

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/whiteboard. 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.

Foundation of Mathematics and History of Mathematics

September 15th (Tue)

9:40–11:25

01-01-0001

- 1 Shigeru Masuda The fluid dynamics and the heat theory by Poisson 15
(Res. Workshop of Classical Fluid Dynamics)

01-01-0003

- 2 Shigeru Masuda The historical derivatives of the particular value and the particular
(Res. Workshop of Classical Fluid Dynamics) function in the wave and heat theory 15

01-99-0001

- 3 Shotaro Tanaka * Method of finding values of approximate expressions and cosets of Suida
power series 15

01-01-0004

- 4 Shunzi Horiguchi Handwriting analysis of Chinese characters in the picture scroll of
(Niigata Sangyo Univ.) Kikugenpou Betsuden Ichimaki-Hihachiji and 1000 characters that are
written by Koutaku Hosoi 15

01-01-0008

- 5 Shunzi Horiguchi Comparison of the picture scroll of Kikugenpou Betsuden Ichimaki-
(Niigata Sangyo Univ.) Hihachiji and the catalog of kikugenpou betsuden-catalog illustration
of hihachi 15

01-01-0017

- 6 Ken Saito (Osaka Pref. Univ.) Attempt of identification of later additions to Euclid's "Elements"
through syntactic analysis 15

11:30–12:00 Mathematics History Team Meeting

14:15–16:00

01-01-0002

- 7 Yoshihiro Abe (Kanagawa Univ.) How to define isocoherence 15

01-01-0009

- 8 Toshimichi Usuba (Kobe Univ.) On elementary submodel topology 15

01-01-0013

- 9 Makoto Takahashi (Kobe Univ.) On frame systems of axiom A posets 15

01-01-0012

- 10 Kota Takeuchi (Univ. of Tsukuba) Ramsey property of free amalgamation classes 15

01-01-0015

- 11 Koichiro Ikeda (Hosei Univ.) Generic structures with SOP_3 15

01-01-0011

- 12 Hirotaka Kikyo (Kobe Univ.) Model completeness of generic graphs: irrational coefficient case 15

16:15–17:15 Talk Invited by Section on Foundation and History of Mathematics

01-02-0001

Takako Nemoto (JAIST)^b Determinacy of infinite games in second order arithmetic

September 16th (Wed)

9:30–11:20

01-99-0002

13 Takashi Oyabu ^b World of phenomena: $\text{Aut}(\mathbb{R})$, and other 5 talks 5

01-01-0007

14 Hideto Ishihara (Kyoto Univ.) Sorites paradox 15

01-01-0006

15 Kyohei Yokomizo (Nihon Univ.) A conservativity problem on fragments of intermediate propositional logics 15

01-01-0005

16 Nobu-Yuki Suzuki (Shizuoka Univ.) Axiom schemata preserving disjunction and existence properties of intuitionistic predicate logic 15

01-01-0010

17 Toshio Suzuki (Tokyo Metro. Univ.) A solution to Yamakami's problem on advised context-free languages 15

01-01-0014

18 Kohtaro Tadaki (Chubu Univ.) The principle of typicality: A refinement of the probabilistic interpretation of quantum mechanics 15

01-01-0016

19 Kenshi Miyabe (Meiji Univ.) Characterization of 3-randomness via complexity 15

11:30–12:00 Research Section Assembly

Algebra

September 13th (Sun)

9:15–11:50

- 02-01-0056
1 Katsuyoshi Ohara (Kanazawa Univ.) Tajima Shinichi (Univ. of Tsukuba) Akira Terui (Univ. of Tsukuba) Computation of basis for generalized eigenspaces using minimal annihilating polynomials 10
- 02-01-0066
2 Kazunori Matsuda (Osaka Univ.)* Takayuki Hibi (Osaka Univ.) Normality and Gorenstein Fano properties of twinned ordered polytopes. 15
- 02-01-0057
3 Akiyoshi Tsuchiya (Osaka Univ.) Best possible lower bounds on the coefficients of Ehrhart polynomials 15
- 02-01-0044
4 Akihito Wachi (Hokkaido Univ. of Edu.) A volume formula for lattice polyhedra 15
- 02-01-0029
5 Ken-ichi Yoshida (Nihon Univ.) Shiro Goto (Meiji Univ.) Naoki Taniguchi (Meiji Univ.) Almost Gorenstein property of Rees algebras of p_g ideals in two-dimensional normal local rings 15
- 02-01-0030
6 Shiro Goto (Meiji Univ.) Naoyuki Matsuoka (Meiji Univ.) Naoki Taniguchi (Meiji Univ.) Ken-ichi Yoshida (Nihon Univ.) The almost Gorenstein Rees algebras of socle ideals 15
- 02-01-0004
7 Takanori Nagamine (Niigata Univ.) The kernels of derivations of $R[x, y]$ 10
- 02-01-0043
8 Ryota Okazaki (Fukuoka Univ. of Edu.) Kohji Yanagawa (Kansai Univ.) Cohen–Macaulay-ness of the bounded complex and the matroid ideal of an affine oriented matroid 15
- 02-01-0045
9 Hiroki Matsui (Nagoya Univ.) Prethick subcategories of modules and characterizations of local rings 15
- 02-01-0064
10 Daisuke Suyama (Hokkaido Univ.) The supersolvability, inductive freeness, and freeness of the Ish arrangement 15

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

- 02-02-0003
Hidefumi Ohsugi (Kwansei Gakuin Univ.) Gröbner bases of toric ideals and their application

15:30–18:00

- 02-01-0017
11 Ryo Kanda (Nagoya Univ.)^b Atom-molecule correspondence in Grothendieck categories 15
- 02-01-0034
12 Hideto Asashiba (Shizuoka Univ.) Cohen–Montgomery duality for bimodules and its applications to equivalences given by bimodules 15
- 02-01-0063
13 Takeshi Usa (Univ. of Hyogo) Universal families of homological shells, Koszul domains, and Koszul graph maps 15
- 02-01-0038
14 Ayako Itaba (Shizuoka Univ.) Finite condition (Fg) for self-injective Koszul algebras 10
- 02-01-0036
15 Satoshi Yamanaka (Okayama Univ.) On weakly separable polynomials and weakly quasi-separable polynomials in skew polynomial rings 10

02-01-0053	16 Mitsuo Hoshino (Univ. of Tsukuba)	Crossed products for matrix rings	10
	<u>Noritsugu Kameyama</u> (Shinshu Univ.)		
	Hiroataka Koga (Tokyo Denki Univ.)		
02-01-0046	17 Takahide Adachi (Nagoya Univ.)	Brauer star algebras and triangulations	15
02-01-0049	18 Yuya Mizuno (Nagoya Univ.)	Preprojective algebras of Dynkin type, tilting theory and Weyl group	15
02-01-0059	19 Tomohiro Itagaki (Tokyo Univ. of Sci.)	The Hochschild (co)homology of a class of algebras given by a cyclic quiver and two paths	10
02-01-0062	20 Daiki Obara (Tokyo Univ. of Sci.)	On the Hochschild cohomology ring modulo nilpotence of the finite dimensional quiver algebras with quantum-like relations	15

September 14th (Mon)

9:15–12:00

02-01-0018	21 Tomohiro Iwami	* Some remarks on Fano fibrations	10
	(Kyushu Sangyo Univ.)		
02-01-0058	22 Katsuki Asa	Plane curves with small polar degree	10
	<u>Masahiro Watari</u>		
	(Okinawa Nat. Coll. of Tech.)		
02-99-0001	23 Katsumi Akahori	Remarks on normal generation of special line bundles on algebraic curves	15
	(Gifu Pharmaceutical Univ.)		
02-01-0015	24 Takanori Ayano (Osaka City Univ.)	On Jacobi inversion problem for telescopic curves	15
02-01-0024	25 Yoshifumi Tsuchimoto (Kochi Univ.)	The Dolbeault complex of non commutative projective spaces	15
02-01-0050	26 <u>Tomoo Matsumura</u>	K -theoretic Segre classes	15
	(Okayama Univ. of Sci.)		
	Takeshi Ikeda (Okayama Univ. of Sci.)		
	Hiroshi Naruse (Univ. of Yamanashi)		
	Thomas Hudson (Postech)		
02-01-0051	27 <u>Tomoo Matsumura</u>	Determinant formula of the K -theory Schubert classes	15
	(Okayama Univ. of Sci.)		
	Takeshi Ikeda (Okayama Univ. of Sci.)		
	Hiroshi Naruse (Univ. of Yamanashi)		
	Thomas Hudson (Postech)		
02-01-0002	28 Narutaka Ozawa (Kyoto Univ.)	Noncommutative real algebraic geometry of Kazhdan's property (T)	15
02-01-0022	29 Makoto Enokizono (Osaka Univ.)	Slopes of fibered surfaces with a finite cyclic automorphism	15
02-01-0003	30 Ryo Okawa (Kyoto Univ.) ^b	Wall-crossing between stable and co-stable ADHM data	15

13:10–14:10 Talk Invited by Algebra Section

02-02-0001	Sho Hei Ma (Tokyo Tech) ^b	On the Kodaira dimension of certain orthogonal modular varieties	
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September 15th (Tue)

9:15–11:25

02-01-0033

31 Tatsuki Kuwagaki (Univ. of Tokyo) The nonequivariant coherent-constructible correspondence for toric surfaces 15

02-01-0014

32 Tomoaki Shirato (Nagoya Univ.) Frobenius splitting for elliptic fibrations with wild fiber and applications 15

02-01-0023

33 Masataka Tomari (Nihon Univ.) * Normal two-dimensional singularities where the normalized tangent cone is reduced 15

02-01-0005

34 Kiwamu Watanabe (Saitama Univ.) * Uniform families of minimal rational curves on Fano manifolds 15

02-01-0008

35 Hiroyuki Nakasora (Okayama Univ.) * On the support t -designs of extremal binary doubly even self-dual codes 10

02-01-0054

36 Kazufumi Kimoto (Univ. of Ryukyus) Analog of group determinants for group-subgroup pairs 10
Masato Wakayama (Kyushu Univ.)

02-01-0028

37 Jae-Ho Lee (Tohoku Univ.) Nonsymmetric Askey–Wilson polynomials and Q -polynomial distance-regular graphs 15

02-01-0041

38 Shuhei Kamioka (Kyoto Univ.) Plane partitions and orthogonal polynomials 15

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

02-02-0004

Shunsuke Tsuchioka (Univ. of Tokyo) KOR conjecture and beyond

15:30–17:50

02-01-0032

39 Fumihito Oda (Kinki Univ.) The units of a partial Burnside ring relative to the Young subgroups of a symmetric group 10
Yugen Takegahara
(Muroran Inst. of Tech.)

Tomoyuki Yoshida

(Hokusei Gakuen Univ.)

02-01-0035

40 Shigeto Kawata (Osaka City Univ.) * On height zero lattices and Auslander–Reiten components for blocks of finite groups 10

02-01-0060

41 Taiki Shibata (Univ. of Tsukuba) On irreducible representations of quasireductive supergroups 15

02-01-0037

42 Kenichi Shimizu (Nagoya Univ.) Internal character theory 15

02-01-0055

43 Maki Nakasuji (Sophia Univ.) Casselman problem and duality 15
Hiroshi Naruse (Univ. of Yamanashi)

02-01-0006

44 Kazutoshi Kariyama * A remark on Jacquet–Langlands correspondence and invariant s 10
(Onomichi City Univ.)

02-01-0007

45 Kazuya Kawasetsu (Univ. of Tokyo) \mathcal{W} -algebras with non-admissible levels and the Deligne exceptional series 15

02-01-0048

46 Kazuya Kawasetsu (Univ. of Tokyo) The generalized principal subspaces and an intermediate vertex subalgebra 15

02-01-0012

47 Tomoyuki Arakawa (Kyoto Univ.) Joseph ideals and lisse minimal W -algebras 15
Anne Moreau (Univ. Poitiers)

September 16th (Wed)

9:30–12:00

02-01-0001

48 Shigeru Iitaka (Gakushuin Univ.)* General Mersenne numbers and Wieferich prime with respect to P ... 10

02-01-0019

49 Hiromi Ei (Hirosaki Univ.)
Florian Luca (Univ. of Witwatersrand)
Yohei Tachiya (Hirosaki Univ.) Linear independence results for the reciprocal sums of Fibonacci numbers associated with Dirichlet characters 10

02-01-0011

50 Takao Komatsu (Wuhan Univ.) Some explicit formulas of Bernoulli and Cauchy polynomials in terms of r -Stirling numbers 15

02-01-0031

51 Soichi Ikeda (Nagoya Univ.)*
Kaneaki Matsuoka (Nagoya Univ.) On the lcm-sum function 10

02-01-0047

52 Tomohiro Ikkai (Nagoya Univ.) On counting binomial coefficients not divided by a prime along polynomial curves 10

02-01-0020

53 Yuta Suzuki (Nagoya Univ.) A mean value on the sum of two primes in arithmetic progressions 10

02-01-0052

54 Ade Irma Suriajaya (Nagoya Univ.)
Junghun Lee (Nagoya Univ.)
Tomokazu Onozuka (Nagoya Univ.) Some probabilistic value distributions of the Riemann zeta function and its derivatives 10

02-01-0026

55 Genki Shibukawa (Osaka Univ.) New elliptic function identities and an elliptic analogue of reciprocity laws of generalized Dedekind sums 15

02-01-0039

56 Makoto Minamide (Yamaguchi Univ.)*
Jun Furuya
(Hamamatsu Univ. School of Medicine)
Yoshio Tanigawa (Nagoya Univ.) The truncated Voronoï formula in a new circle problem 10

02-01-0040

57 Debika Banerjee *
(Harish-Chandra Res. Inst.)
Makoto Minamide (Yamaguchi Univ.) On nonsquare-free integers 10

02-01-0042

58 Debika Banerjee *
(Harish-Chandra Res. Inst.)
Makoto Minamide (Yamaguchi Univ.) On non- k -free integers 10

02-01-0016

59 Yoshio Tanigawa (Nagoya Univ.)* Mean square estimate in short intervals 10

14:15–15:45

02-01-0065

60 Yuichi Sakai
Masanobu Kaneko (Kyushu Univ.)
Kiyokazu Nagatomo (Osaka Univ.) The 3rd order modular linear differential equations 15

02-01-0061

61 Seiichi Hanamoto (Kyushu Univ.) Zeros of weakly holomorphic modular forms of level 5 10

02-01-0021

62 Kazuki Utsumi (Ritsumeikan Univ.)
Masato Kuwata (Chuo Univ.) Mordell–Weil generators of a certain elliptic $K3$ surface 10

02-01-0027

63 Kazuto Ota (Tohoku Univ.) On the Mazur–Tate refined conjecture of BSD type 10

02-01-0025

64 Fumio Sairajji (Hiroshima Int. Univ.)^b
Takuya Yamauchi (Kagoshima Univ.) On the class numbers of the fields of the p^n -torsion points of elliptic curves over \mathbb{Q} with conductor p 10

02-01-0009

65 Yasushi Mizusawa * On the Galois group of a certain real tamely ramified 2-extension 10
(Nagoya Inst. of Tech.)

02-01-0010

66 Yasushi Mizusawa * On tame pro-2 Galois groups over the basic \mathbb{Z}_2 -extension 10
(Nagoya Inst. of Tech.)

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

02-02-0002

Tomoki Mihara Characterisation of the Berkovich spectrum of the Banach algebra of
(Univ. of Tokyo/Keio Univ.) p -adic continuous functions

Geometry

September 13th (Sun)

9:50–12:00

- 03-01-0006
1 Hirotaka Ebisui (Oval Research Center) Ebisui-Papus-Papus theorem 5
- 03-01-0003
2 Hiroaki Izumi The SYNC 10
- 03-01-0004
3 Hiromasa Tanabe (Matsue Coll. of Tech.) Geometry of ruled real hypersurfaces in a nonflat complex space form 15
Maeda Sadahiro (Saga Univ.)
- 03-01-0013
4 Makoto Sakaki (Hirosaki Univ.)* Lorentzian stationary surfaces in 4-dimensional space forms of index 2 (II) 10
- 03-01-0048
5 Shintaro Akamine (Kyushu Univ.) Causal characters of zero mean curvature surfaces of Riemann-type in the Lorentz–Minkowski 3-space 15
- 03-01-0008
6 Kosuke Naokawa (Kobe Univ.) Isometric deformations of cuspidal edges 15
Masaaki Umehara (Tokyo Tech)
Kotaro Yamada (Tokyo Tech)
- 03-01-0009
7 Kosuke Naokawa (Kobe Univ.) The topology of developable closed strips on given knots in spaces of constant curvature 10
- 03-01-0019
8 Naoya Ando (Kumamoto Univ.) C^1 -umbilics with arbitrarily high indices 15
Masaaki Umehara (Tokyo Tech)
Toshifumi Fujiyama (Univ. of Tokyo)
- 03-01-0014
9 Shoichi Fujimori (Okayama Univ.) Analytic extension of Jorge–Meeks type maximal surfaces 15
Yu Kawakami (Kanazawa Univ.)
Masatoshi Kokubu (Tokyo Denki Univ.)
Wayne Rossman (Kobe Univ.)
Masaaki Umehara (Tokyo Tech)
Kotaro Yamada (Tokyo Tech)

14:15–16:45

- 03-01-0031
10 Takahiro Hashinaga (Hiroshima Univ.) Local isometric embeddings of three-dimensional Lie groups 10
Yoshio Agaoka (Hiroshima Univ.)
- 03-01-0044
11 Kurando Baba Examples of austere orbits of the isotropy representations for semisimple pseudo-Riemannian symmetric spaces 10
(Fukushima Nat. Coll. of Tech.)
- 03-01-0037
12 Shinji Ohno (Tokyo Metro. Univ.) Biharmonic homogeneous hypersurfaces in compact symmetric spaces 15
Takashi Sakai (Tokyo Metro. Univ.)
Hajime Urakawa (Tohoku Univ.)*
- 03-01-0018
13 Shinji Ohno (Tokyo Metro. Univ.) Weakly reflective submanifolds in compact symmetric spaces 15
- 03-01-0033
14 Makiko Tanaka (Tokyo Univ. of Sci.)* Maximal antipodal subgroups of compact Lie groups 15
Hiroyuki Tasaki (Univ. of Tsukuba)

03-01-0050	15	Makiko Tanaka (Tokyo Univ. of Sci.) * Jost-Hinrich Eschenburg (Univ. of Augsburg) Peter Quast (Univ. of Augsburg)	Isometries of extrinsic symmetric spaces	15
03-01-0011	16	Kotaro Kawai (Univ. of Tokyo)	Cohomogeneity one coassociative submanifolds	15
03-01-0024	17	Naoyuki Koike (Tokyo Univ. of Sci.)	Volume-preserving mean curvature flow for tubes in a symmetric space	15
03-01-0051	18	Hajime Ono (Saitama Univ.) Hirosi Iriyeh (Ibaraki Univ.)	Almost all Lagrangian torus orbits in $\mathbb{C}P^n$ are not Hamiltonian volume minimizing	10

September 14th (Mon)

10:30–10:45 Presentation Ceremony for the 2015 MSJ Geometry Prize**10:50–11:50 Award Lecture for the 2015 MSJ Geometry Prize**

03-02-0003	Hirosi Iritani (Kyoto Univ.)	Mirror symmetry for toric varieties
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13:15–14:15 Award Lecture for the 2015 MSJ Geometry Prize

10-02-0001	Osamu Saeki (Kyushu Univ.)	Stable maps and topology manifolds
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September 15th (Tue)

10:00–12:00

03-01-0038	19	Takashi Komatsu (Tohoku Univ.)	Limiting distributions of discrete-time quantum walks on the square lattice	15
03-01-0025	20	Masaru Hasegawa (Univ. de São Paulo)	Parabolic, ridge and sub-parabolic curves of implicit surfaces with singularities	10
03-01-0032	21	Takeyuki Nagasawa (Saitama Univ.) * Aya Ishizeki (Saitama Univ.)	The Möbius invariance of decomposed Möbius energies	15
03-01-0016	22	Yasushi Homma (Waseda Univ.)	The Rarita–Schwinger operator on Einstein spin manifolds	10
03-01-0026	23	Kaoru Ikeda (Keio Univ.) ^b	The principal series of $GL_n(\mathbb{R})$ parameterized by the energy of the Toda lattice and geometrical quantizations	15
03-01-0043	24	Satoshi Nakamura (Tohoku Univ.)	K-stability with a divisor and Log-Futaki invariant	10
03-01-0029	25	Genki Hosono (Univ. of Tokyo) *	Approximations and examples of singular Hermitian metrics on vector bundles	15
03-01-0007	26	Masao Jinzenji (Hokkaido Univ.)	Toward direct proof of mirror theorem of projective hypersurfaces	15
14:15–16:25				
03-01-0027	27	Keita Kunikawa (Tohoku Univ.)	Splitting theorem for translating solitons in arbitrary codimension . . .	15
03-01-0002	28	Homare Tadano (Osaka Univ.)	An upper diameter bound for compact Ricci solitons with applications to the Hitchin–Thorpe inequality	15
03-01-0012	29	Ryosuke Takahashi (Nagoya Univ.)	Asymptotic stability for Kähler–Ricci solitons	15

03-01-0023	30 Tomoya Nakamura (Waseda Univ.)	The deformation of symplectic structures by a moment mapping ·····	15
03-01-0030	31 Suguru Ishikawa (Kyoto Univ.)	Spectral invariants of distance functions ·····	10
03-01-0042	32 Yoshihiro Sugimoto (Kyoto Univ.) ^b	Energy-capacity inequality of Hofer's pseudo metric of Lagrangian submanifolds ·····	10
03-01-0034	33 Yoshihiro Sugimoto (Kyoto Univ.) ^b	A construction of a partial symplectic quasi-state via symplectic homology and its application ·····	15

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

03-02-0001	Masato Mimura (Tohoku Univ.)*	Strong algebraization of fixed point properties	
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September 16th (Wed)

10:00–12:00

03-01-0040	34 <u>Jin-ichi Itoh</u> (Kumamoto Univ.) Yutaro Yamashita (Mimata Junior High School)	Quadratic surfaces as the surfaces generated by circles or rectangular hyperbolas ·····	10
03-01-0041	35 <u>Jin-ichi Itoh</u> (Kumamoto Univ.) Joël Rouyer (IMRA, Bucharest) Costin Vilcu (IMRA, Bucharest)	Moderate smoothness of most Alexandrov surfaces ·····	10
03-01-0015	36 Nobuhiro Innami (Niigata Univ.)	Voronoi diagrams and cut loci in a surface ·····	10
03-01-0017	37 Youhei Sakurai (Univ. of Tsukuba)	Rigidity of manifolds with boundary under a lower weighted Ricci curvature bound ·····	15
03-01-0047	38 Yu Kitabeppu (Kyoto Univ.)	A finite diameter theorem on RCD spaces ·····	10
03-01-0036	39 Kota Hattori (Keio Univ.)*	The nonuniqueness of the tangent cone at infinity of Ricci-flat manifolds ·····	15
03-01-0020	40 <u>Asuka Takatsu</u> (Tokyo Metro. Univ.) ^b Takashi Shioya (Tohoku Univ.)	High-dimensional metric-measure limit of Stiefel manifolds ·····	15
03-01-0021	41 <u>Asuka Takatsu</u> (Tokyo Metro. Univ.) ^b Hiroshi Kawabi (Okayama Univ.)	Riemannian Wasserstein geometry on the space of Gaussian measures over the Wiener space ·····	15
14:15–16:15			
03-01-0046	42 <u>Nobuhiko Otaba</u> (Keio Univ.)* Jimmy Petean (CIMAT)	Metrics of constant scalar curvature on sphere bundles ·····	15
03-01-0049	43 Yoshihiro Umehara (Tohoku Univ.)	Distribution of the pair of two conformal invariant on a 3-dimensional closed manifold ·····	15
03-01-0022	44 <u>Yoshihiko Matsumoto</u> (Tokyo Tech) Kazuo Akutagawa (Tokyo Tech)	Harmonic maps between asymptotically hyperbolic manifolds ·····	15
03-01-0035	45 <u>Yoshihiko Matsumoto</u> (Tokyo Tech) Kengo Hirachi (Univ. of Tokyo) Christian Lübbe (Birkbeck, Univ. of London)	Q -curvature of Weyl connections and asymptotically hyperbolic Einstein manifolds ·····	15
03-01-0045	46 Jun Nonaka (Waseda Univ. Senior High School)	The growth rates of ideal Coxeter polyhedra in hyperbolic 3-space ···	15

[03-01-0028](#)
47 Ryokichi Tanaka (Tohoku Univ.) Vershik’s question on Gromov hyperbolic groups 10

[03-01-0010](#)
48 Hiroki Sako (Niigata Univ.) Group approximation in Cayley topology and coarse geometry, Part III:
Masato Mimura (Tohoku Univ.) Geometric property (T) 15
Narutaka Ozawa (Kyoto Univ.)
Yuhei Suzuki (Univ. of Tokyo)

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

[03-02-0002](#)
Tomohiro Fukaya (Tohoku Univ.) Boundary of relatively hyperbolic group and the coarse geometry

Complex Analysis

September 13th (Sun)

9:30–12:00

- [04-99-0002](#)
1 Katsuyuki Nishimoto (Descartes Press Co.) * The solutions to the Laplace's non-homogeneous ordinary differential equations by means of the N-fractional calculus 15
- [04-99-0001](#)
2 Shigeyoshi Owa (Yamato Univ.) * Notes on some conditions for univalence 10
- [04-01-0034](#)
3 Kazuo Kuroki (Osaka Univ. of Health and Sport Sci.) Some starlikeness conditions concerned with the second coefficient 15
- [04-01-0020](#)
4 Toshio Hayami (Setsunan Univ.) Notes on the convex combinations of harmonic univalent functions ... 15
- [04-01-0022](#)
5 Rintaro Ohno (Tohoku Univ.) Conditions and properties of concave functions 15
- [04-01-0032](#)
6 Narufumi Tsuboi (Tokyo Tech) * The defects of power series in the unit disk with Hadamard gaps 15
- [04-01-0016](#)
7 Takao Ohno (Oita Univ.) * Trudinger's inequality for Riesz potentials of functions in Musielak–Orlicz spaces on metric measure spaces 15
Tetsu Shimomura (Hiroshima Univ.)
- [04-01-0012](#)
8 Masaharu Nishio (Osaka City Univ.)^b Reproducing kernel for iterated parabolic operators on the upper half space 15
- [04-01-0013](#)
9 Kiyoki Tanaka (Osaka City Univ.) Polyharmonic Bergman space and its reproducing kernel 10

14:15–16:15

- [04-01-0030](#)
10 Masashi Kisaka (Kyoto Univ.) A mechanism of appearing small copies of the Mandelbrot set 15
Tomoki Kawahira (Tokyo Tech)
- [04-01-0029](#)
11 Junghun Lee (Nagoya Univ.) J -stability of immediately expanding rational maps in non-Archimedean dynamics 10
- [04-01-0002](#)
12 Yūsuke Okuyama (Kyoto Inst. Tech.) Equidistribution of rational functions having a superattracting periodic point 15
- [04-01-0008](#)
13 Hiroki Sumi (Osaka Univ.) Complex analogues of the Takagi function in random complex dynamics 15
- [04-01-0009](#)
14 Johannes Jaerisch (Shimane Univ.) Hölder regularity of the complex analogues of the Takagi function 15
Hiroki Sumi (Osaka Univ.)
- [04-01-0010](#)
15 Shizuo Nakane (Tokyo Polytechnic Univ.) Stretching rays for complex cubic polynomials 15
- [04-01-0033](#)
16 Naotaka Kajino (Kobe Univ.) The Laplacian on the Apollonian gasket and its Weyl type eigenvalue asymptotics 15

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

- [04-02-0002](#)
Noriaki Suzuki (Meijo Univ.) * Polynomial approximation and potential theory

September 14th (Mon)

9:30–12:00

04-01-0031

- 17 Yohei Komori (Waseda Univ.) On the growth rate of ideal Coxeter groups in hyperbolic 3-space 15
Tomoshige Yukita (Waseda Univ.)

04-01-0027

- 18 Katsuhiko Matsuzaki (Waseda Univ.) Barycentric extension of circle diffeomorphisms 15

04-01-0023

- 19 Hiroshige Shiga (Tokyo Tech) On the number of Teichmüller curves 15

04-01-0021

- 20 Masanori Amano (Tokyo Tech) On families of asymptotic Jenkins–Strebel rays 15

04-01-0004

- 21 Hideki Miyachi (Osaka Univ.) Extremal length functions are log-plurisubharmonic 15

04-01-0019

- 22 Toshihiro Nakanishi (Shimane Univ.) * Parametrization of Teichmüller spaces by trace functions and mapping class group 15
Gou Nakamura (Aichi Inst. of Tech.)

04-01-0024

- 23 Hidetaka Hamada The Schwarz lemma and the Schwarz–Pick lemma in several complex variables 10
(Kyushu Sangyo Univ.)
Gabriela Kohr (Babeş-Bolyai Univ.)

04-01-0025

- 24 Hidetaka Hamada The Landau theorem in several complex variables 10
(Kyushu Sangyo Univ.)
Gabriela Kohr (Babeş-Bolyai Univ.)

04-01-0026

- 25 Hidetaka Hamada Bonk’s distortion theorem and the Bloch constant for Bloch mappings in \mathbb{C}^n 15
(Kyushu Sangyo Univ.)

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

04-02-0001

- Takeo Ohsawa (Nagoya Univ.)^b L^2 extension theorems and Suita conjecture

September 15th (Tue)

9:15–12:00

04-01-0005

- 26 Shinichi Tajima (Univ. of Tsukuba) * A method for computing Bruce–Roberts’ Milnor numbers via local cohomology 15
Katsusuke Nabeshima
(Univ. of Tokushima)

04-01-0006

- 27 Shinichi Tajima (Univ. of Tsukuba) * Algorithms for computing holonomic D-modules associated with a hypersurface 10
Katsusuke Nabeshima
(Univ. of Tokushima)

04-01-0007

- 28 Shinichi Tajima (Univ. of Tsukuba) * Algorithms for computing holonomic D-modules associated with a hypersurface II 10
Katsusuke Nabeshima
(Univ. of Tokushima)

04-01-0003

- 29 Yūsuke Okuyama (Kyoto Inst. Tech.) Lehto–Virtanen, Marty, and Zalcman-type theorems and their applications to Kobayashi hyperbolic geometry 15

04-01-0014			
30	<u>Tatsuhiro Honda</u> (Hiroshima Inst. of Tech.) Ian Graham (Univ. of Toronto) Hidetaka Hamada (Kyushu Sangyo Univ.) Gabriela Kohr (Babeş-Bolyai Univ.) Kwang Ho Shon (Pusan Nat. Univ.)	Growth, distortion and coefficient bounds on complex Banach spaces	15
04-01-0017			
31	Takayuki Koike (Univ. of Tokyo)*	Toward a higher codimensional Ueda theory	10
04-01-0028			
32	Sachiko Hamano (Fukushima Univ.)	Variational formula for L_s -canonical semi-exact differential and application	15
04-01-0001			
33	Satoru Shimizu (Tohoku Univ.)*	Structure and equivalence of a class of tube domains with solvable groups of automorphisms	15
04-01-0015			
34	Takeo Ohsawa (Nagoya Univ.) ^b	Application and simplified proof of a sharp L^2 extension theorem	15
04-01-0011			
35	Junjiro Noguchi (Univ. of Tokyo*) ^b	On convergnece radius of the inverse of Abelian integrals and Levi's problem for ramified domains	15

Functional Equations

September 13th (Sun)

9:00–12:00

05-01-0003

- 1 Saburo Saitoh (Gunma Univ.)* Aveiro discretization method in mathematics: A new discretization principle (I: Principle) 8
 L. P. Castro (Univ. of Aveiro)
 H. Fujiwara (Kyoto Univ.)
 M. M. Rodrigues (Univ. of Aveiro)
 Vu Kim Tuan (Univ. of West Georgia)

05-01-0004

- 2 Saburo Saitoh (Gunma Univ.)* Aveiro discretization method in mathematics: A new discretization principle (II: Applications) 8
 L. P. Castro (Univ. of Aveiro)
 H. Fujiwara (Kyoto Univ.)
 M. M. Rodrigues (Univ. of Aveiro)
 Vu Kim Tuan (Univ. of West Georgia)

05-01-0018

- 3 Ichiro Tsukamoto (Toyo Univ.)* A nonlinear differential equation with an irregular singular point and slowly varying solutions of $x'' = t^{-2}x^{1+\alpha}$ with $\alpha < 0$ 10

05-01-0052

- 4 Sunao Ōuchi (Sophia Univ.)* A functional equation with solutions of irregular singular type. 10

05-01-0054

- 5 Shingo Takeuchi Complete (p, q) -elliptic integral and its application to Bhatia–Li's mean 12
 (Shibaura Inst. of Tech.)

05-01-0055

- 6 Nobuki Takayama (Kobe Univ.) Evaluation of A -hypergeometric polynomials by difference equations .. 12
 Katsuyoshi Ohara (Kanazawa Univ.)

05-01-0069

- 7 Yoshiaki Goto (Kobe Univ.) Contiguity relations and intersection matrices for hypergeometric functions of type (k, n) 12

05-01-0063

- 8 Kunihiko Taniguchi * Permanence for a nonautonomous Lotka–Volterra competition system with finite delays 10
 (Kobe City Coll. of Tech.)

05-01-0075

- 9 Masakazu Onitsuka Uniform asymptotic stability and global exponential stability for two-dimensional half-linear differential systems 10
 (Okayama Univ. of Sci.)

05-01-0056

- 10 Yutaka Kamimura ^b Local uniqueness of solution to an inverse blow-up problem 12
 (Tokyo Univ. of Marine Sci. and Tech.)
 Hiroyuki Usami (Gifu Univ.)

05-01-0031

- 11 Kazuki Himoto (Osaka Pref. Univ.) The limits of the solutions of a linear integral delay system 12
 Hideaki Matsunaga (Osaka Pref. Univ.)

05-01-0073

- 12 Taisuke Yoneyama (Tokyo Univ. of Sci.) Characterization of the range of wave operators via wave packet transform 12
Keiichi Kato (Tokyo Univ. of Sci.)

05-01-0064

- 13 Hajime Koba (Waseda Univ.)* Generalized quasi-reversibility method for a backward heat equation with a fractional Laplacian 7
 Hideki Matsuoka (Univ. of Tokyo)

14:15–16:15

05-01-0028

- 14 Toshio Horiuchi (Ibaraki Univ.) Radial symmetry and its breaking in the Caffarelli–Kohn–Nirenberg type inequalities for $p = 1$ 10
 Naoki Chiba

- 05-01-0032
15 Motohiro Sobajima (Tokyo Univ. of Sci.) Remarks on higher-order weighted Rellich inequalities in L^p 12
- 05-01-0015
16 Masaru Ikehata (Hiroshima Univ.)* The enclosure method for the evaluation of the spot welding area using
Hiromichi Itou (Tokyo Univ. of Sci.) a solution of the Laplace equation 12
Akira Sasamoto
(Nat. Inst. of Adv. Industrial Sci. and Tech.)
- 05-01-0045
17 Naotaka Syoji (Univ. of Tsukuba) Discreteness of transmission eigenvalues for the interior transmission
eigenvalue problem 10
- 05-01-0049
18 Shigeru Sakaguchi (Tohoku Univ.)* Neutrally coated inclusions in three dimensions 12
Hyeonbae Kang (Inha Univ.)
Hyundae Lee (Inha Univ.)
- 05-01-0005
19 Ryuji Kajikiya (Saga Univ.) A priori estimate for the first eigenvalue of the p -Laplacian 12
- 05-01-0061
20 Xiaojing Liu (Ibaraki Univ.) Remarks on the strong maximum principle involving p -Laplacian 10
Toshio Horiuchi (Ibaraki Univ.)
- 05-01-0021
21 Kunihiko Usuba (Tokyo Univ. of Sci.) Partial regularity of minimizers of $p(x)$ -growth functionals with $1 <$
 $p(x) < 2$ 10

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

- 05-02-0001
Toshiyuki Mano (Univ. of Ryukyus) A generalization of differential equations of Okubo type to several
variables case and flat structure

September 14th (Mon)

9:00–12:00

- 05-01-0038
22 Satoshi Tanaka (Okayama Univ. of Sci.) Uniqueness of sign-changing radial solutions for the scalar field equation
in some ball and annulus 12
- 05-01-0029
23 Tatsuki Mori (Ryukoku Univ.) Profiles of solutions to a stationary limiting problem for a cell polariza-
tion model 12
Kousuke Kuto
(Univ. of Electro-Comm.)
Tohru Tsujikawa (Univ. of Miyazaki)
Shoji Yotsutani (Ryukoku Univ.)
- 05-01-0001
24 Tetu Makino (Yamaguchi Univ.)* On spherically symmetric solutions to the Einstein–Euler equations
(Supplement) 12
- 05-01-0024
25 Erika Ushikoshi (Tamagawa Univ.)* Hadamard variational formula for the higher variation of the Green
function of the Laplace equation with the Dirichlet boundary condition
..... 10
- 05-01-0041
26 Keisuke Takasao (Univ. of Tokyo)* Existence of weak solution for volume preserving mean curvature flow
via phase field method 10
- 05-01-0042
27 Keisuke Takasao (Univ. of Tokyo)* Gradient estimates for mean curvature flow with transport term and
Masashi Mizuno (Nihon Univ.) Neumann boundary condition 10
- 05-01-0012
28 Masahiko Shimojyou Classification of the behavior on a free boundary problem for the
(Okayama Univ. of Sci.) curvature flow with driving force 10
Hiroshi Matano (Univ. of Tokyo)
Jong-Shenq Guo (Tamkang Univ.)
Chang Hong Wu (Nat. Univ. of Tainan)

- 05-01-0013
29 Masahiko Shimojyou (Okayama Univ. of Sci.) Asymptotic behavior on a free boundary problem for the curvature flow with driving force 10
Hiroshi Matano (Univ. of Tokyo)
Jong-Shenq Guo (Tamkang Univ.)
Chang Hong Wu (Nat. Univ. of Tainan)
- 05-01-0006
30 Takashi Kagaya (Tokyo Tech) Exponential stability of a traveling wave for an area preserving curvature motion 10
Masahiko Shimojyou (Okayama Univ. of Sci.)
- 05-01-0007
31 Motohiko Sato (Wakholk Univ.) Dynamic boundary conditions for the singular degenerate parabolic equations 10
- 05-01-0059
32 Jin Takahashi (Tokyo Tech) Solutions with time-dependent singularities in semilinear heat equations 10
Toru Kan (Tokyo Tech)
- 05-01-0023
33 Hirotsada Honda (Keio Univ.) On the vanishing diffusion limit of Sakaguchi–Kuramoto equation 12
Atusi Tani (Keio Univ.*)
- 05-01-0040
34 Norisuke Ioku (Ehime Univ.) Sharp decay estimates in Lebesgue spaces for nonnegative Schrödinger heat semigroups 12
Kazuhiro Ishige (Tohoku Univ.)
Eiji Yanagida (Tokyo Tech)
- 05-01-0037
35 Masahiro Suzuki (Tokyo Tech) Time-periodic solutions to the drift-diffusion model for semiconductors 12
Toru Kan (Tokyo Tech)

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

- 05-02-0002
Fumihiko Hirotsawa (Yamaguchi Univ.) Linear wave equations with time dependent coefficients and its applications

September 15th (Tue)

9:00–12:00

- 05-01-0034
36 Kentarou Fujie (Tokyo Univ. of Sci.) Global existence and boundedness of radial solutions to a parabolic-parabolic Keller–Segel system with general sensitivity 12
Takasi Senba (Kyushu Inst. of Tech.)
- 05-01-0020
37 Noriko Mizoguchi (Tokyo Gakugei Univ.) Nonexistence of type I blowup solutions to parabolic-parabolic Keller–Segel system 12
- 05-01-0017
38 Yuki Naito (Ehime Univ.) Global attractivity in the weighted norm for a supercritical semilinear heat equation 12
- 05-01-0025
39 Kimie Nakashima (Tokyo Univ. of Marine Sci. and Tech.) Uniqueness and stability of multi-layered steady-state in a spatially inhomogeneous reaction diffusion equation 12
Wei-Ming Ni (Univ. of Minnesota)
- 05-01-0043
40 Hiroshi Matsuzawa (Numazu Nat. Coll. of Tech.) Spreading speed and sharp asymptotic profiles of solutions in free boundary problems for nonlinear diffusion equations in high dimensions 12
Yihong Du (Univ. of New England)
Maolin Zhou (Univ. of New England)
- 05-01-0072
41 Hiroko Yamamoto (Meiji Univ.) Concentration points in stationary solutions of a singularly perturbed reaction-diffusion equation with variable coefficients 10
Izumi Takagi (Tohoku Univ.)
- 05-01-0022
42 Takashi Suzuki (Osaka Univ.) 2D Smoluchowski–Poisson equation: quantization of blowup in infinite time 8

- 05-01-0014
43 Masaru Ikehata (Hiroshima Univ.) * The enclosure method for inverse obstacle scattering using a solution of the Maxwell system in the time domain 12
- 05-01-0065
44 Eiji Onodera (Kochi Univ.) Uniqueness of a fourth-order dispersive flow for closed curves on compact Riemann surfaces with constant sectional curvature 10
- 05-01-0044
45 Tokio Matsuyama (Chuo Univ.) * Gevrey class solutions of the Kirchhoff equation 12
Michael Ruzhansky
(Imperial Coll. London)
- 05-01-0010
46 Yusuke Sugiyama (Tokyo Univ. of Sci.) Degeneracy in finite time of some quasilinear wave equation 12
- 05-01-0026
47 Kyouhei Wakasa (Hokkaido Univ.) * The lifespan of solutions to semilinear damped wave equations in one space dimension 10
- 05-01-0053
48 Kazuyoshi Yokoyama * Life span of small solutions to a system of wave equations 10
(Hokkaido Univ. of Sci.)
Kunio Hidano (Mie Univ.)
- 05-01-0047
49 Kunio Hidano (Mie Univ.) * A note on the method for proving global existence of small solutions to systems of 2D quasi-linear wave equations in the multi-speed setting 12

12:10–12:30 Presentation Ceremony for the 2015 MSJ Analysis Prize

14:15–16:15

- 05-01-0036
50 Satoshi Masaki (Hiroshima Univ.) Global behavior of mass subcritical generalized KdV equation 12
Jun-ichi Segata (Tohoku Univ.)
- 05-01-0002
51 Jun-ichi Segata (Tohoku Univ.) * Small data global existence and scattering for the generalized Korteweg–de Vries equation 12
Satoshi Masaki (Hiroshima Univ.)
- 05-01-0027
52 Toshiyuki Suzuki Virial identity for Hartree equations with an inverse-square potential of critical case 12
(Kanagawa Univ./Kogakuin Univ.)
- 05-01-0011
53 Hideaki Sunagawa (Osaka Univ.) On Schrödinger systems with dissipative nonlinearities of derivative type 10
Chunhua Li (Yanbian Univ.)
- 05-01-0016
54 Gaku Hoshino (Waseda Univ.) Space-time analytic smoothing effect for a system of Schrödinger equations under mass resonance condition 10
Tohru Ozawa (Waseda Univ.)
- 05-01-0019
55 Kazumasa Fujiwara (Waseda Univ.) On the local solvability of semirelativistic equations 10
- 05-01-0008
56 Hiroyuki Hirayama (Nagoya Univ.) Almost sure well-posedness of the Cauchy problem for the fourth order nonlinear Schrödinger equation 10
Mamoru Okamoto (Shinshu Univ.)
- 05-01-0009
57 Hiroyuki Hirayama (Nagoya Univ.) Well-posedness and scattering for fourth order nonlinear Schrödinger type equations at the scaling critical regularity 10
Mamoru Okamoto (Shinshu Univ.)
- 05-01-0046
58 Ryosuke Hyakuna (Waseda Univ.) * On the local well-posedness for the pure power NLS in one space dimension 10

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

- 05-02-0003
Kazuhiro Takimoto (Hiroshima Univ.) Entire solutions to some types of parabolic Hessian equations

September 16th (Wed)

9:00–12:00

05-01-0039

- 59 Masayuki Hayashi (Waseda Univ.) Local well-posedness for the derivative nonlinear Schrödinger equation
Tohru Ozawa (Waseda Univ.) 10

05-01-0067

- 60 Kota Uriya (Tohoku Univ.)* On the ill-posedness for a system of quadratic nonlinear Schrödinger equations 12
Takayoshi Ogawa (Tohoku Univ.)
Tsukasa Iwabuchi (Osaka City Univ.)

05-01-0048

- 61 Shintaro Kondo (Meiji Univ.) Almost-periodic solution of Hasegawa–Wakatani equations with vanishing resistivity 12

05-01-0071

- 62 Penyuan Hsu (Tokyo Tech) A local analysis of the axi-symmetric Navier–Stokes flow near a saddle point and no-slip flat boundary 10
Hirofumi Notsu (Waseda Univ.)
Tsuyoshi Yoneda (Tokyo Tech)

05-01-0062

- 63 Takahiro Okabe (Hiroasaki Univ.)* Navier–Stokes flow in the weighted Hardy space with applications to time decay problem 12
Yohei Tsutsui (Shinshu Univ.)

05-01-0070

- 64 Hideo Kozono (Waseda Univ.) Navier–Stokes equations with external forces in Lorentz spaces and its application to self-similar solutions 12
Senjo Shimizu (Kyoto Univ.)

05-01-0050

- 65 Takahito Kashiwabara (Tokyo Tech) Global well-posedness of the primitive equations in L^p -spaces 10
Matthias Hieber (TU Darmstadt)

05-01-0068

- 66 Masahiro Sawada (Osaka Univ.) Unboundedness of some solutions to isentropic model equations for the one dimensional periodic motions of a compressible self-gravitating viscous fluid 10
Yoshitaka Yamamoto (Osaka Univ.)

05-01-0033

- 67 Itsuko Hashimoto Decay rate of Radially symmetric solutions for Burgers equation 10
(Toyama Nat. Coll. of Tech.)

05-01-0030

- 68 Yoshiyuki Kagei (Kyushu Univ.) Traveling waves bifurcating from Poiseuille flow in viscous compressible fluid 12
Takaaki Nishida (Kyoto Univ.)

05-01-0060

- 69 Shouta Enomoto (Kyushu Univ.) Stability of spatially periodic stationary solutions to the compressible Navier–Stokes equation in periodic layer 10
Yoshiyuki Kagei (Kyushu Univ.)

05-01-0035

- 70 Jan Prüss (Univ. Halle) Local existence of compressible two-phase flows with phase transitions 12
Senjo Shimizu (Kyoto Univ.)

05-01-0057

- 71 Takayuki Kubo (Univ. of Tsukuba)* Local well-posedness of the compressible-compressible two phase problem without surface tension 12
Yoshihiro Shibata (Waseda Univ.)
Kohei Soga (Keio Univ.)

05-01-0058

- 72 Takayuki Kubo (Univ. of Tsukuba)* Global well-posedness for some two phase problem: compressible-compressible case 12
Yoshihiro Shibata (Waseda Univ.)
Kohei Soga (Keio Univ.)

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

05-02-0004

- Nobu Kishimoto (Kyoto Univ.) Unconditional uniqueness of solutions for nonlinear dispersive equations

Real Analysis

September 15th (Tue)

9:30–12:00

- 06-01-0002
1 Yoshifumi Ito (Univ. of Tokushima*) On the relativity of motion 15
- 06-01-0003
2 Yoshifumi Ito (Univ. of Tokushima*) Fourier transformation of L^2_{loc} -functions. Revisited 15
- 06-01-0012
3 Kiyohisa Tokunaga (Yamaguchi Univ.) A triangular double integral by the arithmetic sequence 15
- 06-01-0020
4 Shigehiro Sakata (Waseda Univ.) Power concavity of Poisson's integral for the upper half space 15
- 06-01-0007
5 Yukio Kasahara (Hokkaido Univ.) Rigidity for matrix-valued Hardy functions 10
Akihiko Inoue (Hiroshima Univ.)
Mohsen Pourahmadi
(Texas A&M Univ.)
- 06-01-0029
6 Shin-ya Matsushita (Akita Pref. Univ.) On the best approximation problem 15
Li Xu (Akita Pref. Univ.)
- 06-01-0026
7 Toshikazu Watanabe (Nihon Univ.) Some applied results of a fixed point theorem in partially ordered sets
Masashi Toyoda (Tamagawa Univ.) to boundary value problems for a fractional order differential equations
..... 15
- 06-01-0001
8 Takeshi Iida The Adams inequality on weighted Morrey spaces of higher order com-
(Fukushima Nat. Coll. of Tech.) mutators 15
- 06-01-0023
9 Hiroki Saito (Kogakuin Univ.) Some remarks on the A_∞^* weights 15
Hitoshi Tanaka (Univ. of Tokyo)

14:15–16:25

- 06-01-0014
10 Denny Iveral Hakim Interpolation of closed subspaces of Morrey spaces 15
(Tokyo Metro. Univ.)
Yoshihiro Sawano (Tokyo Metro. Univ.)
- 06-01-0015
11 Denny Iveral Hakim Linear operators on generalized Morrey spaces 15
(Tokyo Metro. Univ.)
Eiichi Nakai (Ibaraki Univ.)
Yoshihiro Sawano (Tokyo Metro. Univ.)
- 06-01-0016
12 Saburou Saitoh (Gunma Univ.*)^b Generalized delta functions as generalized reproducing kernels 15
Yoshihiro Sawano (Tokyo Metro. Univ.)
- 06-01-0013
13 Naohito Tomita (Osaka Univ.) Flag paraproducts on Hardy spaces 15
Akihiko Miyachi
(Tokyo Woman's Christian Univ.)
- 06-01-0031
14 Sachiko Atsushiba Fixed points, attractive points and convergence theorems for nonlinear
(Univ. of Yamanashi) mappings 15
- 06-01-0022
15 Jun Kawabe (Shinshu Univ.) Nonadditive portmanteau theorem 15
- 06-01-0021
16 Ryotaro Tanaka (Niigata Univ.) A new extremal structure in Banach spaces and its application 15

06-01-0018

- 17 Hiroyasu Mizuguchi (Niigata Univ.) On the upper bound of geometric constants in absolute normalized
Kichi-Suke Saito (Niigata Univ.) normed spaces 15

16:40–17:40 Talk Invited by Real Analysis Section

06-02-0001

- Kichi-Suke Saito (Niigata Univ.)* Recent development on geometric structure of Banach spaces

September 16th (Wed)

9:15–12:00

06-01-0004

- 18 Noriaki Yoshino (Tokyo Univ. of Sci.) An operator-theoretic approach using the Yosida approximation to a
quasilinear degenerate chemotaxis system of parabolic-elliptic type ... 15

06-01-0011

- 19 Kentarou Fujie (Tokyo Univ. of Sci.) Global solvability and asymptotic behavior of solutions to a chemotaxis
Sachiko Ishida (Tokyo Univ. of Sci.) model for tumor invasion with nonlinear diffusion 15
Akio Ito (Kinki Univ.)
Tomomi Yokota (Tokyo Univ. of Sci.)

06-01-0010

- 20 Alexander Leonidovich Skubachevskii Solvability of Vlasov–Poisson systems in a half-space 15
(Peoples' Friendship Univ. of Russia)
Yutaka Tsuzuki (Tokyo Univ. of Sci.)

06-01-0030

- 21 Shun Uchida (Waseda Univ.) Periodic problem for double-diffusive convection system in \mathbb{R}^N with
Mitsuharu Ôtani (Waseda Univ.) $N = 3, 4$ 15

06-01-0009

- 22 Takeshi Fukao (Kyoto Univ. of Edu.) Convergence of Cahn–Hilliard systems to the Stefan problem with dy-
namic boundary conditions 15

06-01-0017

- 23 Motohiro Sobajima On the threshold for Kato's selfadjointness problem and its L^p -generalization
(Tokyo Univ. of Sci.) 15

06-01-0028

- 24 Kentarou Yoshii (Tokyo Univ. of Sci.) Nonlocal solutions of hyperbolic type equations 15
Luisa Malaguti
(Univ. of Modena and Reggio Emilia)

06-01-0025

- 25 Hiroshi Watanabe (Salesian Polytech.) Asymptotic behavior of solutions to non-isothermal mathematical mod-
Ken Shirakawa (Chiba Univ.) els of grain boundary motions 15

06-01-0019

- 26 Ken Shirakawa (Chiba Univ.) Kobayashi–Warren–Carter type models with anisotropic effects 15
Hiroshi Watanabe (Salesian Polytech.)
Salvador Moll (Univ. of Valencia)

06-01-0024

- 27 Noriaki Yamazaki (Kanagawa Univ.) Remarks on numerical experiments of Allen–Cahn equations with con-
Tomoyuki Suzuki (Kanagawa Univ.) straint via Yosida approximation 15
Keisuke Takasao (Univ. of Tokyo)

14:15–15:15

06-01-0008

- 28 Risei Kano (Kochi Univ.) The existence of solutions for the weak-variational inequalities by the
Takeshi Fukao (Kyoto Univ. of Edu.) perfect plasticity model 15

06-01-0033

- 29 Akio Ito (Kinki Univ.) Mathematical model for brewing Japanese Sake with stirring process
Nobuyuki Kenmochi and its approximated problems 15
Yusuke Murase (Meijo Univ.)

06-01-0032

30 Kota Kumazaki Solvability of a mathematical model for concrete carbonation process
(Tomakomai Nat. Coll. of Tech.) consisting of moisture and carbon dioxide transport 15

06-01-0005

31 Naoki Sato Existence theorems of periodic solutions for one dimensional free bound-
(Nagaoka Nat. Coll. of Tech.) ary problems for adsorption phenomena 15
Toyohiko Aiki (Japan Women's Univ.)

15:30–16:30 Talk Invited by Real Analysis Section

06-02-0002

Sachiko Ishida (Tokyo Univ. of Sci.) Mathematical analysis of chemotaxis-Navier–Stokes systems and related models

Functional Analysis

September 13th (Sun)

14:30–16:30

- 07-01-0015
1 Toshinao Kagawa (Tokyo City Univ.) The Hermite function expansions of the Heaviside function 15
- 07-01-0018
2 Toshinao Kagawa (Tokyo City Univ.) A characterization of the generalized functions via the special Hermite expansions 15
Yasuyuki Oka
(Kushiro Nat. Coll. of Tech.)
- 07-01-0028
3 Kiyoomi Kataoka (Univ. of Tokyo) * Micro local energy forms of Sobolev type for hyperfunctions with real analytic parameters and some applications 10
Kaito Yamasaki (Tokyo Shuppan Co.)
- 07-01-0021
4 Koichi Taniguchi (Chuo Univ.) * L^p -boundedness of functions of Schrödinger operators 15
Tsukasa Iwabuchi (Osaka City Univ.)
Tokio Matsuyama (Chuo Univ.)
- 07-01-0029
5 Hiroyuki Yamagishi The best constant of Sobolev inequality corresponding to a bending problem of a beam with periodic boundary condition 15
(Tokyo Metropolitan Coll. of Indus. Tech.)
Yoshinori Kametaka (Osaka Univ.)
Atsushi Nagai (Nihon Univ.)
- 07-01-0033
6 Hiroaki Niikuni Spectral structure of periodic Schrödinger operators with two potentials on the degenerate zigzag nanotubes 15
(Maebashi Inst. of Tech.)
- 07-01-0024
7 Takeru Hidaka (Kyushu Univ.) Self-adjointness and existence of the ground state for the semi-relativistic Pauli–Fierz model 15
Fumio Hiroshima (Kyushu Univ.)

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

- 07-02-0003
Mitsuteru Kadowaki Spectral analysis for wave propagation in two-layered media
(Univ. of Shiga Pref.)

September 14th (Mon)

9:30–12:00

- 07-01-0036
8 Masatoshi Kitagawa (Univ. of Tokyo) Classification of multiplicity-free holomorphic discrete series representations 15
- 07-01-0025
9 Ryosuke Nakahama (Univ. of Tokyo) Laguerre semigroups for functions on symmetric cones and the Bessel functions 15
- 07-01-0014
10 Toshihisa Kubo (Univ. of Tokyo) On the reducible points for the generalized Verma modules 15
Haian He (BICMR)
Roger Zierau (Oklahoma State Univ.)
- 07-01-0035
11 Atsumu Sasaki (Tokai Univ.) Remarks on visible actions on spherical nilpotent orbits 15
- 07-01-0034
12 Hideyuki Ishi (Nagoya Univ.) * The Laplace transforms and the Legendre transforms of functions on a convex cone 15
- 07-01-0002
13 Takashi Yamasaki (Kyushu Univ.) * Realizing homogeneous convex cones through oriented graphs 15
Takaaki Nomura (Kyushu Univ.)

07-01-0012

- 14 Tatsuya Tsurii (Osaka Pref. Univ.) A hypergroup arising from characters of a compact hypergroup and its
Satoe Yamanaka (Nara Women's Univ.) subhypergroup 15
Satoshi Kawakami (Nara Univ. of Edu.)

07-01-0013

- 15 Satoe Yamanaka (Nara Women's Univ.) A commutative hypergroup associated with a hyperfield 15
Tatsuya Tsurii (Osaka Pref. Univ.)
Satoshi Kawakami (Nara Univ. of Edu.)

13:30–14:30 Talk Invited by Functional Analysis Section

07-02-0001

- Sho Matsumoto (Kagoshima Univ.) Weingarten calculus and harmonic analysis on symmetric groups

September 15th (Tue)

9:00–12:00

07-01-0032

- 16 Hiroshi Isa (Maebashi Inst. of Tech.) Divergences on the paths $A \natural_x B$ and $A \natural_{x,r} B$ 15
Masatoshi Ito (Maebashi Inst. of Tech.)
Hiroaki Tohyama
(Maebashi Inst. of Tech.)
Eizaburo Kamei
Masayuki Watanabe
(Maebashi Inst. of Tech.)

07-01-0026

- 17 Yoichi Udagawa (Tokyo Univ. of Sci.) Some properties of weighted operator means due to Pálfi and Petz
Takeaki Yamazaki (Toyo Univ.) 10
Masahiro Yanagida
(Tokyo Univ. of Sci.)

07-01-0022

- 18 Yuki Seo (Osaka Kyoiku Univ.) On the generalized Tsallis relative operator entropy 10

07-01-0019

- 19 Masatoshi Fujii (Osaka Kyoiku Univ.) Inequalities associated with Heron mean for positive operators 15
Shigeru Furuichi (Nihon Univ.)
Ritsuo Nakamoto

07-01-0017

- 20 Junichi Fujii (Osaka Kyoiku Univ.) From Fibonacci matrix to a matrix representation for anyons 15

07-01-0016

- 21 Hiroyuki Osaka (Ritsumeikan Univ.) Symmetric operator monotone functions and operator means 15
Shuhei Wada
(Kisarazu Nat. Coll. of Tech.)
Yukihiro Tsurumi (Ritsumeikan Univ.)

07-01-0005

- 22 Yasuo Watatani (Kyushu Univ.)* Relative position of three subspaces in a Hilbert space containig a
Masatoshi Enomoto pentagon as a direct summand 15

07-01-0003

- 23 Kengo Matsumoto * Strongly continuous orbit equivalence of topological Markov shifts and
(Joetsu Univ. of Edu.) Cuntz–Krieger algebras 15

07-01-0001

- 24 Narutaka Ozawa (Kyoto Univ.) The Furstenberg boundary and C^* -simplicity 15

07-01-0023

- 25 Kei Hasegawa (Kyushu Univ.) K -nuclearity of amalgamated free product C^* -algebras 15

07-01-0007

- 26 Rui Okayasu (Osaka Kyoiku Univ.) Haagerup approximation property via bimodules 15
Narutaka Ozawa (Kyoto Univ.)
Reiji Tomatsu (Hokkaido Univ.)

14:15–16:45

07-01-0008

27 Yusuke Isono (Kyoto Univ.) Unique prime factorization and bicentralizer problem for a class of type III factors 15

07-01-0011

28 Reiji Tomatsu (Hokkaido Univ.) A characterization of fullness of continuous cores of free product factors 15
Yoshimichi Ueda (Kyushu Univ.)

07-01-0031

29 Toshihiko Masuda (Kyushu Univ.) Classification of outer actions of discrete amenable groups (G -kernels) on injective factors 15

07-01-0020

30 Satoshi Goto (Sophia Univ.) Remarks on the flat part commuting squares 10

07-01-0009

31 Kenjiro Yanagi (Yamaguchi Univ.) On some generalized inequalities related to fidelity and trace distance 15

07-01-0004

32 Sin-Ei Takahasi (Toho Univ.) A characterization of multipliers of a Lau algebra constructed by semisimple commutative Banach algebras 15

07-01-0030

33 Toshikazu Abe (Niigata Univ.) Algebraic structures on metric spaces 15

07-01-0010

34 Keiji Izuchi * Path connected components in weighted composition operators on the disk algebra with the essential operator norm. 15
(Niigata Univ./Niigata Univ.)
Yuko Izuchi

07-01-0006

35 Takuya Hosokawa (Ibaraki Univ.) Weighted composition operators between Hilbert spaces of analytic functions in Hilbert–Schmidt norm topologies 15
Kei Ji Izuchi (Niigata Univ.)
Shūichi Ohno (Nippon Inst. of Tech.)

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

07-02-0002

Osamu Hatori (Niigata Univ.) Isometries on substructures of function algebras and operator algebras

Statistics and Probability

September 13th (Sun)

9:30–12:00

- 08-01-0021
1 Naoki Kubota (Nihon Univ.) Lower Gaussian concentration for the crossing random walk in random potentials 15
- 08-01-0015
2 Masato Takei (Yokohama Nat. Univ.) On linearly edge-reinforced random walks on the half-line 10
- 08-01-0009
3 Yoshihiro Abe (Kyoto Univ.) Maximum and minimum of local times for two-dimensional random walk 10
- 08-01-0011
4 Katusi Fukuyama (Kobe Univ.)* Metric discrepancy results for complex geometric progressions 5
Noriyuki Kuri
(Daido Life Insurance Co.)
- 08-01-0025
5 Takayoshi Setokuchi Long-term behavior of discrepancies of irrational rotations based on
(Setokuchi Roof Tile Factory Co. Ltd.) numbers having single isolated large partial quotient 15
Keizo Takashima
(Okayama Univ. of Sci.)
- 08-01-0033
6 Yuji Hamana (Kumamoto Univ.) The hitting time and the Wiener sausage of Brownian motion with
Hiroyuki Matsumoto constant drift 15
(Aoyama Gakuin Univ.)
- 08-01-0012
7 Yuki Suzuki (Keio Univ.)* A diffusion process with a random potential consisting of two contracted
self-similar processes 15
- 08-01-0032
8 Takashi Imamura (Chiba Univ.) Determinantal structures in the O’Connell–Yor directed random poly-
Tomohiro Sasamoto (Tokyo Tech) mer model 15
- 08-01-0018
9 Hirofumi Osada (Kyushu Univ.) Cores of Dirichlet forms related to infinite particle systems 10
Hideki Tanemura (Chiba Univ.)
- 08-01-0016
10 Yu Ito (Osaka Univ.) Differential equations driven by rough paths: an approach via fractional
calculus 15

14:15–14:45

- 08-01-0002
11 Hiroaki Hata (Shizuoka Univ.) Risk-sensitive asset management with general factor models 15
- 08-01-0029
12 Kazutoshi Yamazaki (Kansai Univ.) Optimal double stopping of a Brownian bridge 15

15:00–16:00 Talk Invited by Statistics and Probability Section

- 08-02-0002
Yuichi Shiozawa (Okayama Univ.) Global properties of symmetric Markov processes and Dirichlet forms

16:15–17:15 Talk Invited by Statistics and Probability Section

- 08-02-0003
Fumio Hiroshima (Kyushu Univ.) Application of Feynman–Kac type formula to quantum field theory

September 14th (Mon)

9:30–11:30

08-01-0010

- 13 Hiroki Sako (Niigata Univ.) The arcsine law, quantum classical correspondence, and orthogonal polynomials 15
Hayato Saigo
(Nagahama Inst. of Bio-Sci. and Tech.)

08-01-0013

- 14 Kohei Tanaka (Shinshu Univ.) Quantum probability theory from the categorical viewpoint 15
Hitoshi Motoyama
(Aoyama Gakuin Univ.)

08-01-0014

- 15 Ayako Hasegawa (Ochanomizu Univ.) On limit spectral measures of Marchenko–Pastur limit of random matrices with dependent entries and an application of fluctuations 15
Noriyoshi Sakuma (Aichi Univ. of Edu.)
Hiroaki Yoshida (Ochanomizu Univ.)

08-01-0031

- 16 Tomonori Nakatsu (Ritsumeikan Univ.) Integration by parts formulas concerning maxima of some one-dimensional SDEs with applications 15

08-01-0023

- 17 Dai Taguchi (Ritsumeikan Univ.) Approximation for non-smooth functionals of SDEs with irregular drift 15
Hoang-Long Ngo
(Hanoi Nat. Univ. of Edu.)

08-01-0026

- 18 Takafumi Amaba (Ritsumeikan Univ.) Convergence implications via dual flow method 15
Gō Yūki (Ritsumeikan Univ.)
Dai Taguchi (Ritsumeikan Univ.)

08-01-0034

- 19 Kazuhiro Yoshikawa SLK martingales and representations of the Virasoro algebra 10
(Ritsumeikan Univ.)
Takafumi Amaba (Ritsumeikan Univ.)

08-01-0041

- 20 Shigeyoshi Ogawa (Ritsumeikan Univ.) On the derivation of noncausal function from its Haar-SFCs 10
Hideaki Uemura (Aichi Univ. of Edu.)

11:30–12:00 Research Section Assembly

September 15th (Tue)

9:30–12:00

08-01-0042

- 21 Tamio Koyama (Univ. of Tokyo) Differential systems for the normalizing constant of Fisher distribution on the special orthogonal group 15

08-01-0037

- 22 Takahiro Suto (Tokyo Univ. of Sci.) An asymmetry model with m -additional parameters for square contingency tables with ordered categories 15
Kiyotaka Iki (Tokyo Univ. of Sci.)
Sadao Tomizawa (Tokyo Univ. of Sci.)

08-01-0017

- 23 Akira Shibuya (Tokyo Univ. of Sci.) Generalized diagonal exponent symmetry model and its orthogonal decomposition in square contingency tables with ordered categories ... 15
Kiyotaka Iki (Tokyo Univ. of Sci.)
Sadao Tomizawa (Tokyo Univ. of Sci.)

08-01-0030

- 24 Ryotaro Maeda (Tokyo Univ. of Sci.) Extended double linear diagonals-parameter symmetry model for contingency table 10
Kouji Tahata (Tokyo Univ. of Sci.)
Sadao Tomizawa (Tokyo Univ. of Sci.)

08-01-0024

- 25 Ayaka Yagi (Tokyo Univ. of Sci.) On the likelihood ratio test for mean vectors with monotone missing data in two-sample problem 15
Takashi Seo (Tokyo Univ. of Sci.)

- [08-01-0003](#)
26 Shoichi Sasabuchi (Kyushu Univ.) On the distributions of test statistics for homogeneity of mean vectors under order restrictions when the covariance matrices are unknown ... 10
- [08-01-0008](#)
27 Kazuyoshi Yata (Univ. of Tsukuba) Two-sample tests for high-dimensional data and their optimality 15
Makoto Aoshima (Univ. of Tsukuba)
- [08-01-0044](#)
28 Yoshihiro Suto (Waseda Univ.) Shrinkage estimation for the autocovariance matrix of vector-valued Gaussian stationary processes 10
- [08-01-0039](#)
29 Hideaki Nagahata (Waseda Univ.) Discriminant and cluster analysis of high-dimensional time series data
Yan Liu (Waseda Univ.) 15
Hirotaka Uchiyama (Waseda Univ.)
Masanobu Taniguchi (Waseda Univ.)
- [08-01-0038](#)
30 Yoshihiko Maesono (Kyushu Univ.) On asymptotic representation of kernel type estimator of density ratio
Taku Moriyama (Kyushu Univ.) 10
- 14:15–15:15**
[08-01-0043](#)
31 Hiroshi Takahashi (Nihon Univ.) A note on the Bahadur representation of sample quantiles for \mathcal{M} -
Ken-ichi Yoshihara dependent random variables 10
(Yokohama Nat. Univ.*)
- [08-01-0006](#)
32 Teppei Ogihara (Inst. of Stat. Math.) Maximum-likelihood-type estimation for high-frequency financial data
..... 15
- [08-01-0020](#)
33 Koji Tsukuda (Kurume Univ.) Estimating the large mutation parameter of the Ewens sampling formula
..... 15
- [08-01-0027](#)
34 Shintaro Hashimoto (Univ. of Tsukuba) Reference prior via α -divergence in a non-regular multi-parametric case
Ken-ichi Koike (Univ. of Tsukuba) 15
- 15:30–16:30 Talk Invited by Statistics and Probability Section**
[08-02-0001](#)
Toshihiro Abe (Nanzan Univ.) On some cylindrical distributions and their related topics
- 16:40–17:40 Talk Invited by Statistics and Probability Section**
[08-02-0004](#)
Kengo Kamatani (Osaka Univ.) Asymptotic theory of Markov chain Monte Carlo method in high-
dimension
- September 16th (Wed)
- 9:30–12:00**
[08-01-0036](#)
35 Yutaka Saito (Niigata Univ.) A generalization of some minimax inequality theorem into set-valued
Tamaki Tanaka (Niigata Univ.) maps via scalarization 10
Syuuji Yamada (Niigata Univ.)
- [08-01-0005](#)
36 Satoshi Suzuki (Shimane Univ.) Characterizations of the solution set for quasiconvex programming ... 15
Daishi Kuroiwa (Shimane Univ.)
- [08-01-0040](#)
37 Xiao-Nan Lu (Nagoya Univ.) Applications of difference families to graceful labeling of digraphs ... 15
Masakazu Jimbo (Chubu Univ.)
- [08-01-0004](#)
38 Shohei Satake (Nagoya Univ.) Some results on the asymmetry of digraphs and probabilistic methods
Masanori Sawa (Kobe Univ.) 15
Masakazu Jimbo (Chubu Univ.)

- 08-01-0007
39 Masanori Sawa (Kobe Univ.) Developing design theory for measure spaces III —Sobolev’s theorem and its generalization 15
- 08-01-0019
40 Masahide Kuwada (Int. Inst. for Nat. Sci.) Existence conditions for balanced fractional 2^m factorial designs of resolution $R^*(\{1\}|\Omega_4)$ with $N < \nu_4(m)$ 15
Yoshifumi Hyodo (Okayama Univ. of Sci./Int. Inst. for Nat. Sci.)
Hiromu Yumiba (Int. Inst. for Nat. Sci.)
- 08-01-0022
41 Kazuki Matsubara (ChuoGakuin Univ.) Pairwise additive 1-rotational BIB designs 15
Sanpei Kageyama (Tokyo Univ. of Sci.)
- 08-01-0028
42 Satoshi Aoki (Kobe Univ.) Markov chain Monte Carlo methods for the Box–Behnken designs and Takayuki Hibi (Osaka Univ.) centrally symmetric configurations 15
Hidefumi Ohsugi (Kwansei Gakuin Univ.)
- 08-01-0035
43 Masatake Hirao (Aichi Pref. Univ.) QMC design sequences generated by determinantal point processes on the sphere 15

Applied Mathematics

September 13th (Sun)

9:30–12:00

- 09-01-0022
1 Minoru Fujimoto (Seika Science Lab.) On the Goldbach conjecture 10
Kunihiko Uehara (Tezukayama Univ.)
- 09-01-0023
2 Minoru Fujimoto (Seika Science Lab.) On the relation of the limit for the calculation period between the prime
Kunihiko Uehara (Tezukayama Univ.) factorization and the NP complete problem 10
- 09-99-0001
3 Nobuo Shindo 3-colors solution of the edges of all maximum plane graphs 10
- 09-01-0001
4 Kazuhiko Ushio (Kinki Univ.) Balanced C_8 -foil designs and related designs 15
- 09-01-0036
5 Iwao Sato (Oyama Nat. Coll. of Tech.) A new determinant expression for the weighted Bartholdi zeta function
Hideo Mitsuhashi (Utsunomiya Univ.) of a digraph 15
Hideaki Morita (Muroan Inst. of Tech.)
- 09-01-0019
6 Hiroshi Nozaki (Aichi Univ. of Edu.) Maximizing the order of a regular graph of given valency and second
eigenvalue 15
- 09-01-0055
7 Suh-Ryung Kim (Seoul Nat. Univ.) On the competition numbers of diamond-free graphs 10
Jung Yeun Lee (Seoul Nat. Univ.)
Boram Park (Asia Univ.)
Yoshio Sano (Univ. of Tsukuba)
- 09-01-0017
8 Kumi Kobata (Kinki Univ.) On graphs such that both of the graph and its complement are 2-
Shinsei Tazawa (Kinki Univ.*) connected 15
Tomoki Yamashita (Kinki Univ.)
- 09-01-0011
9 Kenta Noguchi (Keio Univ.) Embeddings of complete graphs with every face k -gonal 10
- 09-01-0009
10 Jun Fujisawa (Keio Univ.) Matching extendability of triangulations of the projective plane 15

14:15–16:20

- 09-01-0006
11 Shinya Fujita (Yokohama City Univ.) A new approach towards a conjecture on intersecting three longest paths
Michitaka Furuya (Tokyo Univ. of Sci.) 10
Reza Naserasr (Univ. Paris-Sud 11)
Kenta Ozeki
(Nat. Inst. of Information/JST ERATO)
- 09-01-0007
12 Akira Saito (Nihon Univ.) Extendability of the complementary prism of a bipartite graph 15
Nawarat Ananchuen (Silpakorn Univ.)
Watcharaphong Ananchuen
(Sukhothai Thammathirat Open Univ.)
- 09-01-0018
13 Akito Suzuki (Shinshu Univ.) The spectral mapping theorem and the generator of a quantum walk
Etsuo Segawa (Tohoku Univ.) 15
- 09-01-0030
14 Etsuo Segawa (Tohoku Univ.) Birth eigenspace of the Grover walks on infinite trees 15
Yusuke Higuchi (Showa Univ.)

- 09-01-0039
15 Kaname Matsue (Inst. of Stat. Math.) Simplicial quantum walks: construction and problems 15
Osamu Ogurisu (Kanazawa Univ.)
Etsuo Segawa (Tohoku Univ.)
- 09-01-0035
16 Shin Harase (Ritsumeikan Univ.) On the SFMT pseudorandom number generators 15
Takamitsu Kimoto
(Recruit Holdings Co.)
- 09-01-0053
17 Momoko Hayamizu On minimum spanning tree-like metric spaces 15
(Grad. Univ. for Adv. Stud./Inst. of Stat. Math.)
Kenji Fukumizu
(Inst. of Stat. Math./Grad. Univ. for Adv. Stud.)

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

- 09-02-0006
Haruhide Matsuda On trees and connected factors of graphs
(Shibaura Inst. of Tech.)

September 14th (Mon)

9:30–12:00

- 09-01-0002
18 Shunzi Horiguchi Expressions represented by the unevenness and curvature that compare
(Niigata Sangyo Univ.) the convergences of expanded Halley method (Tsuchikura–Horiguchi–
Murase–Halley method) 10
- 09-01-0003
19 Shunzi Horiguchi ^b Extensions of three types of Halley method 15
(Niigata Sangyo Univ.)
- 09-01-0013
20 Takehito Yoshiki (Univ. of Tokyo) The improved order of the worst case error for α -smooth functions
Takashi Goda (Univ. of Tokyo) 15
Kosuke Suzuki (Univ. of Tokyo)
- 09-01-0024
21 Josef Dick (Univ. New South Wales) Construction of interlaced polynomial lattice rules achieving accelerat-
Kosuke Suzuki (Univ. of Tokyo) ing convergence for infinitely differentiable functions 15
Takashi Goda (Univ. of Tokyo)
Takehito Yoshiki (Univ. of Tokyo)
- 09-01-0016
22 Endo(Watanabe) Takako Relation between two-phase quantum walk and the topological numbers
(Ochanomizu Univ.) 15
Norio Konno (Yokohama Nat. Univ.)
Hideaki Obuse (Hokkaido Univ.)
- 09-01-0027
23 Hideo Mitsuhashi (Utsunomiya Univ.) The discrete-time quaternionic quantum walk on a graph 15
Norio Konno (Yokohama Nat. Univ.)
Iwao Sato (Oyama Nat. Coll. of Tech.)
- 09-01-0021
24 Katsuhiro Ota (Keio Univ.) A degree condition for a graph to contain disjoint cycles of the same
Yoshimi Egawa (Tokyo Univ. of Sci.) even length 15
Shinya Fujita (Yokohama City Univ.)
Tadashi Sakuma (Yamagata Univ.)
- 09-01-0031
25 Yoshimi Egawa (Tokyo Univ. of Sci.) The existence of a path-factor without small odd paths 15
Michitaka Furuya (Tokyo Univ. of Sci.)
Kenta Ozeki
(Nat. Inst. of Information/JST ERATO)

- 09-01-0032
26 Kiyoshi Ando Conditions for k -connected graphs to have a contractible edge 15
(Nat. Inst. of Information/JST ERATO)

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

- 09-02-0005
Hiroyuki Ochiai Mathematics for image synthesis
(Kyushu Univ./JST CREST)

September 15th (Tue)

9:30–11:55 Special Session “Quantum walk and its related topics”

- 09-02-0002
Norio Konno (Yokohama Nat. Univ.) Mathematical structure of the quantum walk 45
- 09-02-0001
Yutaka Shikano Discrete time quantum walk and quantum dynamical simulation 45
(Inst. for Molecular Sci./Chapman Univ./Tokyo Tech)
- 09-02-0004
Hideaki Obuse (Hokkaido Univ.) Quantum walk meets topological insulators 45

14:15–17:25

- 09-01-0033
27 Ippei Obayashi (Tohoku Univ.) Continuation of point clouds via persistence diagrams 15
Marcio Gameiro (Univ. de São Paulo)
Yasuaki Hiraoka (Tohoku Univ.)
- 09-01-0038
28 Genki Kusano (Tohoku Univ.) Kernel function on persistence diagrams 15
Yasuaki Hiraoka (Tohoku Univ.)
Kenji Fukumizu (Inst. of Stat. Math.)
- 09-01-0025
29 Akane Kawaharada (Univ. of Shizuoka) Fractal feature analysis of the patterns created by 2D cellular automata
..... 10
- 09-01-0034
30 Kaname Matsue (Inst. of Stat. Math.) Slow shadowing: an effective technique for tracing trajectories near slow
manifolds 15
- 09-01-0054
31 Shigetoshi Yazaki (Meiji Univ.) Comparison study of an image segmentation by means of a direct
method and level-set method 15
Sato Kentaro (Fuji Soft Incorporated)
Petr Pauš
(Meiji Univ./Czech Tech. Univ. in Prague)
- 09-01-0010
32 Tadashi Nakajima (Tokyo Denki Univ.)* The duration problem of an insurer 15
Kunio Nishioka (Chuo Univ.)
Sadao Sato (Tokyo Denki Univ.)
- 09-01-0042
33 Takaaki Aoki (Kyoto Univ.) Optimal control problem with quasi-geometric discounting revisited .. 15
- 09-01-0051
34 Masaji Watanabe (Okayama Univ.) Mathematical formulation for exogenous type microbial depolymeriza-
tion process 15
Fusako Kawai (Kyoto Inst. Tech.)
- 09-01-0004
35 George Miyake A computational method of a target bifurcation set by using the bisec-
tion method 15
(Ube Nat. Coll. of Tech.)
Yuji Katsuta (Ube Nat. Coll. of Tech.)
- 09-01-0028
36 Aoi Honda (Kyushu Inst. of Tech.) Inclusion-exclusion integral —Integral with respect to nonadditive mono-
tone measure— 15
Yoshiaki Okazaki
(Fuzzy Logic Systems Inst.)

09-01-0020

- 37 Fuminori Sakaguchi (Univ. of Fukui) Two possible relationships between rapidly converging generalized continued fractions and an integer-type algorithm for ODEs using quasi-orthogonalizations 15

September 16th (Wed)

9:30–12:00

09-01-0044

- 38 Masahiro Watari (Okinawa Nat. Coll. of Tech.) Branching pattern models of two subtropical tree species in Okinawa Island I 15

09-01-0049

- 39 Masahiro Watari (Okinawa Nat. Coll. of Tech.) Branching pattern models of two subtropical tree species in Okinawa Island II 10

09-01-0015

- 40 Ryusuke Kon (Univ. of Miyazaki) Bifurcation of cycles in nonlinear semelparous Leslie matrix models .. 15

09-01-0012

- 41 Takeshi Gotoda (Kyoto Univ.) Existence of enstrophy dissipating solution for 3-body problem in α point vortex system 15

09-01-0046

- 42 Yoshitaro Tanaka (Meiji Univ.) Singular limit problem in a reaction diffusion model for phyllotactic formation 15
Hirokazu Ninomiya (Meiji Univ.)
Masayasu Mimura (Meiji Univ.)

09-01-0041

- 43 Hirofumi Izuhara (Univ. of Miyazaki) Pattern formation in a chemotaxis-growth system 15
Kuto Kousuke (Univ. of Electro-Comm.)
Tohru Tsujikawa (Univ. of Miyazaki)

09-01-0048

- 44 Koichi Anada (Waseda Univ. Senior High School/Shibaura Inst. of Tech.) On Type II Blow-up Solutions to a quasi-linear parabolic partial differential equations 15
Tetsuya Ishiwata (Shibaura Inst. of Tech.)

09-01-0029

- 45 Hisasi Tani (Meiji Univ.) Inertial effect on weakly nonlinear analysis for two-phase Hele-Shaw problem 15

09-01-0050

- 46 Shigetoshi Yazaki (Meiji Univ.) Structure-preserving numerical scheme for Hele-Shaw problems by the method of fundamental solutions 15
Koya Sakakibara (Univ. of Tokyo)

14:15–16:45

09-01-0047

- 47 Issei Oikawa (Waseda Univ.) On finite element solutions when triangles are almost flat 15

09-01-0008

- 48 Takiko Sasaki (Univ. of Tokyo) Error analysis of splitting methods for abstract Cauchy problems 15
Masahito Ohta (Tokyo Univ. of Sci.)

09-01-0037

- 49 Akitoshi Takayasu (Waseda Univ.) Verified numerical enclosure of blow-up time for ODEs 15
Kaname Matsue (Inst. of Stat. Math.)
Takiko Sasaki (Univ. of Tokyo)
Kazuaki Tanaka (Waseda Univ.)
Makoto Mizuguchi (Waseda Univ.)
Shin'ichi Oishi (Waseda Univ.)

09-01-0014

- 50 Yoshitaka Watanabe (Kyushu Univ./JST CREST) Some consideration of numerical verifications for the Kolmogorov problem 15

09-01-0026

- 51 Takehiko Kinoshita (Kyoto Univ./Kyoto Univ.) Some remarks for the solutions of Poisson equations with H^3 regularities on the polygonal domain 10
 Yoshitaka Watanabe (Kyushu Univ./JST CREST)
 Mitsuhiro T. Nakao (Sasebo Nat. Coll. of Tech.)

09-01-0040

- 52 Tomoya Kemmochi (Univ. of Tokyo) On the discretization of an adhesive obstacle problem with a higher order term 15

09-01-0043

- 53 Yusuke Imoto (Kyushu Univ.) Error estimates of a time implicit particle method for the heat equation
Daisuke Tagami (Kyushu Univ.) 15

09-01-0052

- 54 Xuefeng Liu (Niigata Univ.) Verified lower eigenvalue bound for self-adjoint differential operator .. 15

09-01-0045

- 55 Koya Sakakibara (Univ. of Tokyo) On the charge simulation method using dummy points and weighted-average condition 15
Shigetoshi Yazaki (Meiji Univ.)

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

09-02-0003

- Tomoyuki Miyaji (Meiji Univ.) A billiard problem in nonlinear and nonequilibrium problem: a computer-assisted analysis

Topology

September 13th (Sun)

9:50–12:00

- [10-01-0004](#)
1 Yusuke Takimura (Gakushuin Boy's Junior High School) Noboru Ito (Waseda Univ.) Strong and weak (1, 2, 3) homotopies on knot projections 15
- [10-01-0008](#)
2 Noboru Ito (Waseda Univ.) Based chord diagrams for spherical curves 10
- [10-01-0018](#)
3 Tomo Murao (Univ. of Tsukuba) On the extension of a fundamental theorem in braid theory for handlebody-braids 10
- [10-01-0032](#)
4 Masaaki Suzuki (Meiji Univ.) Jae Choon Cha (POSTECH) Non-meridional epimorphisms of knot groups 10
- [10-01-0001](#)
5 Masakazu Teragaito (Hiroshima Univ.) Quasi-alternating links and Kauffman polynomials 10
- [10-01-0010](#)
6 Teruaki Kitano (Soka Univ.) The first cohomology of a knot group with \mathbb{C}^2 -coefficients twisted by an $SL(2; \mathbb{C})$ -representation and twisted Alexander polynomial 10
- [10-01-0012](#)
7 Tetsuya Itoh (Kyoto Univ.) Generalized Jones–Kawamuro conjecture 10
- [10-01-0021](#)
8 Atsushi Ishii (Univ. of Tsukuba) Scott Carter (Univ. of South Alabama) Masahico Saito (Univ. of South Florida) Kokoro Tanaka (Tokyo Gakugei Univ.) Group, quandle, and mixed (co)homologies 10
- [10-01-0025](#)
9 Kouki Sato (Tokyo Tech) Heegaard Floer d -invariant of 1-surgeries of $(2, q)$ -cablings 10
- [10-01-0034](#)
10 Shinya Harada (Tokyo Tech) Hasse–Weil zeta functions of SL_2 -character varieties of certain closed arithmetic hyperbolic 3 manifolds 10
- [10-01-0006](#)
11 Yuichi Yamada (Univ. of Electro-Comm.) Motoo Tange (Univ. of Tsukuba) Four dimensional manifolds constructed by lens space surgeries 10

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

- [10-02-0003](#)
Yuichi Nohara (Kagawa Univ.) Lagrangian fibrations on Grassmannians and mirror symmetry

15:30–17:15

- [10-01-0027](#)
12 Inasa Nakamura (Univ. of Tokyo) On addition of 1-handles with chart loops to 2-dimensional braids 10
- [10-01-0030](#)
13 Takahiro Oba (Tokyo Tech) Compact Stein surfaces and braided surfaces 15
- [10-01-0011](#)
14 Akiko Shima (Tokai Univ.) Teruo Nagase (Tokai Univ.*) C -minimal 5-charts with four crossings 15
- [10-01-0013](#)
15 Kenta Hayano (Hokkaido Univ.) Noriyuki Hamada (Univ. of Tokyo) A monodromy of a genus-3 Lefschetz pencil on the 4-torus 15
- [10-01-0003](#)
16 Genki Omori (Tokyo Tech) Ryoma Kobayashi (Ishikawa Nat. Coll. of Tech.) A finite generating set for the level 2 twist subgroup of the mapping class group of a closed non-orientable surface 15

10-01-0023	17 Yasushi Kasahara (Kochi Univ. of Tech.)	On simple closed curves and a visualization of the linearity for mapping class group of surface	10
10-01-0014	18 Takuya Sakasai (Univ. of Tokyo) Masaaki Suzuki (Meiji Univ.) Shigeyuki Morita (Univ. of Tokyo*/Tokyo Tech*)	Tautological algebra of mapping class group and representation theory	15

September 14th (Mon)

10:30–10:45 Presentation Ceremony for the 2015 MSJ Geometry Prize (Room of Geometry)**10:50–11:50 Award Lecture for the 2015 MSJ Geometry Prize (Room of Geometry)**

03-02-0003	Hiroshi Iritani (Kyoto Univ.)	Mirror symmetry for toric varieties	
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13:15–14:15 Award Lecture for the 2015 MSJ Geometry Prize (Room of Geometry)

10-02-0001	Osamu Saeki (Kyushu Univ.)	Stable maps and topology manifolds	
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September 15th (Tue)

9:50–12:00

10-01-0022	19 Hiromichi Nakayama (Aoyama Gakuin Univ.)	Surface diffeomorphisms with connected but not path-connected minimal sets containing arcs	15
10-01-0016	20 Takahiro Yamamoto (Kyushu Sangyo Univ.)	Cobordism group of Morse functions on surfaces with boundary	15
10-01-0019	21 Naohiko Kasuya (Aoyama Gakuin Univ.) Antonio Jose Di Scala (Politecnico di Torino) Daniele Zuddas (KIAS)	Almost complex submanifolds in the even dimensional Euclidean spaces	15
10-01-0020	22 Naohiko Kasuya (Aoyama Gakuin Univ.) Antonio Jose Di Scala (Politecnico di Torino) Daniele Zuddas (KIAS)	Non-Kähler complex structures on \mathbb{R}^4	15
10-01-0031	23 Kouichi Yasui (Hiroshima Univ.)	Corks, exotic 4-manifolds and knot concordance	15
10-01-0033	24 Selman Akbulut (Michigan State Univ.) Kouichi Yasui (Hiroshima Univ.)	Contact 5-manifolds admitting open books with exotic Stein pages . . .	10
10-01-0017	25 Tomohiro Horiuchi (Chuo Univ.) Yoshihiko Mitsumatsu (Chuo Univ.)	Reeb components of leafwise complex foliations and their symmetries	15
10-01-0024	26 Atsuhide Mori (Osaka City Univ.)*	Contact structures and leafwise symplectic foliations	15

14:15–15:45[10-01-0026](#)

- 27 [Eiichi Matsuhashi](#) (Shimane Univ.) Arcwise increasing maps 10
 Benjamin Espinoza
 (Univ. of Pittsburgh at Greensburg)

[10-01-0029](#)

- 28 [Huhe Han](#) (Yokohama Nat. Univ.) The spherical dual transform is an isometry for spherical Wulff shapes
 Takashi Nishimura 15
 (Yokohama Nat. Univ.)

[10-01-0028](#)

- 29 Takayuki Masuda (Osaka Univ.) A gluing theorem of Lorentzian transformation groups 10

[10-01-0005](#)

- 30 [Kenshi Ishiguro](#) (Fukuoka Univ.) Modular invariants and Weyl groups 10
 Takahiro Koba (Fukuoka Univ.)

[10-01-0002](#)

- 31 Yusuke Suyama (Osaka City Univ.) Simplicial 2-spheres obtained from non-singular complete fans 10

[10-01-0015](#)

- 32 Miho Hatanaka (Osaka City Univ.) On the relation between root systems and facet vectors of graph associahedrons 10

[10-01-0007](#)

- 33 [Mikiya Masuda](#) (Osaka City Univ.)^b The cohomology of regular Hessenberg varieties and representations of
 Hiraku Abe the symmetric group 15
 (Osaka City Univ./Univ. of Toronto)
 Megumi Harada (McMaster Univ.)
 Tatsuya Horiguchi (Osaka City Univ.)

16:15–17:15 Talk Invited by Topology Section[10-02-0002](#)

- Zhi Lu (Fudan Univ.) Equivariant unitary bordism and equivariant cohomology Chern numbers

Infinite Analysis

September 13th (Sun)

9:30–12:00

- [11-01-0014](#)
1 Yusuke Ohkubo (Nagoya Univ.) Crystallization of the level 2 representation of the Ding–Iohara algebra
Hidetoshi Awata (Nagoya Univ.) 15
Hiroki Fujino (Nagoya Univ.)
- [11-01-0009](#)
2 Takuya Matsumoto Quantum affine algebra associated with the centrally extended Lie
(Nagoya Univ./Nagoya Univ.) superalgebra $\mathfrak{sl}(2|2)$ 15
- [11-01-0004](#)
3 Kanehisa Takasaki (Kinki Univ.) Open string amplitudes of topological string theory on closed vertex
Toshio Nakatsu (Setsunan Univ.) 15
- [11-01-0008](#)
4 Atsuo Kuniba (Univ. of Tokyo) Multispecies TASEP and the tetrahedron equation 15
Shouya Maruyama (Univ. of Tokyo)
Masato Okado (Osaka City Univ.)
- [11-01-0005](#)
5 Tomoki Nakanishi (Nagoya Univ.) Quantum generalized cluster algebras and quantum dilogarithms of
higher degrees 15
- [11-01-0011](#)
6 Takeshi Ikeda (Okayama Univ. of Sci.) Pfaffian sum formula for the symplectic Grassmannians 15
Tomoo Matsumura
(Okayama Univ. of Sci.)
- [11-01-0012](#)
7 Takeshi Ikeda (Okayama Univ. of Sci.) K -theoretic degeneracy loci of the symplectic vector bundle 15
Tomoo Matsumura
(Okayama Univ. of Sci.)
Hiroshi Naruse (Univ. of Yamanashi)
Thomas Hudson
(Pohang Univ. of Sci. and Tech.)

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

- [11-02-0001](#)
Toshiro Kuwabara Jet bundles on symplectic manifolds and vertex algebras
(Higher School of Economics)

September 14th (Mon)

9:30–12:00

- [11-01-0013](#)
8 Yoshikatsu Sasaki (Hiroshima Univ.) Weierstrass' elliptic function solution to the autonomous limit of the
string equation 10
- [11-01-0006](#)
9 Hidehito Nagao (Akashi Coll. of Tech.) The Padé approximation method applied to q -Painlevé equations 15
- [11-01-0007](#)
10 Tetsu Masuda (Aoyama Gakuin Univ.) Construction of rational solutions to the q -Sasano system of type $D_7^{(1)}$
..... 15
- [11-01-0002](#)
11 Masahiko Ito (Tokyo Denki Univ.) A generalization of the Sears–Slater transformation and elliptic La-
Masatoshi Noumi (Kobe Univ.) grange interpolation of type BC_n 15
- [11-01-0010](#)
12 Satoshi Tsujimoto (Kyoto Univ.) Exceptional Bannai–Ito polynomials 15
- [11-01-0015](#)
13 Kimio Ueno (Waseda Univ.) Dilogarithm function and monodromy preserving deformation 15

[11-01-0003](#)

- 14 [Rei Inoue](#) (Chiba Univ.) Toric network and generalized discrete Toda lattice 15
 Thomas Lam (Univ. of Michigan)
 Pavlo Pylyavskyy (Univ. of Minnesota)

[11-01-0016](#)

- 15 [Shinsuke Iwao](#) (Aoyama Gakuin Univ.) The full Kostant–Toda hierarchy, totally nonnegative matrices and
 Kyo Nishiyama (Aoyama Gakuin Univ.) singular curves 15
 Noboru Ogawa (Tokai Univ.)

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

[11-02-0002](#)

- Gen Kuroki (Tohoku Univ.) On canonical quantization of τ -functions for Painlevé systems