Created: 2018/12/11 10:43

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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Algebra

March 17th (Sun)

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12 Yutaka Yoshii (Ibaraki Univ.) Some generating sets of the Jacobson radical of the hyperalgebra $\mathrm{Dist}(\mathrm{SL}_{2,r})$ ····· 10

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46 Ryo Okawa (Waseda Univ.)
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53 Tomohiro Iwami (Kyushu Inst. of Tech.) *
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Masaki Taniguchi (Univ. of Tokyo)
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12 Shinichiroh Matsuo (Nagoya Univ.) þ
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14 Isami Koga (Meiji Univ.)
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Yasushi Homma (Waseda Univ.) Toward spin 3/2 geometry

March 18th (Mon)

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16 Homare Tadano (Tokyo Univ. of Sci.) A new compactness theorem via m-Bakry–Émery Ricci curvature with positive m 15

03-01-0004
17 Homare Tadano (Tokyo Univ. of Sci.) Some compactness theorems for transverse Ricci solitons on complete Sasaki manifolds 15

03-01-0031
18 Daisuke Kazukawa (Tohoku Univ.) Concentration of l_p-product spaces 15

03-01-0007
19 Naotaka Kajino (Kobe Univ.) The Laplacian on some round Sierpiński carpets and Weyl's asymptotics for its eigenvalues 15

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20 Kota Hattori (Keio Univ.) On spectral convergence of vector bundles 15

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21 Koichi Nagano (Univ. of Tsukuba) Volume pinching theorems for CAT(1) spaces 15

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March 19th (Tue)

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03-01-0018
23 Takuro Yasui (Waseda Univ.), Runa Umezawa (Waseda Univ.), Yohei Komori (Waseda Univ.) Area formula for cyclic polygon in classical geometry 15

03-01-0015
24 Shigehiro Sakata (Univ. of Miyazaki) Critical points of Riesz potential and characterization of regular triangles 15

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28 Noriaki Ikeda (Ritsumeikan Univ.) On the relation of Lie algebroids to constrained Hamiltonian systems and their BV/BFV formulation 15

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34 Toru Kajigaya (Tokyo Denki Univ.) On Hamiltonian stable Lagrangian tori in complex hyperbolic spaces ····· 15

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35 Hiroshi Sawai (Numazu Nat. Coll. of Tech.) For a structure theorem of Vaisman solvmanifolds ····· 15

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Complex Analysis

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9:45–11:50

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Fumio Maitani (Kyoto Inst. Tech.*)
Masakazu Shiba (Hiroshima Univ.*)
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04-01-0014
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04-01-0011
5 Atsushi Kameyama (Gifu Univ.)
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04-01-0015
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04-01-0016
7 Mitsuhiro Shishikura (Kyoto Univ.)
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04-01-0012
8 Atsushi Hayashimoto * (Nagano Nat. Coll. of Tech.)
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04-01-0008
9 Cho-Ho Chu (Queen Mary, Univ. of London)
Hidetaka Hamada (Kyushu Sangyo Univ.)
Tatsuhiro Honda (Senshu Univ.)
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11 Hidetaka Hamada (Kyushu Sangyo Univ.)
Mihai Iancu (Babeş-Bolyai Univ.)
Gabriela Kohr (Babeş-Bolyai Univ.)
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Ikkei Hotta (Yamaguchi Univ.)
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March 18th (Mon)

9:45–11:45

04-01-0002
12 Katsusuke Nabeshima (Tokushima Univ.)
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04-01-0003
13 Katsusuke Nabeshima (Tokushima Univ.)
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15 Masataka Tomari (Nihon Univ.) *
On the finiteness of weight types of weighted homogeneous complex singularities for a positive geometric genus 15

04-01-0013
16 Tomohiro Okuma (Yamagata Univ.)
Weighted homogeneous surface singularities homeomorphic to Brieskorn complete intersections 15

04-01-0004
17 Atsushi Yamamori (Kogakuin Univ.)
Two variations of Boas–Fu–Straube's deflation identity 15

04-01-0007
18 Takeo Ohsawa (Nagoya Univ.) ♭
Analyticity criterion for functions by the existence of a complete Kähler metric on the complement of the graph 15

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Takato Uehara (Okayama Univ.)
Dynamical systems on complex surfaces

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March 17th (Sun)

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1 Hideaki Izumi (Chiba Inst. of Tech.) — How to solve iterated functional equations by using dimensioned numbers · · · · · 10

05-01-0013
2 Akihito Ebisu (Chiba Inst. of Tech.) — Invariants of difference equations and transformation formulae for hypergeometric functions · · · · · 10

05-01-0021
3 Yoshiaki Goto (Otaru Univ. of Commerce) — Finite irreducible monodromy group for Lauricella's F_C · · · · · 10

05-01-0026
4 Kanam Park (Kobe Univ.) — A certain generalization of q-hypergeometric functions and their related monodromy preserving deformation · · · · · 10

05-01-0073
5 Nobuki Takayama (Kobe Univ.), Saiei-Jaeyeong Matsubara-Heo (Kobe Univ.) — An algorithm for computing intersection numbers of twisted cohomology groups · · · · · 10

05-01-0046
6 Takashi Aoki (Kindai Univ.), Shofu Uchida (Kindai Univ.) — Voros coefficients at the origin of the generalized hypergeometric differential equation with a large parameter · · · · · 10

05-01-0037
7 Waichiro Matsumoto (Ryukoku Univ.*) * — Admissible data spaces of the Cauchy problem for linear hyperbolic systems · · · · · 10

05-01-0081
8 Masakazu Onitsuka (Okayama Univ. of Sci.) — Hyers–Ulam stability of second-order linear difference equations with constant coefficients · · · · · 10

05-01-0002
9 Tetsutaro Shibata (Hiroshima Univ.) — Global solution curves of ordinary differential equations with nonlinear diffusion · · · · · 10

05-01-0029
10 Naoki Hamamoto (Osaka City Univ.) — Rellich–Leray inequality for axisymmetric and solenoidal vector fields · · · · · 10

05-01-0057
11 Takeshi Suguro (Tohoku Univ.)$^{\flat}$, Hideo Kubo (Hokkaido Univ.), Takayoshi Ogawa (Tohoku Univ.) — The dual of a logarithmic Sobolev inequality and the uncertainty principle · · · · · 10

05-01-0074
12 Masato Hashizume (Ehime Univ.) — Effect of compact term on maximization problem related to the Trudinger–Moser inequality · · · · · 10

05-01-0067
13 Hiroshi Ando (Ibaraki Univ.) *, Toshio Horiuchi (Ibaraki Univ.) — Weighted Hardy's Inequalities with compact perturbations · · · · · 10

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05-01-0048
14 Kazuyuki Yagasaki (Kyoto Univ.), Tomasz Stachowiak — Bifurcations of radially symmetric solutions in a coupled elliptic system with critical exponents · · · · · 10

05-01-0049
15 Shingo Takeuchi (Shibaura Inst. of Tech.) — Exact solutions and asymmetry for a nonlocal boundary value problem · · · · · 10

05-01-0027
16 Kenichiro Umezu (Ibaraki Univ.), Uriel Kaufmann (Univ. Nacional de Córdoba), Humberto Ramos Quoirin (Univ. de Santiago de Chile) — Exact multiplicity of positive solutions for an indefinite concave Robin bvp · · · · · 10

05-01-0053
17 Toshiaki Yachimura (Tohoku Univ.) Domain perturbation and singular perturbation of the coefficients for a two-phase eigenvalue problem 10

05-01-0052
18 Lorenzo Cavallina (Tohoku Univ.)
Toshiaki Yachimura (Tohoku Univ.) On a two-phase Serrin-type overdetermined problem and its numerical computation 10

05-01-0008
19 Yuika Kajihara (Kyoto Univ.)
Mitsuru Shibayama (Kyoto Univ.) Variational proof of the existence of brake orbits in the planar 2-center problem 10

05-01-0069
20 Jun Okamoto (Univ. of Tokyo) Random discretization of O'Hara knot energy 10

05-01-0038
21 Simon Blatt (Salzburg Univ.)
Aya Ishizeki (Chiba Univ.)
Takeyuki Nagasawa (Saitama Univ.) A Möbius invariant discretization Γ-converging to the Möbius energy 10

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Shingo Kamimoto (Hiroshima Univ.) Resurgent functions and convolution products

March 18th (Mon)

9:15–12:00

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22 Masato Kimura (Kanazawa Univ.)
Patrick van Meurs (Kanazawa Univ.) Precise characterisation of the minimiser of interaction energies 10

05-01-0035
23 Kengo Terai (Waseda Univ.) Uniqueness structure for weakly coupled systems of ergodic problems for Hamilton–Jacobi equations 10

05-01-0006
24 Shota Tateyama (Tohoku Univ.) On L^p-viscosity solutions of parabolic bilateral obstacle problems with unbounded ingredients 10

05-01-0024
25 Koichi Taniguchi (Chuo Univ.)
Vladimir Georgiev (Univ. Pisa) Gradient estimates for heat equation in an exterior domain 10

05-01-0054
26 Shigeru Sakaguchi (Tohoku Univ.) Some characterizations of parallel hyperplanes by a stationary isothermic surface in multi-layered heat conductors 10

05-01-0068
27 Yuki Kaneko (Waseda Univ.)
Hiroshi Matsuzawa (Numazu Nat. Coll. of Tech.)
Yoshio Yamada (Waseda Univ.) Asymptotic profiles of solutions and propagating terrace for a free boundary problem of nonlinear diffusion equation with positive bistable nonlinearity 10

05-01-0072
28 Junyong Eom (Tohoku Univ.)
Kazuhiro Ishige (Univ. of Tokyo) Large time behavior of ODE type solutions to nonlinear diffusion equations 10

05-01-0071
29 Kotaro Hisa (Tohoku Univ.)
Kazuhiro Ishige (Univ. of Tokyo) Solvability of the heat equation with a nonlinear boundary condition 10

05-01-0050
30 Masamitsu Suzuki (Univ. of Tokyo)
Yasuhito Miyamoto (Univ. of Tokyo) Weakly coupled reaction-diffusion systems with rapidly growing nonlinearities and singular initial data 10

05-01-0010
31 Ryuichi Sato (Tohoku Univ.) Local and global existence of slow diffusion equation with a nonlinear source 10

05-01-0047
32 Kenta Nakamura (Kyushu Univ.)
Masashi Misawa (Kumamoto Univ.) On the properties for doubly nonlinear equations of p-Sobolev flow type 10

05-01-0017
33 Longjie Zhang (Univ. of Tokyo) Mean curvature flow with driving force 10

05-01-0059
34 Tomoro Asai (Univ. of Tokyo) * Existence and stability of the self-similar solutions for the surface diffusion flow equations with nonlinear boundary conditions 10

13:15–14:15 Talk Invited by Functional Equations Section

05-02-0001
Nicola Fusco (Univ. di Napoli) Asymptotic stability of the gradient flow of some nonlocal energies

March 19th (Tue)

9:00–12:00

05-01-0023
35 Shota Sakamoto (Tohoku Univ.) Kinetic formulation of mutation process in bacteria and its probability measure solutions 10

05-01-0043
36 Yuya Tokuta (Free Univ.) Euglena bioconvection 10

05-01-0077
37 Ryo Ito (Meiji Univ.) A minimizing problem associated with the spreading speed for spatially periodic Fisher-KPP equation 10

05-01-0082
38 Ryunosuke Mori (Meiji Univ.) A variational problem for the spreading speed of the solutions of KPP equations 10

05-01-0041
39 Kentaro Nagahara (Tokyo Tech)
Eiji Yanagida (Tokyo Tech) Maximization of the total population in a reaction-diffusion model with logistic growth 10

05-01-0045
40 Masahiko Shimojo (Okayama Univ. of Sci.)
Eiji Yanagida (Tokyo Tech)
Peter Takáč (Univ. Rostock) Convergence to traveling pulse of logarithmic diffusion equation 10

05-01-0039
41 Masahiko Shimojyou (Okayama Univ. of Sci.)
Amy Poh AiLing (Okayama Univ.) Center problem of reaction diffusion systems 10

05-01-0036
42 Md Rabiul Haque (Tohoku Univ.) ♭
Takayoshi Ogawa (Tohoku Univ.)
Ryuichi Sato (Tohoku Univ.) Existence of weak solutions to a convection-diffusion equation in a uniformly local Lebesgue space 10

05-01-0001
43 Tobias Black (Paderborn Univ.)
Johannes Lankeit (Paderborn Univ.)
Masaaki Mizukami (Tokyo Univ. of Sci.) Asymptotic behavior of solutions to a Keller–Segel system with signal-dependent sensitivity 10

05-01-0005
44 Teruto Nishino (Tokyo Univ. of Sci.)
Tomomi Yokota (Tokyo Univ. of Sci.) Effect of nonlinear diffusion on a lower bound for the blow-up time for solutions of a fully parabolic chemotaxis system 10

05-01-0034
45 Masaki Kurokiba (Muroran Inst. of Tech.) ♭
Takayoshi Ogawa (Tohoku Univ.) Finite time blow up of weak solutions to the degenerate drift-diffusion system of fast diffusion type 10

05-01-0058
46 Koichi Komada (Tohoku Univ.) Final state problem for partial differential equations with nonlocal dispersive term 10

05-01-0083
47 Masaru Hamano (Saitama Univ.)
Masahiro Ikeda (RIKEN/Keio Univ.) Time global behavior of solutions to NLS with a potential 10

05-01-0040
48 Tomoyuki Tanaka (Nagoya Univ.) Local well-posedness for fourth order Benjamin–Ono type equations on the torus 10

14:15–16:15

05-01-0014
49 Mamoru Okamoto (Shinshu Univ.)
Shuji Machihara (Saitama Univ.)
Ill-posedness of the Cauchy problem for the Dirac–Klein–Gordon system in 1d 10

05-01-0060
50 Satoshi Masaki (Osaka Univ.)
Jun-ichi Segata (Tohoku Univ.)
Kota Uriya (Okayama Univ. of Sci.)
Asymptotic behavior of complex valued solutions to Klein–Gordon equation with a critical nonlinearity 10

05-01-0066
51 Masahiro Ikeda (RIKEN/Keio Univ.)
Hayato Miyazaki (Tsuyama Nat. Coll. of Tech.)
Very strong instablity for standing wave solutions to the system of the quadratic Klein–Gordon equations 10

05-01-0042
52 Masahiro Ikeda (RIKEN/Keio Univ.)
Motohiro Sobajima (Tokyo Univ. of Sci.)
Kyouhei Wakasa (Tokyo Univ. of Sci.)
On blowup solutions of semilinear wave equations and their weakly coupled systems 10

05-01-0030
53 Sojiro Murai (Tokyo Metro. Coll. of Ind. Tech.)
Strichartz estimates for magnetic Klein–Gordon equations in exterior domain and its application 10

05-01-0019
54 Kenji Nishihara (Waseda Univ.*)
Motohiro Sobajima (Tokyo Univ. of Sci.)
Yuta Wakasugi (Ehime Univ.)
Critical exponent for the semilinear wave equations with a damping increasing in the far field 10

05-01-0061
55 Tatsuya Matsui (Tohoku Univ.)♭
Ryosuke Nakasato (Tohoku Univ.)
Takayoshi Ogawa (Tohoku Univ.)
Singular limit of the magnetohydrodynamic system of damped wave type to the classical magnetohydrodynamic system 10

05-01-0063
56 Hideo Kubo (Hokkaido Univ.)♭
Vladimir Georgiev (Pisa Univ.)
Kyouhei Wakasa (Tokyo Univ. of Sci.)
On the critical exponent for nonlinear wave equations with non-effective damping 10

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

05-02-0003
Yohei Fujishima (Shizuoka Univ.)
Solvability for a semilinear heat equation without the self-similar structure

March 20th (Wed)

9:00–12:00

05-01-0032
57 Takuya Sato (Tohoku Univ.)♭
Takayoshi Ogawa (Tohoku Univ.)
Analytic smoothing effect for system of nonlinear Schrödinger equations with general mass resonance 10

05-01-0075
58 Masayuki Hayashi (Waseda Univ.)
Variational approach to nonlinear Schrödinger equations of derivative type I: Global existence 10

05-01-0076
59 Masayuki Hayashi (Waseda Univ.)
Variational approach to nonlinear Schrödinger equations of derivative type II: Orbital stability 10

05-01-0025
60 Hiroyuki Hirayama (Univ. of Miyazaki)
Shinya Kinoshita (Univ. Bielefeld)
Mamoru Okamoto (Shinshu Univ.)
Well-posedness for a system of quadratic derivative nonlinear Schrödinger equations with radial initial data 10

05-01-0016
61 Gaku Hoshino (Osaka Univ.)
Scattering for solutions of a dissipative nonlinear Schrödinger equation 10

05-01-0070
62 Rowan Killip (UCLA)
Satoshi Masaki (Osaka Univ.)
Jason Murphy (Missouri S&T)
Monica Visan (UCLA)
Analysis of mass-subcritical NLS in critical negative order Sobolev space · · · · · 10

05-01-0055
63 Jan Brezina (Kyushu Univ.)
Ondřej Kreml (IMCAS)
Václav Mácha (IMCAS)
Nonuniqueness of delta shocks in the model of Chaplygin gas · · · · · 10

05-01-0065
64 Kai Koike (Keio Univ./RIKEN)
Asymptotic behavior of a point mass moving in a 1D viscous compressible fluid · · · · · 10

05-01-0028
65 Kazuyuki Tsuda (Osaka Univ.)
Takayuki Kobayashi (Osaka Univ.)
Global existence and time decay estimate of solutions to the compressible two phase flow system under critical condition · · · · · 10

05-01-0009
66 Keiichi Watanabe (Waseda Univ.)
Global solvability of compressible-incompressible two-phase flows with phase transitions and surface tensions in bounded domains · · · · · 10

05-01-0044
67 Yutaka Terasawa (Nagoya Univ.)
Helmut Abels (Univ. of Regensburg)
Existence of weak solutions for a diffuse interface model for two-phase flows of incompressible fluids with different densities and nonlocal free energies · · · · · 10

05-01-0011
68 Yoshihiro Shibata (Waseda Univ.)
2 phase problem for the Navier–Stokes equations in the whole space · · · · · 10

05-01-0012
69 Yoshihiro Shibata (Waseda Univ.)
On the decay properties of Stokes semigroup associated with two phase problem with surface tension · · · · · 10

05-01-0004
70 Tetu Makino (Yamaguchi Univ.*) *
Juhi Jang
(Univ. Southern California/KIAS)
Spectral analysis of linearized non-radial oscillations of gaseous stars · · · · · 10

14:15–16:15

05-01-0015
71 Ryo Kanamaru (Waseda Univ.)
Improvement of the extension theorem of strong solutions to Navier–Stokes equations by Vishik type spaces · · · · · 10

05-01-0007
72 Itsuko Hashimoto
(Kansai Univ./Osaka City Univ.)
Asymptotic stability of radially symmetric stationary solutions for the multi-dimensional Burgers equation · · · · · 10

05-01-0003
73 Huanyuan Li (Univ. of Tokyo)
On local strong solutions to the Cauchy problem of two-dimensional nonhomogeneous incompressible Navier–Stokes–Korteweg equations · · 10

05-01-0062
74 Teppei Kobayasi (Meiji Univ.)
A steady flow of an incompressible viscous fluid through an aperture in a 3-D domain · · · · · 10

05-01-0022
75 Hideo Kozono
(Waseda Univ./Tohoku Univ.)
Yutaka Terasawa (Nagoya Univ.)
Yuta Wakasugi (Ehime Univ.)
Asymptotic properties of steady solutions to the 2D Navier–Stokes equations with finite generalized Dirichlet integral · · · · · 10

05-01-0084
76 Yasunori Maekawa (Kyoto Univ.)
On local energy decay estimate and L^q-L^r estimates of the Oseen semigroup in a two-dimensional exterior domain · · · · · 10

05-01-0033
77 Paolo Maremonti (Univ. Campania)
Senjo Shimizu (Kyoto Univ.)
Global existence of solutions to 2-D Navier–Stokes flow with non-decaying initial data in half-plane · · · · · 10

05-01-0051
78 Jan Prüss (Univ. Halle)
Senjo Shimizu (Kyoto Univ.)
On stability of a Navier–Stokes–Ohm problem from plasma physics · · · 10

16:30–17:30 Award Lecture for the 2018 MSJ Analysis Prize

05-02-0002

Shuichi Kawashima (Waseda Univ.) Dissipative structure and stability analysis for symmetric hyperbolic systems

Real Analysis

March 19th (Tue)

9:00–12:00

06-01-0038
1 Yōhei Yamasaki ♭ A C^0 homeomorphism with infinite "volume" 10

06-01-0008
2 Toshiharu Kawasaki (Nihon Univ. / Tamagawa Univ.) Indefinite integral and primitive function 10

06-01-0035
3 Ryoichi Kunisada (Waseda Univ.) L^p spaces over finitely additive measures 10

06-01-0043
4 Toshiaki Murofushi (Tokyo Tech) Naoki Enomoto (Tokyo Tech) Relationships between properties of non-additive measures and properties of supremum increments: null-continuity and property (S) 10

06-01-0036
5 Ryoji Fukuda (Oita Univ.) Aoi Honda (Kyushu Inst. of Tech.) Yoshiaki Okazaki (Fuzzy Logic Systems Inst.) Non-linear integral for an expansion of non-additive measure 10

06-01-0023
6 Hiroyasu Mizuguchi (Chiba Inst. of Tech.) On the James constant in Radon planes 10

06-01-0017
7 Fumiaki Kohsaka (Tokai Univ.) Approximation of minimizers of convex functions in complete CAT(1) spaces 10

06-01-0040
8 Shin-ya Matsushita (Akita Pref. Univ.) On the convergence rate of operator splitting methods 10

06-01-0037
9 Koji Aoyama (Chiba Univ.) Strong convergence theorems for the best approximation problem 10

06-01-0031
10 Sachiko Atsushiba ♭ (Univ. of Yamanashi) Weak ad strong convergence theorems for generalized hybrid-type sequences and some nonlinear mappings 10

06-01-0011
11 Ryotaro Tanaka (Tokyo Univ. of Sci.) Naoto Komuro (Hokkaido Univ. of Edu.) Kichi-Suke Saito (Niigata Univ.⋆) Symmetric points for Birkhoff orthogonality I 10

06-01-0012
12 Ryotaro Tanaka (Tokyo Univ. of Sci.) ♭ Naoto Komuro (Hokkaido Univ. of Edu.) Kichi-Suke Saito (Niigata Univ.⋆) Symmetric points for Birkhoff orthogonality II 10

06-01-0018
13 Yukino Tomizawa (Niigata Inst. of Tech.) Properties given by convex combinations in some metric spaces 10

06-01-0032
14 Ryutaro Arai (Ibaraki Univ.) Eiichi Nakai (Ibaraki Univ.) An extension of the characterization of CMO and its application to compact commutators on Morrey spaces 10

06-01-0028
15 Minglei Shi (Ibaraki Univ.) Ryutaro Arai (Ibaraki Univ.) Eiichi Nakai (Ibaraki Univ.) Generalized fractional maximal operators on Orlicz–Morrey spaces ... 10

06-01-0021
16 Ryota Kawasumi Eiichi Nakai (Ibaraki Univ.) Pointwise multipliers on weak Morrey spaces 10

14:15–15:15 Award Lecture for the 2018 MSJ Analysis Prize

06-02-0002
Akihiko Miyachi (Tokyo Woman's Christian Univ.) — Estimates for multilinear pseudo-differential operators

15:30–16:50

06-01-0014
17 Yoshihiro Sawano (Tokyo Metro. Univ.) ♭ — A relation between the Kantrovitch operator and the Hardy–Littlewood maximal operator · · · · · 10

06-01-0015
18 Yoshihiro Sawano (Tokyo Metro. Univ.) ♭ — A non-dense subspace in $\mathcal{M}^p_q$ with $1 \le q < p < \infty$ · · · · · 10

06-01-0016
19 Yoshihiro Sawano (Tokyo Metro. Univ.) ♭ — Elliptic differential operators with non-smooth coefficients in uniformly local L^2 spaces · · · · · 10

06-01-0026
20 Toru Nogayama (Tokyo Metro. Univ.) — Boundedness of the commutators of fractional integral operators on mixed Morrey spaces · · · · · 10

06-01-0003
21 Takeshi Iida (Fukushima Nat. Coll. of Tech.) — Note on the integral operators in weighted Morrey spaces · · · · · 10

06-01-0025
22 Hiro-o Kita (Kagoshima Univ.*) * — On generalized weak Orlicz spaces constructed by φ-functions · · · · · 10
Takashi Miyamoto (Osaka Kyoiku Univ.)
Naoko Ogata (Kobe Univ.)

06-01-0045
23 Shigehiko Kuratsubo (Hirosaki Univ.*) — Multiple Fourier series and lattice point problems · · · · · 10
Eiichi Nakai (Ibaraki Univ.)

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

06-02-0003
Takeshi Kawazoe (Keio Univ.) — Singular integrals for Jacobi analysis

March 20th (Wed)

9:00–11:50

06-01-0001
24 Masaaki Mizukami (Tokyo Univ. of Sci.) — Existence of global weak solutions in a chemotaxis-Navier–Stokes system I: Effect of strong diffusion · · · · · 10

06-01-0002
25 Masaaki Mizukami (Tokyo Univ. of Sci.) — Existence of global weak solutions in a chemotaxis-Navier–Stokes system II: Effect of strong logistic-type damping · · · · · 10

06-01-0022
26 Keiichiro Kagawa (Waseda Univ.) — Asymptotic limits of the viscous Cahn–Hilliard equation · · · · · 10
Mitsuharu Ôtani (Waseda Univ.)

06-01-0019
27 Kosuke Kita (Waseda Univ.) — On the comparison theorem for parabolic equations governed by nonlinear boundary conditions · · · · · 10
Mitsuharu Ôtani (Waseda Univ.)

06-01-0030
28 Takanori Kuroda (Waseda Univ.) — Finite time blow-up for a Ginzburg–Landau equation with linear term · · · · · 10
Mitsuharu Ôtani (Waseda Univ.)

06-01-0029
29 Kazuki Shimura (Oita Univ.) — Structure-preserving finite difference schemes for a Cahn–Hilliard system coupled with viscoelasticity · · · · · 10
Shuji Yoshikawa (Oita Univ.)

06-01-0020
30 Makoto Okumura (Osaka Univ.) — A structure-preserving scheme for the Allen–Cahn equation with dynamic boundary conditions · · · · · 10

06-01-0044
31 Ryota Nakayashiki (Chiba Univ.) — Coupling system of Allen–Cahn equation and phase-field model of grain boundary motion governed by dynamic boundary condition · · · · · 10

06-01-0042
32 Kota Kumazaki (Nagasaki Univ.) — On a multiscale model describing moisture transport in concrete materials · · · · · 10

06-01-0024
33 Takeshi Fukao (Kyoto Univ. of Edu.)
Hao Wu (Fudan Univ.) — Long time behavior of GMS model with a strict separation property from pure phases · · · · · 10

06-01-0039
34 Yutaka Tsuzuki (Hiroshima Shudo Univ.) — Solvability of problems for Vlasov–Poisson equations with angle error in magnetic field in a half-space · · · · · 10

06-01-0041
35 Yoshimasa Sasaki (Niigata Univ.)
Hiroki Ohwa (Niigata Univ.) — Continuous dependence on the initial conditions and flux functions of solutions for a single conservation law · · · · · 10

06-01-0033
36 Makoto Nakamura (Yamagata Univ.)
Yuya Sato (Yamagata Univ.) — Global solutions for a semilinear diffusion equation in expanding or contracting spaces · · · · · 10

06-01-0034
37 Makoto Nakamura (Yamagata Univ.) — On the Navier–Stokes equations in homogeneous and isotropic spacetimes with a constant density of mass · · · · · 10

06-01-0007
38 Takayoshi Ogawa (Tohoku Univ.)♭
Senjo Shimizu (Kyoto Univ.) — Maximal regularity for the Cauchy problem of heat equations in BMO · · · · · 10

14:15–15:05

06-01-0010
39 Akio Ito — Fix-Caginalp phase field model with quasi-variational structure on the boundary condition · · · · · 10

06-01-0004
40 Noriaki Yamazaki (Kanagawa Univ.)
Nobuyuki Kenmochi (Chiba Univ.⋆)
Ken Shirakawa (Chiba Univ.) — Singular optimal control problems for nonlinear evolution equations governed by double time-dependent subdifferentials · · · · · 10

06-01-0027
41 Ken Shirakawa (Chiba Univ.)
Hiroshi Watanabe (Oita Univ.) — Structural observations for one-dimensional phase-field system associated with grain boundary motion · · · · · 10

06-01-0006
42 Miyu Hotta (Japan Women's Univ.)
Toyohiko Aiki (Japan Women's Univ.) — On growth model having age-structure for jellyfish with food chain · · · 10

06-01-0009
43 Miu Takahashi (Japan Women's Univ.)
Toyohiko Aiki (Japan Women's Univ.)
Martijn Anthonissen (Eindhoven Univ. of Tech.) — Existence of a solution of the initial boundary value problem describing a real experiment related to the Soret effect · · · · · 10

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

06-02-0001
Yoshikazu Giga (Univ. of Tokyo) — On total variation flow type equations

Functional Analysis

March 17th (Sun)

10:30–12:00

07-01-0002
1 Hiroshi Inoue (Daiichi Univ. of Pharm.) Non self-adjoint Hamiltonian and physical operators constructed by biorthogonal sequences in Hilbert space ····· 15

07-01-0025
2 Atia Afroz (Saitama Univ.) Bifurcation and hysteresis sets of Euler buckling problem ····· 10

07-01-0014
3 Takeo Kamizawa (Tokyo Univ. of Sci.) How can we compute the solutions to master equations of open quantum systems? I ····· 10

07-01-0001
4 Shuji Watanabe (Gunma Univ.) * The second-order phase transition in the BCS-Bogoliubov model of superconductivity and its operator-theoretical proof II ····· 15

07-01-0035
5 Kiyoomi Kataoka (Univ. of Tokyo*) On asymptotic analysis of the evolution operator related to the continuous Kuramoto equation ····· 15

14:15–16:00

07-01-0027
6 Keiji Nakatsugawa (Hokkaido Univ.)
Toshiyuki Fujii (Asahikawa Med. Univ.)
Avadh Saxena (Los Alamos Lab.)
Satoshi Tanda (Hokkaido Univ.) Time operators and time crystals ····· 10

07-01-0031
7 Akito Suzuki (Shinshu Univ.) ♭ Supersymmetry of chiral symmetric unitary operators ····· 15

07-01-0016
8 Fumio Hiroshima (Kyushu Univ.) Existence, absence and localization of the ground state of the renormalized Nelson Hamiltonian ····· 15

07-01-0033
9 Koki Hirota (Ritsumeikan Univ.) Purely imaginary eigenvalues of the semiclassical Zakharov–Shabat operator ····· 15

07-01-0034
10 Yukihide Tadano (Univ. of Tokyo)
Kouichi Taira (Univ. of Tokyo) Uniform bounds for discrete Birman–Schwinger operators ····· 15

07-01-0017
11 Yukihide Tadano (Univ. of Tokyo) Construction of Isozaki–Kitada modifiers for discrete Schrödinger operators with long-range perturbations on general lattices ····· 15

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

07-02-0001
Hisashi Morioka (Doshisha Univ.) Weyl-type lower bound for non-scattering energies of time-harmonic acoustic equations

March 18th (Mon)

9:00–12:00

07-01-0004
12 Yoritaka Iwata (Tokyo Tech) ♭ Abstract formulation of the Cole–Hopf transform ····· 15

07-01-0018
13 Hideyasu Yamashita (Aichi Gakuin Univ.) Glauber–Sudarshan-type quantizations and their path integral representations for compact Lie groups ····· 15

07-01-0011
14 Hideto Nakashima (Nagoya Univ.) On zeta functions in several variables associated with homogeneous cones and their functional equations ····· 15

07-01-0015
15 Ryosuke Nakahama (Univ. of Tokyo) Subspace of Hermitian symmetric space of rank 2 and hypergeometric polynomials ····· 15

07-01-0019
16 Nobukazu Shimeno (Kwansei Gakuin Univ.)
Hiroshi Oda (Takushoku Univ.)
Spherical transform for a small K-type on real split Lie group of type G_2 15

07-01-0009
17 Minoru Itoh (Kagoshima Univ.)
A higher order analogue of the Pfaffian version of the Cayley–Hamilton theorem and a description of an invariant theory 15

07-01-0023
18 Toshihisa Kubo (Ryukoku Univ.)
Bent Ørsted (Aarhus Univ.)
On the Peter–Weyl type decomposition theorem for the space of K-finite solutions to intertwining differential operators 15

07-01-0024
19 Junko Inoue (Tottori Univ.)
Semi-invariant generalized vectors associated with holomorphically induced representations of exponential solvable Lie groups 15

07-01-0007
20 Toshihiko Matsuki (Ryukoku Univ.)
Orthogonal multiple flag varieties of finite type: Even-degree case (Setting of problem) 15

07-01-0008
21 Toshihiko Matsuki (Ryukoku Univ.)
Orthogonal multiple flag varieties of finite type: Even-degree case (Classification) 15

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

07-02-0003
Masatoshi Kitagawa (Nara Women's Univ.)
Invariant differential operators and uniformly bounded multiplicities

March 19th (Tue)

9:00–12:00

07-01-0006
22 Hiroko Manaka (Nihon Univ.)
Results with respect to fixed point theorems of an elastic nonlinear mapping in Banach spaces 15

07-01-0029
23 Kazuhiro Kawamura (Univ. of Tsukuba)
Hironao Koshimizu (Yonago Nat. Coll. of Tech.)
Takeshi Miura (Niigata Univ.)
Isometries on $C^1([0,1])$ with respect to several norms 15

07-01-0030
24 Fernanda Botelho (Univ. of Memphis)
Takeshi Miura (Niigata Univ.)
Generalized bi-circular idempotents on $C^1([0,1])$ 15

07-01-0036
25 Norio Niwa (Nihon Univ.)
Takeshi Miura (Niigata Univ.)
Surjective isometries on a Banach space of analytic functions on the open unit disc 15

07-01-0022
26 Osamu Hatori (Niigata Univ.)
Shiho Oi (Niigata Pref. Hakkai High School)
2-local maps on spaces of continuous functions 15

07-01-0012
27 Keiichi Watanabe (Niigata Univ.)
Cauchy–Bunyakovsky–Schwarz type inequalities related to the Möbius operations 15

07-01-0037
28 Masaru Nagisa (Chiba Univ.)
Yasuo Watatani (Kyushu Univ.)
Monotone maps on operator algebras 15

07-01-0010
29 Shigeru Furuichi (Nihon Univ.)
Venus Kaleibary (Tabriz Univ.)
On reverses of the Golden–Thompson type inequalities 15

07-01-0005
30 Yuki Seo (Osaka Kyoiku Univ.)
Matrix norm inequalities related to geometric means 15

07-01-0020
31 Hiroaki Tohyama (Maebashi Inst. of Tech.)
Hiroshi Isa (Maebashi Inst. of Tech.)
Eizaburo Kamei
Masayuki Watanabe (Maebashi Inst. of Tech.)
The n-th relative operator entropies on the path $A \sharp_{\mu,r} B$ 15

14:15–15:45

07-01-0028
32 Yusuke Sawada (Nagoya Univ.)
E_0-semigroups and product systems of W*-bimodules 15

07-01-0003
33 Kengo Matsumoto * (Joetsu Univ. of Edu.)
Flip conjugacy of topological Markov shifts and Ruelle C^*-algebras ... 15

07-01-0013
34 Hiroyuki Osaka (Ritsumeikan Univ.)
Tamotsu Teruya (Gunma Univ.)
The Rokhlin property for inclusions of C*-algebras 15

07-01-0026
35 Yasuhiko Sato (Kyoto Univ.)
Calculations of nuclear dimension for amenable C*-algebras 15

07-01-0021
36 Tsuyoshi Kajiwara (Okayama Univ.)
Yasuo Watatani (Kyushu Univ.)
Dimension group of the C*-algebra associated with the Sierpinski gasket 15

16:00–17:00 Talk Invited by Functional Analysis Section

07-02-0002
Yuki Arano (Kyoto Univ.) ♭
Actions of tensor categories

Statistics and Probability

March 17th (Sun)

9:30–12:00

08-01-0042
1 Hiroki Takahashi (Keio Univ.) Equi-distribution theorem for the Gauss map 15

08-01-0012
2 Hajime Kaneko (Univ. of Tsukuba)
Shigeki Akiyama (Univ. of Tsukuba)
Dong Han Kim (Dongguk Univ.) Comparison of normality between different numerical systems 15

08-01-0040
3 Johannes Jaerisch (Shimane Univ.)
Maik Gröger (Univ. Vienna)
Marc Kesseböhmer (Univ. Bremen) Dimension gaps in transient dynamics on the real line 15

08-01-0031
4 Naoto Shimaru (Okayama Univ. of Sci.)
Keizo Takashima (Okayama Univ. of Sci.) On discrepancies of irrational rotations with several large partial quotients 15

08-01-0003
5 Kenkichi Tsunoda (Osaka Univ.) Scaling limits for Glauber–Kawasaki processes 15

08-01-0020
6 Mao Shinoda (Keio Univ.) Non-convergence of equilibrium measures for a locally constant function 15

08-01-0011
7 Yosuke Kawamoto (Fukuoka Dental Coll.) Dynamical transitons between universal infinite particle systems related to random matrices 15

08-01-0018
8 Shota Osada (Kyushu Univ.) Tree representations of continuum determinantal point processes and tail triviality 15

14:15–15:05

08-01-0014
9 Akihito Hora (Hokkaido Univ.) Effect of microscopic pausing time distributions on the evolution of limit shapes of random Young diagrams 15

08-01-0033
10 Toshihiro Uemura (Kansai Univ.)
Rene Schilling (TU Dresden) Homogenization of symmetric Lévy processes on $\mathbb{R}^d$ 15

08-01-0004
11 Sergio Albeverio (Bonn Univ.)
Minoru Yoshida (Kanagawa Univ.) Non-local Dirichlet forms on infinite dimensional topological vevtor spaces 15

15:20–16:20 Award Lecture for the 2018 MSJ Analysis Prize

08-02-0002
Norio Konno (Yokohama Nat. Univ.) From interacting particle systems to quantum walks

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

08-02-0003
Khanh Duy Trinh (Tohoku Univ.) Gaussian beta ensembles in global regime

March 18th (Mon)

10:00–11:20

08-01-0001
12 Satoshi Suzuki (Shimane Univ.) Optimality conditions for quasiconvex programming in terms of subdifferentials 15

08-01-0030
13 Toshiharu Fujita (Kyushu Inst. of Tech.) Markov decision process with converging branch system 10

08-01-0044
14 Takahiro Tsuchiya (Univ. of Aizu)
Dai Taguchi (Osaka Univ.)
Forward-backward stochastic differential equations and Newton's method 15

08-01-0024
15 Yuji Yoshida (Univ. of Kitakyushu)
Risk measures derived from utility functions 15

08-01-0029
16 Ryoichi Suzuki (Keio Univ.)
Local risk-minimization for digital options in Lévy markets via Malliavin calculus 10

11:30–12:00 Research Section Assembly

March 19th (Tue)

9:45–12:00

08-01-0037
17 Yuichi Goto (Waseda Univ.)
Bivariate asymptotic theory of nonparametric estimation based on binary time series 10

08-01-0039
18 Yujie Xue (Waseda Univ.)
Modified LASSO estimators for linear quantile regression models with long-memory disturbances 10

08-01-0025
19 Hideaki Nagahata (Inst. of Stat. Math. / Waseda Univ.)
Higher-order approximation of the distribution of test statistics for high-dimensional time-series ANOVA models 15

08-01-0038
20 William Dunsmuir (Univ. of New South Wales)
Yan Liu (Kyoto Univ.)
A test of missing completely at random in time series 15

08-01-0028
21 Fumiya Akashi (Waseda Univ.)
Robust local polynomial regression method for the dependent cylindrical data 15

08-01-0006
22 Koji Tsukuda (Univ. of Tokyo)
Yoichi Nishiyama (Waseda Univ.)
Goodness-of-fit tests for Markovian processes based on marked empirical processes 15

08-01-0026
23 Kazuyoshi Yata (Univ. of Tsukuba)
Makoto Aoshima (Univ. of Tsukuba)
Aki Ishii (Tokyo Univ. of Sci.)
Tests for high-dimensional covariance structures using ECDM methodology 15

08-01-0041
24 Ken-ichi Koike (Univ. of Tsukuba)
Asymptotic comparison of Bayesian information inequalities 15

14:15–15:00

08-01-0009
25 Gaku Igarashi (Univ. of Tsukuba)
Boundary-bias-free direct density ratio estimation using beta kernel 15

08-01-0010
26 Yoshihide Kakizawa (Hokkaido Univ.)
Gaku Igarashi (Univ. of Tsukuba)
Higher-order bias corrections for asymmetric kernel density estimators 15

08-01-0005
27 Yoshihiko Maesono (Kyushu Univ.)
Rizky Reza Fauzi (Kyushu Univ.)
Boundary-free Kolmogorov–Smirnov test based on kernel estimation 10

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

08-02-0004
Aki Ishii (Tokyo Univ. of Sci.)
High-dimensional statistical inference under the strongly spiked eigenvalue model

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

08-02-0001
Kiyotaka Iki (Nihon Univ.)
Symmetry models based on an underlying bivariate distribution for square contingency tables

March 20th (Wed)

9:30–12:00

08-01-0002
28 Mitsuhiro Takami (Tokyo Univ. of Sci.)
Yusuke Saigusa (Yokohama City Univ.)
Aki Ishii (Tokyo Univ. of Sci.)
Tomoyuki Nakagawa (Tokyo Univ. of Sci.)
Sadao Tomizawa (Tokyo Univ. of Sci.)
Geometric mean type measure of symmetry for square contingency tables with ordered categories 10

08-01-0022
29 Toshiki Takei (Tokyo Univ. of Sci.)
Aki Ishii (Tokyo Univ. of Sci.)
Tomoyuki Nakagawa (Tokyo Univ. of Sci.)
Sadao Tomizawa (Tokyo Univ. of Sci.)
Geometric mean type measure of marginal homogeneity for square contingency tables with ordered categories 10

08-01-0007
30 Satoru Shinoda
(Tokyo Univ. of Sci. / Taisho Pharmaceutical Co., Ltd.)
Kouji Tahata (Tokyo Univ. of Sci.)
Kiyotaka Iki (Nihon Univ.)
Sadao Tomizawa (Tokyo Univ. of Sci.)
Marginal inhomogeneity based on complementary log-log transform for multi-way contingency table 10

08-01-0008
31 Takuya Yoshimoto
(Tokyo Univ. of Sci. / Chugai Pharmaceutical Co., Ltd.)
Kouji Tahata (Tokyo Univ. of Sci.)
Kiyotaka Iki (Nihon Univ.)
Sadao Tomizawa (Tokyo Univ. of Sci.)
Moment symmetry model and decomposition of marginal symmetry model for multi-way contingency tables 15

08-01-0016
32 Kengo Fujisawa (Tokyo Univ. of Sci.)
Kouji Tahata (Tokyo Univ. of Sci.)
Generalized marginal inhomogeneity model for multidimensional contingency tables 15

08-01-0032
33 Ayaka Yagi (Tokyo Univ. of Sci.)
Mizuki Onozawa (Tokyo Univ. of Sci.)
Takashi Seo (Tokyo Univ. of Sci.)
A new test statistic for a mean vector with monotone missing data 15

08-01-0036
34 Nobuhiro Taneichi (Hokkaido Univ. of Edu.)
Yuri Sekiya (Hokkaido Univ. of Edu.)
Jun Toyama (Inst. for the Practical Application of Math.)
Improvement of test statistics of some independencies in three dimensional contingency tables. 15

08-01-0027
35 Shohei Satake (Kobe Univ.)
Kazuki Yoshida (Kobe Univ.)
Frederick Kin Hing Phoa (Academia Sinica)
Masanori Sawa (Kobe Univ.)
On constructing CAOA with strength 3 and the location of sequences of quadratic residues 15

08-01-0013
36 Masanori Sawa (Kobe Univ.)
A motivation for the study of cubature formulas for rotationally invariant integrals 15

14:15–16:00

08-01-0023
37 Shoko Chisaki (Tokyo Univ. of Sci.)
Nobuko Miyamoto (Tokyo Univ. of Sci.)
Ryoh Fuji-Hara (Univ. of Tsukuba*)
Geometrical constructions of dropout designs 10

Applied Mathematics

March 17th (Sun)

9:00–12:10

09-01-0002
1 Shunji Horiguchi — Sets of initial values converging at the roots of the extended complex Newton method for $z^3 = 1$ ····· 15

09-01-0031
2 Shigeyoshi Ogawa (Ritsumeikan Univ.) — A Lagrangian numerical scheme for the noncausal stochastic integral ····· 10

09-01-0025
3 Hirotake Yaguchi (Mie Univ.*) * — Rate of convergence to invariant density function for distribution of iterated beta transformation and linear mod 1 transformation ····· 15

09-01-0046
4 Isamu Ohnishi (Hiroshima Univ.)
Masayasu Mimura (Musashino Univ.)
Rein van der Hout
Danielle Hilhorst (Univ. Paris-Sud) — Existence theorem of time global solution of modified Keller–Rubinow model for Liesegang phenomena by use of subdifferential ····· 10

09-01-0050
5 Yasuhide Uegata (Meiji Univ.)
Shigetoshi Yazaki (Meiji Univ.)
Kazunori Kuwana (Yamagata Univ.)
Maika Goto (Yamagata Univ.) — Mathematical approach to smoldering phenomena on a sheet of paper near floor I : analysis by image segmentation ····· 15

09-01-0049
6 Syunsuke Kobayashi (Meiji Univ.)
Yasuhide Uegata (Meiji Univ.)
Shigetoshi Yazaki (Meiji Univ.) — Mathematical approach to smoldering phenomena on a sheet of paper near floor (II: bifurcation analysis) ····· 15

09-01-0059
7 Shinya Uchiumi (Gakushuin Univ.)
Masahisa Tabata (Kyushu Univ.*) — Convergence of the Lagrange–Galerkin scheme with numerical quadrature —L^2-estimate of the velocity— ····· 15

09-01-0060
8 Masaaki Uesaka (Hokkaido Univ.)
Yoshikazu Giga (Univ. of Tokyo)
Koya Sakakibara (Kyoto Univ./RIKEN)
Kazutoshi Taguchi (Univ. of Tokyo) — On numerical scheme for constrained total variation flows ····· 15

09-01-0051
9 Kohji Ohtsuka (Hiroshima Kokusai Gakuin Univ.)
Takashi Nakazawa (Osaka Univ.) — Shape optimization in Stokes problem using a generalization of J-integral ····· 15

09-01-0053
10 Yuuki Shimizu (Kyoto Univ.) — Fluid equations on surfaces and its steady solutions ····· 15

09-01-0026
11 Christopher C. Green (Macquarie Univ.)
Koya Sakakibara (Kyoto Univ.)
Takashi Sakajo (Kyoto Univ.) — Numerical computation of harmonic measures on closed surfaces ····· 15

09-01-0005
12 Takashi Sakajo (Kyoto Univ.)
Bartosz Protas (McMaster Univ.) — Feedback stabilization of an inviscid vortex sheet ····· 15

12:30–12:45 Presentation Ceremony for the 2018 MSJ Prize for Excellent Young Applied Mathematicians

14:15–16:55

09-01-0010
13 Yasuaki Hiraoka (Kyoto Univ./RIKEN)
Michio Yoshiwaki (RIKEN/Kyoto Univ./Osaka City Univ.) — Algebraic stability theorem for the derived category of the persistence module ····· 15

09-01-0012
14 Tatsuya Mikami (Tohoku Univ.)
Yasuaki Hiraoka (Kyoto Univ.)
Percolation on homology generators in codimension one 15

09-01-0003
15 Mickaël Buchet (Graz Univ. of Tech.)
Emerson Gaw Escolar (RIKEN / Kyoto Univ.)
Every 1D persistence module is a restriction of some indecomposable 2D persistence module 15

09-01-0035
16 Hideto Asashiba (Shizuoka Univ.)
Mickaël Buchet (Graz Univ. of Tech.)
Emerson Gaw Escolar (RIKEN / Kyoto Univ.)
Ken Nakashima (Shizuoka Univ.)
Michio Yoshiwaki (RIKEN / Kyoto Univ. / Osaka City Univ.)
On interval decomposability of 2D persistence modules 15

09-01-0024
17 Tomoki Uda (Tohoku Univ.)
Takashi Sakajo (Kyoto Univ.)
Tomoo Yokoyama (Kyoto Univ. of Edu.)
Discrete forumulation of Reeb graphs and its application to topological flow data analysis 15

09-01-0042
18 Yuki Chiba (Univ. of Tokyo)
Discontinuous Galerkin method for Poisson equation with Robin boundary condition on a curved domain 15

09-01-0017
19 Junji Yamada (Kyoto Univ.)
Mitsuru Shibayama (Kyoto Univ.)
Integrability of planer three-body problem with generalized force under reduction 15

09-01-0047
20 Takuya Tsuchiya (Waseda Univ.)
Misa Fukushima (Waseda Univ.)
Gen Yoneda (Waseda Univ.)
Numerical simulations of second order perturbation equations of Einstein equations in Minkowski background 15

09-01-0052
21 Akitoshi Takayasu (Univ. of Tsukuba)
Verified computations for solutions of complex Ginzburg–Landau equations 15

09-01-0015
22 Yoshitaka Watanabe (Kyushu Univ.)
Takehiko Kinoshita
Nobito Yamamoto (Univ. of Electro-Comm.)
Mitsuhiro T. Nakao (Waseda Univ.)
A higher order constructive error estimation of the Poisson equation and its applications 15

17:00–18:00 Talk Invited by Applied Mathematics Section

09-02-0003
Xuefeng Liu (Niigata Univ.)
Progress about computer-assisted proof for the stationary solution of Navier–Stokes equation

March 18th (Mon)

9:10–12:10

09-01-0014
23 Fumio Nakajima (Iwate Univ.) *
Logarithmic potential poperty appeared on the surfaces of Japanese volcanoes 15

09-01-0016
24 Masashi Mizuno (Nihon Univ.) *
Yekaterina Epshteyn (Univ. Utah)
Chun Liu (Illinois Inst. Tech.)
Some evolution equation of grain boundaries with dynamic lattice orientations and with triple junction drag 15

09-01-0018
25 Kei Nishi (Kyoto Sangyo Univ.)
Yasumasa Nishiura (Tohoku Univ.)
Takashi Teramoto (Asahikawa Medical Univ.)
Pulse dynamics in a bistable three-component reaction-diffusion system with a jump-type heterogeneity 15

09-01-0028
26 Masato Kimura (Kanazawa Univ.)
Ryohei Yamaoka (Kanazawa Univ.)
Tetsuya Ishiwata (Shibaura Inst. of Tech.)
Shigetoshi Yazaki (Meiji Univ.)
Two dimensional snow crystal growth model with supersaturation of vapor ····· 15

09-01-0008
27 Fuminori Sakaguchi (Univ. of Fukui)
A kind of generalization of an integer-type algorithm for solving ODEs based on the algebraic extension of the field of rational functions ····· 15

09-01-0034
28 Shoya Motonaga (Kyoto Univ.)
Kazuyuki Yagasaki (Kyoto Univ.)
Nonpersistence of periodic orbits, homoclinic orbits, first integrals, and commutative vector fields in perturbed systems ····· 15

09-01-0038
29 Kazuyuki Yagasaki (Kyoto Univ.)
Bifurcations of homoclinic orbits in reversible systems ····· 15

09-01-0019
30 Abdennasser Chekroun (Univ. of Tlemcen)
Toshikazu Kuniya (Kobe Univ.)
Analysis of an infection age structured SIR epidemic model with spatial diffusion in the case of Neumann boundary condition ····· 15

09-01-0004
31 Takeshi Gotoda (Hokkaido Univ.)
Masaaki Uesaka (Hokkaido Univ.)
Yusuke Yasugahira (Hokkaido Univ.)
Yasuaki Kobayashi (Univ. of Tokyo)
Hiroyuki Kitahata (Chiba Univ.)
Mitsuhiro Denda (Shiseido Co., Ltd.)
Masaharu Nagayama (Hokkaido Univ.)
Mathematical modeling for layered structure and barrier function of the epidermis ····· 15

09-01-0040
32 Maya Kageyama (Kwansei Gakuin Univ.)
Atsushi Yagi (Osaka Univ.*)
Segregation patterns for self-regulating homeostasis model ····· 15

09-01-0044
33 Sohei Tasaki (RIKEN / Sendai Nat. Coll. of Tech.)
Madoka Nakayama (Sendai Nat. Coll. of Tech.)
Izumi Takagi (Tohoku Univ. / Renmin Univ. of China)
Wataru Shoji (Tohoku Univ. / Tohoku Univ.)
Necessary and sufficient condition for hysteresis in a mathematical model of cell type regulation of *Bacillus subtilis* ····· 15

13:15–14:15 Talk Invited by Applied Mathematics Section

09-02-0001
Shingo Iwami (Kyushu Univ.)
Collaboration between mathematical sciences and virology

March 19th (Tue)

9:20–11:45

09-01-0001
34 Shohei Satake (Kobe Univ.)
On the Erdős–Moon problem ····· 15

09-01-0058
35 Sho Suda (Aichi Univ. of Edu.)
Alexander Gavrilyuk (Pusan Nat. Univ.)
Janoš Vidali (Univ. of Ljubljana)
On tight 4-designs in Hamming association schemes ····· 10

09-01-0013
36 Kosuke Suzuki (Hiroshima Univ.) ♭
Classification of digital (0,2)-sequences in base 2 ····· 15

09-01-0030
37 Hiroshi Naruse (Univ. of Yamanashi)
Soichi Okada (Nagoya Univ.)
Generating function of reverse plane partitions and equivariant K-theory ····· 15

09-01-0027
38 Hidefumi Ohsugi (Kwansei Gakuin Univ.)
Akiyoshi Tsuchiya (Osaka Univ.)
Reflexive polytopes arising from bipartite graphs with γ-positivity associated to interior polynomials 15

09-01-0033
39 Ayaka Ishikawa (Yokohama Nat. Univ.)
The enumeration of unlabeled rooted trees using Young tableaux 15

09-01-0054
40 Akiko Yazawa (Shinshu Univ.)
The Hessian of the generating function for the forests with k components 15

09-01-0007
41 Chie Nara (Meiji Univ.)
Jin-ichi Itoh (Sugiyama Jogakuen Univ.)
Continuous flattening of the 2-dimensional skeleton in a regular simplex 15

09-01-0011
42 Iwao Sato (Oyama Nat. Coll. of Tech.)
Hideo Mitsuhashi (Hosei Univ.)
Hideaki Morita (Muroran Inst. of Tech.)
The weighted Kirchhoff index of a graph 15

14:20–16:30

09-01-0032
43 Masahiro Hachimori (Univ. of Tsukuba)
An optimization problem on the orientations of graphs related to the out-degrees 10

09-01-0006
44 Kiyoshi Ando (Nat. Inst. of Information / JST ERATO)
Some local conditions for k-contractible edges 15

09-01-0009
45 Shinya Fujita (Yokohama City Univ.)
On the optimal proper connection number in connected graphs 10

09-01-0020
46 Akira Saito (Nihon Univ.)
Jun Fujisawa (Keio Univ.)
Robert E. L. Aldred (Otago Univ.)
Distance matching extension of star-free graphs 15

09-01-0021
47 Jun Fujisawa (Keio Univ.)
Carol T. Zamfirescu (Ghent Univ.)
Separating triangles in non-hamiltonian 1-tough triangulations 15

09-01-0023
48 Yusuke Suzuki (Niigata Univ.)
Gen Kawatani (Tokyo Univ. of Sci.)
Partially broken orientations of Eulerian plane graphs 15

09-01-0029
49 Kengo Enami (Yokohama Nat. Univ.)
Non-isomorphic graphs with the same beans function 15

09-01-0036
50 Yumiko Ohno (Yokohama Nat. Univ.)
An algorithm for enumerating triad colorings of triangulations on closed surfaces 15

16:40–17:40 Talk Invited by Applied Mathematics Section

09-02-0002
Michitaka Furuya (Kitasato Univ.) [b]
Comparison and characterization of graph classes generated by forbidden subgraph conditions

March 20th (Wed)

9:20–11:50

09-01-0022
51 Akihiro Narimatsu (Yokohama Nat. Univ.)
Conditions for existence of localization in space-homogeneos quantum walks on Z^d 15

09-01-0037
52 Kei Saito (Yokohama Nat. Univ.)
Periodicity for the Fourier quantum walk on graphs 10

09-01-0055
53 Kei Saito (Yokohama Nat. Univ.)
Akito Suzuki (Shinshu Univ.)
Akihiro Narimatsu (Yokohama Nat. Univ.)
Toru Fuda (Kokushikan Univ.)
Long-time behavior of the split-step quantum walk on cycles 10

Topology

March 17th (Sun)

9:45–12:00

10-01-0001
1 Naoki Kitazawa (Kyushu Univ.) Explicit fold maps and their source manifolds 15

10-01-0019
2 Naoki Kitazawa (Kyushu Univ.) Inverse images of regular values of a differentiable map and the toplogy of its Reeb space 15

10-01-0029
3 Takahiro Yamamoto (Tokyo Gakugei Univ.) Topological equivalence among map germs of 3-manifolds with boundary into the plane 15

10-01-0007
4 Kenta Hayano (Keio Univ.) Stability of non-proper functions 15

10-01-0035
5 Yutaro Kabata (Kyushu Univ.), Kentaro Saji (Kobe Univ.), Masaru Hasegawa (Iwate Med. Univ.) Contact cylindrical surfaces and apparent contours around parabolic points of regular surfaces in Euclidean 3-space 15

10-01-0036
6 Kentaro Saji (Kobe Univ.), Yoshiki Yamamoto (Kobe Univ.) Contacts of standard cuspidal edge with singular surfaces 10

10-01-0025
7 Keisuke Teramoto (Kobe Univ.) Functions on causpidal edges and D_4 singularities 15

10-01-0011
8 Takahiro Matsuyuki (Tokyo Tech) Obstruction class of a deformation of homotopy algebra models 15

14:15–15:05

10-01-0005
9 Masaki Nakagawa (Okayama Univ.), Hiroshi Naruse (Univ. of Yamanashi) Darondeau–Pragacz formulas in complex cobordism 15

10-01-0024
10 Shun Wakatsuki (Univ. of Tokyo) Generalizations of the loop coproduct 15

10-01-0020
11 Shin Hayashi (Nat. Inst. of Adv. Industrial Sci. and Tech./Tohoku Univ.) Index theory for Toeplitz operators associated with some concave corners and its applications 10

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

10-02-0002
Kiyonori Gomi (Shinshu Univ.) Introduction to topological insulators for topologists

March 18th (Mon)

9:30–11:50

10-01-0008
12 Atsuhide Mori (Osaka Dental Univ.) A pair of Poisson structures associated with normal distributions 15

10-01-0023
13 Kazuaki Ogiwara (Osaka City Univ.), Masashi Noji (Osaka City Univ.) The smooth torus orbit closures in the Grassmannians 15

10-01-0030
14 Yuuki Shimizu (Kyoto Univ.) Fluid dynamics on surfaces from the viewpoint of the singular Riemannian foliation generated by a Killing vector field 15

10-01-0006
15 Tsukasa Ishibashi (Univ. of Tokyo), Rei Inoue (Chiba Univ.), Hironori Oya (Shibaura Inst. of Tech.) Cluster realization of Weyl groups and higher Teichmüller theory 15

10-01-0009
16 Wataru Yuasa (Kyoto Univ.) On power subgroups of Dehn twists in hyperelliptic mapping class groups 15

10-01-0037
17 Takuya Katayama (Hiroshima Univ.)
Erika Kuno (Osaka Univ.)
On virtual embeddability between the mapping class groups of some surfaces 15

10-01-0027
18 Yoshihiro Asayama (Yokohama Nat. Univ.)
Naoki Matsumoto (Seikei Univ.)
Balancedness for spanning bipartite quadrangulations of triangulations 15

10-01-0031
19 Takamichi Sushida (Hokkaido Univ.)
Yoshikazu Yamagishi (Ryukoku Univ.)
Voronoi tilings with general Archimedean spiral lattices 15

March 18th (Mon) Conference Room V

13:00–13:10 Presentation Ceremony for the 2018 MSJ Geometry Prize

13:15–14:15 Award Lecture for the 2018 MSJ Geometry Prize

03-02-0003
19 Yuji Odaka (Kyoto Univ.) * Collapsing Kähler–Einstein metrics and moduli compactification

March 19th (Tue)

9:00–11:50

10-01-0028
20 Yuta Nozaki (Univ. of Tokyo)
An infinite family of homologically fibered knots of the same genus 15

10-01-0022
21 Kazuhiro Ichihara (Nihon Univ.)
Makoto Ozawa (Komazawa Univ.)
J. Hyam Rubinstein (Univ. of Melbourne)
Decomposing Heegaard splittings along separating incompressible surfaces in 3-manifolds 10

10-01-0013
22 Toru Ikeda (Kindai Univ.)
Surgery descriptions of orientation-reversing periodic maps on closed orientable 3-manifolds 10

10-01-0018
23 Shunsuke Tsuji (Kyoto Univ.)
A construction of the universal $sl(n)$-quantum invariant for integral homology 3-spheres 15

10-01-0002
24 Tomomi Kawamura (Nagoya Univ.)
Integral region choice problems on link diagrams 10

10-01-0012
25 Masashi Takamura (Aoyama Gakuin Univ.)
Noboru Ito (Univ. of Tokyo)
Arrow diagrams on spherical curves and computations 15

10-01-0016
26 Noboru Ito (Univ. of Tokyo)
Yusuke Takimura (Gakushuin Boys' Junior High School)
Crosscap number two alternating knots 15

10-01-0017
27 Noboru Ito (Univ. of Tokyo)
Yuka Kotorii (RIKEN)
On the degree three case of Goussarov–Polyak–Viro Conjecture of knots 15

10-01-0015
28 Tomo Murao (Univ. of Tsukuba)
An extension and an Alexander pair of a multiple conjugation quandle 10

10-01-0032
29 Kanako Oshiro (Sophia Univ.)
Shadow biquandles and local biquandles 10

10-01-0026
30 Atsushi Ishii (Univ. of Tsukuba)
Kanako Oshiro (Sophia Univ.)
Fox derivatives for quandles 10

10-01-0014
31 Hiroto Masuda (Keio Univ.)
Construction of corks with nonabelian infinite group actions 15

14:15–15:05

10-01-0034
32 Airi Aso (Tokyo Metro. Univ.) Twisted Alexander polynomials of tunnel number one Montesinos knots 10

10-01-0021
33 Ryoto Tange (Kyushu Univ.) Twisted Alexander polynomials and certain Dehn surgeries on twist knots 10

10-01-0010
34 Taizo Kanenobu (Osaka City Univ.)
Toshio Sumi (Kyushu Univ.) Twisted Alexadner polynomial of a ribbon 2-knot 10

10-01-0003
35 Tomoyuki Yasuda * (Nara Nat. Coll. of Tech.) Evaluations of the ribbon crossing number on ribon 2-knots and the crossing number on 1-knots. 10

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

10-02-0001
Takahiro Oba (Kyoto Univ.) Fiber structures and the topology of contact and symplectic manifolds

Infinite Analysis

March 19th (Tue)

10:00–11:45

11-01-0001
1 Yasuaki Gyoda (Nagoya Univ.)
Shogo Fujiwara (Nagoya Univ.)
Duality between mutations and rear mutations in cluster algebras · · · · 15

11-01-0003
2 Yuma Mizuno (Tokyo Tech)
Exponents associated with the Y-system of type X_r with level ℓ · · · · · 15

11-01-0009
3 Takao Suzuki (Kindai Univ.)
Naoto Okubo (Aoyama Gakuin Univ.)
A similarity reduction of q-Drinfeld–Sokolov hierarchy of type $A^{(1)}_{2n+1}$ and q-Garnier system · · · · · 15

11-01-0010
4 Naoto Okubo (Aoyama Gakuin Univ.)
Takao Suzuki (Kindai Univ.)
Generalized q-Painlevé VI systems of type $(A_{2n+1}+A_1+A_1)^{(1)}$ arising from cluster algebra · · · · · 15

11-01-0011
5 Naoto Okubo (Aoyama Gakuin Univ.)
Teruhisa Tsuda (Hitotsubashi Univ.)
Tetsu Masuda (Aoyama Gakuin Univ.)
Birational realization of Weyl groups and cluster algebras · · · · · 15

11-01-0012
6 Tomoyuki Takenawa (Tokyo Univ. of Marine Sci. and Tech.)
The space of initial conditions for some 4D Painlevé systems · · · · · 15

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

11-02-0001
Hajime Nagoya (Kanazawa Univ.)
Conformal field theory and Painlevé equations

15:30–16:30 Talk Invited by Infinite Analysis Special Session

11-02-0002
Ryosuke Kodera (Kobe Univ.)
Affine Yangians and integrable systems

March 20th (Wed)

10:00–11:45

11-01-0004
7 Koichi Hiraide (Ehime Univ.)
Chihiro Matsuoka (Osaka City Univ.)
Representation with special functions via Borel–Laplace transform to invariant curves of 2D dynamics and chaotic sets I · · · · · 15

11-01-0005
8 Chihiro Matsuoka (Osaka City Univ.)
Koichi Hiraide (Ehime Univ.)
Representation with special functions via Borel–Laplace transform to invariant curves of 2D dynamics and chaotic sets II · · · · · 15

11-01-0007
9 Takanori Ayano (Osaka City Univ.)
Victor Buchstaber (Steklov Inst. of Math.)
Construction of two parametric deformation of KdV-hierarchy and solution by sigma function · · · · · 15

11-01-0006
10 Shinsuke Iwao (Tokai Univ.)
Tropical KP and combinatorics of Young tableaux · · · · · 15

11-01-0002
11 Genki Shibukawa (Kobe Univ.)
Pieri type formulas for the shifted Jack polynomials · · · · · 15

11-01-0008
12 Ayumu Hoshino (Hiroshima Inst. of Tech.)
Jun'ichi Shiraishi (Univ. of Tokyo)
Kostka polynomials with one column diagrams of type B_n, C_n and D_n · · · · · 15