Final: 2025/8/1

2025 The Mathematical Society of Japan

AUTUMN MEETING

Dates: September 16th (Tue)–19th (Fri), 2025

Venue: Higashiyama Campus, Nagoya University
Furo-cho, Chikusa-ku, Nagoya, 464-8601, Aichi, Japan

Contact to: Graduate School of Mathematics,
Nagoya University
Furo-cho, Chikusa-ku, Nagoya, 464-8601, Aichi, Japan
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The Mathematical Society of Japan

	I C13	II C15	III C23	IV C25	V S2X	VI S30	VII C33	VIII C35	IX C43
16th (Tue)	Functional Equations 9:00–12:00 14:15–16:30	Functional Analysis 9:30–10:30	Complex Analysis 9:30–11:10 15:40–16:30	Statistics and Probability 9:00–12:00	Applied Mathematics 9:30–11:45 15:30–16:35	Geometry 9:30–11:45 14:15–16:45	Infinite Analysis 9:30–11:45 14:15–15:20	Topology 9:30–12:00 14:30–16:00	Algebra 9:00–12:00 15:30–17:15
	Featured Invited Talks 13:00–14:00								
	Invited Talk 17:00–18:00	Invited Talk 10:45–11:45	Invited Talk 14:20–15:20	Invited Talks 14:15–15:15 15:30–16:30	Invited Talks 14:15–15:15 16:50–17:50		Invited Talk 15:30–16:30	Invited Talk 16:30–17:30	Invited Talk 14:15–15:15
17th (Wed)	Functional Equations 9:15–12:00	Functional Analysis 10:00–10:45	Complex Analysis 9:30–11:10	Statistics and Probability 9:20–11:20	Applied Mathematics 9:00–11:50 13:10–14:00		Infinite Analysis 9:30–10:35		Algebra 9:00–12:00
	Invited Talk 13:00–14:00	Invited Talk 11:00–12:00	Invited Talk 13:00–14:00			Invited Talks 10:20–11:20 12:50–13:50	Invited Talk 10:45–11:45		Invited Talk 13:00–14:00
	MSJ Prizes Presentation (Toyoda Auditorium) ····· (14:30–15:00) Plenary Talks (Toyoda Auditorium) Autumn Prize Winner ····· (15:15–16:15) Akio Tamagawa (Kyoto Univ.) ····· (16:30–17:30) Official Party (Hananoki Restaurant) ····· (18:00–20:00)								
18th (Thu)	Functional Equations 9:15–12:00 14:30–16:30	Functional Analysis 10:00–11:10 14:15–14:55	Real Analysis 10:00–11:30 14:15–15:30	Statistics and Probability 9:30–11:45	Applied Mathematics 10:00–12:00 14:15–16:00	Geometry 9:30–11:45 14:15–17:45	Found. of Math. & Hist. of Math. 10:00–11:55 15:30–16:45	Topology 9:30–11:30 14:15–16:00	Algebra 9:30–12:00 15:30–17:30
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19th (Fri)	Functional Equations 9:15–12:00 14:15–16:30		Real Analysis 10:00–12:00 14:15–15:45	Statistics and Probability 10:00–11:45	Applied Mathematics 10:00–12:00 14:15–16:00	Geometry 9:30–10:45	Found. of Math. & Hist. of Math. 9:30–10:30 14:15–15:30	Topology 9:30–12:00 14:15–16:30	Algebra 9:30–12:00 15:30–17:30
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MSJ Autumn Meeting 2025

Organizing Committee
Chair of Organizing Committee Mitsuru SUGIMOTO (Nagoya Univ.)
Chair of Executive Committee Akira ISHII (Nagoya Univ.)
Vice Chair of Executive Committee Sho TANIMOTO (Nagoya Univ.)

Organizer The Mathematical Society of Japan

Co-organizer Graduate School of Mathematics, Nagoya University

Acknowledgements We would like to thank Nagoya University for their great cooperation in organizing this Autumn Meeting.

Registration for Participation

Visit the following link to register.
`https://www.mathsoc.jp/activity/meeting/nagoya25sept/reg.html` (in Japanese)
This survey is conducted in order to grasp the number of participants in advance.
Please register by September 15th (Mon) if possible. (You can register during this annual meeting.)

Plenary Talks

September 17th (Wed) Toyoda Auditorium

Award Lecture for the 2025 MSJ Autumn Prize

Autumn Prize Winner ..... (15:15–16:15)

Akio Tamagawa (Kyoto Univ.) Anabelian geomerty —past, present and future ..... (16:30–17:30)

Featured Invited Talks

September 16th (Tue)

Conference Room III

Junjiro Noguchi (Univ. of Tokyo*/Sci. Tokyo*) — Value distribution and distribution of rational points III · · (13:00–14:00)

Conference Room IV

Hideki Tanemura (Chiba Univ.*) — Stochastic analysis of infinite particle systems with interactions · · · · · (13:00–14:00)

Conference Room VI

Guest Talk from Korean Mathematical Society

Cheol-Hyun Cho (Pohang Univ. of Sci. & Tech.) — Geometric models of simple Lie algebras via singularity theory · · · · · (13:00–14:00)

September 18th (Thu)

Conference Room II

Kyo Nishiyama (Aoyama Gakuin Univ.) — Orbits on flag vrieties and representation theory: An overview · · · · · (13:00–14:00)

Conference Room VI

Yoshihisa Kitagawa (Utsunomiya Univ.*) — Construction of flat tori in the 3-sphere and its applications · · · · · (13:00–14:00)

September 19th (Fri)

Conference Room I

Tadayoshi Adachi (Kyoto Univ.) — Quantum scattering in spatially homogeneous electromagnetic fields · · · · · (13:00–14:00)

Conference Room IX

Osamu Iyama (Univ. of Tokyo) — Freeness and simplicity: Tilting theory revisited · · · · · (13:00–14:00)

Talks Invited by Research Sections and Special Session

September 16th (Tue)

Algebra (Conference Room IX)

Kenta Ueyama (Shinshu Univ.) Tilting theory for Artin–Schelter Gorenstein algebras ····· (14:15–15:15)

Complex Analysis (Conference Room III)

Shun Kumagai (Hachinohe Inst. of Tech.) Galois action on Teichmüller curves and related combinatorial objects ····· (14:20–15:20)

Functional Equations (Conference Room I)

Kouichi Taira (Kyushu Univ.) Essential selfadjointness and spectral theory for the d'Alembertian on Lorentzian manifolds ····· (17:00–18:00)

Functional Analysis (Conference Room II)

Takeshi Wada (Shimane Univ.) On initial boundary value problems for Maxwell–Schrödinger equations ····· (10:45–11:45)

Statistics and Probability (Conference Room IV)

Toru Sera (Univ. of Osaka) Distributional limit theorems for intermittent dynamical systems and one-dimensional diffusion processes ····· (14:15–15:15)

Ryosuke Shimizu (Kyoto Univ.) Singularity phenomena of Sobolev spaces and energy measures on fractals ····· (15:30–16:30)

Applied Mathematics (Conference Room V)

Masatake Hirao (Aichi Pref. Univ.) Spherical design theory and its applications ····· (14:15–15:15)

Mariko Hagita (Ochanomizu Univ.) Discrete mathematical approaches to impression evaluation ····· (16:50–17:50)

Topology (Conference Room VIII)

Shuhei Maruyama (Kanazawa Univ.) On the Euler class of foliated sphere bundles ····· (16:30–17:30)

Infinite Analysis (Conference Room VII)

Takafumi Mase (Univ. of Tokyo) Exact calculation of degrees for lattice equations ····· (15:30–16:30)

September 17th (Wed)

Algebra (Conference Room IX)

Tatsuyuki Hikita (Kyoto Univ.) On the Stanley–Stembridge conjecture ····· (13:00–14:00)

Geometry (Conference Room VI)

Award Lecture for the 2025 MSJ Geometry Prize

Shin-ichi Matsumura (Tohoku Univ.) Structure theorems for varieties with non-negative curvature ····· (10:20–11:20)

Award Lecture for the 2025 MSJ Geometry Prize

Koichi Nagano (Univ. of Tsukuba) On the geometry of metric spaces with upper curvature bounds ····· (12:50–13:50)

Complex Analysis (Conference Room Ⅲ)

Takahiro Inayama (Tokyo Univ. of Sci.) — L^2 estimates, L^2 extension theorems, and positivity of curvature ····· (13:00–14:00)

Functional Equations (Conference Room I)

Tatsuya Watanabe (Kyoto Sangyo Univ.) — Ground state solutions for nonlocal elliptic problems associated with the nonlinear Schrödinger–Poisson system ····· (13:00–14:00)

Functional Analysis (Conference Room Ⅱ)

Shuji Horinaga (NTT-IFM)♭ — On local A-parameters containing unitary lowest weight representations of unitary groups and applications ····· (11:00–12:00)

Infinite Analysis (Conference Room Ⅶ)

Yuji Kodama (Ohio State Univ.)♭ — KP solitons and the Schottky uniformization ····· (10:45–11:45)

September 18th (Thu)

Foundation of Mathematics and History of Mathematics (Conference Room Ⅶ)

Masato Fujita (Japan Coast Guard Academy) — Topologically tame ordered structures ····· (14:15–15:15)

Algebra (Conference Room Ⅸ)

Atsushi Ito (Univ. of Tsukuba) — On M-regularity and rational maps defined by line bundles on abelian varieties ····· (14:15–15:15)

Functional Equations (Conference Room I)

Shuji Yoshikawa (Hiroshima Univ.) — Structure-preserving discretization of differential equations and its applications ····· (17:00–18:00)

Real Analysis (Conference Room Ⅲ)

Toru Nogayama (Tokyo Univ. of Sci.) — A study of function spaces with mixed norm ····· (15:45–16:45)

Functional Analysis (Conference Room Ⅱ)

Michiya Mori (Univ. of Tokyo) — Various generalizations of Wigner's theorem ····· (15:10–16:10)

Statistics and Probability (Conference Room Ⅳ)

Takeshi Emura (Hiroshima Univ.)♭ — Factorial survival analysis for treatment effects under dependent censoring and its asymptotic theory ····· (14:15–15:15)

Tomoaki Imoto (Univ. of Shizuoka) — The constructions of flexible circular, toroidal, and cylindrical distributions and their applications ····· (15:30–16:30)

Applied Mathematics (Conference Room Ⅴ)

Award Lecture for the 2024 Applied Mathematics Prize

Masato Kimura (Kanazawa Univ.) — Irreversible fracture phase field models: Energy dissipation structure and applications ····· (16:15–17:15)

Topology (Conference Room Ⅷ)

Toshiyuki Akita (Hokkaido Univ.) — Associated groups of quandles, Wirtinger presentations, and group homology ····· (16:30–17:30)

September 19th (Fri)

Foundation of Mathematics and History of Mathematics (Conference Room VII)

Yushiro Aoki (Tokyo Nat. Coll. of Tech.) — A discontinuous homomorphism on C(X) and a fragment of Martin's axiom ····· (10:45–11:45)

Algebra (Conference Room IX)

Toshiki Matsusaka (Kyushu Univ.) ♭ — (Mock) modular nature of q-series ····· (14:15–15:15)

Geometry (Conference Room VI)

Kento Osuga ♭ (Nagoya Univ. / Nagoya Univ.) — Volumes of moduli spaces of bordered Klein surfaces ····· (11:00–12:00)

Functional Equations (Conference Room I)

Mitsuo Higaki (Kobe Univ.) — A Runge-type approximation theorem for the unsteady Stokes equations ····· (17:00–18:00)

Real Analysis (Conference Room III)

Yoshiho Akagawa (Kyoto Univ. of Edu.) — Variational inequality with time-nonlocal unknown dependence for kinematic hardening ····· (16:00–17:00)

Applied Mathematics (Conference Room V)

Ayuki Sekisaka (Meiji Univ.) — Spectral stability of traveling waves and mathematical structure: A perspective from domain dimensionality and boundedness ····· (16:15–17:15)

Open Lectures for Citizens

Date: September 20th (Sat) 14:00–16:30

Venue: Sakata & Hirata Hall

Organizer: The Mathematical Society of Japan

Co-organizer: Graduate School of Mathematics, Nagoya University

Program: Opening Speech ..... (14:00–14:05)
Kazuhiro Ishige (President of MSJ / Univ. of Tokyo)

Lecture 1: "Mathematics of soap films, soap bubbles, and crystals, and their applications" ..... (14:10–15:10)
Miyuki Koiso (Kyushu Univ.)

Lecture 2: "Computers and mathematics: From computational complexity to quantum computing" ..... (15:30–16:30)
François Le Gall (Nagoya Univ.)

Web Page: `https://www.mathsoc.jp/en/meeting/nagoya25sept/`

Foundation of Mathematics and History of Mathematics

September 18th (Thu) Conference Room VII

10:00–11:55

1 Ikuo Yoneda (Nat. Inst. of Tech., Tokuyama Coll.) — Quasi-geometric elimination of imaginaries and modular law in the real sort · · · 15

2 Ikuo Yoneda (Nat. Inst. of Tech., Tokuyama Coll.) — No implications between CF-property and elimination of imaginaries · · · 15

3 Koki Okura (Univ. of Tsukuba) — Dp-finite groups expanded by closed sets · · · 15

4 Hirotaka Kikyo (Kobe Univ.), Akito Tsuboi (Univ. of Tsukuba*) — Chromatic number of several countable graphs · · · 15

5 Koichiro Ikeda (Hosei Univ.) — On theories having a type with tree property · · · 15

6 Akito Tsuboi (Univ. of Tsukuba*) — Applying HF to finite model theory: The power of proactive use · · · 10

7 Koitaro Nakaura (Univ. of Tokyo) — On the chromatic numbers of stable and unstable graphs · · · 15

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

Masato Fujita (Japan Coast Guard Academy) — Topologically tame ordered structures

15:30–16:45

8 Haruka Kogure (Kobe Univ.), Taishi Kurahashi (Kobe Univ.) — On partially conservative sentences 1 · · · 15

9 Haruka Kogure (Kobe Univ.), Taishi Kurahashi (Kobe Univ.) — On partially conservative sentences 2 · · · 15

10 Yuta Sato (Kobe Univ.) — Uniform Lyndon interpolation theorem for $\mathbf{N}^{+}\mathbf{A}_{m,n}$ through propositionalization and cut elimination · · · 15

11 Takahiro Seki (Niigata Univ.) — Associativity and commutativity of variations of residual axioms · · · 15

12 Ryo Kashima (Sci. Tokyo) — On the completeness of infinitary proof systems for the modal mu-calculus · · · 15

September 19th (Fri) Conference Room VII

9:30–10:30

13 Takayuki Kihara (Nagoya Univ.), Ming Ng (Nagoya Univ.) — Subtoposes of the effective topos and the Katětov order · · · 15

14 Kohtaro Tadaki (Chubu Univ.) — An analysis of Wigner's friend in the framework of the principle of typicality · · · 15

15 Kenta Tsukuura (Nat. Fisheries Univ.) — The dissection of (†) · · · 15

16 Takashi Yamazoe (Kobe Univ.) — Cardinal invariants of products of ideals · · · 15

10:45–11:45 Talk Invited by Section on Foundation and History of Mathematics

Yushiro Aoki (Tokyo Nat. Coll. of Tech.) — A discontinuous homomorphism on C(X) and a fragment of Martin's axiom

12:00–12:15 Research Section Assembly

14:15–15:30

17 Tsukane Ogawa (Yokkaichi Univ.)
Tanaka Noriko (Naragakuen Univ.)
On the completion of the five vulumes of the *Kijutsu Kairo Hou* ····· 15

18 Noriko Tanaka (Naragakuen Univ.)
Ogawa Tsukane (Yokkaichi Univ.)
Takuma school, Oka Yukitada, Kijutu-Kairoho Vol. 5 and Shiki-Kijutsu math features ····· 15

19 Koichi Hirata
(Matsuyama Univ. / Ehime Univ.*)
Renjutsu: from the viewpoint of inversive coordinates of circles ····· 15

20 Katsushi Waki (Yamagata Univ.) ♭
Layout analysis of WASAN documents using `NDL_Layout` ····· 15

21 Hideyuki Majima (Ochanomizu Univ.*)
On the sphere volume ratio ····· 15

15:45–16:00 Mathematics History Team Meeting

Algebra

September 16th (Tue) Conference Room IX

9:00–12:00

1 Katsusuke Nabeshima
(Tokyo Univ. of Sci.)
Shinichi Tajima (Niigata Univ.*)
Comprehensive Gröbner systems approach to Chevalley's theorem on image of rational morphisms ····· 15

2 Koichiro Tani (Univ. of Osaka)
Koji Matsushita (Univ. of Tokyo)
Standard multigraded Hibi rings and Cartwright–Sturmfels ideals ····· 15

3 Koji Matsushita (Univ. of Tokyo)
Akiyoshi Tsuchiya (Toho Univ.)
Invariants of graded rings associated with stable set polytopes ····· 15

4 Kyosuke Maeda (Nihon Univ.)
Ken-ichi Yoshida (Nihon Univ.)
Ulrich ideals on rational triple points ····· 15

5 Ken-ichi Yoshida (Nihon Univ.)
Kyosuke Maeda (Nihon Univ.)
Ulrich ideals on 2-dimensional quotient singularities ····· 15

6 Kei-ichi Watanabe ♭
(Nihon Univ. / Meiji Univ.)
Tomohiro Okuma (Yamagata Univ.)
Ken-ichi Yoshida (Nihon Univ.)
The canonical trace ideal and nearly Gorenstein property for 2 dimensional normal local rings ····· 15

7 Sora Miyashita (Univ. of Osaka)
When do pseudo-Gorenstein rings become Gorenstein? ····· 15

8 Mitsuhiro Miyazaki
(Osaka Metro. Univ.)
A new property between Gorenstein and Cohen–Macaulay properties of commutative rings ····· 15

9 Naoki Endo (Meiji Univ.)
Deformation of the quasi-Gorenstein property in extended Rees algebras ····· 15

10 Shinnosuke Ishiro
(Gunma Nat. Coll. of Tech.)
Kazuma Shimomoto (Sci. Tokyo)
Perfectoid towers and lim Cohen–Macaulay sequences ····· 15

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

Kenta Ueyama (Shinshu Univ.) Tilting theory for Artin–Schelter Gorenstein algebras

15:30–17:15

11 Yuki Mifune (Nagoya Univ.) On upper bounds for the dimension of the singularity category ····· 15

12 Kaito Kimura (Nagoya Univ.) On defining ideals of singular loci ····· 15

13 Kei-ichiro Iima (Nat. Inst. of Tech., Nara Coll.), Ryo Takahashi (Nagoya Univ.) Extension-closed subcategories of Cohen–Macaulay module category over a complete local hypersurfaces ····· 15

14 Shu Minaki (Tokyo Univ. of Sci.), Ayako Itaba (Tokyo Univ. of Sci.) Group and Lie algebra structure of Hochschild cohomology of Beilinson algebra of weighted down-up algebras ····· 10

15 Shota Inoue (Tokyo Univ. of Sci.), Ayako Itaba (Tokyo Univ. of Sci.) Symmetric cohomology of triangular bialgebras ····· 15

16 Mariko Ohara (Toyama Pref. Univ.) A stable model category and Hopfological invariant ····· 15

September 17th (Wed) Conference Room IX

9:00–12:00

17 Ryota Wakao (Okayama Univ. of Sci.) On R-matrices constructed from Hopf superalgebras of low dimension ····· 10

18 Yasuhiko Asao (Fukuoka Univ.), Shun Wakatsuki (Nagoya Univ.) Minimal projective resolution and magnitude homology of geodetic metric spaces ····· 15

19 Sota Asai (Univ. of Tokyo) An extension theorem of semibricks in quiver representations ····· 15

20 Yusuke Nishinaka (Nagoya Univ.) Costello–Gwilliam factorization algebras and vertex algebras ····· 15

21 Shuji Fujino (Tokyo Univ. of Sci.), Yuta Kozakai (Tokyo Univ. of Sci.), Kohei Takamura (Tokyo Univ. of Sci.) How to construct two-sided tilting complexes for generalized Brauer tree algebras ····· 15

22 Shingo Okuyama (Nat. Inst. of Tech., Kagawa Coll.), Yasuhiro Omoda (Nat. Inst. of Tech., Akashi Coll.), Kazunori Nakamoto (Univ. of Yamanashi) An example of a non-2-thick irreducible representation of the symmetric group ····· 15

23 Maria Ferrara (Univ. Campania Luigi Vanvitelli), Marco Trombetti (Univ. Napoli Federico II), Sin Yi Tsang (Ochanomizu Univ.) On orders whose arithmetical properties determine the structure of skew braces ····· 15

24 Kohji Yanagawa (Kansai Univ.), Xin Ren (Osaka Metro. Univ.) Transposes in the q-deformed modular group and their applications to q-deformed rational numbers ····· 15

25 Shuhei Tsujie (Hokkaido Univ. of Edu.), Ryo Uchiumi (Univ. of Osaka) On 2-multiarrangements of three lines over fields of positive characteristic ····· 15

26 Shun-ichi Kimura (Hiroshima Univ.)
Hiyu Inoue (Hiroshima Univ.)
Shin-nosuke Kadowaki (Hiroshima Univ.)
Ending partizan games ····· 15

27 Shun-ichi Kimura (Hiroshima Univ.)
Surreal numbers as the K-ring of some combinatorial games ····· 15

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

Tatsuyuki Hikita (Kyoto Univ.)
On the Stanley–Stembridge conjecture

September 18th (Thu) Conference Room IX

9:30–12:00

28 Shota Maehara (Kyushu Univ.)
An algebraic research on minimum number of chambers for line arrangements ····· 15

29 Tatsushi Shimazaki (Kobe Univ.)
Takahiko Nobukawa (Kogakkan Univ.)
Taikei Fujii (Kobe Univ.)
The number of set-valued semistandard tableaux and special values of Grothendieck polynomials ····· 15

30 Takeshi Torii (Okayama Univ.)
Kazunori Nakamoto (Univ. of Yamanashi)
The moduli of subalgebras of the full matrix ring of degree 3 (4) ····· 15

31 Kohei Aoyama (Univ. of Osaka)
The property of being a Deligne–Mumford stack is not preserved by the warping stack ····· 15

32 Yasuhiro Oki (Rikkyo Univ.)
Kazuki Kanai (Kure Nat. Coll. of Tech.)
The rationality problem for multinorm one tori ····· 15

33 Tomohiro Iwami (Kyushu Inst. of Tech.)
Certain mixed motivic sheaves for extensions of symmetric 2-forms related to three-dimensional Miyaoka–Yau type inequality with third Chern classes ····· 15

34 Taro Sano (Kobe Univ.)
On Hodge structures of compact complex manifolds with semistable degenerations ····· 15

35 Hisato Matsukawa (Hokkaido Univ.)
The spectrum of triangulated categories with actions ····· 15

36 Shu Nimura (Nagoya Univ.)
Akira Ishii (Nagoya Univ.)
Derived McKay correspondence for real reflection groups of rank three ····· 15

12:00–12:30 Research Section Assembly

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

Atsushi Ito (Univ. of Tsukuba)
On M-regularity and rational maps defined by line bundles on abelian varieties

15:30–17:30

37 Natsume Kitagawa (Nagoya Univ.)
The standard models of del Pezzo fibrations of degree 4 ····· 15

38 Shuto Abe (Nagoya Univ.)
Automorphism groups of Fano threefolds ····· 15

39 Kiwamu Watanabe (Chuo Univ.)
Quadratic varieties of small codimension ····· 15

40 Osamu Fujino (Kyoto Univ.)
Hiroshi Sato (Fukuoka Univ.)
On non-projective complete toric varieties ····· 10

September 19th (Fri) Conference Room IX

9:30–12:00

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

15:30–17:30

Geometry

September 16th (Tue) Conference Room VI

9:30–11:45

14:15–16:45

September 17th (Wed) Conference Room VI

10:00–10:15 Presentation Ceremony for the 2025 MSJ Geometry Prize

10:20–11:20 Award Lecture for the 2025 MSJ Geometry Prize

Shin-ichi Matsumura (Tohoku Univ.) Structure theorems for varieties with non-negative curvature

12:50–13:50 Award Lecture for the 2025 MSJ Geometry Prize

Koichi Nagano (Univ. of Tsukuba) On the geometry of metric spaces with upper curvature bounds

September 18th (Thu) Conference Room VI

9:30–11:45

14:15–17:45

September 19th (Fri) Conference Room VI

9:30–10:45

11:00–12:00 Talk Invited by Geometry Section

Complex Analysis

September 16th (Tue) Conference Room III

9:30–11:10

5 Ikkei Hotta (Yamaguchi Univ.)
Sebastian Schleißinger (Univ. of Würzburg)
Toshiyuki Sugawa (Tohoku Univ.)
Nonlinear resolvents and decreasing Loewner chains ····· 15

6 Shunsuke Kasao (Shibaura Inst. of Tech. Kashiwa Junior & Senior High School)
Yu Kawakami (Kanazawa Univ.)
Bloch–Ros principle and its application ····· 15

14:20–15:20 Talk Invited by Complex Analysis Section

Shun Kumagai (Hachinohe Inst. of Tech.)
Galois action on Teichmüller curves and related combinatorial objects

15:40–16:30

7 Junichiro Narita (Daido Univ./Daido Univ.*)
Mikihiro Hayashi (Hokkaido Univ.*)
Shigeo Segawa (Daido Univ.*)
On Hasumi's theorem for the classification of plane domains by Hardy classes ····· 15

8 Katsuhiko Matsuzaki (Waseda Univ.)
Fei Tao (Waseda Univ.)
Characterization of asymptotically smooth curve ····· 15

9 Yûsuke Okuyama (Kyoto Inst. Tech.)
Schwarzian derivatives and their generalizations of meromorphic functions appearing in complex dynamics ····· 15

September 17th (Wed) Conference Room Ⅲ

9:30–11:10

10 Takanori Ayano (Osaka Metro. Univ.)
Victor M. Buchstaber (Steklov Math. Inst.)
Solution to the KP equation in terms of a hyperelliptic function of degree 2 ····· 15

11 Takeo Ohsawa (Nagoya Univ.)♭
An example of holomorphically nonconvex locally pseudoconvex analytic set in $\mathbb{C}^3$ ····· 15

12 Makoto Abe (Hiroshima Univ.*)
Tatsuhiro Honda (Senshu Univ.)
Boundary distance functions of unramified Riemann domains over $\mathbb{C}^n$ ····· 15

13 Tadashi Takahashi (Hagoromo Univ. of Int. Stud.)
A computer algebraic study on Yoshihara's defining equation ····· 15

14 Atsushi Atsuji (Keio Univ.)
Nevalinna theory for meromorphic functions on transient Kähler manifolds ····· 15

15 Kazuko Matsumoto (Tokyo Univ. of Sci.)
Eigenvalues of the Levi form of logarithmic Fubini–Study distance to a non-singular complex curve in $\mathbb{CP}^2$ ····· 15

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

Takahiro Inayama (Tokyo Univ. of Sci.)
L^2 estimates, L^2 extension theorems, and positivity of curvature

Functional Equations

September 16th (Tue) Conference Room I

9:00–12:00

1 Shunya Adachi (Utsunomiya Univ.) — Middle Laplace transform for linear Pfaffian systems and its application · · · 10

2 Nobuki Takayama (Kobe Univ.⋆) Hiromasa Nakayama (Nihon Univ.) — Algorithm to classify hypergeometric systems to isomorphic classes · · · 10

3 Kazuki Ishibashi (Hiroshima Inst. of Tech.) — A Hille–Kneser type oscillation criterion for linear differential equations with a PD-based operator · · · 10

4 Hiroyuki Usami (Gifu Univ.⋆) Manabu Naito (Ehime Univ.⋆) — Necessary conditions for half-linear ordinary differential equations in order that they have solutions behaving exponentially · · · 10

5 Tomoyuki Tanigawa (Osaka Metro. Univ.) Takaŝi Kusano (Hiroshima Univ.⋆) Jaroslav Jaroš (Comenius Univ.) Hiroyuki Usami (Gifu Univ.⋆) — On the amplitude and the slope at zeros of oscillatory solutions of half-linear differential equations · · · 10

6 Yasuhisa Saito (Shimane Univ.) — Global attractivity for a general delay differential equation with superlinear damping · · · 10

7 Kazuyuki Yagasaki (Kyoto Univ.) — Solvability of integrable partial differential equations under meromorphic initial conditions by quadrature · · · 10

8 Tetsutaro Shibata (Hiroshima Univ.⋆) — Global bifurcation curves of nonlocal elliptic equations with oscillatory nonlinear term · · · 10

9 Satoshi Tanaka (Tohoku Univ.) Kotaro Watanabe (Nat. Defense Acad. of Japan) Naoki Shioji (Yokohama Nat. Univ.) — Uniqueness and multiplicity of positive radial solutions to the supercritical Brezis–Nirenberg type problem in an annulus · · · 10

10 Satoshi Masaki (Hokkaido Univ.) — On quartic conserved quantity for a class of nonlinear ODE system · · · 10

11 Ryuji Kajikiya (Osaka Electro-Comm. Univ.) Shingo Takeuchi (Shibaura Inst. of Tech.) — Estimate for the first eigenvalue of the one-dimensional p-Laplacian · · · 10

12 Ryuji Kajikiya (Osaka Electro-Comm. Univ.) — Least energy solutions of the Hénon equation in reflectionally symmetric or point symmetric unbounded domains · · · 10

13 Slim Ibrahim (Univ. of Victoria) Ikkei Shimizu (Kyoto Univ.) — Global perturbation of isolated equivariant chiral skyrmions from the harmonic maps · · · 10

14 Yuki Amari (Keio Univ.) — Saddle point solutions in $SU(3)$ Yang–Mills theory: Hyperbolic monopole–antimonopole bound state · · · 10

14:15–16:30

15 Takeshi Suguro (Kumamoto Univ.) ♭ Stability estimates for the Sobolev type functional inequality for a p-Laplace equation ····· 10

16 Naoki Hamamoto (Osaka Metro. Univ.) The Poincaré–Wirtinger constant for curl-free fields on the ball ····· 10

17 Daowen Lin (Okinawa Inst. of Sci. and Tech. Grad. Univ.), Xinan Ma (Univ. of Sci. and Tech. of China) Best constant and extremal functions for a class of Hardy–Sobolev–Mazya inequalities ····· 10

18 Takashi Suzuki (Osaka Univ.) Blowup set of the Smoluchowski–Poisson equation in higher dimension ····· 5

19 Yohei Toyota (Nat. Inst. of Tech., Nara Coll.) Behavior of ground state solutions for semilinear elliptic equation associated with critical Sobolev exponent ····· 10

20 Kenta Kumagai (Sci. Tokyo) Bifurcation structure of semilinear elliptic equations with singular weights in two dimensions ····· 10

21 Yuxiao Zhang (Hiroshima Univ.) Higher-order boundary estimates for large solutions to semilinear Poisson equations with exponential nonlinearities ····· 10

22 Sho Katayama (Univ. of Tokyo), Yasuhito Miyamoto (Univ. of Tokyo) Infinite multiplicity of positive solutions of an inhomogeneous supercritical elliptic equation on $\mathbb{R}^N$ ····· 10

23 Yuki Osada (Tokyo Univ. of Sci.), Alessio Pomponio (Politecnico di Bari) Variational analysis for coupled nonlinear Schrödinger equations with point interaction ····· 10

24 Noriyoshi Fukaya (Waseda Univ.) Uniqueness and nondegeneracy of ground states for 2d-nonlinear scalar field equations with point interaction ····· 10

25 Kouta Araki (Nihon Univ.), Masashi Mizuno (Nihon Univ.) A priori estimates for solutions of nonlinear Fokker–Planck equations with inhomogeneous spatial diffusion ····· 10

17:00–18:00 Talk Invited by Functional Equations Section

Kouichi Taira (Kyushu Univ.) Essential selfadjointness and spectral theory for the d'Alembertian on Lorentzian manifolds

September 17th (Wed) Conference Room I

9:15–12:00

26 Mostafa Fazly (UTSA), Yasuhito Miyamoto (Univ. of Tokyo) Linear-coupling effect in the 1D Gross–Pitaevskii system: Exact solutions and eigenvalue problems ····· 10

27 Hiroshi Matsuzawa (Kanagawa Univ.), Hidenori Kokufukata (Tsurumi Senior High School) Ground state for a system of nonlinear Schrödinger equations with three waves interaction and critical nonlinearities ····· 10

28 Reiri Miyamoto (Tokyo Univ. of Sci.), Motohiro Sobajima (Tokyo Univ. of Sci.) The critical Fujita exponent for one-dimensional semilinear heat equations with potentials and space-dependent nonlinearities ····· 10

29 Junichi Harada (Akita Univ.) Remarks on the oscillating solutions to the 6D Fujita equation ····· 6

30 Mizuki Kojima (Kanagawa Univ.) On self-similar solutions of time-fractional semilinear heat equations ····· 10

31 Yasuhito Miyamoto (Univ. of Tokyo)
Masamitsu Suzuki (Meiji Univ.)
Solvability of the Cauchy problem for fractional semilinear parabolic equations in critical and doubly critical cases ····· 10

32 Naoya Hatano (Univ. of Osaka) ♭
Masahiro Ikeda (Univ. of Osaka)
Unconditional uniqueness of Hardy–Hénon parabolic equations on Herz spaces ····· 10

33 Jiyuan Guo (Tokyo Univ. of Sci.)
Shohei Kohatsu (Tokyo Univ. of Sci.)
Tomomi Yokota (Tokyo Univ. of Sci.)
Global existence of weak solutions in a three-dimensional flux-limited Keller–Segel–Navier–Stokes system involving superlinear production ·· 10

34 Hiroshi Wakui (Univ. of Fukui)
Tetsuya Yamada
(Fukui Nat. Coll. of Tech.)
Stability and large time behavior in a drift-diffusion equation with an attractive drift term ····· 10

35 Yuri Soga (Tohoku Univ.) ♭
Concentration phenomena to a chemotaxis system with indirect signal production ····· 10

36 Kazuhiro Oeda (Kyushu Sangyo Univ.)
Kousuke Kuto (Waseda Univ.)
Stationary solutions of a prey-predator model with directed population flux and a protection zone ····· 10

37 Yuki Kaneko (Kanto Gakuin Univ.)
Yoshio Yamada (Waseda Univ.)
Asymptotic behaviors and propagating terrace for a free boundary problem of a positive bistable reaction-diffusion equation under Dirichlet boundary conditions ····· 10

38 Yuki Tsukamoto (Tokyo Univ. of Sci.)
Appearance of stationary interfaces in the fast reaction limit ····· 10

39 Makoto Nakamura (Univ. of Osaka)
Kazusa Eguchi (Univ. of Osaka)
Kento Tachibana (Univ. of Osaka)
Global solutions for the Allen–Cahn type equation in de Sitter spacetime under a quartic potential ····· 10

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

Tatsuya Watanabe
(Kyoto Sangyo Univ.)
Ground state solutions for nonlocal elliptic problems associated with the nonlinear Schrödinger–Poisson system

September 18th (Thu) Conference Room I

9:15–12:00

40 Mamoru Aihara (Hokkaido Univ.)
A game interpretation for the weighted p-Laplace equation ····· 10

41 Takuya Sato (Univ. of Tokyo)
A game approach to free boundary problems of anisotropic forced mean curvature flow equations ····· 10

42 Hiroyoshi Mitake (Univ. of Tokyo)
Panrui Ni (Univ. of Tokyo)
Optimal rate of convergence for homogenization of Hamilton–Jacobi equations with prescribed contact boundary conditions ····· 10

43 Hiroyoshi Mitake (Univ. of Tokyo)
Panrui Ni (Univ. of Tokyo)
Rate of convergence for homogenization of nonlinear weakly coupled Hamilton–Jacobi systems ····· 10

44 Yasuhiro Fujita (Univ. of Toyama)
Norikazu Yamaguchi (Univ. of Toyama)
Residence time for a Hamilton–Jacobi flow starting from a pathological function ····· 10

45 Takashi Kagaya
(Muroran Inst. of Tech.)
Solvability for fully nonlinear parabolic equations with a singular Dirichlet boundary condition ····· 10

46 Qing Liu
(Okinawa Inst. of Sci. and Tech. Grad. Univ.)
Made Benny Prasetya Wiranata
(Okinawa Inst. of Sci. and Tech. Grad. Univ.)
Monge solutions of time-dependent Hamilton–Jacobi equations in metric spaces ····· 10

47 Kotaro Motegi (Sci. Tokyo) A regularity theorem for integral varifolds close to triple junction · · · · 10

48 Kiichi Tashiro (Sci. Tokyo) On existence of weak mean curvature flow with prescribed contact angle · · · · 10

49 Florian Gruen (Kyoto Univ.)
Tatsuya Miura (Kyoto Univ.) Regularity and structure of non-planar p-elasticae · · · · 10

50 Ryunosuke Mori (Meiji Univ.) Propagation and blocking of a curvature flow with driving force in two-dimensional cylinders with periodically arrayed obstacles · · · · 10

51 Satoshi Masaki (Hokkaido Univ.) On the asymptotic behavior of solutions to NLS systems without coercive conserved quantities · · · · 10

52 Hiroyuki Hirayama (Univ. of Miyazaki)
Masahiro Ikeda (Univ. of Osaka) On traveling waves for the nonlinear Schrödinger system with quadratic three wave interaction · · · · 10

14:30–16:30

53 Yuji Sagawa (Gifu Nat. Coll. of Tech.) Asymptotic behavior of small solutions to a two-component system of cubic nonlinear Schrödinger equations in one space dimension · · · · 10

54 Chunhua Li (Yanbian Univ.)
Yuji Sagawa (Gifu Nat. Coll. of Tech.)
Hideaki Sunagawa (Osaka Metro. Univ.)
Shinpei Washio (Shukugawa Junior High School & High School) Remarks on L^2-decay of small solutions to derivative nonlinear Schrödinger equations with weakly dissipative structure · · · · 10

55 Haruya Mizutani (Univ. of Osaka)
Masaki Kawamoto (Okayama Univ.) Modified scattering for the final state problem of the 1D cubic NLS with long-range potential · · · · 10

56 Minami Watanabe (Tsuda Coll.) Scattering for the nonlinear Schrödinger equation with exponential nonlinearity · · · · 10

57 Sonae Hadama (Kyoto Univ.) Semi-classical limit of scattering states: from the Hartree equation to the Vlasov equation · · · · 10

58 Mamoru Okamoto (Hiroshima Univ.)
Guopeng Li (Beijing Inst. of Tech.)
Liying Tao (China Acad. of Eng. Phys.) Global solution to the periodic energy-critical stochastic nonlinear Schrödinger equation · · · · 10

59 Kotaro Inami (Nagoya Univ.) Smoothing property of the Schrödinger equation in modulation spaces · · · · 10

60 Masayuki Hayashi (Kyoto Univ.) Uniqueness of solutions for the logarithmic Schrödinger equation · · · · 10

61 Nobutatsu Kobayashi (Tokyo Univ. of Sci.)
Masahito Ohta (Tokyo Univ. of Sci.) Global well-posedness for a generalized Zakharov system in a higher energy space · · · · 10

17:00–18:00 Talk Invited by Functional Equations Section

Shuji Yoshikawa (Hiroshima Univ.) Structure-preserving discretization of differential equations and its applications

September 19th (Fri) Conference Room I

9:15–12:00

62 Takuma Yoshizumi (Univ. of Osaka)
Makoto Nakamura (Univ. of Osaka)
Blowup for semi-linear Klein–Gordon equations with positive initial energy in FLRW spacetimes 10

63 Koji Wada (Hokkaido Univ.)
Kyouhei Wakasa (Muroran Inst. of Tech.)
Blow-up of solutions for discrete semilinear wave equation with the scale-invariant damping 10

64 Shunsuke Kitamura (Tohoku Univ.)
Non-existence of time-local solutions of derivative type with spatial weights and non-compactly supported data in one space dimension ... 10

65 Motohiro Sobajima (Tokyo Univ. of Sci.)
A weighted energy method for wave equations with time-dependent damping 10

66 I-Kun Chen (Nat. Taiwan Univ.)
Chun-Hsiung Hsia (Nat. Taiwan Univ.)
Daisuke Kawagoe (Kyoto Univ.)
On the existence and regularity of weakly nonlinear stationary Boltzmann equations 10

67 Dingqun Deng (Akita Univ.)
Shock wave stability for the 3D Boltzmann equation: Bridging kinetic theory and fluid dynamics 10

68 Naoto Deguchi (Sci. Tokyo)
On stability of time-periodic compressible Navier–Stokes flows in three-dimensional exterior domain 10

69 Masatoshi Okita (Kurume Nat. Coll. of Tech.)
Yoshiyuki Kagei (Sci. Tokyo)
Takayuki Kobayashi (Univ. of Osaka)
Ryosuke Nakasato (Shinshu Univ.)
On the asymptotic behavior of solutions to the compressible Navier–Stokes equations with the non-slip boundary condition in the half space 10

70 Takayuki Kobayashi (Univ. of Osaka)
Ryosuke Nakasato (Shinshu Univ.)
Analyticity and asymptotic behavior of solutions to the compressible Navier–Stokes–Korteweg equations with the zero sound speed in critical spaces 10

71 Masahiro Suzuki (Nagoya Inst. of Tech.)
Mingjie Li (Minzu Univ. of China)
Katherine Zhiyuan Zhang (Northeastern Univ.)
Stationary flows for viscous heat-conductive fluid in a perturbed half-space 10

72 Masahiro Suzuki (Nagoya Inst. of Tech.)
Wenrui Huang (Brown Univ.)
Benoît Pausader (Brown Univ.)
The asymptotic behavior of solutions to the Vlasov–Poisson equation in convex domains 10

73 Taiki Okazaki (Tohoku Univ.)
Tsukasa Iwabuchi (Tohoku Univ.)
On the uniqueness of the surface quasi-geostrophic equation with the fractional Laplacian 10

74 Mikihiro Fujii (Nagoya City Univ.)
Tsukasa Iwabuchi (Tohoku Univ.)
Sharp well-posedness and ill-posedness of the stationary quasi-geostrophic equation 10

75 Yoshiki Iida (Waseda Univ.)
Resolvent problem for the linearized primitive equations on non-smooth layers 10

14:15–16:30

76 Kento Sube (Waseda Univ.) Well-posedness and analyticity of solutions to the stationary MHD equations ····· 10

77 Hiroki Ohyama (Kyoto Univ.), Junha Kim (Ajou Univ.), Ryo Takada (Univ. of Tokyo) Asymptotics for the inviscid rotating stably stratified Boussinesq equations in a 3D layer ····· 10

78 Hiroki Ohyama (Kyoto Univ.) Long-time solvability and asymptotics for the 3D rotating MHD equations ····· 10

79 Masakazu Yamamoto (Gunma Univ.) Logarithmic time evolution of incompressible Navier–Stokes flow and symmetric structure of its drift term ····· 10

80 Yuta Koizumi (Waseda Univ.) On analyticity in time of Koch–Tataru solutions to the Navier–Stokes equations ····· 10

81 Kenta Oishi (Nat. Inst. of Tech., Kagawa Coll.) Time-periodic solutions for the Lagrangian formulation of the one-phase problem for the incompressible Navier–Stokes equations ····· 10

82 Taiki Takeuchi (Kyushu Univ.) Unique existence of solutions to the Navier–Stokes system with singular external forces ····· 10

83 Motofumi Aoki (Kyoto Univ.), Yasunori Maekawa (Kyoto Univ.) On the non-uniqueness of solutions to the two-dimensional forced Navier–Stokes equations in the half space ····· 10

84 Yosuke Asami (Nagoya Univ.), Toshiaki Hishida (Nagoya Univ.) Regularity properties of a generalized Oseen evolution operator in exterior domains, with applications to the Navier–Stokes initial value problem ····· 10

85 Keiichi Watanabe (Suwa Univ. of Sci.) Unique strong solution to the stationary Navier–Stokes equations around a uniform flow in the whole plane ····· 10

86 Kazuyuki Tsuda (Kyushu Sangyo Univ.), Reinhard Farwig (TU Darmstadt) Critical decay rate of stability for stationary solutions to the Navier–Stokes equations in exterior domains ····· 10

17:00–18:00 Talk Invited by Functional Equations Section

Mitsuo Higaki (Kobe Univ.) A Runge-type approximation theorem for the unsteady Stokes equations

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Real Analysis

September 18th (Thu) Conference Room Ⅲ

10:00–11:30

1 Masaya Kitajima (Nagoya Univ.) Application of differential formulas for generalized Bessel functions to the evaluation of lattice point errors for astroid-type p-circles ····· 15

2 Katsuo Matsuoka (Toho Univ.) Boundedness of some sublinear operators in power-weighted Herz spaces at indices beyond critical index ····· 15

3 Hiroki Saito (Nihon Univ.) Weighted trace inequality with Hausdorff capacity ····· 15

4 Jingeon An (Univ. of Basel) ♭ Second order estimates for a free boundary phase transition ····· 15

5 Haesung Lee (Kumoh National Inst. of Tech.) Local elliptic regularity for solutions to stationary Fokker–Planck equations via Dirichlet forms and resolvents ····· 15

14:15–15:30

6 Yoshifumi Ito (Tokushima Univ.*) Reality of showing signs of physical phenomena ····· 15

7 Yoshifumi Ito (Tokushima Univ.*) Phenomena of spectra of the hydrogen atoms ····· 15

8 Kenichi Mitani (Okayama Pref. Univ.) Skewness and modulus of smoothness in Banach space ····· 15

9 Shin-ya Matsushita (Akita Pref. Univ.) Inertial projection algorithm for fixed point problem ····· 15

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

Toru Nogayama (Tokyo Univ. of Sci.) A study of function spaces with mixed norm

September 19th (Fri) Conference Room Ⅲ

10:00–12:00

10 Shohei Kohatsu (Tokyo Univ. of Sci.) Global existence and boundedness of weak solutions to a Keller–Segel system with flux dependent sensitivity and superlinear production ··· 15

11 Naotaka Ukai (Chiba Univ.), Daiki Mizuno (Chiba Univ.), Ken Shirakawa (Chiba Univ.), Harbir Antil (George Mason Univ.) Solvability of a pseudo-parabolic system based on a gradient flow with unknown-dependent energy ····· 15

12 Hana Kakiuchi (Japan Women's Univ.), Toyohiko Aiki (Japan Women's Univ.) On behavior of free boundaries to two-phase Stefan problems for parabolic partial differential equation systems ····· 15

13 Daiki Mizuno (Chiba Univ.), Ken Shirakawa (Chiba Univ.) Optimal control problem for grain boundary motion with heat exchange and variable-dependent mobility ····· 15

14 Akiko Morimura (Japan Women's Univ.), Toyohiko Aiki (Japan Women's Univ.) Existence of weak solutions to a system describing moisture transport in porous media with an elliptic-parabolic equation ····· 15

15 Yuya Tanaka (Kwansei Gakuin Univ.), Masaaki Mizukami (Kyoto Univ. of Edu.) Boundedness and asymptotic behavior of classical solutions to a model for tuberculosis granuloma formation ····· 15

16 Yutaro Chiyo (Tokyo Univ. of Sci.), Kazuki Hasegawa (Tokyo Univ. of Sci.), Shohei Kohatsu (Tokyo Univ. of Sci.), Tomomi Yokota (Tokyo Univ. of Sci.) Global existence and boundedness in a one-dimensional quasilinear parabolic–elliptic–elliptic chemotaxis system with flux limitation ····· 15

14:15–15:45

17 Chiharu Kosugi (Yamaguchi Univ.) A class of energy conservation systems representing stretching and shrinking motions of the elastic curve with the compressible stress function ····· 15

18 Yusuke Murase (Meijo Univ.) Numerical analysis of mathematical modeling for moisture transport with upwind difference scheme ····· 15

19 Risei Kano (Kochi Univ.)
Takahiro Yamanaka (Kochi Prefectural Sukumo High School)
On the boundary conditions of the Bernoulli–Euler beam model with piezoelectric effects ····· 15

20 Hiroshi Watanabe (Oita Univ.)
Ken Shirakawa (Chiba Univ.)
Jose Salvador Moll (Univ. Valencia)
Existence of solutions to a 3D-model associated with grain boundary motion with anisotropy ····· 15

21 Takeshi Fukao (Ryukoku Univ.)
Characterization of dynamic boundary conditions in the zero-thickness limit ····· 15

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

Yoshiho Akagawa (Kyoto Univ. of Edu.)
Variational inequality with time-nonlocal unknown dependence for kinematic hardening

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Functional Analysis

September 16th (Tue) Conference Room II

9:30–10:30

1 Shuji Watanabe (Sanjo City Univ.)
The Bogoliubov transformation and the gap equation in the BCS model of superconductivity with external magnetic field II ····· 15

2 Hiroki Sako (Niigata Univ.)
On intertwining operators between quantum walks ····· 15

3 Fumio Hiroshima (Kyushu Univ.)
Fiber decomposition of NcHO by 2pQRM ····· 15

4 Yoritaka Iwata (Osaka Univ. of Economics Law)
Takahiro Noi (Otemon Gakuin Univ.)
Cauchy problem of any order hyperbolic evolution equations in Besov spaces ····· 15

10:45–11:45 Talk Invited by Functional Analysis Section

Takeshi Wada (Shimane Univ.)
On initial boundary value problems for Maxwell–Schrödinger equations

September 17th (Wed) Conference Room II

10:00–10:45

5 Akihito Hora (Hokkaido Univ.)
Jucys–Murphy elements for wreath products and dynamical random multi Young diagrams ····· 15

6 Toshihisa Kubo (Ryukoku Univ.)
The branching law of a scalar generalized Verma module for $(\mathfrak{sl}(n+1,\mathbb{C}), \mathfrak{p}_{1,n})$ to $\mathfrak{sl}(n,\mathbb{C})$ ····· 15

7 Atsumu Sasaki (Tokai Univ.)
Weyl group of reductive real spherical homogeneous space of real line bundle type ····· 15

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

Shuji Horinaga (NTT-IFM)♭
On local A-parameters containing unitary lowest weight representations of unitary groups and applications

September 18th (Thu) Conference Room II

10:00–11:10

8 Takeaki Yamazaki (Toyo Univ.)
Chafiq Benhida (Univ. de Lille)
On numerical range of generalized Aluthge trnasforms ····· 10

9 Yuki Seo (Osaka Kyoiku Univ.)
Matrix trace inequalities related to matrix geometric means ····· 15

10 Shigeru Furuichi (Nihon Univ.)
Matrix inequalities via block matrices ····· 15

11 Junichi Fujii (Osaka Kyoiku Univ.*)
A criterion of operator divergence ····· 15

12 Dante Hoshina
(Nat. Inst. of Tech., Kisarazu Coll.)
Shuhei Wada
(Nat. Inst. of Tech., Kisarazu Coll.)
ALM-framework in the theory of multivariate operator means ····· 15

14:15–14:55

13 Katsuhisa Koshino (Kanagawa Univ.)
Isometries between spaces of metrics ····· 15

14 Hajime Moriya (Kanazawa Univ.) ♭
Graded tensor-product extension of KMS states ····· 10

15 Taro Sogabe (Kyoto Univ.) ♭
Kengo Matsumoto
(Joetsu Univ. of Edu.)
Ergodic automorphisms on unital Kirchberg algebras ····· 15

15:10–16:10 Talk Invited by Functional Analysis Section

Michiya Mori (Univ. of Tokyo)
Various generalizations of Wigner's theorem

Statistics and Probability

September 16th (Tue) Conference Room IV

9:00–12:00

1 Hiromichi Ono (Kyoto Univ.)
Hausdorff dimension of the limit sets of tree iterated function systems ····· 15

2 Katsunori Fujie (Kyoto Univ.)
Takahiro Hasebe (Hokkaido Univ.)
Perturbed Random Matrices and Free Probability of Type B′ ····· 15

3 Kenshiro Tashiro
(Okinawa Inst. of Sci. and Tech. Grad. Univ.)
Kohei Suzuki (Durham Univ.)
The Bakry–Émery gradient estimate and the Dyson Brownain motion ····· 15

4 Ryo Inayoshi (Meijo Univ.)
An operator information quantity of a semigroup and associated differential equations ····· 15

5 Masaaki Fukasawa (Univ. of Osaka)
Minato Hojo (Univ. of Osaka)
Limit distribution of errors in discretization of stochastic Volterra equations with multidimensional kernel ····· 15

6 Masaaki Fukasawa (Univ. of Osaka), Basile Maire (Quantena AG), Marcus Wunsch (ZHAW School of Management and Law) — Liquidity provision of utility indifference type in decentralized exchanges 15

7 Kei Noba (Univ. of Osaka), José Luis Pérez (CIMAT) — Scale functions for spectrally negative Lévy processes killed by additive functionals 15

8 Ryoichiro Noda (Kyoto Univ.), Naotaka Kajino (Kyoto Univ.) — Generalized Kac's moment formula for positive continuous additive functionals 15

9 Takumu Ooi (Tokyo Univ. of Sci.) — Homeomorphism of the Revuz correspondence for finite energy integrals 15

10 Yuichi Shiozawa (Doshisha Univ.) — Volume growth, big jump, and essential spectrum for regular Dirichlet forms 15

11 Naomasa Ueki (Kyoto Univ.) — A definition of self-adjoint operators derived from the Schrödinger operator with the white noise potential on the plane 15

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

Toru Sera (Univ. of Osaka) — Distributional limit theorems for intermittent dynamical systems and one-dimensional diffusion processes

15:30–16:30 Talk Invited by Statistics and Probability Section

Ryosuke Shimizu (Kyoto Univ.) — Singularity phenomena of Sobolev spaces and energy measures on fractals

September 17th (Wed) Conference Room IV

9:20–11:20

12 Teruo Tanaka (Hiroshima City Univ.) — Nonlinear semigroups associated with optimal stopping problems for discrete time multiparameter Markov processes 15

13 Toshiharu Fujita (Kyushu Inst. of Tech.) — Max-add criterion in diverging Markov decision process 10

14 Hidefumi Kawasaki (Kyushu Univ.) — Weak extension of the ham-sandwich theorem: some ratio not in half 15

15 Shintaro Hashimoto (Hiroshima Univ.) — Robust Bayesian inference for censored survival data 15

16 Yuzo Maruyama (Chiba Univ.), Akimichi Takemura (Shiga Univ.) — A new perspective on dominating the James–Stein estimator 15

17 Yoshihiko Maesono (Chuo Univ.), Shota Akiba (Chuo Univ.) — Another representation of kernel quantile regression 10

18 Yoshihide Kakizawa (Hokkaido Univ.), Gu Yuting — Nonparametric regression using asymmetric kernels 15

19 Koji Tsukuda (Kyushu Univ.), Shun Matsuura (Keio Univ.) — Upper bounds for the MSE of estimators in allometric regression model: cases of elliptically symmetric error distributions 15

20 Yuki Hayashi (Nanzan Univ.), Takayuki Shiohama (Nanzan Univ.) — Adaptive estimation for the parameters of Jones–Pewsey distribution 10

11:30–12:00 Research Section Assembly

September 18th (Thu) Conference Room IV

9:30–11:45

21 Kou Fujimori (Shinshu Univ.), Hiroshi Shiraishi (Keio Univ.), Junichi Hirukawa (Nanzan Univ.), Konstantinos Fokianos (Univ. of Cyprus)
Sparse estimators for multivariate integer-valued autoregressive models with applications to estimations for Hawkes processes ····· 15

22 Yuta Koike (Univ. of Tokyo)
Second-order accuracy of the double wild bootstrap in high-dimensions ····· 15

23 Shogo Nakakita (Univ. of Tokyo)
Generalization error analysis of binary linear classification problems by Lipschitz concentration ····· 15

24 Shogo Nakakita (Univ. of Tokyo)
Sparse estimation of high-dimensional Ornstein–Uhlenbeck processes with repeated observations ····· 15

25 Takayuki Yamada (Kyoto Women's Univ.), Tetsuto Himeno (Shiga Univ.)
Testing the diagonality of the covariance matrix in high-dimensional data with missing values ····· 15

26 Tetsuya Umino (Univ. of Tsukuba), Kazuyoshi Yata (Univ. of Tsukuba), Makoto Aoshima (Univ. of Tsukuba)
Automatic sparse estimation of the high-dimensional covariance matrix ····· 15

27 Kento Egashira (Tokyo Univ. of Sci.), Kazuyoshi Yata (Univ. of Tsukuba), Makoto Aoshima (Univ. of Tsukuba)
Change point detection for high dimensional data under a strongly spiked eigenvalue model ····· 15

28 Yujie Xue (Inst. of Stat. Math.), Anna Clara Monti (Univ. of Sannio), Masanobu Taniguchi (Waseda Univ.*)
Higher-order investigation of general time series divergences ····· 10

12:15–12:45 Presentation Ceremony for the 2025 MSJ Analysis Prize

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

Takeshi Emura (Hiroshima Univ.)♭
Factorial survival analysis for treatment effects under dependent censoring and its asymptotic theory

15:30–16:30 Talk Invited by Statistics and Probability Section

Tomoaki Imoto (Univ. of Shizuoka)
The constructions of flexible circular, toroidal, and cylindrical distributions and their applications

September 19th (Fri) Conference Room IV

10:00–11:45

29 Hiroto Inoue (Nishinippon Inst. of Tech.)
F-*t* joint distribution and its application for two-sample problem ····· 15

30 Rintaro Ichiya (Waseda Univ.), Rinka Sagawa (Waseda Univ.), Yan Liu (Waseda Univ.)
Detection of chaotic behaviors in stochastic systems ····· 15

31 Rikako Nomura (Waseda Univ.)
Yan Liu (Waseda Univ.)
Normalizing transformation of the Hill estimator ····· 15

32 Noboru Nomura (Kochi Univ.)
Estimation in conjoint analysis based on Gaussian distribution ····· 15

33 Satoru Shinoda (Yokohama City Univ.)
Takuya Yoshimoto (Chugai Pharmaceutical Co. / Yokohama City Univ.)
Kouji Tahata (Tokyo Univ. of Sci.)
A measure of departure from hth-order marginal symmetry for multi-way contingency tables ····· 15

34 Atsushi Komaba (Univ. of Yamanashi)
Hisashi Johno (Univ. of Yamanashi)
Kazunori Nakamoto (Univ. of Yamanashi)
Kolmogorov–Smirnov test, Kuiper test and OVL-q test ····· 15

35 Tomoyuki Nakagawa (Meisei Univ. / RIKEN)
Takeru Matsuda (Univ. of Tokyo / RIKEN)
Kouji Tahata (Tokyo Univ. of Sci.)
An information-geometric interpretation of the partitioning of goodness-of-fit test statistics for symmetry in square contingency tables ····· 15

Applied Mathematics

September 16th (Tue) Conference Room V

9:30–11:45

1 Kazunori Matsuda (Kitami Inst. of Tech.)
The minimum number of edges of connected graphs with ind-match$(G) = p$, min-match$(G) = q$ and match$(G) = r$ ····· 15

2 Shinya Fujita (Yokohama City Univ.)
High connectivity keeping paths in graphs ····· 10

3 Atsuhiro Nakamoto (Yokohama Nat. Univ.)
Naoki Matsumoto (Univ. of Ryukyus)
Kyosuke Wakayama (Yokohama Nat. Univ.)
Alkajim Ahadi Aradais (Mindanao State Univ.)
4-Polychromatic 5-coloring of subcubic plane graphs ····· 15

4 Shohei Satake (Kumamoto Univ.)
Yoshinori Yamasaki (Ehime Univ.)
On the embeddability of the Markoff mod p graph ····· 15

5 Emerson Gaw Escolar (Kobe Univ.)
Woojin Kim (KAIST)
Barcoding invariants and their equivalent discriminating power ····· 15

6 Hideki Matsumura (Tokyo Metro. Univ.)
Masanori Sawa (Kobe Univ.)
Ellipsoidal designs and the Prouhet–Tarry–Escott problem ····· 15

7 Tomoki Tamaru (Kobe Univ.)
Masanori Sawa (Kobe Univ.)
Masatake Hirao (Aichi Pref. Univ.)
The subdesign problem in the Barnes–Wall and shorter Leech lattices ····· 15

8 Eiichi Bannai (Kyushu Univ.*)
Hirotake Kurihara (Yamaguchi Univ.)
Hiroshi Nozaki (Aichi Univ. of Edu.)
On the existence and non-existence of spherical m-stiff configurations 15

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

Masatake Hirao (Aichi Pref. Univ.) Spherical design theory and its applications

15:30–16:35

9 Xiao-Nan Lu (Gifu Univ.)
Completely uniform nested pairings in Boolean Steiner quadruple systems 15

10 Munenori Inagaki (Kobe Univ.)
Yukihiro Uchida (Tokyo Metro. Univ.)
Masanori Sawa (Kobe Univ.)
Hideki Matsumura (Tokyo Metro. Univ.)
The multidimensional Prouhet–Tarry–Escott problem and combinatorial designs I 15

11 Nobuko Miyamoto (Tokyo Univ. of Sci.)
Shoko Chisaki (Osaka Inst. of Tech.)
Ryoh Fuji-Hara (Univ. of Tsukuba*)
Mutually orthogonal block sequences and spreads in a finite projective space 15

12 Kazuki Matsubara (Saitama Univ.)
Shoko Chisaki (Osaka Inst. of Tech.)
Ryoh Fuji-Hara (Univ. of Tsukuba*)
Nobuko Miyamoto (Tokyo Univ. of Sci.)
A construction of regular rectangular designs 15

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

Mariko Hagita (Ochanomizu Univ.) Discrete mathematical approaches to impression evaluation

September 17th (Wed) Conference Room V

9:00–11:50

13 Taisuke Hosaka (Yokohama Nat. Univ.)
Etsuo Segawa (Yokohama Nat. Univ.)
Pulsation of quantum walk on graph with bridge 15

14 Tatsuya Tsurii (Tokyo Univ. of Information Sci.)
Naoharu Ito (Nara Univ. of Edu.)
Itsuki Kawabata (Takatsuki Yanagawa Junior High School)
A study on periodicity of Fourier walk using group structures obtained from its evolution matrix 15

15 Hiroto Sekido (Yokohama Nat. Univ.)
Etsuo Segawa (Yokohama Nat. Univ.)
Periodicity of quantum graph walks defined by covering graphs 15

16 Kei Saito (Nihon Univ.)
Yusuke Ide (Nihon Univ.)
Norio Konno (Nihon Univ.)
Kazuhiro Saito (KDDI Research, Inc.)
Satoshi Watanabe (KDDI Research, Inc.)
A spectral mapping theorem for the quantum searching algorithm via quantum walks 15

17 Tomohiro Washino (Nat. Inst. of Tech., Nara Coll.)
Tadashi Takahashi (Hagoromo Univ. of Int. Stud.)
Defining equations of the set of true parameters 15

18 Hirotake Yaguchi (Mie Univ.*) Generation of nonrecursive n-bit pseudorandom numbers by two times (n-bit)×(n-bit) multiplication ($n = 64, 128, 192, ..., 16384$) ····· 15

19 Tetsuya Nagano (Univ. of Nagasaki*) Note on unforgeability of a digital signature scheme based on Finsler encryption ····· 15

20 Masaki Kashima (Keio Univ.) Degree sum condition for claw-free graphs to have a 2-factor with few components ····· 15

21 Jun Fujisawa (Keio Univ.) Matching extension in regular non-bipartite graphs ····· 15

22 Kenta Noguchi (Tokyo Univ. of Sci.) 4-connected graphs with and without HISTs ····· 15

13:10–14:00

23 Iwao Sato (Oyama Nat. Coll. of Tech.)
Takashi Kmatsu (Univ. of Yamanashi)
Norio Konno
(Ritsumeikan Univ./Yokohama Nat. Univ.*)
A characteristic polynomial for the transition probability matrix of a correlated random walk on a graph ····· 15

24 Kosei Watanabe (Nagoya Univ.) A decomposition formula of a Bartholdi zeta function of some covering of a hypergraph ····· 15

25 Takashi Komatsu (Univ. of Yamanashi)
Norio Konno
(Ritsumeikan Univ./Yokohama Nat. Univ.*)
Iwao Sato (Oyama Nat. Coll. of Tech.)
Hideo Mitsuhashi (Hosei Univ.)
Matrix zeta function on covering graphs ····· 15

September 18th (Thu) Conference Room V

10:00–12:00

26 Kota Ikeda (Meiji Univ.)
Tomoyuki Miyaji (Kyoto Univ.)
Characterization of a periodic solution in a differential-difference equation derived from the optimal velocity model ····· 15

27 Yumihiko S. Ikura (Meiji Univ.)
Hirokazu Ninomiya (Meiji Univ.)
On periodic solutions generated by Greenberg–Hastings cellular automata ····· 15

28 Kazuo Takemura (Nihon Univ.) Green's function for nonlocal multipoint boundary value problems of the linear differential operator $(-1)^M(d/dx)^{2M}$ ····· 15

29 Tetsuya Ishiwata
(Shibaura Inst. of Tech.)
Yu Ichida (Kwansei Gakuin Univ.)
Yukihiko Nakata
(Aoyama Gakuin Univ.)
On the effects of distributed delays on blow-up of solutions ····· 15

30 Koichi Anada
(Waseda Univ. Senior High School)
Tetsuya Ishiwata
(Shibaura Inst. of Tech.)
Takeo Ushijima (Tokyo Univ. of Sci.)
Remarks on behavior for Type II blow-up solutions of a quasilinear parabolic equation in the curve shortening problems ····· 15

31 Hideki Murakawa (Ryukoku Univ.)
Yoshitaro Tanaka
(Future Univ.-Hakodate)
A relationship between haptotaxis and chemotaxis in cell sorting phenomena ····· 15

32 Masumi Kondo (Okayama Univ. of Sci.), Masakazu Onitsuka (Okayama Univ. of Sci.) — Conditional Ulam stability for the Gompertz model ····· 15

14:15–16:00

33 Yu Ichida (Kwansei Gakuin Univ.), Daisuke Yamane (Ritsumeikan Univ.) — Pull-in and touchdown phenomena in mathematical models of micro-machine behavior ····· 15

34 Hideki Kawahara (Nagoya Univ.) — Numerical approximation of delay differential equations via operator splitting in fractional domains ····· 15

35 Yoshitaka Watanabe (Kyushu Univ.), Shuting Cai (Fujian Jiangxia Univ.) — Numerical verification for Elkouh's problem representing fluid flow between parallel circular disks ····· 15

36 Takuya Tsuchiya (Meiji Gakuin Univ.) — On structure-preserving numerical calculation of wave equation for a vector field ····· 15

37 Akitoshi Takayasu (Univ. of Tsukuba) — Computer-assisted proof of a saddle-to-saddle connection in the Swift–Hohenberg equation ····· 15

38 Makoto Okumura (Konan Univ.) — A finite difference scheme for the Cahn–Hilliard equation with dynamic boundary conditions using a nonlinear difference ····· 15

16:15–17:15 Award Lecture for the 2024 Applied Mathematics Prize

Masato Kimura (Kanazawa Univ.) — Irreversible fracture phase field models: Energy dissipation structure and applications

September 19th (Fri) Conference Room V

10:00–12:00

39 Shunji Horiguchi — Extended Schröder's method ····· 10

40 Shunji Horiguchi — Relations between Newton's method, the extended Newton's method, Schröder's method and interior, exterior division points ····· 7

41 Fuminori Sakaguchi (Univ. of Fukui) — Continued fractions, Euclidean algorithm and an integer-type algorithm for solving ODEs ····· 15

42 Atsushi Nakayasu (Univ. of Tokyo), Takayuki Yamada (Univ. of Tokyo) — On a calculation method of the thickness via partial differential equations ····· 15

43 Toru Kan (Osaka Metro. Univ.), Yoshihisa Morita (Ryukoku Univ.*), Ken-Ichi Nakamura (Meiji Univ.), Chang-Hong Wu (National Yang Ming Chiao Tung Univ.) — Asymmetric front propagation in the bistable reaction-diffusion equation on a metric graph ····· 15

44 Kazuyuki Yagasaki (Kyoto Univ.) — Bifurcations of synchronized solutions in the Kuramoto model with two-mode interaction depending on two graphs ····· 15

45 Takashi Furuya (Doshisha Univ.) — Transformers are universal in-context learners ····· 15

46 Ryota Kawasumi (Gunma Univ.), Ikeda Masahiro (Univ. of Osaka) — Universal approximation property of neural ODEs via Orlicz norms ····· 15

14:15–16:00

47 Enhao Liu (Kyoto Univ.)
Hideto Asashiba (Shizuoka Univ.*)
Interval multiplicities of persistence modules ····· 15

48 Kota Takeda (Nagoya Univ.)
Error analysis of the ensemble Kalman filter with partial and noisy observations ····· 15

49 Shunsuke Kaji (Meijo Univ.) ♭
Yasushi Ota (St. Andrew's Univ.)
An inverse problem of partial differential equation for the future of interest rate ····· 15

50 Isamu Ohnishi (Hiroshima Univ.)
Comparative analysis of control strategies for a linear system with noise ····· 15

51 Isamu Ohnishi (Hiroshima Univ.)
Stochastic model predictive control of cheer spikes and low-frequency noise in outdoor festivals ····· 15

52 Rikuki Okamoto (Ritsumeikan Univ.) ♭
Norio Konno
(Ritsumeikan Univ. / Yokohama Nat. Univ.*)
Jiro Akahori (Ritsumeikan Univ.)
Syohei Koyama (Ritsumeikan Univ.)
On the distribution of conditional maxima for quantum walks ····· 15

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

Ayuki Sekisaka (Meiji Univ.)
Spectral stability of traveling waves and mathematical structure: A perspective from domain dimensionality and boundedness

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Topology

September 16th (Tue) Conference Room VIII

9:30–12:00

1 Norihisa Takahashi (Ritsumeikan Univ.)
Hiraku Nozawa (Ritsumeikan Univ.)
On certain irreducible finite group actions on surfaces ····· 10

2 Naoyuki Monden (Okayama Univ.)
Susumu Hirose (Tokyo Univ. of Sci.)
On Nielsen equivalence classes of two-elements generators of mapping class groups ····· 15

3 Nariya Kawazumi (Univ. of Tokyo)
Arthur Soulié
(Univ. Caen Normandie / CNRS)
On stable covariantly twisted cohomology of the mapping class group for surfaces ····· 15

4 Nariya Kawazumi (Univ. of Tokyo)
On the Weil–Petersson symplectic form on the Teichmüller space ····· 15

5 Takuya Sakasai (Univ. of Tokyo)
Yuuki Tadokoro (Tokyo Univ. of Sci.)
Kokoro Tanaka (Tokyo Gakugei Univ.)
A variant of groups defined by Kim and Manturov ····· 10

6 Kanako Oie (Nara Women's Univ.)
Hiroshige Shiga (Sci. Tokyo*)
Ryo Matsuda (Kyoto Univ.)
On the spectrum of the number of geodesics and tight geodesics in the curve complex ····· 15

7 Aoi Wakuda (Univ. of Tokyo)
A separability criterion for two loops on an orientable surface and the Goldman bracket ····· 15

8 Tsukasa Ishibashi (Tohoku Univ.)
Cyclic quantum Teichmüller theory ····· 15

14:30–16:00

9 Reo Yabuguchi (Okayama Univ.), Naoyuki Monden (Okayama Univ.) — Knot surgered elliptic surfaces for a $(2, 2h+1)$-torus knot ····· 15

10 Natsuya Takahashi (Univ. of Osaka), Nobutaka Asano (Tsuyama Nat. Coll. of Tech.) — Stein fillings of planar contact 3-manifolds admitting genus-2 relative trisections ····· 15

11 Tatsumasa Suzuki (Meiji Univ.), Tsukasa Isoshima (Keio Univ.) — The non-simply connected Price twist for the 4-sphere ····· 15

12 Motoo Tange (Univ. of Tsukuba) — Exotic E(n) without 1-handles ····· 15

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

Shuhei Maruyama (Kanazawa Univ.) — On the Euler class of foliated sphere bundles

September 17th (Wed) Conference Room VI

10:00–10:15 Presentation Ceremony for the 2025 MSJ Geometry Prize

10:20–11:20 Award Lecture for the 2025 MSJ Geometry Prize

Shin-ichi Matsumura (Tohoku Univ.) — Structure theorems for varieties with non-negative curvature

12:50–13:50 Award Lecture for the 2025 MSJ Geometry Prize

Koichi Nagano (Univ. of Tsukuba) — On the geometry of metric spaces with upper curvature bounds

September 18th (Thu) Conference Room VIII

9:30–11:30

13 Naoki Kitazawa (Osaka Metro. Univ.) — Reconstructing Morse functions with prescribed preimages of single points ····· 15

14 Naoki Kitazawa (Osaka Metro. Univ.) — Reconstructing Morse functions on 3-dimensional compact and connected manifolds with prescribed preimages of single points ····· 10

15 Naoki Kitazawa (Osaka Metro. Univ.) — A most natural special generic map whose image is an immersed compact manifold of codimension 0 and the cohomology rings of the manifolds ····· 15

16 Gakuto Kato (Nihon Univ.) — On a construction of stable maps from a 3-manifold into the plane ····· 10

17 Saiei-Jaeyeong Matsubara-Heo (Tohoku Univ.) — Distinguishing Euler characteristics ····· 15

18 Yasushi Hirata (Kanagawa Univ.), Yukinobu Yajima (Kanagawa Univ.*) — Embeddings as closed subspaces into irreducible spaces ····· 15

19 Kazuo Tomoyasu (Nat. Inst. of Tech., Miyakonojo Coll.), Heikki Junnila (Univ. of Helsinki) — Gartside's problem and hereditarily normal compactifications of metrizable spaces ····· 15

14:15–16:00

20 Michiaki Takiwaki (Kyoto Univ.) — An isometry theorem induced by the Radon transform between the convolution and interleaving distances ····· 15

21 Katsuhiko Kuribayashi (Shinshu Univ.), Takahito Naito (Nippon Inst. of Tech.), Shun Wakatsuki (Nagoya Univ.), Toshihiro Yamaguchi (Kochi Univ.) — Algebraic interleavings of spaces over the classifying space of the circle ····· 15

22 Kohei Tanaka (Shinshu Univ.) — Directed homotopy theory on stratified spaces and small categories ··· 15

23 Masaki Taho (Univ. of Tokyo) — Topology and diffeology via metric-like functions ····· 15

24 Tadayuki Haraguchi (Naragakuen Univ.), Kazuhisa Shimakwa (Okayama Univ.*) — Adjunction spaces of diffeological spaces ····· 15

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

Toshiyuki Akita (Hokkaido Univ.) — Associated groups of quandles, Wirtinger presentations, and group homology

September 19th (Fri) Conference Room VIII

9:30–12:00

25 Keisuke Himeno (Hiroshima Univ.) — The unoriented band unknotting number of torus knots ····· 10

26 Tetsuya Itoh (Kyoto Univ.) — Slice Cromwell inequality of homogeneous knots ····· 10

27 Yujiro Miki, Kodai Wada (Kobe Univ.) — 4-moves and Kawauchi's conjecture for 2-component links ····· 10

28 Noboru Ito (Shinshu Univ.), Hiroki Mizuno (Shinshu Univ.) — Arnold strangeness of surface immersions ····· 15

29 Migiwa Sakurai (Shibaura Inst. of Tech.), Yoshiyuku Ohyama (Tokyo Woman's Christian Univ.) — Infinitely many virtual knots which have any given sequence of n-writhes ····· 10

30 Shin Satoh (Kobe Univ.) — The α_2-invariant of a ribbon 2-knot and a Gauss diagram ····· 10

31 Inasa Nakamura (Saga Univ.) — Deformations of dotted diagrams and reduced diagrams ····· 10

32 Inasa Nakamura (Saga Univ.) — Torus-covering knot groups and their irreducible metabelian $SU(2)$-representations ····· 10

33 Katsumi Ishikawa (Kyoto Univ.), Masaaki Suzuki (Meiji Univ.), Takayuki Morifuji (Keio Univ.) — On TAV groups of knots ····· 10

34 Yuki Matsushima (Tokyo Metro. Univ.) — On the HOMFLY polynomial of an r^2-periodic knot ····· 15

35 Keita Nakagane, Jun Yoshida (RIKEN), Noboru Ito (Shinshu Univ.) — Twists on Frobenius algebra and link homology ····· 10

14:15–16:30

36 Hajime Kubota (Kyoto Univ.) — On grid homology for diagonal knots ····· 15

37 Satoshi Tsuchimi (Kindai Univ.) — The Kontsevich function and the Zwegers' μ-function ····· 15

38 Sakumi Sugawara (Hokkaido Univ.) — The comology ring of the 3-manifold defined from a combinatorial line arrangement ····· 15

39 Yuya Koda (Keio Univ. / Hiroshima Univ.), Kazuto Takao (Tohoku Univ.) — Diagrammatic criteria for strong irreducibility of Heegaard splittings and finiteness of Goeritz groups ····· 15

40 Yasuyoshi Tsutsumi (Kobe Shinwa Univ.) — Lescop invariants of both the Brieskorn–Hamm manifolds obtained by Dehn surgeries on knots in an integral homology 3-sphere ····· 10

41 Kazuhiro Ichihara (Nihon Univ.), Toshio Saito (Joetsu Univ. of Edu.), Jong In Dae (Kindai Univ.) — On the knot complement conjecture and cosmetic surgery ····· 15

Infinite Analysis

September 16th (Tue) Conference Room VII

9:30–11:45

1 Shota Shigetomi (Kyushu Univ.), Kenji Kajiwara (Kyushu Univ.), Shizuo Kaji (Kyushu Univ. / Kyoto Univ.) — A proof of existence of Kaleidocycle ····· 15

2 Serban Matei Mihalache (Univ. of Tokyo), Tomoro Mochida (Tohoku Univ.) — From polygon equations to simplex equations ····· 15

3 Youichi Shibukawa (Hokkaido Univ.), Davide Ferri (Univ. of Turin) — Quiver-theoretic Yang–Baxter equation and Garside theory (1) ····· 15

4 Youichi Shibukawa (Hokkaido Univ.), Davide Ferri (Univ. of Turin) — Quiver-theoretic Yang–Baxter equation and Garside theory (2) ····· 15

5 Yosuke Kawamoto (Okayama Univ.), Alexander I. Bufetov (Steklov Math. Inst. RAS, etc.) — Boundary Feller–Dynkin processes associated with Laguerre processes ····· 15

6 Yusuke Ohkubo (Setsunan Univ.) — Kac determinant for a q-deformation of the direct sum of the N=1 super Virasoro algebra and the free fermion algebra ····· 15

7 Rei Inoue (Chiba Univ.), Atsuo Kuniba (Univ. of Tokyo), Yuji Terashima (Tohoku Univ.), Junya Yagi (Tsinghua Univ.) — Quantized six-vertex model on a torus ····· 15

8 Toshio Oshima (Univ. of Tokyo*) — Transformations of Pfaffian systems with logarithmic singularities along hyperplane arrangements ····· 15

14:15–15:20

9 Genki Shibukawa (Kitami Inst. of Tech.)
Satoshi Tsuchimi (Kindai Univ.)
A degeneration of the generalized Zwegers' μ-function according to the Ramanujan difference equation ····· 15

10 Yousuke Ohyama (Tokushima Univ.)
Connection problems on q-Lommel functions ····· 15

11 Yumi Arai (Ochanomizu Univ.)
On q-middle convolution and generalized q-hypergeometric equation ·· 15

12 Taikei Fujii (Kobe Univ.)
Nobukawa Takahiko (Kogakkan Univ.)
Linear relations for Kajihara's q-hypergeometric series $\Phi^m_{1,1}$ and $\Phi^m_{2,0}$ ····· 15

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

Takafumi Mase (Univ. of Tokyo)
Exact calculation of degrees for lattice equations

September 17th (Wed) Conference Room VII

9:30–10:35

13 Tatsushi Shimazaki (Kobe Univ.)
Takahiko Nobukawa (Kogakkan Univ.)
Taikei Fujii (Kobe Univ.)
Pecial values of Grothendieck polynomials in terms of hypergeometric functions ····· 15

14 Eriko Shinkawa (Tohoku Univ.)
Kazuya Aokage (Ariake Nat. Coll. of Tech.)
HiroFumi Yamada (Rikkyo Univ.)
Virasoro action on Schur Q-functions and Pfaffian identities ····· 15

15 Masashi Hamanaka (Nagoya Univ.)
Shangshuai Li (Shanghai Univ.)
Shan-Chi Huang (Nagoya Univ.)
Da-Jun Zhang (Shanghai Univ.)
Four-dimensional Wess–Zumino–Witten model and soliton resonances ····· 15

16 Kanehisa Takasaki (Osaka Metro. Univ./Kyoto Univ.*)
Large BKP vs. B-Toda in Lax–Sato form ····· 15

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

Yuji Kodama (Ohio State Univ.)♭
KP solitons and the Schottky uniformization

Information for Speakers

The Organizing Committee apologizes that it had to cut the duration of contributed talks because of technical reasons. Since the schedule is very tight, we ask the speakers to strictly keep time. A bell will be rung when 2/3 of the assigned time has passed. A second bell will be rung as soon as the time is up, and the speaker has to leave the stage.

Collaborative works are presented by the underlined authors. The talks with ♭ marks denote presentations on blackboard or whiteboard. The speakers with ⋆ marks are professors emeriti. If you find anything wrong in the program, do not hesitate to inform the Chair of Organizing Committee by sending e-mail to the address `program25sept@mathsoc.jp`.

Each conference room is equipped with a blackboard (or whiteboard) and a projector with VGA interface or HDMI interface for PC presentation. You are asked to use your own PC and to bring suitable accessories (for example, USB type C-HDMI adapter) for your presentation. The time for connecting your PC to the projector is a part of the assigned duration of your talk. You are strongly recommended to check beforehand if your slides can be properly displayed in the conference room. We also advise you to bring the PDF file of your presentation on a USB flash drive, just in case the PC connection does not work.

Information for Participants

Smoking is prohibited in the entire facility, including the lecture halls.
No parking is available on campus, and private vehicles are not permitted. Please use public transportation.
Nagoya University is an eduroam member.
There are not many dining options around Nagoya University. The on-campus cafeteria hours during the conference are as follows (closed on Saturdays):

South Cafeterias:	11:30–13:30
North Cafeterias:	10:30–15：00, 16:30–19:00
Dining Forest:	11:00–14:00
Universal Club:	11:30–14:00

There is a FamilyMart Nagoya University store across the street from the Liberal Arts and Sciences Main Building, and another FamilyMart IB-Kan store in front of Exit 3 of the Nagoya University subway station, which will be available throughout the conference. If you wish to eat and drink at the venue, please use the Hattori Hall on the 1st floor.

Official Party

Date: September 17th (Wed) 18:00–20:00
Venue: Hananoki Restaurant

Participants are asked to pay 6,000 JPY at the party.

Directions

2025 MSJ AUTUMN MEETING

Dates : September 16th (Tue)–19th (Fri), 2025

Venue : Higashiyama Campus, Nagoya University
Furo-cho, Chikusa-ku, Nagoya, 464-8601, Aichi, Japan

Contact to : Graduate School of Mathematics, Nagoya University
Furo-cho, Chikusa-ku, Nagoya, 464-8601, Aichi, Japan
nagoya25sept@mathsoc.jp

Web Site : https://www.mathsoc.jp/en/meeting/nagoya25sept/

Conference Rooms

	Place	Research Sections
Conference Room I	C13, 1F, Liberal Arts & Sci. Main Bldg.	Functional Equations, Featured Invited Talk
Conference Room II	C15, 1F, Liberal Arts & Sci. Main Bldg.	Functional Analysis, Featured Invited Talk
Conference Room III	C23, 2F, Liberal Arts & Sci. Main Bldg.	Complex Analysis, Real Analysis, Featured Invited Talk
Conference Room IV	C25, 2F, Liberal Arts & Sci. Main Bldg.	Statistics and Probability, Featured Invited Talk
Conference Room V	S2X, 2F, Liberal Arts & Sci. Main Bldg.	Applied Mathematics
Conference Room VI	S30, 3F, Liberal Arts & Sci. Main Bldg.	Geometry, Featured Invited Talks
Conference Room VII	C33, 3F, Liberal Arts & Sci. Main Bldg.	Infinite Analysis, Foundation of Mathematics and History of Mathematics
Conference Room VIII	C35, 3F, Liberal Arts & Sci. Main Bldg.	Topology
Conference Room IX	C43, 4F, Liberal Arts & Sci. Main Bldg.	Algebra, Featured Invited Talk
Plenary Talks	Toyoda Auditorium	
Open Lectures for Citizens	Sakata & Hirata Hall	

Other Rooms

Membership Fee & Extended Abstracts	C12, 1F, Liberal Arts & Sci. Main Bldg.
Discussion Areas	S2Y, 2F & C34, 3F, Liberal Arts & Sci. Main Bldg.
Book Display and Sale	C10 & C11, 1F, Liberal Arts & Sci. Main Bldg.
Executive Committee, MSJ President	C20, 2F, Liberal Arts & Sci. Main Bldg.
Official Party	Hananoki Restaurant