayuki Watanabe
            (Maebashi Inst. of Tech.)   The n-th divergence on the path $A \natural_t B$ $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0013
21   Masatoshi Ito (Maebashi Inst. of Tech.)   Estimations of the Lehmer mean by the Heron mean $\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0022
22   <u>Takeaki Yamazaki</u> (Toyo Univ.)   Upper and lower bounds, and operator monotonicity of an extension of
     Masatoshi Ito (Maebashi Inst. of Tech.)   the Petz–Hasegawa function $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
     Takayuki Furuta (Hirosaki Univ.*)
     Masahiro Yanagida
            (Tokyo Univ. of Sci.)

07-01-0025
23   <u>Masaru Nagisa</u>   (Chiba Univ.)   Positive definite functions and operator norm inequalities $\cdots\cdots\cdots\cdots$ 15
     Imam Nugraha Albania
            (Univ. Pendidikan Indonesia)

07-01-0019
24   Shûichi Ohno (Nippon Inst. of Tech.) *   The Toeplitzness of weighted composition operators $\cdots\cdots\cdots\cdots\cdots$ 10

07-01-0015
25   <u>Masatoshi Enomoto</u>   *   Configulation problem of two subspaces $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
     Yasuo Watatani (Kyushu Univ.)

07-01-0009
26   <u>Tsuyoshi Kajiwara</u> (Okayama Univ.)   C*-algebra associated with Seirpinski carpet $\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
     Yasuo Watatani (Kyushu Univ.)

07-01-0020
27   Takahiro Sudo (Univ. of Ryukyus)   The K-theory for the group and subgroup C^*-algebras of the special or general linear groups over integers $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0006
28   Kengo Matsumoto   *   Asymptotic continuous orbit equivalence of hyperbolic dynamics and
            (Joetsu Univ. of Edu.)   Ruelle C*-algebras $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

14:15–15:30

07-01-0001
29 Yuhei Suzuki (Nagoya Univ.) On pure infiniteness of crossed products of minimal extensions · · · · · · · 15

07-01-0017
30 Norio Nawata (Osaka Kyoiku Univ.) Trace scaling automorphisms of $\mathcal{W} \otimes \mathbb{K}$ · 15

07-01-0027
31 Yasuhiko Sato (Kyoto Univ.) Projections associated with quasidiagonality · 15

07-01-0021
32 Yusuke Sawada (Nagoya Univ.) The bicategory of W*-bimodules · 15
   Shigeru Yamagami (Nagoya Univ.)

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

07-02-0002
   Yusuke Isono (Kyoto Univ.) Deformation/rigidity theory and type III von Neumann algebras

Statistics and Probability

September 11th (Mon)

9:15–12:00

08-01-0029
1 Tamio Koyama   (Kobe Univ.)   An inversion formula utilizing hyperfunctions and it's application $\cdots\cdot$ 15

08-01-0004
2 Hiroki Takahashi (Keio Univ.)   Lyapunov optimization for non-generic one-dimensional expanding Markov
   Mao Shinoda   (Keio Univ.)   maps $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

08-01-0028
3 Johannes Jaerisch (Shimane Univ.) Spectral gap property for random dynamics on the real line and the
   Hiroki Sumi   (Kyoto Univ.)   Hölder regularity of generalised Takagi functions $\cdots\cdots\cdots\cdots\cdots$ 15

08-01-0015
4 Naoto Shimaru (Okayama Univ. of Sci.) Another proof of Weyl's lemma $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
   Keizo Takashima
            (Okayama Univ. of Sci.)

08-01-0030
5 Hideaki Uemura (Aichi Univ. of Edu.) On the reconstruction of random function from its SFCs defined by an
   Shigeyoshi Ogawa (Ritsumeikan Univ.) arbitrary CONS $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

08-01-0024
6 Kiyoiki Hoshino (Osaka Pref. Univ.) Identification of finite variation processes from the SFC $\cdots\cdots\cdots\cdots$ 15

08-01-0017
7 Masato Hoshino (Waseda Univ.)   Global well-posedness of complex Ginzburg–Landau equation with a
                                  space-time white noise $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

08-01-0010
8 Masato Hoshino (Waseda Univ.)   A coupled KPZ equation, its two types of approximations and existence
   Tadahisa Funaki (Waseda Univ.)   of global solutions $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

08-01-0025
9 Masaki Wada (Fukushima Univ.)   Large time asymptotics for fundamental solutions of critical Schrödinger
                                  operators $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

14:15–15:00

08-01-0020
10 Kazuhiro Yoshikawa   Composed order statistics and multivariate compound Poisson processes
            (Ritsumeikan Univ.) $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
   Takahiro Aoyama (Okayama Univ.)

08-01-0019
11 Masatake Hirao (Aichi Pref. Univ.) Frame potentials of determinantal point processes on the d-sphere $\cdots\cdot$ 15

08-01-0023
12 Masato Takei (Yokohama Nat. Univ.) Vertex-reinforced random walks on complete bipartite graphs $\cdots\cdots\cdots$ 10
   Tomohiro Ishikawa
            (Yokohama Nat. Univ.)

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

08-02-0003
   Kazuki Okamura (Kyoto Univ.)   Several properties for random walks on graphs

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

08-02-0001
   Akira Sakai   (Hokkaido Univ.)   Recent progress in researches on phase transitions and critical behavior
                                  for Ising ferromagnets

<div align="center">

September 12th (Tue)

</div>

9:20–11:30

08-01-0022
13   Toshiharu Fujita   On nonserial dyanmic programming —Converging branch systems—
          (Kyushu Inst. of Tech.)   ·· 15
     Naoki Saikawa (Kyushu Inst. of Tech.)

08-01-0006
14   Kazuki Matsubara (ChuoGakuin Univ.)   The existence of two-pairwise additive cyclic BIB designs of block size
     Sanpei Kageyama (Tokyo Univ. of Sci.)   two ·· 15

08-01-0027
15   Hiromu Yumiba (Int. Inst. for Nat. Sci.)   A*-optimal balanced third-order designs of resolution R*($\{10, 01\}$) with
     Yoshifumi Hyodo $N < \nu(m)$ for 3^m factorials ··· 15
     (Okayama Univ. of Sci. / Int. Inst. for Nat. Sci.)
     Masahide Kuwada
          (Int. Inst. for Nat. Sci.)

08-01-0031
16   Xiao-Nan Lu (Tokyo Univ. of Sci.)   Locating arrays with error-correcting ability ······················· 15
     Masakazu Jimbo (Chubu Univ.)

08-01-0009
17   Kanta Naito   (Shimane Univ.)   Regression with stagewise minimization on the risk ················· 15
     Takuma Yoshida (Kagoshima Univ.)

08-01-0011
18   Yoshihiko Maesono (Kyushu Univ.)   On direct kernel estimator of density ratio ······················· 10
     Masanari Motoyama (ZEN-NOH)

08-01-0021
19   Yoshihide Kakizawa (Hokkaido Univ.)   Symmetrical-based q-MIG kernel density estimation ··············· 15

11:30–12:00   Research Section Assembly

13:15–14:15

08-01-0008
20   Kiyotaka Iki (Tokyo Univ. of Sci.)   Decomposition of diamond model for square contingency tables with
                                        ordered categories ··· 10

08-01-0032
21   Kouji Tahata (Tokyo Univ. of Sci.)   Asymmetry model and decomposition of symmetry for square contin-
                                        gency tables ··· 10

08-01-0026
22   Ayaka Yagi (Tokyo Univ. of Sci.)   Transformed T^2-type statistics for testing equality of two mean vectors
     Takashi Seo (Tokyo Univ. of Sci.)   with monotone samples ··· 15

08-01-0007
23   Masashi Hyodo (Osaka Pref. Univ.)   Simultaneous test of mean vector and variance covariance matrix using
     Hayate Ogawa (Osaka Pref. Univ.)   Euclidean norm for multi-sample problem ························· 15
     Takahiro Nishiyama (Senshu Univ.)

<div align="center">

September 13th (Wed)

</div>

9:40–12:10

08-01-0002
24   Koji Tsukuda (Univ. of Tokyo)   Covariance structure associated with equality between two general ridge
     Hiroshi Kurata (Univ. of Tokyo)   estimators ··· 15

08-01-0012
25   Aki Ishii   (Tokyo Univ. of Sci.)   Equality tests of high-dimensional covariance matrices based on eigen-
     Kazuyoshi Yata (Univ. of Tsukuba)   structures ··· 15
     Makoto Aoshima (Univ. of Tsukuba)

08-01-0003
26   Kazuyoshi Yata (Univ. of Tsukuba)   Asymptotic normality for inference on high-dimensional mean vectors
     Makoto Aoshima (Univ. of Tsukuba)   under the SSE model ··· 15

08-01-0005
27   Yugo Nakayama (Univ. of Tsukuba)   Asymptotic properties of support vector machines in high-dimension,
     Kazuyoshi Yata (Univ. of Tsukuba)   low-sample-size settings · 15
     Makoto Aoshima (Univ. of Tsukuba)

08-01-0013
28   Yujie Xue   (Waseda Univ.)   Modified LASSO estimators of the models with long-memory distur-
     Taniguchi Masanobu (Waseda Univ.)   bances · 10

08-01-0018
29   Kou Fujimori   (Waseda Univ.)   The Dantzig selector for high-dimensional linear models of diffusion
                                           processes · 10

08-01-0014
30   Hideaki Nagahata (Waseda Univ.)   Analysis of variance for high dimensional time series · · · · · · · · · · · · · · · 15
     Masanobu Taniguchi (Waseda Univ.)

08-01-0016
31   Kazuhiko Takano (Shinshu Univ.)   Geometric properties of system spaces of autoregressive process of de-
                                           gree 1 · 10

08-01-0033
32   Yan Liu   (Waseda Univ.)   A test for stationarity by copula spectral density · · · · · · · · · · · · · · · · · · 15

14:15–15:15   Talk Invited by Statistics and Probability Section
08-02-0004
     Tomonari Sei (Univ. of Tokyo)   A scaling problem of multi-dimensional probability distributions

15:30–16:30   Talk Invited by Statistics and Probability Section
08-02-0002
     Fumiya Akashi (Waseda Univ.)   Robust statistical inference for non-standard time series models based
                                      on the empirical likelihood and normalization methods

Applied Mathematics

September 11th (Mon)

10:00–12:00

09-01-0045
1   Shohei Satake   (Kobe Univ.)   Constructions of Ramanujan graphs and related results · · · · · · · · · · · · 15

09-01-0025
2   Tomoko Adachi   (Toho Univ.)   Ordering of the complete bipartite graph and its application to rectangular RAID system · 10

09-01-0009
3   Sho Fujimura (Fukuoka Univ.)   On the number of perfect matchings of line graphs · · · · · · · · · · · · · · · · 10
    Shuji Shiraishi (Fukuoka Univ.)

09-01-0037
4   Raiji Mukae   Impurity of projective planar graphs · 15
        (Kisarazu Nat. Coll. of Tech.)
    Terukazu Sano
        (Kisarazu Nat. Coll. of Tech.)

09-01-0008
5   Kohei Tanaka (Shinshu Univ.)   Discrete Euler calculus and its application to the counting problem
                                           · 15

09-01-0017
6   Aoi Honda (Kyushu Inst. of Tech.)   Monotonicity of inclusion-exclusion integral and interaction operator
    Yoshiaki Okazaki   · 15
        (Fuzzy Logic Systems Inst.)

09-01-0030
7   Yoshitaka Sasaki   Counting restricted lonesum matrices · 10
    (Osaka Univ. of Health and Sport Sci.)
    Yasuo Ohno   (Tohoku Univ.)

09-01-0035
8   Atsuhiko Mizusawa   On characterization of simple non-confusing travel groupoids · · · · · · · · 15
    Diogo Kendy Matsumoto
        (Shibaura Inst. of Tech.)

14:15–15:45

09-01-0011
9   Kazuki Matsubara (ChuoGakuin Univ.)   Continuous flattening of α-trapezoidal polyhedra · · · · · · · · · · · · · · · · · · · 15
    Chie Nara   (Meiji Univ.)

09-01-0005
10 Kiyoshi Ando   A new forbidden subgraph for 5-contractible edges · · · · · · · · · · · · · · · · · 15
    (Nat. Inst. of Information/JST ERATO)

09-01-0018
11 Akira Saito   (Nihon Univ.)   Rainbow forbidden subgraphs in edge-colored graphs · · · · · · · · · · · · · · · 15
    Colton Magnant
        (Georgia Southern Univ.)

09-01-0029
12 Shinya Fujita (Yokohama City Univ.)   Degree conditions for cycles in edge-colored graphs · · · · · · · · · · · · · · · · 10

09-01-0026
13 Morimasa Tsuchiya (Tokai Univ.)   On series parallel orders and strict-double-bound graphs · · · · · · · · · · · · 10
    Shinichiro Tashiro (Tokai Univ.)

09-01-0038
14 Momoko Hayamizu   On the size of universal tree-based networks · 15
    (Inst. of Stat. Math./JST PRESTO)
    Shizuo Kaji
    (Yamaguchi Univ./JST PRESTO)
    Satoru Fujishige
        (Kyoto Univ./Kyoto Univ.*)

16:00–17:00   Talk Invited by Applied Mathematics Section

09-02-0002
Shuya Chiba (Kumamoto Univ.)   2-factors with a specified number of components and degree sum conditions

September 12th (Tue)

9:30–12:00

09-01-0012
15 Hideo Mitsuhashi (Hosei Univ.)   Quaternionic quantum walks of Szegedy type on finite graphs and
Norio Konno (Yokohama Nat. Univ.)   second weighted zeta functions · 15
Kaname Matsue
    (Kyushu Univ./Kyushu Univ.)
Iwao Sato (Oyama Nat. Coll. of Tech.)

09-01-0014
16 Iwao Sato (Oyama Nat. Coll. of Tech.)   A generalized Bartholdi zeta function of a graph · · · · · · · · · · · · · · · · · 15
Hideo Mitsuhashi (Hosei Univ.)
Hideaki Morita
        (Muroran Inst. of Tech.)

09-01-0028
17 Norio Konno (Yokohama Nat. Univ.)   Partition-based quantum walk · 15
Renato Portugal   (LNCC)
Iwao Sato (Oyama Nat. Coll. of Tech.)
Etsuo Segawa   (Tohoku Univ.)

09-01-0023
18 Kaname Matsue   Simplicial quantum walks version 2 —correspondence to coined walks
    (Kyushu Univ./Kyushu Univ.)   on graphs— · 15
Osamu Ogurisu (Kanazawa Univ.)
Etsuo Segawa   (Tohoku Univ.)

09-01-0024
19 Kaname Matsue   Simplicial quantum search · 15
    (Kyushu Univ./Kyushu Univ.)
Osamu Ogurisu (Kanazawa Univ.)
Etsuo Segawa   (Tohoku Univ.)

09-01-0031
20 Yusuke Yoshie (Tohoku Univ.)   A periodicity of the Grover walk on Bethe trees · · · · · · · · · · · · · · · · · · · 10
Etsuo Segawa   (Tohoku Univ.)
Tetsuji Taniguchi
        (Hiroshima Inst. of Tech.)
Sho Kubota   (Tohoku Univ.)

09-01-0033
21 Daiju Funakawa (Hokkaido Univ.)   Localization of a 2-dimensional 4-state quantum walk · · · · · · · · · · · · · · 15
Toru Fuda   (Hokkaido Univ.)
Satoshi Sasayama (Hokkaido Univ.)
Akito Suzuki   (Shinshu Univ.)

09-01-0036
22 Toru Fuda   (Hokkaido Univ.)   Weak limit distribution of a one-dimensional split-step quantum walk
Daiju Funakawa (Hokkaido Univ.)   · 15
Akito Suzuki   (Shinshu Univ.)

09-01-0040
23 Tomohiro Ikkai (Nagoya Univ.)   Hypergroups and random walks on graphs · 15
Yusuke Sawada (Nagoya Univ.)

September 13th (Wed)

9:30–11:40

09-01-0004
24   Shunzi Horiguchi   Extended Newton method and fractals (in case of real variable function)
· 15

09-01-0001
25   Ippei Obayashi (Tohoku Univ.)   Data analysis using persistence homology and machine learning · · · · · · 15

09-01-0032
26   Fuminori Sakaguchi (Univ. of Fukui) Some possible relationships among an integer-type algorithm for solving
ODEs, difference equations and number theory · 15

09-01-0002
27   George Miyake   A computational method for stationary solutions in nonlinear au-
        (Ube Nat. Coll. of Tech.)   tonomous dynamical system · 10
     Yuji Katsuta (Ube Nat. Coll. of Tech.)

09-01-0042
28   Koichi Anada   A numerical method of estimating blow-up rates for nonlinear evolution
        (Waseda Univ. Senior High School) equations by using rescaling algorithm · 15
     Tetsuya Ishiwata
        (Shibaura Inst. of Tech.)
     Takeo Ushijima (Tokyo Univ. of Sci.)

09-01-0041
29   Tomoki Uda   (Kyoto Univ.)   Shape derivative and its application to vortex patch equilibria in a
periodic array · 15

09-01-0039
30   Takuya Tsuchiya (Waseda Univ.)   On the numerical analysis of the Cauchy problem for semi-linear Klein–
     Makoto Nakamura (Yamagata Univ.)   Gordon equation in de Sitter spacetime · 15

09-01-0044
31   Ryosuke Urakawa (Waseda Univ.)   Verification of Einstein's equation by geodesics · · · · · · · · · · · · · · · · · · · 15
     Tsuchiya Takuya (Waseda Univ.)
     Yoneda Gen   (Waseda Univ.)

14:15–16:15

09-01-0027
32   Takehiko Kinoshita   An improvement of norm bound computation for inverses of linear
     Yoshitaka Watanabe (Kyushu Univ.)   operators in Hilbert spaces · 15
     Mitsuhiro T. Nakao (Waseda Univ.)

09-01-0016
33   Tomoya Kemmochi (Univ. of Tokyo)   Time-global error estimates for finite element approximation of parabolic
problems · 15

09-01-0043
34   Yuki Chiba   (Univ. of Tokyo)   Discontinuous Galerkin method for an N-dimensional spherically sym-
     Norikazu Saito (Univ. of Tokyo)   metric Poisson equation · 15

09-01-0021
35   Yukihiko Nakata (Shimane Univ.)   Delay equations for reinfection dynamics · 15

09-01-0015
36   Hiromasa Suzuki (Shiga Univ.)   Analytical and numerical approaches to codimension-two bifurcation in
     Yasumasa Nishiura (Tohoku Univ.)   a three-component reaction-diffusion system · 15

09-01-0007
37   Yuuki Shimizu   (Kyoto Univ.)   Toroidal geometry stabilizing a ring of N point vortices on a torus
     Takashi Sakajo   (Kyoto Univ.)   · 15

09-01-0013
38   Mitsuru Shibayama (Kyoto Univ.)[♭] Non-integrability of the restricted n-body problem · · · · · · · · · · · · · · · 15

16:30–17:30   Talk Invited by Applied Mathematics Section

09-02-0001
     Kaname Matsue   Saddles create connections: Rigorous numerics and dynamical systems
        (Kyushu Univ./Kyushu Univ.)

September 14th (Thu)

9:30–10:30

09-01-0034
39   Kazuhiro Oeda (Waseda Univ.) Stationary problem of a diffusive prey-predator system with protection zones · 15

09-01-0006
40   Takashi Teramoto An action functional approach to localized patterns in a three-component
        (Asahikawa Medical Univ.) FitzHugh–Nagumo model · 10
     Peter van Heijster
        (Queensland Univ. of Tech.)
     Chao-Nien Chen
        (Nat. Tsing-Hua Univ.)
     Yasumasa Nishiura (Tohoku Univ.)

09-01-0019
41   Takashi Suzuki   (Osaka Univ.) Bone metabolism modeling —break down of dynamical equilibrium · · 5

09-01-0020
42   Takashi Suzuki   (Osaka Univ.) Cell signal modeling —reproducibility of damping oscillation · · · · · · · · 5

09-01-0010
43   Yasumasa Nishiura (Tohoku Univ.) Lamellae to onion transformation in block copolymer nanoparticles via
     Edgar Avalos   (Tohoku Univ.) coupled Cahn–Hilliard equations · 15
     Takashi Teramoto
        (Asahikawa Medical Univ.)
     Hiroshi Yabu   (Tohoku Univ.)

10:45–11:45   Talk Invited by Applied Mathematics Section

09-02-0003
     Naoto Nakano Revisiting delay-embedding in terms of Hilbert–Schmidt integral oper-
     (JST PRESTO/Hokkaido Univ.) ator theory: Towards dynamical reconstruction for empirical modelling

Topology

September 11th (Mon)

10:00–12:00

10-01-0006
1   Naoyuki Monden   Signatures of surface bundles $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
        (Osaka Electro-Comm. Univ.)

10-01-0007
2   Naoyuki Monden   Stable commutator lengths of Dehn twists $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
        (Osaka Electro-Comm. Univ.)

10-01-0023
3   Hironobu Naoe (Tohoku Univ.)   Corks and their shadow complexities $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

10-01-0032
4   Kouichi Yasui   (Osaka Univ.)   Nonexistence of twists and surgeries generating exotic 4-manifolds $\cdots$ 15

10-01-0034
5   Takahiro Oba   (Tokyo Tech)   Surfaces in D^4 with the same boundary and fundamental group $\cdots\cdots$ 15

10-01-0030
6   Shinpei Baba (Univ. Heidelberg)   Neck-pinching of $\mathbb{CP}^1$-structures on surfaces and convergence of holonomy representations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

10-01-0033
7   Norihisa Takahashi (Ritsumeikan Univ.)   On a classification of periodic maps on surfaces which commute with
    Hiraku Nozawa (Ritsumeikan Univ.)   certain involutions $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

10-01-0037
8   Mao Okada   (Univ. of Tokyo)   Local rigidity of certain actions of nilpotent-by-cyclic groups on the
    sphere $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

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

10-02-0001
    Nariya Kawazumi (Univ. of Tokyo)   Mapping class groups, the Goldman–Turaev Lie bialgebra and the Kashiwara–Vergne problem

15:30–17:30

10-01-0004
9   Yuta Nozaki   (Univ. of Tokyo)   Every lens space contains a genus one homologically fibered knot $\cdots\cdots$ 15

10-01-0013
10   Michihiko Fujii (Univ. of Ryukyus)   The spherical growth series for certain Seifert fiber spaces $\cdots\cdots\cdots\cdots$ 10

10-01-0015
11   Teruaki Kitano   (Soka Univ.)   Finiteness of the values of Reidemeister torsion for a spliced sum along knots with $SL(2;\mathbb{C})$-irreducible representations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

10-01-0026
12   Yuichi Yamada   Exceptional Dehn surgeries along the Mazur link $\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
        (Univ. of Electro-Comm.)

10-01-0027
13   Toshio Saito (Joetsu Univ. of Edu.)   An approach to defining Hempel distance of generalized Heegaard splittings $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

10-01-0036
14   Keiichi Sakai   (Shinshu Univ.)   Generalized connected sum formula for the Arnold invariants of generic
    Ryutaro Sugiyama   plane curves $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

10-01-0005
15   Akane Ishigami   (Tokai Univ.)   Minimal 5-charts of type (2,4,2) with a lens of type 1 $\cdots\cdots\cdots\cdots\cdots$ 15

10-01-0019
16   Inasa Nakamura (Univ. of Tokyo)   Simplifying covering surface-knots by an addition of 1-handles with chart loops $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

10-01-0024
17   Shin Satoh   (Kobe Univ.)   Ribbon surface-tangles and doubles of surface-links $\cdots\cdots\cdots\cdots\cdots\cdots$ 10

September 12th (Tue)

10:10–10:25   Presentation Ceremony for the 2017 MSJ Geometry Prize

10:30–11:30   Award Lecture for the 2017 MSJ Geometry Prize
03-02-0002
Kobayashi Osamu   ♭   Weyl's gauge theory, the Schwarzian derivative and a sphere theorem

13:00–14:00   Award Lecture for the 2017 MSJ Geometry Prize
10-02-0002
Makoto Sakuma (Hiroshima Univ.)   Fiber surfaces vs Heegaard surfaces of 3-manifolds

September 13th (Wed)

10:00–12:00
10-01-0011
18   Miyazawa Haruko (Tsuda Coll.)   Invariants of welded links derived from multiplexing of crossings $\cdots\cdots$ 10
     Kodai Wada   (Waseda Univ.)
     Akira Yasuhara   (Tsuda Coll.)

10-01-0017
19   Yasutaka Nakanishi (Kobe Univ.)   A set of local moves generating the writhe polynomial $\cdots\cdots\cdots\cdots$ 10
     Shin Satoh   (Kobe Univ.)

10-01-0018
20   Keiju Kato   (Tokyo Tech)   Interior polynomial for signed bipartite graphs and the HOMFLY polynomial $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

10-01-0022
21   Takuji Nakamura   On a partial order of virtual knots $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
        (Osaka Electro-Comm. Univ.)
     Yasutaka Nakanishi (Kobe Univ.)
     Shin Satoh   (Kobe Univ.)

10-01-0010
22   Takefumi Nosaka (Tokyo Tech)   Milnor invariants via unipotent Magnus embeddings $\cdots\cdots\cdots\cdots$ 10
     Hisatoshi Kodani

10-01-0009
23   Takefumi Nosaka (Tokyo Tech)   Cocycles of nilpotent quotients of free groups $\cdots\cdots\cdots\cdots\cdots\cdots$ 10

10-01-0028
24   Anh T. Tran (Univ. of Texas, Dallas)   Higher-dimensional twisted Alexander invariants for metabelian representations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
     Yoshikazu Yamaguchi (Akita Univ.)

10-01-0038
25   Noboru Ito   (Univ. of Tokyo)   On n-trivialities of classical and virtual knots for some unknotting operations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
     Migiwa Sakurai
        (Ibaraki Nat. Coll. of Tech.)

10-01-0039
26   Hideo Takioka (Osaka City Univ.)   Infinitely many knots with the trivial $(2,1)$-cable Γ-polynomial $\cdots\cdots$ 10

14:15–15:15   Talk Invited by Topology Section
10-02-0003
Takahito Naito (Univ. of Tokyo)   Sullivan's coproduct on the reduced loop homology

15:30–17:30
10-01-0008
27   Yuya Nishimura (Kyoto Sangyo Univ.)   On model structures of Leinster's weak higher categories. $\cdots\cdots\cdots\cdots$ 15

10-01-0035
28   Shingo Okuyama   *   Configuration space of intervals with partially summable labels $\cdots\cdots$ 15
        (Kagawa Nat. Coll. of Tech.)
     Kazuhisa Shimakawa (Okayama Univ.)

10-01-0025
29   Shunsuke Ichiki (Yokohama Nat. Univ.)   Generic linear perturbations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

33   Topology

September 14th (Thu)

10:00–11:30

Infinite Analysis

September 11th (Mon)

9:50–12:00

11-01-0016
1   Saburo Kakei   (Rikkyo Univ.)   Solvable chaos with pseudo-invariants and complex multiplication $\cdots$ 15
    Ryohei Kubo   (Rikkyo Univ.)

11-01-0002
2   Atsuhira Nagano (Univ. of Tokyo)   Differential operators from the viewpoint of automorphic forms $\cdots\cdots$ 15

11-01-0010
3   Atsushi Nakayashiki (Tsuda Coll.)   On the expansion coefficients of KP Tau function $\cdots\cdots\cdots\cdots$ 15
    Soichi Okada   (Nagoya Univ.)
    Yoko Shigyo   (Tsuda Coll.)

11-01-0009
4   Hiroshi Ogawara (Kumamoto Univ.)   On algebraic independence of solutions to certain algebraic difference
                                        equations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

11-01-0018
5   Kôki Itô (Toyohashi Univ. of Tech.)   solution sheaf of q-difference module and its cohomology $\cdots\cdots\cdots$ 15

11-01-0001
6   Ryo Okawa   (Waseda Univ.)   Functional equations of Nekrasov functions proposed by Ito–Maruyoshi–
                                     Okuda $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

11-01-0015
7   Yukiko Konishi   (Kyoto Univ.) *   Almost duality for Saito structure and complex reflection groups $\cdots\cdots$ 15
    Satoshi Minabe (Tokyo Denki Univ.)
    Yuuki Shiraishi   (Kyoto Univ.)

14:20–16:30

11-01-0005
8   Soichi Okada   (Nagoya Univ.)   Schur Q-functions associated to the root system of type C $\cdots\cdots\cdots$ 15

11-01-0017
9   Masahiko Ito (Univ. of Ryukyus)   A determinant formula for the BC_n elliptic hypergeometric integrals of
    Masatoshi Noumi (Kobe Univ.)   Selberg type $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

11-01-0003
10 Kouichi Takemura (Chuo Univ.)   Degenerations of Ruijsenaars–van Diejen operator and q-Painlevé equa-
                                     tions $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

11-01-0004
11 Tetsu Masuda (Aoyama Gakuin Univ.) q-analogues of the Sasano system of the fourth order $\cdots\cdots\cdots\cdots\cdots$ 15

11-01-0008
12 Takao Suzuki   (Kinki Univ.)   A bilinear form of the generalized q-Painlevé VI system with $W(A_{2n+1}^{(1)})$
                                       symmetry $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

11-01-0011
13 Naoto Okubo (Univ. of Tokyo)   Degeneration of q-discrete Painlevé equations and cluster algebras $\cdots$ 15
    Takao Suzuki   (Kinki Univ.)

11-01-0014
14 Hidehito Nagao (Akashi Coll. of Tech.)   Various singularity configurations for q-Painlevé equations of type $E_7^{(1)}$
    Yasuhiko Yamada (Kobe Univ.) $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

11-01-0022
15 Tomoyuki Takenawa   Fiber-dependent deautonomization of integrable 2D mappings and dis-
    (Tokyo Univ. of Marine Sci. and Tech.)   crete Painlevé equations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

16:40–17:40   Talk Invited by Infinite Analysis Special Session

11-02-0002
    Shuhei Kamioka (Kyoto Univ.)   Partition functions for reverse plane partitions derived from the two-
                                    dimensional Toda molecule

September 12th (Tue)

9:50–12:00

11-01-0006
16 Kohei Motegi   Izergin–Korepin analysis on the wavefunctions of the six-vertex models
(Tokyo Univ. of Marine Sci. and Tech.)   · 10

11-01-0019
17 Yas-Hiro Quano   Ising model: 2dim system in a magnetic field and 3 dim system · · · · · · 15
(Suzuka Univ. of Med. Sci.)

11-01-0007
18 Takeo Kojima (Yamagata Univ.)   A bosonization of the quantum affine auperalgebra $U_q(\widehat{sl}(M|N))$ · · · · · 15

11-01-0012
19 Yosuke Saito (Osaka City Univ.)   Elliptic analog of an algebra of fermions and the quantum torus algebra
                                             · 15

11-01-0013
20 Yusuke Ohkubo   Singular vectors of the level N representation of Ding–Iohara–Miki
(Nat. Res. Univ. Higher School of Econ.)   algebra · 15

11-01-0020
21 Ivan Chi Ho Ip   (Kyoto Univ.)   On tensor product decomposition of positive representations · · · · · · · · · 15

11-01-0021
22 Hitoshi Konno   Elliptic quantum group and elliptic weight function · · · · · · · · · · · · · · · 15
(Tokyo Univ. of Marine Sci. and Tech.)

11-01-0023
23 Hitoshi Konno   Finite-dimensional representations of elliptic quantum group on the
(Tokyo Univ. of Marine Sci. and Tech.)   Gelfand–Tsetlin basis · 15

13:00–14:00   Talk Invited by Infinite Analysis Special Session

11-02-0001
Hidetoshi Awata (Nagoya Univ.)   The representation theory of the Ding–Iohara–Miki algebra