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.

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Foundation of Mathematics and History of Mathematics

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March 19th (Mon)

9:00–11:30

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Algebra

March 18th (Sun)

9:00–11:45

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13 Shin-ya Koyama   (Toyo Univ.)   Convergence of Euler products of Selberg zeta functions $\cdots\cdots\cdots\cdots\cdots$ 10
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18 Tomoya Machide   On an identity involving symmetric sums of regularized multiple zeta-
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5   Algebra

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25   Genki Koda (Tokyo Univ. of Sci.)   Certain Galois extensions whose Galois groups are isoclinic to D_8 ···· 10
     Masanari Kida (Tokyo Univ. of Sci.)

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26   Akinari Hoshi   (Niigata Univ.)   Degree three unramified cohomology groups and Noether's problem for
     Ming-chang Kang (Nat. Taiwan Univ.)   groups of order 243 ·· 10
     Aiichi Yamasaki (Kyoto Univ.)

02-01-0061
27   Akinari Hoshi   (Niigata Univ.)   Computation of degree three unramified cohomology groups using GAP
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March 19th (Mon)

9:15–12:00

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28   Fumitsuna Maruyama   ♭   On a certain method for determining the non-singularity of an integral
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29   Yuki Irie   (Chiba Univ.) ♭ p-Saturations of Welter's game and the irreducible representations of
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30   Fumihito Oda   (Kindai Univ.)   Axiomatic theory of Burnside rings I ···························· 10
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31   Masahiro Wakatake (Kindai Univ.)   The unit group of a partial Burnside ring of a reducible Coxeter group
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32   Kazuya Aokage   Tensor product of the spin representations for the symmetric groups
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March 20th (Tue)

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02-01-0008
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44   <u>Ayako Itaba</u> (Tokyo Univ. of Sci.)   3-dimensional quadratic AS-regular algebras corresponding to elliptic
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45   Ayako Itaba (Tokyo Univ. of Sci.)   On some non-projective infinitely generated modules over path algebras
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        (Shizuoka Univ.)
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47   Tomohiro Itagaki (Tokyo Univ. of Sci.)   Batalin–Vilkovisky algebra structures on the Hochschild cohomology of
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02-01-0041
48   Sota Asai   (Nagoya Univ.) ∗   Bricks over preprojective algebras · 10

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49   Tsutomu Nakamura (Okayama Univ.)   Bousfield localization and cosupport in derived categories of commuta-
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51   Toshinori Kobayashi (Nagoya Univ.)   Syzygies of Cohen–Macaulay modules and endomorphism ring of the
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7   Algebra

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15:40–16:40   Award Lecture for the 2018 MSJ Algebra Prize
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     Satoshi Naito   (Tokyo Tech)   Representation theory of quantum affine algebras

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March 21st (Wed)

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62   Koji Chinen   (Kindai Univ.)   Analogs of Mallows–Sloane bound for divisible formal weight enumera-tors · 10

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63   Norihiro Nakashima   Counter examples of Holm's questions for high order free hyperplane
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Geometry

March 18th (Sun)

9:15–11:35

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03-01-0042
2   Tsukasa Takeuchi (Keio Univ.)   Construction of symplectic-Haantjes manifold of certain Hamiltonian
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3   Takayuki Moriyama (Mie Univ.)   Some examples of global Poisson structures on S^4 · · · · · · · · · · · · · · · · · 10
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03-01-0017
4   Takayuki Moriyama (Mie Univ.)   Splitting theorem for sheaves of holomorphic k-vectors on complex
Takashi Nitta   (Mie Univ.)   contact manifolds · 10

03-01-0009
5   Hiroshi Sawai   Examples of solvmanifolds without LCK structures · · · · · · · · · · · · · · · · · 15
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6   Masayuki Igarashi (Tokyo Univ. of Sci.) *   On Hermite–Liouville structures constructed on the Hopf surface · · · · · 10

03-01-0024
7   Satoshi Nakamura (Tohoku Univ.)   Hessian of the Ricci Calabi functional · 15

03-01-0006
8   Satoshi Nakamura (Tohoku Univ.)   Remarks on modified Ding functional for toric Fano manifolds · · · · · · · 10

03-01-0027
9   Tomoyuki Hisamoto (Nagoya Univ.)   Gradient flow of the Ding energy and optimal degeneration of a Fano
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10   Shin-ichi Oguni (Ehime Univ.) *   On a coarse Cartan–Hadamard theorem · 15

03-01-0013
11   Tomohiro Fukaya (Tokyo Metro. Univ.)   New formulation of nonpositively curved spaces from the view point of
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03-01-0036
12   Tetsu Toyoda   A generalization of Gromov's $\mathrm{Cycl}_k(0)$ condition and an intrinsic char-
(Suzuka Nat. Coll. of Tech.)   acterization of five points in a CAT(0) space · 15

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13   Daisuke Kazukawa (Tohoku Univ.)   A new condition for convergence of energies and stability of Ricci
curvature bounds · 15

03-01-0007
14   Hiroki Nakajima (Tohoku Univ.)   Isoperimetric rigidity and distributions of 1-Lipschitz functions · · · · · · 15
Takashi Shioya (Tohoku Univ.)

03-01-0025
15   Hiroki Nakajima (Tohoku Univ.)   Lipschitz order with an additive error and normal law à la Lévy on the
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03-01-0031
16   Taiki Yamada (Tohoku Univ.)   The Ricci curvature and the Laplacian on edges of graphs · · · · · · · · · · · 10
Jürgen Jost (Max Planck Inst.)

03-01-0018
17   Ayato Mitsuishi (Fukuoka Univ.)   Obtuse constant and volume of Alexandrov spaces · · · · · · · · · · · · · · · · · 15
Takao Yamaguchi (Kyoto Univ.)

16:45–17:45   Talk Invited by Geometry Section

03-02-0002
Ryokichi Tanaka (Tohoku Univ.) ♭   Potential theory on discrete groups and metric embedding

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March 19th (Mon)

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9:00–11:45

03-01-0005
18 Hirotaka Ebisui   Discovery of concurrent, collinear Theorems ···················· 15
        (Geomathes Res. Center)

03-01-0010
19 Jun O'Hara   (Chiba Univ.)   Residues and intrinsic volumes of submanifolds of $\mathbb{R}^n$ ··············· 15

03-01-0023
20 Kaho Ohashi (Japan Women's Univ.) Construction of a metric on the moduli space of Delzant polytopes
                                ··· 15

03-01-0026
21 Kenzi Satô (Tamagawa Univ.)   The existence of orthocenters of simplices of hyperbolic spaces ······· 15

03-01-0044
22 Yuichiro Taketomi (Hiroshima Univ.) Singularities of the moduli space of left-invariant metrics and the prop-
                                erties of the corresponding metrics ······························· 15

03-01-0041
23 <u>Naohiko Kasuya</u> (Kyoto Sangyo Univ.) Knots and links of complex tangents ···························· 15
    Masamichi Takase (Seikei Univ.)

03-01-0032
24 Nobuhiro Innami (Niigata Univ.)   The asymptotic behavior of geodesic circles in a 2-torus ············· 15

03-01-0004
25 Kei Kondo (Yamaguchi Univ.)   From Hopf's curvature pinching conjecture to a differentiable exotic
                                sphere theorem ··· 15

03-01-0019
26 <u>Toshihiro Shoda</u> (Saga Univ.)   Metrics on a closed surface of genus two which maximize the first
    Shin Nayatani (Nagoya Univ.)   eigenvalue of the Laplacian ····································· 15

13:15–14:15   Talk Invited by Geometry Section
03-02-0003
    Hirofumi Sasahira (Kyushu Univ.) * The Seiberg–Witten equations and applications

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March 20th (Tue)

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27 Jong Taek Cho (Chonnam Nat. Univ.) Realizations of some contact metric manifolds as Ricci soliton real
    Takahiro Hashinaga   hypersurfaces ··· 15
    (Kitakyushu Nat. Coll. of Tech.)
    <u>Akira Kubo</u> (Hiroshima Shudo Univ.)
    Yuichiro Taketomi (Hiroshima Univ.)
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03-01-0015
28 Kazushi Kobayashi (Chiba Univ.)   Some remarks on the homological mirror symmetry for tori ·········· 15

03-01-0020
29 Mitsuhiro Itoh (Univ. of Tsukuba) Harmonic manifolds of hypergeometric type and spherical Fourier trans-
    <u>Hiroyasu Satoh</u> (Nippon Inst. of Tech.) form ··· 10

03-01-0003
30 Nobutaka Boumuki (Oita Univ.)   Irreducible representations of real semisimple Lie groups related to
                                homogeneous holomorphic line bundles over elliptic orbits ·········· 10

03-01-0029
31 Jun Watanabe (Univ. of Tokyo)♭   Fibered cusp b-pseudodifferential operators and its applications ······ 15

03-01-0008
32 Norihito Koiso   ♭ A wave equation of motion of an elastic wire on a Riemannian manifold
        (Kyushu Univ./Osaka Univ.⋆)   ·· 15

03-01-0033
33 <u>Toru Kajigaya</u> (MathAM-OIL)   Hamiltonian stability for weighted measure and generalized Lagrangian
    Keita Kunikawa (Tohoku Univ.)   mean curvature flow ·· 15

03-01-0037
34 Miyuki Koiso   (Kyushu Univ.)   Non-uniqueness of closed non-smooth hypersurfaces with constant anisotropic
                                mean curvature ··· 15

03-01-0038
35   Miyuki Koiso   (Kyushu Univ.)   Uniqueness of stable closed non-smooth hypersurfaces with constant anisotropic mean curvature · 10

14:15–16:30

03-01-0001
36   Makoto Sakaki (Hirosaki Univ.) *   Transforms for minimal surfaces in 5-dimensional space forms · · · · · · · 10

03-01-0002
37   Makoto Sakaki (Hirosaki Univ.) *   Transforms and a representation formula for non-conformal harmonic surfaces in the Euclidean 3-space · 15

03-01-0021
38   Kurando Baba (Tokyo Univ. of Sci.)   Calibrated equalities and hyperpolar actions · 15
     Osamu Ikawa (Kyoto Inst. Tech.)
     Atsumu Sasaki   (Tokai Univ.)

03-01-0022
39   Kurando Baba (Tokyo Univ. of Sci.)   Calibrated inequalities in pseudo-Riemannian geometry and a duality
     Osamu Ikawa (Kyoto Inst. Tech.)   · 10
     Atsumu Sasaki   (Tokai Univ.)

03-01-0035
40   Atsufumi Honda   *   Isometric deformations of mixed type surfaces · 10
             (Yokohama Nat. Univ.)

03-01-0040
41   Taro Kimura   Classification of Cartan embeddings which are austere submanifolds
     (Nat. Inst. of Tech., Tsuruoka Coll.)   · 15
     Katsuya Mashimo (Hosei Univ.)

03-01-0014
42   Osamu Ikawa (Kyoto Inst. Tech.)   Lagrangian Floer homology of two real forms in a complex flag manifold
     Hiroshi Iriyeh   (Ibaraki Univ.)   · 15
     Takayuki Okuda (Hiroshima Univ.)
     Takashi Sakai (Tokyo Metro. Univ.)
     Hiroyuki Tasaki (Univ. of Tsukuba)

03-01-0028
43   Yohei Komori   (Waseda Univ.)   Construction of pseudo-Anosov automorphisms whose dilatations are 2-Salem numbers · 15

16:45–17:45   Talk Invited by Geometry Section
03-02-0001
     Hideki Miyachi   (Osaka Univ.)   Toward complex analysis on Teichmüller space

Complex Analysis

March 18th (Sun)

9:45–11:45

04-01-0004
1   Shigeyoshi Owa (Yamato Univ.)*   On univalences for Alexander type integrals $\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
    Hitoshi Saitoh
         (Gunma Nat. Coll. of Tech.)
    Janusz Sokol (Univ. of Rzeszow)
    Mamoru Nunokawa (Gunma Univ.*)

04-01-0008
2   Kiyoki Tanaka (Daido Univ.)♭   Toeplitz operators on the polyharmonic Bergman space $\cdots\cdots\cdots\cdots$ 15

04-01-0005
3   Ryosuke Yamazaki   The realization problem for Jørgensen numbers $\cdots\cdots\cdots\cdots\cdots\cdots$ 15
    (Gakushuin Boys' Senior High School)
    Yasushi Yamashita
              (Nara Women's Univ.)

04-01-0014
4   Naotaka Kajino (Kobe Univ.)   Weyl's eigenvalue asymptotics for the Laplacian on circle packing limit
    sets of certain Kleinian groups $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0011
5   Tomoshige Yukita (Waseda Univ.)   Construction of infinite series of ideal hyperbolic Coxeter 4-polytopes
    whose growth rates are Perron numbers. $\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0009
6   Masahiro Yanagishita   Construction of p-Weil–Petersson metric on p-integrable Teichmüller
              (Yamaguchi Univ.)   space $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0012
7   Dounnu Sasaki (Waseda Univ.)   The denseness probelm of geodesic currents and subset currents $\cdots\cdots$ 15

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

04-02-0002
    Hiroki Sumi (Kyoto Univ.)   Randomness-induced phenomena in random holomorphic dynamical
    systems and their applications

March 19th (Mon)

10:00–11:40

04-01-0006
8   Takahiro Inayama (Univ. of Tokyo) L^2 estimates and vanishing theorems for holomorphic vector bundles
    equipped with singular Hermitian metrics $\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0001
9   Genki Hosono (Univ. of Tokyo)   On recent topics on L^2 extension theorems $\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0013
10 Sachiko Hamano (Osaka City Univ.)   Variation of the **a**-span of an open Riemann surface and pseudoconvexity
    Masakazu Shiba (Hiroshima Univ.*) $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
    Hiroshi Yamaguchi (Shiga Univ.*)

04-01-0002
11 Akio Kodama (Kanazawa Univ.*)♭   A localization principle for biholomorphic mapppings between the Fock–
    Bargmann–Hartogs domains $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0007
12 Masataka Tomari (Nihon Univ.)*   maximal ideal cycle and fundamental cycle of normal two dimensional
    Tadashi Tomaru (Gunma Univ.*)   double points $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

04-01-0010
13 Katsusuke Nabeshima   An algorithm for computing integral numbers in a ring of convergent
              (Tokushima Univ.)   power series II $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
    Shinichi Tajima (Univ. of Tsukuba)

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

04-02-0001
    Takayuki Koike (Osaka City Univ.)   Hermitian metrics on numerically effective line bundles and neighbor-
    hoods of complex submanifolds

Functional Equations

March 18th (Sun)

9:15–12:00

05-01-0010
1 Mostafa Adimy (Univ. of Lyon)
   Abdennasser Checkroun
           (Univ. of Tlemcen)
   Toshikazu Kuniya (Kobe Univ.)
   Analysis of a mathematical model for hematopoietic stem cells with a nonlocal term and time delay $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0073
2 Hideaki Izumi (Chiba Inst. of Tech.)
   Solving functional equations by using dimensioned numbers $\cdots\cdots\cdots$ 10

05-01-0028
3 Hideaki Matsunaga (Osaka Pref. Univ.)
   Doi Pati
   Sugie Jitsuro (Shimane Univ.)
   Oscillation criteria for a nonlinear delay difference equation by phase plane analysis $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0047
4 Yasuhiro Fujita (Univ. of Toyama)
   Nao Hamamuki (Hokkaido Univ.)
   Antonio Siconolfi
         (Sapienza Univ. of Rome)
   Norikazu Yamaguchi (Univ. of Toyama)
   On a Hamilton–Jacobi flow staring from a pathological function $\cdots\cdots$ 10

05-01-0037
5 Shingo Takeuchi
         (Shibaura Inst. of Tech.)
   Applications of generalized trigonometric functions to a nonlocal boundary value problem $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0007
6 Kodai Fujimoto (Osaka Pref. Univ.)
   Naoto Yamaoka (Osaka Pref. Univ.)
   Oscillation constants for second-order nonlinear differential equations with $p(t)$-Laplacian $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0017
7 Ryuji Kajikiya   (Saga Univ.)
   Inbo Sim   (Univ. of Ulsan)
   Satoshi Tanaka (Okayama Univ. of Sci.)
   A complete classification of bifurcation diagrams for a class of (p,q)-Laplace equations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0023
8 Masakazu Onitsuka
         (Okayama Univ. of Sci.)
   Tanaka Satoshi (Okayama Univ. of Sci.)
   Box dimension of solution curves for a class of two-dimensional linear differential systems $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0036
9 Satoshi Tanaka (Okayama Univ. of Sci.)
   Masakazu Onitsuka
         (Okayama Univ. of Sci.)
   Characteristic equation for autonomous planar half-linear differential systems $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0062
10 Junya Nishiguchi (Tohoku Univ.)
   On global attractors for dynamical systems without natural metrics $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0056
11 Yumiko Takei   (Kobe Univ.)
   On the expression of Voros coefficients for hypergeometric differential equations with two variables in terms of the topological recursion and its applications $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0005
12 Saburou Saitoh
   (Gunma Univ.*/Inst. of Reproducing Kernels)
   Haydar Akca (Abu Dhabi Uni.)
   Sandra Pinelas
         (Military Acad. Portugal)
   * Incompleteness of the theory of differential equations and open problems $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0006
13 Saburou Saitoh
   (Gunma Univ.*/Inst. of Reproducing Kernels)
   Tsutomu Matsuura (Gunma Univ.)
   * Division by zero calculus and singular integrals $\cdots\cdots\cdots\cdots\cdots\cdots$ 10

14:15–16:15

05-01-0029
14   Takanobu Hara   A Carleson-type estimate for p-superharmonic functions · · · · · · · · · · · · 10
(Hokkaido Univ./Tokyo Metro. Univ.)

05-01-0048
15   Xiaojing Liu   (Ibaraki Univ.)   The equivalences among p-capacity, p-Laplace-capacities and Hausdorff
Toshio Horiuchi (Ibaraki Univ.)   measure · 10

05-01-0030
16   Albert Rodríguez Mulet   Eigenfrequencies of a thin straight elastic body · · · · · · · · · · · · · · · · · · · 10
                 (Hokkaido Univ.)

05-01-0039
17   Takashi Furuya (Nagoya Univ.)   An application of the factorization method for some inverse acoustic
scattering problems · 10

05-01-0038
18   Kimie Nakashima   Multiple existence of indefinite nonlinear diffusion problem in popula-
(Tokyo Univ. of Marine Sci. and Tech.)   tion genetics · 10

05-01-0075
19   Kazuhiro Oeda (Waseda Univ.)   Classification of steady states to a prey-predator model with population
Kousuke Kuto   flux by attractive transition · 10
        (Univ. of Electro-Comm.)

05-01-0004
20   Yasuhito Miyamoto (Univ. of Tokyo)   A limit equation and bifurcation diagrams of semilinear elliptic equa-
tions with general supercritical growth · 10

05-01-0009
21   Yasuhito Miyamoto (Univ. of Tokyo)   Exact eigenvalues and eigenfunctinos for a one-dimensional Gel'fand
Tohru Wakasa (Kyushu Inst. of Tech.)   problem · 10

05-01-0051
22   Kenichiro Umezu (Ibaraki Univ.)   Loop components of nontrivial nonnegative solutions for indefinite
Uriel Kaufmann   concave-convex problems · 10
        (Univ. Nacional de Córdoba)
Humberto Ramos Quoirin
        (Univ. de Santiago de Chile)

16:30–17:30   Award Lecture for the 2017 MSJ Analysis Prize

05-02-0002
Yoshitsugu Takei (Doshisha Univ.)   On the instanton-type expansions of elliptic functions and Painlevé
transcendents —The final stage of the exact WKB analysis for Painlevé
equations

March 19th (Mon)

9:15–12:00

05-01-0041
23   Yohei Toyota   (Osaka Univ.)   The behavior of blow-up solutions for mean filed equation with multi-
Takashi Suzuki   (Osaka Univ.)   intensities · 10

05-01-0042
24   Daisuke Naimen   Blow-up analysis for sign-changing radial solutions in Trudinger–Moser
       (Muroran Inst. of Tech.)   critical equations in $\mathbb{R}^2$ · 10
Massimo Grossi
       (Sapienza Univ. of Roma)

05-01-0024
25   Megumi Sano (Osaka City Univ.)   Minimization problems related to sharp critical Rellich inequalities in
Futoshi Takahashi (Osaka City Univ.)   four dimension · 10

05-01-0034
26   Aya Ishizeki   (Chiba Univ.)   Decomposition of generalized O'Hara's energies · · · · · · · · · · · · · · · · · · · 10
Takeyuki Nagasawa (Saitama Univ.)

05-01-0053
27   Yohei Sato   (Saitama Univ.)   Infinitely many solutions for a nonlinear Schrödinger equation with
Shibata Masataka (Tokyo Tech)   general nonlinearity · 10

15　　Functional Equations

13:15–14:15　Award Lecture for the 2017 MSJ Analysis Prize

March 20th (Tue)

9:15–12:00

16   Functional Equations

05-01-0019
42   Yūki Naito   (Ehime Univ.)   Asymptotic behavior of global solutions for semilinear heat equations with slowly decaying initial data ································· 10

05-01-0018
43   Kyohei Itakura   (Kobe Univ.)   Spectral theory for repulsive Hamiltonians ······················· 10

05-01-0044
44   Wataru Ichinose (Shinshu Univ.)   The Feynman path integrals of continuous quantum measurements and the non-self-adjoint Schrödinger equations ························ 10

05-01-0049
45   Hironori Michihisa (Hiroshima Univ.) Diffusive structures and wave effects of damped wave equations ······ 10

05-01-0058
46   Naofumi Mori (Fukuoka Inst. of Tech.) The S & K mixed condition for symmetric hyperbolic systems with non-symmetric relaxations ···································· 10

05-01-0061
47   Kenta Nakamura (Kyushu Univ.)   Asymptotic stability of rarefaction waves for a model system of hyperbolic balance laws ·· 10
     Tohru Nakamura (Kumamoto Univ.)
     Shuichi Kawashima (Kyushu Univ.)

05-01-0074
48   Motohiro Sobajima   Life-span of blowup solutions to semilinear wave equation with space-dependent critical damping ································· 10
              (Tokyo Univ. of Sci.)
     Masahiro Ikeda (RIKEN/Keio Univ.)

14:15–16:15
05-01-0063
49   Takayuki Niimura (Hokkaido Univ.)   Attractors and their stability with respect to rotational inertia for a nonlocal extensible beam equation ····························· 10

05-01-0020
50   Masahiro Ikeda (RIKEN/Keio Univ.)   Time decay estimates for the linear damped wave equation and the critical exponent for the semilinear problem with slowly decaying data ·· 10
     Yuta Wakasugi   (Ehime Univ.)
     Inui Takahisa (Tokyo Univ. of Sci.)
     Mamoru Okamoto (Shinshu Univ.)

05-01-0021
51   Masahiro Ikeda (RIKEN/Keio Univ.)   Life-span of solutions to semilinear wave equation with time-dependent critical damping ································· 10
     Motohiro Sobajima
              (Tokyo Univ. of Sci.)

05-01-0025
52   Natsumi Yoshida (Ritsumeikan Univ.) Large time behavior of solutions toward a multiwave pattern to the Cauchy problem for the dissipative wave equation with partially linearly degenerate flux ··· 10

05-01-0026
53   Natsumi Yoshida (Ritsumeikan Univ.) Global asymptotic stability of the rarefaction waves for a scalar conservation law with nonlinear viscosity ··························· 10
     Akitaka Matsumura (Osaka Univ.⋆)

05-01-0013
54   Yuichiro Kawahara   Scattering problem for the fourth order nonlinear Schrödinger equation ·· 10
     (Doshisha Junior and Senior High School)
     Nakao Hayashi   (Osaka Univ.)
     Pavel I. Naumkin   (UNAM)

05-01-0033
55   Satoshi Masaki   (Osaka Univ.)   Long range scattering for nonlinear Schrödinger equation with repulsive delta potential ··· 10
     Jason Murphy
     (Missouri Univ. of Sci. and Tech.)
     Jun-ichi Segata (Tohoku Univ.)

05-01-0046
56   Hayato Miyazaki   Nonexistence of scattering and modified scattering states for nonlinear Schrödinger equations with critical homogeneous nonlinearity ········ 10
              (Tsuyama Nat. Coll. of Tech.)
     Satoshi Masaki   (Osaka Univ.)

05-01-0055
57   Sojiro Murai   *   Strichartz and scattering for magnetic Schrödinger equations in exterior domain ·· 10
     (Tokyo Metropolitan Coll. of Indus. Tech.)

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

05-02-0003
Hirokazu Ninomiya (Meiji Univ.)   Traveling wave solutions and entire solutions of reaction-diffusion equations

March 21st (Wed)

9:15–12:00

05-01-0070
58   Ikkei Shimizu   (Kyoto Univ.)   Remarks on local well-posedness of Schrödinger map equation $\cdots\cdots$ 10

05-01-0071
59   Mamoru Okamoto (Shinshu Univ.)   Ill-posedness of the Cauchy problem for the fractional Schrödinger equation $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0078
60   Daisuke Sakoda (Osaka Univ.)   Small data global existence for a quadratic derivative nonlinear Schrödinger
Hideaki Sunagawa (Osaka Univ.)   system in two space dimensions $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0045
61   Hiroyuki Hirayama (Univ. of Miyazaki)   Well-posedness for the Zakharov–Kuznetsov–Burgers equation in two
space dimensions $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0077
62   Ikki Fukuda (Hokkaido Univ.)   Second asymptotic profile for the generalized KdV-Burgers equation
$\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0016
63   Shota Sakamoto (Kyoto Univ.)   Solution to the Boltzmann equation in velocity-weighted Chemin–
Duan Renjun   Lerner type spaces $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
    (Chinese Univ. of Hong Kong)

05-01-0003
64   Tetu Makino (Yamaguchi Univ.*) * On axisymmetric solutions of the Einstein–Euler equations $\cdots\cdots\cdots$ 10

05-01-0054
65   Itsuko Hashimoto   Asymototic behavior toward nonlinear waves for radially symmetric
    (Kansai Univ. / Osaka City Univ.)   solutions of multi-dimensional Burgers equation $\cdots\cdots\cdots\cdots\cdots$ 10
Akitaka Matsumura (Osaka Univ.*)

05-01-0067
66   Yusuke Ishigaki (Kyushu Univ.)   Global existence of solutions of the compressible viscoelastic fluid
around parallel flow $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0059
67   Keiichi Watanabe (Waseda Univ.)   Maximal regularity of compressible-incompressible two-phase flows with
phase transitions $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0011
68   Yoshihiro Shibata (Waseda Univ.)   Free boundary problem with surface tension $\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0012
69   Yoshihiro Shibata (Waseda Univ.)   Global well-posedness for a $\mathbb{Q}$ tensor model of Incompressible Nematic
Liquid Crystals in $\mathbb{R}^N$ $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0060
70   Kazuyuki Tsuda (Osaka Univ.)   Time decay estimate with diffusive property and smoothing effect for
Takayuki Kobayashi (Osaka Univ.)   solution to the compressible Navier–Stokes–Korteweg system $\cdots\cdots\cdots$ 10

14:15–16:15

05-01-0052
71   Nobu Kishimoto (Kyoto Univ.)   Global mild solution to Navier–Stokes equations with partial hypervis-
Yoshitaka Saiki (Hitotsubashi Univ.)   cosity $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
Kengo Nakai   (Univ. of Tokyo)
Yoneda Tsuyoshi (Univ. of Tokyo)

05-01-0076
72   Tatsu-Hiko Miura (Univ. of Tokyo)   On singular limit equations for the Navier–Stokes equations in moving
thin domains $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0072
73   Yasunori Maekawa (Kyoto Univ.)   On stability of physically reasonable solutions to the two-dimensional
Navier–Stokes equations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0027
74   Kohei Nakao   (Shinshu Univ.)   Beale–Kato–Majda type extension criterion of smooth solutions to the
Yasushi Taniuchi (Shinshu Univ.)   Navier–Stokes equations in three dimensional domains $\cdots\cdots\cdots\cdots$ 10

05-01-0035
75   Hideo Kozono （Waseda Univ.）* A remark on Liouville-type theorem for the nonstationary Navier–
     Yutaka Terasawa （Nagoya Univ.）   Stokes equations in two dimensional domains $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
     Yuta Wakasugi （Ehime Univ.）

05-01-0043
76   Akira Okada   （Kyoto Univ.） Spatial analyticity of solutions to the Navier–Stokes equtations with
     Hideo Kozono   （Waseda Univ.） initial data in homogeneous Besov spaces $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
     Senjo Shimizu   （Kyoto Univ.）

05-01-0068
77   Takahiro Okabe （Hirosaki Univ.） Remark on the strong solvability of the Navier–Stokes equations in the
     Youhei Tsutsui （Shinshu Univ.） weak L^n space $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0031
78   Hiroyuki Tsurumi （Waseda Univ.） Solutions of the stationary Navier–Stokes equations in homogeneous
     Triebel–Lizorkin spaces $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

05-01-0032
79   Hiroyuki Tsurumi （Waseda Univ.） Ill-posedness of the stationary Navier–Stokes equations in homogeneous
     Besov spaces $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

16:30–17:30   Talk Invited by Functional Equations Section
05-02-0004
  Tsukasa Iwabuchi （Tohoku Univ.）[b] On the ill-posedness for the compressible Navier–Stokes equations

Real Analysis

March 20th (Tue)

9:00–12:00

06-01-0017
1 Toshiharu Kawasaki
(Nihon Univ. / Tamagawa Univ.)
On the principal value of Henstock–Kurzweil integral $\cdots\cdots\cdots\cdots$ 15

06-01-0033
2 Aoi Honda (Kyushu Inst. of Tech.)
Yoshiaki Okazaki
(Fuzzy Logic Systems Inst.)
Weak L_p space $L^{p,\infty}$ for quasi-subadditive monotone measure $\cdots\cdots$ 15

06-01-0003
3 Toshiaki Murofushi (Tokyo Tech)
Naoki Enomoto   (Tokyo Tech)
Conditions for the strong form of the Egorov theorem in non-additive measure theory $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0026
4 Fumiaki Kohsaka (Tokai Univ.)
The proximal point algorithm for convex functions in complete CAT(1) spaces $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0031
5 Shin-ya Matsushita (Akita Pref. Univ.)
On the convergence of an operator splitting method $\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0015
6 Koji Aoyama   (Chiba Univ.)
Strongly quasi-nonexpansive mappings, II $\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0028
7 Sachiko Atsushiba
(Univ. of Yamanashi)
Weak and strong convergence theorems for a sequence of nonlinear operators $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0032
8 Tomonari Suzuki
(Kyushu Inst. of Tech.)
Two topologies on ν-generalized metric spaces $\cdots\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0016
9 Yukino Tomizawa
(Niigata Inst. of Tech.)
Geometric constants of $\pi/2$-rotation invariant norms $\cdots\cdots\cdots\cdots$ 15

06-01-0030
10 Ryoichi Kunisada (Waseda Univ.)[♭]
Summability methods and Fourier analysis on $\mathbb{R}^{\times}$ $\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0006
11 Takeshi Iida
(Fukushima Nat. Coll. of Tech.)
The dual inequality of the boundedness fot the Hardy–Littlewood maximal operator and the fractional integrals $\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

14:15–16:15

06-01-0025
12 Ryutaro Arai   (Ibaraki Univ.)
Eiichi Nakai   (Ibaraki Univ.)
Compact commutators of Calderón–Zygmund and generalized fractional integral operators with a function in Campanato spaces on generalized Morrey spaces $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0008
13 Minglei Shi   (Ibaraki Univ.)
Eiichi Nakai   (Ibaraki Univ.)
Commutators of generalized fractional integral operators on Orlicz spaces $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0019
14 Gaku Sadasue (Osaka Kyoiku Univ.)
Eiichi Nakai   (Ibaraki Univ.)
Commutators of fractional integrals on martingale Morrey spaces $\cdots$ 15

06-01-0010
15 Koichi Taniguchi (Chuo Univ.)
Tsukasa Iwabuchi (Tohoku Univ.)
Tokio Matsuyama (Chuo Univ.)
Bilinear estimates in Besov spaces on domains $\cdots\cdots\cdots\cdots\cdots\cdots$ 15

06-01-0014
16 Koichi Taniguchi (Chuo Univ.)
Tsukasa Iwabuchi (Tohoku Univ.)
Tokio Matsuyama (Chuo Univ.)
Besov spaces generated by Schrödinger operators $\cdots\cdots\cdots\cdots\cdots\cdots$ 15

20   Real Analysis

06-01-0011
17   <u>Tsukasa Iwabuchi</u> (Tohoku Univ.) *   Besov spaces generated by the Dirichlet Laplacian · · · · · · · · · · · · · · · · · 15
      Koichi Taniguchi (Chuo Univ.)
      Tokio Matsuyama (Chuo Univ.)

06-01-0012
18   <u>Tomoya Kato</u>   (Osaka Univ.)   A remark on the Schrödinger operator on Wiener amalgam spaces · · · 15
      Naohito Tomita (Osaka Univ.)

16:30–17:30   Talk Invited by Real Analysis Section
06-02-0001
      Ryotaro Tanaka (Kyushu Univ.)   Geometric techniques in Banach space theory: Challenges to Tingley's
                                        problem

March 21st (Wed)

9:15–12:00
06-01-0001
19   Masaaki Mizukami   The parabolic-elliptic chemotaxis case as a limit of the fully parabolic
              (Tokyo Univ. of Sci.)   chemotaxis system with signal-dependent sensitivity · · · · · · · · · · · · · · · 15

06-01-0002
20   Shunsuke Kurima (Tokyo Univ. of Sci.)   Vanishing viscosity for a Cahn–Hilliard type system on unbounded
                                                domains · 15

06-01-0013
21   <u>Kosuke Kita</u>   (Waseda Univ.)   Some threshold property for a reaction diffusion system arising from a
      Mitsuharu Ôtani (Waseda Univ.)   nuclear reactor model · 15
      Hiroki Sakamoto
      (Hitachi-GE Nuclear Energy, Ltd.)

06-01-0024
22   Yutaka Tsuzuki   Existence for Vlasov–Poisson equations with angle error in magnetic
              (Hiroshima Shudo Univ.)   field in a half-space · 15

06-01-0027
23   Taishi Motoda (Kyoto Univ. of Edu.)   Time periodic solutions of Cahn–Hilliard system with dynamic bound-
                                              ary conditions · 15

06-01-0022
24   Ryota Nakayashiki (Chiba Univ.)   Kobayashi–Warren–Carter system subject to quasi-linear diffusions and
                                          dynamic boundary conditions · 15

06-01-0021
25   Hiroshi Watanabe (Oita Univ.)   Solvability of degenerate parabolic-parabolic systems · · · · · · · · · · · · · · 15

06-01-0035
26   <u>Makoto Nakamura</u> (Yamagata Univ.)   On the Cauchy problem of a semilinear diffusion equation in an ex-
      Yuya Sato   (Yamagata Univ.)   panding space · 10

06-01-0034
27   Makoto Nakamura (Yamagata Univ.)   Remarks on the derivation of Navier–Stokes equations and elastic wave
                                          equations in uniform and isotropic spacetimes · 10

06-01-0020
28   <u>Yoshikazu Giga</u> (Univ. of Tokyo)   Analyticity of the Stokes semigroup in BMO · 10
      Martin Bolkart (TU Darmstadt)
      Takuya Suzuki
      (Adv. Simulation Tech. of Mechanics R&D, Co., Ltd.)

14:15–16:00
06-01-0023
29   Takeshi Fukao (Kyoto Univ. of Edu.)   A strict separation property from pure phases for GMS model with
                                            logarithmic potential · 15

06-01-0007
30   <u>Noriaki Yamazaki</u> (Kanagawa Univ.)   Quasi-variational evolution equations governed by double time-dependent
      Nobuyuki Kenmochi (Univ. of Warsaw)   subdifferentials · 15
      Ken Shirakawa   (Chiba Univ.)

06-01-0009
31   Akio Ito   ♭   Evolution inclusion on a real Hilbert space with quasi-variational struc-
                       ture for inner product —Time-dependent convex functions— · · · · · · · · 15

16:15–17:15   Talk Invited by Real Analysis Section
06-02-0002
Shun Uchida   (Waseda Univ.)   Solvability of a system describing double-diffusive convection phenomena in some porous medium

Functional Analysis

March 18th (Sun)

14:15–16:15

07-01-0001
1 Saburou Saitoh   * What are reproducing kernels? $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
   (Gunma Univ.*/Inst. of Reproducing Kernels)
   Tsutomu Matsuura (Gunma Univ.)
   Yosihiro Sawano (Tokyo Metro. Univ.)

07-01-0002
2 Saburou Saitoh   * General integral transforms by the concept of generalized reproducing
   (Gunma Univ.*/Inst. of Reproducing Kernels)   kernels $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
   Tsutomu Matsuura (Gunma Univ.)
   Yoshihiro Sawano (Tokyo Metro. Univ.)

07-01-0018
3 Takashi Aoki   (Kindai Univ.)   Linear continuous operators acting on the space of entire functions of a
   Ryuichi Ishimura (Chiba Univ.)   given order $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
   Daniele C. Struppa (Chapman Univ.)
   Shofu Uchida   (Kindai Univ.)

07-01-0020
4 Yoritaka Iwata   (Tokyo Tech)   Module over the Banach algebra defined by the logarithmic representa-
                                       tion of infinitesimal generators $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0023
5 Fumio Hiroshima (Kyushu Univ.)   Mass renormalization in the Nelson model $\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 12
   Susumu Osawa (Kyushu Univ.)

07-01-0030
6 Fumio Hiroshima (Kyushu Univ.)   Renormalized Gibbs measures associated with the Nelson model $\cdots\cdots$ 15

07-01-0029
7 Kiyoomi Kataoka (Univ. of Tokyo)   On generalized eigenvalues of an operator related to Kuramoto conjec-
   Yu Mada   (Univ. of Tokyo)   ture $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

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

07-02-0003
   Nobuaki Obata (Tohoku Univ.)   Quantum probabilistic methods for spectral analysis of graphs

March 19th (Mon)

9:30–12:00

07-01-0005
8 Junsei Watanabe   * Functional analytic viewpoints in computational linguistics of translated
             (Tokyo Gakugei Univ.)   literary works $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0031
9 Shizuo Miyajima (Tokyo Univ. of Sci.)   Characterization of closed balls via metric projections $\cdots\cdots\cdots\cdots$ 10
   Isao Saito (Tokyo Univ. of Sci.)

07-01-0004
10 Sin-Ei Takahasi (Yamagata Univ.*)   Semigroup operations distributed by the ordinary multiplication or
    Hiroyuki Takagi (Shinshu Univ.)   addition on the real numbers $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
    Takeshi Miura   (Niigata Univ.)
    Hirokazu Oka   (Ibaraki Univ.)

07-01-0006
11 Osamu Hatori   (Niigata Univ.)   Surjective isometries on Banach algebras of Lipschitz maps $\cdots\cdots\cdots$ 15

07-01-0011
12 Nobukazu Shimeno   The hypergeometric function of type A and the Lauricella hypergeo-
             (Kwansei Gakuin Univ.)   metric series $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
    Yuichi Tamaoka
             (Kwansei Gakuin Univ.)

07-01-0021
13 <u>Hiroshi Oda</u> (Takushoku Univ.)   Spherical functions for fine K-types $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
    Nobukazu Shimeno
        (Kwansei Gakuin Univ.)

07-01-0025
14 Atsumu Sasaki   (Tokai Univ.)   A Cartan decomposition for spherical homogeneous spaces of reductive
    type $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0026
15 Taito Tauchi   (Univ. of Tokyo)[♭]   Multiplicity of a degenerate principal series for homogeneous spaces
    with infinite orbits $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0014
16 Minoru Itoh (Kagoshima Univ.)   A description of an invariant theory using the notion of wreath algebra
    with trace $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

13:15–14:15   Talk Invited by Functional Analysis Section
07-02-0002
    Hideyuki Ishi   Gamma-type integrals over convex cones
    (Nagoya Univ. / JST PRESTO)

March 20th (Tue)

9:30–12:00
07-01-0012
17 <u>Yasuo Watatani</u> (Kyushu Univ.) *   A computation of the dimension group for the self-similar map given
    Tsuyoshi Kajiwara (Okayama Univ.)   by the tent map $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0010
18 Kengo Matsumoto   *   Ruelle C^*-algebras associated with Smale spaces and bilateral Cuntz–
        (Joetsu Univ. of Edu.)   Krieger algebras $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0007
19 Hiroyuki Osaka (Ritsumeikan Univ.)   Stable rank for crossed products by actions of finite groups on C*-
    algebras $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0022
20 Kei Hasegawa   (Kyushu Univ.)   Boundary rigidity for free product C*-algebras $\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0009
21 Yusuke Sawada (Nagoya Univ.)   The affine property of quasi-free states on self-dual CAR algebras $\cdots$ 15

07-01-0028
22 Takuya Takeishi (Kyoto Univ.)   Reconstructing the Bost–Connes semigroup actions from K-theory $\cdots$ 15

07-01-0019
23 Toshihiko Masuda (Kyushu Univ.)   Tannaka–Kreĭn–Woronowicz duality from the viewpoint of Q-systems
    $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0008
24 Yusuke Isono   (Kyoto Univ.)   Unique prime factorization for infinite tensor product factors $\cdots\cdots\cdots$ 15

07-01-0003
25 Narutaka Ozawa (Kyoto Univ.)   Finite-dimensional representations constructed from random walks $\cdots$ 15

14:15–16:00
07-01-0032
26 Masaru Nagisa   (Chiba Univ.)   Some operator norm inequalities $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0015
27 Junichi Fujii (Osaka Kyoiku Univ.)   Graphical approach to Hopf algebras $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

07-01-0027
28 <u>Masayuki Fujimoto</u>   Mixed Schwarz inequalities via the matrix geometric mean $\cdots\cdots\cdots\cdots$ 10
        (Osaka Kyoiku Univ.)
    Yuki Seo (Osaka Kyoiku Univ.)

07-01-0017
29 <u>Yuki Seo</u> (Osaka Kyoiku Univ.)   A weighted mixed Schwarz operator inequality via the geometric oper-
    Masayuki Fujimoto   ator mean $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
        (Osaka Kyoiku Univ.)

07-01-0013
30 Takeaki Yamazaki (Toyo Univ.)   The Karcher equation, relative operator entropy and the Ando–Hiai
    inequality $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

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

Statistics and Probability

March 18th (Sun)

9:15–12:00

08-01-0016
1   <u>Kazutoshi Yamazaki</u> (Kansai Univ.)   Fluctuation theory for level-dependent Lévy processes $\cdots\cdots\cdots\cdots$ 15
    Irmina Czarna (Univ. of Wrocław)
    Jose-Luis Perez
    (Centro de Investigación en Matemáticas)
    Tomasz Rolski (Univ. of Wrocław)

08-01-0019
2   <u>Kei Noba</u>   (Kyoto Univ.)   On optimal periodic dividend strategies for Lévy risk processes $\cdots\cdots$ 15
    José-Luis Pérez   (CIMAT)
    Kazutoshi Yamazaki (Kansai Univ.)
    Kouji Yano   (Kyoto Univ.)

08-01-0017
3   <u>Yuichi Shiozawa</u> (Osaka Univ.)   Upper rate functions of Brownian motion type for symmetric jump
    Jian Wang (Fujian Normal Univ.)   processes $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

08-01-0030
4   Takahiro Hasebe (Hokkaido Univ.)   Freely selfdecomposability of the normal distributions $\cdots\cdots\cdots\cdots$ 10
    <u>Noriyoshi Sakuma</u> (Aichi Univ. of Edu.)
    Steen Thorbjørnsen (Aarhus Univ.)

08-01-0003
5   Toshio Nakata (Fukuoka Univ. of Edu.)   The maxima for the generalized St. Petersburg game $\cdots\cdots\cdots\cdots$ 10

08-01-0010
6   <u>Yong Moo Chung</u> (Hiroshima Univ.)   Large deviaition principle for unimodal maps with flat critical point
    Hiroki Takahasi   (Keio Univ.) $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

08-01-0033
7   Jin Hatomoto   Relation between mixing properties and chaos in the sense of Devaney
        (Tokyo Nat. Coll. of Tech.) $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

08-01-0009
8   Hisatoshi Yuasa (Osaka Kyoiku Univ.) *   A relative, strictly ergodic model theorem for infinite measure-preserving
    systems $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

08-01-0035
9   Haruyoshi Tanaka   On convergence of the Gibbs measures of perturbed graph iterated
        (Wakayama Med. Univ.)   function systems with degeneration $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

08-01-0014
10   Masatake Hirao (Aichi Pref. Univ.)   On p-frame potential of random point configurations on the sphere $\cdots$ 15

14:15–15:00

08-01-0024
11   Nariyuki Minami (Keio Univ.)   One-dimensional Schrödinger operator with decaying white noise po-
    tential $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

08-01-0006
12   Yuki Suzuki   (Keio Univ.)   Diffusion processes with random potentials consisting of specially con-
    tracted self-similar processes $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

08-01-0021
13   Kiyoiki Hoshino (Osaka Pref. Univ.)   On the reconstruction formulas in the wide sense of Wiener functionals
    from the SFCs $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

15:15–16:15   Award Lecture for the 2017 MSJ Analysis Prize
08-02-0001
    Masayoshi Takeda (Tohoku Univ.)   Properties of symmetric Markov processes with tightness property

16:30–17:30   Talk Invited by Statistics and Probability Section
08-02-0004
    Koichiro Takaoka (Hitotsubashi Univ.)   The first fundamental theorem of asset pricing: stochastic integrals and
    martingale measures

March 19th (Mon)

9:30–11:30

08-01-0002
14   Satoshi Suzuki (Shimane Univ.)   Quasiconvex programming with a reverse quasiconvex constraint $\cdots\cdots$ 15

08-01-0036
15   Masayuki Horiguchi (Kanagawa Univ.)   Adaptive approach in a multivariate Bayesian control chart $\cdots\cdots\cdots$ 15

08-01-0026
16   Toshiharu Fujita
         (Kyushu Inst. of Tech.)   Decision process with converging branch system —Three types of recursive equations— $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

08-01-0022
17   Shuhei Mano (Inst. of Stat. Math.)   A direct sampler for A-hypergeometric distributions and its application to random Young taubleaux $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

08-01-0037
18   Hideyasu Yamashita
         (Aichi Gakuin Univ.)   Probabilistic loop path integral for spins $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

08-01-0007
19   Shigeyoshi Ogawa (Ritsumeikan Univ.)   On the regularity of Gaussian processes indexed by Dirichlet spaces
     Gerard Kerkyacharian
         (LPMA, Univ. Paris-Diderot) $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
     Pencho Petrushev
         (Univ. South Carolina)
     Dominique Picard (Univ. Paris-Diderot)

08-01-0032
20   Tomoko Takemura
         (Nara Women's Univ.)   Convergence of diffusion processes in a tube $\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

11:30–12:00   Research Section Assembly

March 20th (Tue)

10:00–11:40

08-01-0025
21   Hiromu Yumiba (Int. Inst. for Nat. Sci.)   GA*-optimal balanced third-order designs of resolution R*({10, 01})
     Yoshifumi Hyodo   with $N < \nu(m)$ for 3^m factorials $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
     (Okayama Univ. of Sci./Int. Inst. for Nat. Sci.)
     Masahide Kuwada
         (Int. Inst. for Nat. Sci.)

08-01-0028
22   Mitsuhiro Takami (Tokyo Univ. of Sci.)   Measure of departure from local symmetry for square contingency tables
     Yusuke Saigusa (Yokohama City Univ.) $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
     Aki Ishii   (Tokyo Univ. of Sci.)
     Sadao Tomizawa (Tokyo Univ. of Sci.)

08-01-0005
23   Nobuhiro Taneichi
         (Hokkaido Univ. of Edu.)   Improvement of test of complete independence in multi-dimensional contingency tables. $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
     Yuri Sekiya (Hokkaido Univ. of Edu.)
     Jun Toyama
     (Inst. for the Practical Application of Math.)

08-01-0027
24   Tomoya Ikezawa (Tokyo Univ. of Sci.)   Measure of departure from point-symmetry for the collapsed square contingency tables $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10
     Kiyotaka Iki (Tokyo Univ. of Sci.)
     Kouji Yamamoto (Osaka City Univ.)
     Sadao Tomizawa (Tokyo Univ. of Sci.)

08-01-0012
25   Takuya Yoshimoto
     (Tokyo Univ. of Sci./Chugai Pharmaceutical Co., Ltd.)   Covariance symmetry model and decomposition of symmetry model for square contingency table $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
     Kouji Tahata (Tokyo Univ. of Sci.)
     Kiyotaka Iki (Tokyo Univ. of Sci.)
     Sadao Tomizawa (Tokyo Univ. of Sci.)

08-01-0029
26 Jo Suzuki   (Osaka Univ.)   Estimation of conditional mutual information for discrete and continuous variables $\cdots\cdots\cdots$ 15

14:15–15:05

08-01-0034
27 Kazuyoshi Yata (Univ. of Tsukuba)   Bias-corrected estimation of eigenvalues in high-dimensional settings
    Makoto Aoshima (Univ. of Tsukuba) $\cdots\cdots\cdots$ 15

08-01-0008
28 Aki Ishii   (Tokyo Univ. of Sci.)   Equality tests of high-dimensional covariance matrices by using the
    Kazuyoshi Yata (Univ. of Tsukuba)   noise-reduction methodology $\cdots\cdots\cdots$ 15
    Makoto Aoshima (Univ. of Tsukuba)

08-01-0023
29 Yoshihiko Maesono (Kyushu Univ.)   Smoothed two-sample nonparametric tests and their asymptotic prop-
    Taku Moriyama (Kyushu Univ.)   erties $\cdots\cdots\cdots$ 10

15:20–16:20   Talk Invited by Statistics and Probability Section

08-02-0003
    Kazuki Matsubara (ChuoGakuin Univ.)   Pairwise additivity of BIB designs and related combinatorial structures

16:40–17:40   Talk Invited by Statistics and Probability Section

08-02-0002
    Koji Tsukuda (Univ. of Tokyo)   Studies on the theory of weak convergences in Hilbert spaces and its applications

March 21st (Wed)

10:00–12:00

08-01-0020
30 Nakahiro Yoshida (Univ. of Tokyo)   Martingale expansion and power variation $\cdots\cdots\cdots$ 15

08-01-0013
31 Nakahiro Yoshida (Univ. of Tokyo)   Asymptotic expansion of Skorohod integrals $\cdots\cdots\cdots$ 15

08-01-0018
32 Yoshiyuki Tanida (Waseda Univ.)   Asymptotic theory and numerical studies of Whittle estimation for
    Fumiya Akashi (Waseda Univ.)   high-dimensional time series $\cdots\cdots\cdots$ 10
    Masanobu Taniguchi (Waseda Univ.)

08-01-0015
33 Yujie Xue   (Waseda Univ.)   LASSO estimators for high-dimensional time series with long-memory
    Masanobu Taniguchi (Waseda Univ.)   disturbances $\cdots\cdots\cdots$ 10

08-01-0004
34 Kou Fujimori   (Waseda Univ.)   Cox's proportional hazards model with a high-dimensional and sparse
    regression parameter $\cdots\cdots\cdots$ 15

08-01-0011
35 Fumiya Akashi (Waseda Univ.)   Local asymptotic power of self-weighted GEL method and choice of
    weighting function $\cdots\cdots\cdots$ 15

08-01-0031
36 Hikaru Fukuda   (Osaka Univ.)   Local asymptotic normality property for stable processes under high-
    Masaaki Fukasawa (Osaka Univ.)   frequency observations $\cdots\cdots\cdots$ 15

Applied Mathematics

March 18th (Sun)

9:30–11:45

09-01-0005
1 Tomoko Adachi (Toho Univ.) A labeling of a cyclic bipartite graph and its application to RAID $\cdots$ 10

09-01-0029
2 Mickaël Buchet
        (Tohoku Univ. / TU Graz)
    Emerson Gaw Escolar (Tohoku Univ.) Vietoris–Rips realization of indecomposable persistence modules of arbitrarily large dimension $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

09-01-0008
3 Michio Seto
        (Nat. Defense Acad. of Japan)
    Sho Suda (Aichi Univ. of Edu.) Application of the theory of quasi-orthogonal integrals to graph theory
    $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

09-01-0015
4 Shohei Satake   (Kobe Univ.) Remark on two typical properties of random graphs $\cdots\cdots\cdots\cdots$ 15

09-01-0049
5 Shu Kanazawa (Tohoku Univ.)
    Masanori Hino   (Kyoto Univ.) Asymptotic behavior of lifetime sums for random simplicial complex processes $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

09-01-0019
6 Kosuke Suzuki (Hiroshima Univ.)
    Takehito Yoshiki (Kyoto Univ.) Enumeration of the Chebyshev–Frolov lattice points in axis-parallel boxes $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

09-01-0032
7 Naoto Agawa (Kyushu Univ.)
    Yoshihiro Mizoguchi (Kyushu Univ.) A relational T-algebra isomorphic to the category of the topological spaces $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

09-01-0040
8 Sho Suda (Aichi Univ. of Edu.)
    Gary Greaves (Nanyang Tech. Univ.) The Smith normal form of skew-symmetric D-optimal designs of order $n \equiv 2 \pmod 4$ $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

09-01-0038
9 Hiroshi Nozaki (Aichi Univ. of Edu.) Maximizing the order of a bipartite regular graph for given valency and second eigenvalue $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

14:20–16:30

09-01-0036
10 Yandong Bai
        (Northwestern Polytechnical Univ.)
    Shinya Fujita (Yokohama City Univ.)
    Shenggui Zhang
        (Northwestern Polytechnical Univ.) Kernels by properly colored paths in arc-colored digraphs $\cdots\cdots\cdots$ 10

09-01-0006
11 Jun Fujisawa   (Keio Univ.)
    R. E. L. Aldred (Univ. of Otago)
    Akira Saito   (Nihon Univ.) Distance matching extension in cubic bipartite graphs $\cdots\cdots\cdots\cdots$ 15

09-01-0053
12 Yumiko Ohno (Yokohama Nat. Univ.) n-Triad colorings of triangulations on the torus $\cdots\cdots\cdots\cdots\cdots$ 15

09-01-0066
13 Yoshihiro Asayama
        (Yokohama Nat. Univ.)
    Yuki Kawasaki (Yokohama Nat. Univ.)
    Seog-Jin Kim   (Konkuk Univ.)
    Atsuhiro Nakamoto
        (Yokohama Nat. Univ.)
    Kenta Ozeki (Yokohama Nat. Univ.) 3-dynamic coloring for triangulations on surfaces $\cdots\cdots\cdots\cdots\cdots$ 15

09-01-0012
14 Kengo Enami (Yokohama Nat. Univ.) 3-connected 3-regular planar graphs embedded on non-spherical surfaces
    $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

29   Applied Mathematics

09-01-0068
15   Kenta Ozeki (Yokohama Nat. Univ.)   The signature of edge colorings on the projective plane ············· 15
     Toshiki Abe (Yokohama Nat. Univ.)

09-01-0027
16   Kenta Noguchi (Tokyo Denki Univ.)   Spanning bipartite subgraphs having large size of even triangulations
     ·· 15

09-01-0039
17   Yusuke Suzuki (Niigata Univ.)   Exceptional balanced triangulations on closed surfaces ············· 15
     Satoshi Murai   (Osaka Univ.)

16:45–17:45   Talk Invited by Applied Mathematics Section
09-02-0004
     Masashi Shinohara (Shiga Univ.)   Classification problems and extremal problems on distance sets

March 19th (Mon)

9:30–11:45
09-01-0025
18   Iwao Sato (Oyama Nat. Coll. of Tech.)   A weighted generalized Bartholdi zeta function of a digraph ········ 15
     Hideo Mitsuhashi (Hosei Univ.)
     Hideaki Morita (Muroran Inst. of Tech.)

09-01-0033
19   Yusuke Ide   (Kanagawa Univ.)   Two-state space-inhomogeneous coined quantum walk ·············· 10
     Norio Konno (Yokohama Nat. Univ.)
     Daichi Nakayama
             (Yokohama Nat. Univ.)

09-01-0046
20   Takashi Komatsu   The Quantum walk on the 2-dimensional torus ···················· 10
             (Yokohama Nat. Univ.)
     Norio Konno (Yokohama Nat. Univ.)
     Akihiro Narimatsu
             (Yokohama Nat. Univ.)

09-01-0059
21   Daiju Funakawa (Hokkaido Univ.)   Eigenvalue analysis of a 2-dimensional quantum walk ·············· 15
     Toru Fuda   (Hokkaido Univ.)
     Satoshi Sasayama (Hokkaido Univ.)
     Akito Suzuki   (Shinshu Univ.)

09-01-0062
22   Tomoyuki Terada   Study on the one-dimensional lazy Fourier walk ·················· 10
             (Kanazawa Inst. of Tech.)
     Takashi Komatsu
             (Yokohama Nat. Univ.)
     Norio Konno (Yokohama Nat. Univ.)
     Kei Saito (Yokohama Nat. Univ.)

09-01-0051
23   Hiromichi Ohno (Shinshu Univ.)   Unitary equivalence classes of one-dimensional quantum walks ······· 15

09-01-0052
24   Takashi Komatsu   Stationary measures of quantum walks on the higher-dimensional inte-
             (Yokohama Nat. Univ.)   ger lattice ·· 15
     Norio Konno (Yokohama Nat. Univ.)

09-01-0057
25   Takashi Komatsu   Stationary measures of space-inhomogeneous quantum walks ········ 10
             (Yokohama Nat. Univ.)
     Hikari Kawai (Yokohama Nat. Univ.)
     Norio Konno (Yokohama Nat. Univ.)

09-01-0037
26   Yusuke Yoshie (Tohoku Univ.)   Periodicity of the Grover walk on joint of graphs ·················· 15

14:00–14:20   Presentation Ceremony for the 2017 MSJ Prize for Excellent Young Applied Mathematicians

March 20th (Tue)

9:15–11:50

09-01-0017
27 Genki Kusano (Tohoku Univ.)   The bootstrap method by the Persistence weighted Gaussian kernel
· 15

09-01-0013
28 Hiroshi Takeuchi (Tohoku Univ.)   The persistent homology of a correspondence: A viewpoint from quiver
    Yasuaki Hiraoka (Tohoku Univ.)   representations · 15

09-01-0003
29 Ippei Obayashi (Tohoku Univ.)   Volume optimal cycles for persistent homology · · · · · · · · · · · · · · · · · 15

09-01-0011
30 Takashi Teramoto   The case studies of using computational homology in medical science
       (Asahikawa Medical Univ.)   · 10

    Akihiro Takiyama
       (Hokkaido Bunkyo Univ.)

09-01-0065
31 Hiroe Oka   (Ryukoku Univ.)   The Conley index over base · 15
    Sota Koyama (Ryukoku Univ.)

09-01-0001
32 Shunji Horiguchi   On convergences and distributions of roots of extended complex New-
                                       ton's method · 15

09-01-0002
33 Fuminori Sakaguchi (Univ. of Fukui) 'Decipherment' of integer sequences corresponding to extra solutions in
                                       an integer-type algorithm for ODEs · 15

09-01-0031
34 Tomooki Yuasa (Ritsumeikan Univ.) Second order unbiased simulation method for reflected stochastic dif-
    Tatsuki Akiyama (Ritsumeikan Univ.) ferential equations · 15
    Arturo Kohatsu-Higa
        (Ritsumeikan Univ.)

09-01-0004
35 Takehiko Kinoshita   An invertibility verifications for linear elliptic operators mapping to
    Yoshitaka Watanabe (Kyushu Univ.) dual space · 15
    Mitsuhiro T. Nakao (Waseda Univ.)

09-01-0035
36 Tomoyuki Miyaji (Meiji Univ.)   Computer-assisted proof of the existence of a unimodal solution to the
    Hisahi Okamoto (Gakushuin Univ.)   Proudman–Johnson equation · 15

14:15–16:40

09-01-0026
37 Yuuki Ueda   (Univ. of Tokyo)   The inf-sup condition and error estimate of the Nitsche's method for
    Norikazu Saito (Univ. of Tokyo)   the parabolic problems · 15

09-01-0030
38 Daisuke Koyama   ♭   An application of the interior penalty method to a mixed nonconforming
        (Univ. of Electro-Comm.)   finite element method for biharmonic problems · · · · · · · · · · · · · · · · · 15

09-01-0043
39 Xuefeng Liu   (Niigata Univ.)   A priori error estimation for the finite element solution to Stokes equa-
    Mitsuhiro Nakao   tion in 3D domain · 15
     (Waseda Univ./Kyushu Univ.★)
    Chun'guang You
        (China Acad. of Eng. Phys.)
    Shin'ichi Oishi (Waseda Univ.)

09-01-0021
40 Norikazu Saito (Univ. of Tokyo)   Variational analysis of the discontinuous Galerkin time-stepping method
                                       · 15

09-01-0058
41 Tomoya Kemmochi (Univ. of Tokyo)   An analytic semigroup approach for the DG time-stepping method · · · 15

09-01-0048
42   Nobuyuki Higashimori (Kyoto Univ.)   Numerical examples of unstable finite difference schemes for the initial value problem of the heat equation including sideways case · · · · · · · · · · 15

09-01-0034
43   Takuya Tsuchiya (Waseda Univ.)   On the numerical stability of semi-linear Klein–Gordon equations in de
Makoto Nakamura (Yamagata Univ.)   Sitter spacetime · 15

09-01-0044
44   Ai Ishikawa   (Kobe Univ.)   The extension of the energy-preserving method based on the variational
Takaharu Yaguchi (Kobe Univ.)   principle to the Lie group · 15

09-01-0041
45   Makoto Okumura (Osaka Univ.)   Nonlinear and linear DVDM scheme for the conservative non-local
Allen–Cahn equation · 15

16:50–17:50   Talk Invited by Applied Mathematics Section
09-02-0001
Shuji Yoshikawa   (Oita Univ.)   Energy method for structure-preserving finite difference schemes

March 21st (Wed)

9:15–11:55
09-01-0067
46   Masaji Watanabe (Okayama Univ.)   Inverse analysis for microbial population in biodegradation process of
Fusako Kawai (Kyoto Inst. Tech.)   xenobiotic polymer · 15

09-01-0060
47   Yoichi Enatsu (Tokyo Univ. of Sci.)   On an SIR model with free boundary · 15
Emiko Ishiwata (Tokyo Univ. of Sci.)

Takeo Ushijima (Tokyo Univ. of Sci.)

09-01-0020
48   Mamoru Okamoto (Hokkaido Univ.)   Mathematical model including fluid's effect of camphor disk's self-
Masaharu Nagayama (Hokkaido Univ.)   motion · 15

09-01-0028
49   Takeshi Gotoda (Hokkaido Univ.)   Mathematical modeling for stable formation of the granular layer and
Masaaki Uesaka (Hokkaido Univ.)   tight junctions in the epidermis · 15
Yusuke Yasugahira (Hokkaido Univ.)
Yasuaki Kobayashi (Ochanomizu Univ.)
Hiroyuki Kitahata (Chiba Univ.)
Mitsuhiro Denda
        (Shiseido Company, Ltd.)
Masaharu Nagayama (Hokkaido Univ.)

09-01-0047
50   Takamichi Sushida (Hokkaido Univ.)   A mathematical model for representing collective rotational migrations
Hitomi Mori (Hokkaido Univ.)   of cell groups covered by basement membrane · 15
Sumire Ishida (Hokkaido Univ.)
Kazuya Furusawa (Hokkaido Univ.)
Hisashi Haga (Hokkaido Univ.)
Masakazu Akiyama (Hokkaido Univ.)

09-01-0023
51   Shun Sato   (Univ. of Tokyo)   Reformulation of evolutionary differential equations with a mixed deriva-
tive · 15

09-01-0014
52   Yuuki Shimizu   (Kyoto Univ.)   Green's function on surfaces with symmetry · 15

09-01-0009
53   Takashi Sakajo   (Kyoto Univ.)   One dimensional hydrodynamic PDE generating turbulent cascade of
Takeshi Matsumoto (Kyoto Univ.)   inviscid invariant · 15

09-01-0010
54   Takashi Sakajo   (Kyoto Univ.)   Linear feedback control stabilizing point vortex equilibria near a Kasper
Rhodri Nelson (Imperial Coll. London)   Wing · 15
Bartosz Protas (McMaster Univ.)

09-01-0007
55   Kohji Ohtsuka   Shape sensitivity analysis of eigenvalue by generalized J-integral in
(Hiroshima Kokusai Gakuin Univ.)   boundary value problems · 15

14:15–16:40

09-01-0018
56 Keiichi Ueda (Univ. of Toyama)   Synchronization of two interacting populations of oscillators by autonomous parameter control ·································· 15

09-01-0056
57 Takeshi Watanabe (Univ. of Tokyo)   Global bifurcation structure governing interaction between bump heterogeneity and pulse with oscillatory tail ························· 15
    Zhijun Gao   (Tohoku Univ.)
    Yasumasa Nishiura (Tohoku Univ.)

09-01-0063
58 Kei Nishi (Kyoto Sangyo Univ.)   Bifurcation analysis of the motion of two self-propelled camphor disks on an annular field ································ 15
    Masaharu Nagayama (Hokkaido Univ.)
    Satoshi Nakata (Hiroshima Univ.)

09-01-0055
59 Shogo Yamanaka (Kyoto Univ.)   Existence of transverse heteroclinic orbits and nonintegrability in two-degree-of-freedom Hamiltonian systems with saddle-centers ··········· 15
    Kazuyuki Yagasaki (Kyoto Univ.)

09-01-0069
60 Naoto Nakano   Characteristics of derivative embedded surfaces and predictability of timeseries ·· 15
    (Kyoto Univ./JST PRESTO)

09-01-0024
61 Takiko Sasaki   (Meiji Univ.)   Numerical and mathematical analysis for the blow-up curve of solutions to 1-dimensional nonlinear wave equations ······················· 15
    Tetsuya Ishiwata
    (Shibaura Inst. of Tech.)

09-01-0042
62 Koichi Anada   A study for backward self similar solutions of a quasi-linear parabolic equation ·· 15
    (Waseda Univ. Senior High School)
    Tetsuya Ishiwata
    (Shibaura Inst. of Tech.)
    Takeo Ushijima (Tokyo Univ. of Sci.)

09-01-0022
63 Kaname Matsue   Blow-up rates of blow-up solutions determined by dynamics at infinity ·· 15
    (Kyushu Univ./Kyushu Univ.)

09-01-0045
64 Kaname Matsue   Oscillatory blow-up solutions with fast blow-up rates and oscillatory grow-up solutions ································ 15
    (Kyushu Univ./Kyushu Univ.)

16:50–17:50   Talk Invited by Applied Mathematics Section

09-02-0003
    Akitoshi Takayasu (Univ. of Tsukuba)[b]   Verified computations for solutions of evolution equations with semi-group theory

Topology

March 18th (Sun)

9:40–12:00

10-99-0001
1   Eiko Iwayama — The simplex of n-dim. and New Euler–Poincaré Expanded characteristic and the relation of combination numbers $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 5

10-99-0002
2   Eiko Iwayama — The triangle of the cuboids of n-dimension and New Euler–Poincaré Expanded characteristic $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 5

10-99-0003
3   Yoshihito Ogasawara (Waseda Univ.) — On an applicability of topology $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

10-01-0023
4   Hironobu Naoe (Tohoku Univ.) — Infinitely many corks having large shadow-complexities $\cdots\cdots\cdots\cdots$ 15

10-01-0020
5   Akira Miyamura (Tokyo Tech) — A note on signature of Lefschetz fibrations with planar fiber $\cdots\cdots\cdots$ 10

10-01-0007
6   Yusuke Inagaki   (Osaka Univ.) — On Fuchsian loci of Hitchin components of a pair of pants $\cdots\cdots\cdots\cdots$ 15

10-01-0041
7   Yuuki Tadokoro
(Nat. Inst. of Tech., Kisarazu Coll.) — Pointed harmonic volume and its relation to extended Johnson homomorphism $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

10-01-0039
8   Takahiro Yamamoto
(Tokyo Gakugei Univ.) — Cobordism groups of Morse functions on manifolds with boundary $\cdots$ 15

10-01-0044
9   Asahi Tsuchida (Hokkaido Univ.)
Kentaro Saji   (Kobe Univ.) — Singularities of bundle homomorphism between a distribution and a vector bundle $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

10-01-0042
10   Kentaro Saji   (Kobe Univ.) — $SO(3)$-normal form of swallowtail and geometric patterns $\cdots\cdots\cdots\cdots$ 10

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

10-02-0001
Daisuke Kishimoto (Kyoto Univ.) — Homotopy theory of polyhedral products

15:30–18:00

10-01-0019
11   Masayuki Yamasaki
(Okayama Univ. of Sci.) — On rotation numbers of regular closed curves on aspherical surfaces $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

10-01-0035
12   Katsuhiko Kuribayashi (Shinshu Univ.)
Toshiki Aoki — On the category of stratifolds and the Serre–Swan theorem $\cdots\cdots\cdots\cdots$ 15

10-01-0025
13   Takuo Matsuoka — Higher theories of algebraic structures $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

10-01-0002
14   Shin Hayashi   (MathAM-OIL) — Bulk-edge correspondence and the cobordism invariance of the index $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

10-01-0003
15   Shin Hayashi   (MathAM-OIL) — Bulk-edge and corner correspondence $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

10-01-0014
16   Syunji Moriya (Osaka Pref. Univ.) — The space of knots in a manifold and the right operadic module of configuration spaces $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

10-01-0045
17   Syunji Moriya (Osaka Pref. Univ.) — Non-formality of the odd dimensional framed little disks operads $\cdots\cdots$ 15

10-01-0028
18   Hideya Kuwata
(Kindai Univ. Tech. Coll.)
Sho Hasui   (Osaka Pref. Univ.)
Mikiya Masuda (Osaka City Univ.)
Seonjeong Park (Osaka City Univ.) — Classification of toric manifolds over an n-cube with one vertex cut $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

10-01-0029
19 Hiraku Abe (Osaka City Univ.)   On the cohomology rings of regular semisimple Hessenberg varieties
Tatsuya Horiguchi   · 10
(Osaka Univ./Osaka City Univ.)
Mikiya Masuda (Osaka City Univ.)

March 19th (Mon)

9:30–10:30
10-01-0016
20   Atsuhide Mori (Osaka Dental Univ.)   Symplectic/contact geometry of t-distributions · · · · · · · · · · · · · · · · · · · 15

10-01-0024
21   Takuya Katayama (Hiroshima Univ.)   Embeddability of the right-angled Artin groups on the complement
graphs of linear forests · 15

10-01-0008
22   Motoko Kato (Univ. of Tokyo)   On the isomorphism problem of signed Thompson groups · · · · · · · · · · · 10

10-01-0004
23   Narutaka Ozawa (Kyoto Univ.)   Kazhdan's property (T) and semidefinite programming · · · · · · · · · · · · · 15

10:45–11:45   Talk Invited by Topology Section
10-02-0002
Masayuki Asaoka (Kyoto Univ.)   Growth rate of the number of periodic points for smooth dynamical
systems

13:00–14:20
10-01-0037
24   Noriaki Kawaguchi (Univ. of Tokyo)♭   On the shadowing and limit shadowing properties · · · · · · · · · · · · · · · · · 15

10-01-0015
25   Shinobu Hashimoto   Moduli of two-dimensional diffeomorphisms with cubic tangencies · · · · 15
(Tokyo Metro. Univ.)

10-01-0012
26   Koichi Hiraide   (Ehime Univ.)♭   Relationship between topological entropy and Lyapunov exponents · · · 15
Chihiro Matsuoka (Osaka City Univ.)

10-01-0022
27   Kaori Yamazaki   Questions on monotone operators for vector-valued maps · · · · · · · · · · · 15
(Takasaki City Univ. of Econ.)

10-01-0001
28   Yukinobu Yajima (Kanagawa Univ.)   Three embeddings and their implications in products of generalized
Yasushi Hirata (Kanagawa Univ.)   metric spaces · 15

March 20th (Tue)

9:20–12:00
10-01-0005
29   In Dae Jong   (Kindai Univ.)   Achiral 1-cusped hyperbolic 3-manifolds not coming from amphicheiral
Kazuhiro Ichihara (Nihon Univ.)   null-homologous knot complements · 15
Kouki Taniyama (Waseda Univ.)

10-01-0006
30   Kazuhiro Ichihara (Nihon Univ.)   Chirally cosmetic surgeries and Casson invariants · · · · · · · · · · · · · · · · · 15
Tetsuya Itoh   (Osaka Univ.)
Toshio Saito (Joetsu Univ. of Edu.)

10-01-0033
31   Naoki Sakata (Hiroshima Univ.)   Veering structures of the canonical decompositions of hyperbolic fibered
two-bridge link complements · 10

10-01-0030
32   Ken'ichi Yoshida (Kyoto Univ.)   Hyperbolicity on tangle gluings · 15

10-01-0009
33   Ryan Blair (California State Univ.)   Height, trunk and representativity of knots · 15
Makoto Ozawa (Komazawa Univ.)

Infinite Analysis

March 20th (Tue)

10:00–11:30

11-01-0004
1   Kentaro Kojima   (Chuo Univ.)   Polynomial solutions of q-Heun equation $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
Tsukasa Sato   (Chuo Univ.)
Kouichi Takemura (Chuo Univ.)

11-01-0005
2   Zhijie Chen (Yau Math. Sci. Center)   Real-root property of the spectral polynomial of the Treibich–Verdier
Ting-Jung Kuo   potential and related problems $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
     (Nat. Taiwan Normal Univ.)
Chang-Shou Lin (Nat. Taiwan Univ.)
Kouichi Takemura (Chuo Univ.)

11-01-0017
3   Ayumu Hoshino   Explicit formulas for one-column Macdonald polynomials of types C_n
     (Hiroshima Inst. of Tech.)   and D_n $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
Jun'ichi Shiraishi (Univ. of Tokyo)

11-01-0006
4   Masahiko Ito (Univ. of Ryukyus)   Determinant formulas for the q-hypergeometric integrals associated with
Aiko Miyanaga   (Kobe Univ.)   the root system of type G_2 $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
Masatoshi Noumi (Kobe Univ.)

11-01-0015
5   Kôki Itô (Toyohashi Univ. of Tech.)   Homology of q-cycles $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

11-01-0014
6   Kanam Park   (Kobe Univ.)   An extension of q-hypergeometric series and a monodromy preserving
deformation $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

14:00–15:30

11-01-0002
7   Yousuke Ohyama (Tokushima Univ.)   A connection problem for basic hypergeometric series $_r\phi_{r-1}(\mathbf{0}; \boldsymbol{b}; q, x)$
$\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

11-01-0012
8   Yousuke Ohyama (Tokushima Univ.) q-Stokes coefficients of a difference equation satisfied by basic Hyperge-
ometric Series $_3\phi_2(a_1, a_2, a_3; b_1, 0; q, x)$ $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15

11-01-0009
9   Hokuto Kanbara   Expansion of solutions for KZ-theoretical monodromy preserving defor-
Yuto Takeda   mation in terms of multiple polylogarithms $\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
Kimio Ueno   (Waseda Univ.)

11-01-0010
10   Kimio Ueno   (Waseda Univ.)   KZ-theoretical approach to monodromy preserving deformation and its
relation to Schlesinger equations $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 10

11-01-0011
11   Masato Okado (Osaka City Univ.)   Bijection between paths and rigged configurations of nonexceptional
Anne Schilling   (UC Davis)   affine types $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
Travis Scrimshaw (Univ. of Queensland)

11-01-0007
12   Kanehisa Takasaki (Kindai Univ.)   Topological vertex and integrable hierarchies of Volterra type $\cdots\cdots\cdots$ 15

15:45–16:45   Talk Invited by Infinite Analysis Special Session

11-02-0002
     Taro Kimura   (Keio Univ.)   Quiver gauge theory and quiver W-algebra

March 21st (Wed)

9:30–10:30

11-01-0016
13   Kohei Motegi   ♭   Elliptic Felderhof model and elliptic Schur functions $\cdots\cdots\cdots\cdots\cdots$ 15
(Tokyo Univ. of Marine Sci. and Tech.)

11-01-0003
14   Hiroyuki Yamane (Univ. of Toyama)   Bruhat order of Weyl groupoids $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
Iván Angiono (Nat. Univ. of Córdoba)

11-01-0013
15   Takuya Matsumoto (Nagoya Univ.)   Screening operators and $\mathfrak{sl}_2$ action on the lattice vertex operator alge-
Yoshitake Hashimoto   bras of type A_1 $\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots$ 15
(Tokyo City Univ.)
Akihiro Tsuchiya (Kavli IPMU)

11-01-0001
16   Ryo Sato   (Univ. of Tokyo)   Modular transformation properties and the Verlinde formula $\cdots\cdots\cdots$ 15

10:45–11:45   Talk Invited by Infinite Analysis Special Session

11-02-0001
Hiroshi Naruse (Univ. of Yamanashi)   Generalization of Hall–Littlewood function from the view point of Schu-
bert calculus, generationg function and application