

2015 Mathematical Society of Japan

AUTUMN MEETING

Dates: September 13th (Sun)–16th (Wed), 2015

Venue: Kyoto Sangyo University

Motoyama, Kamikamo, Kita-ku, Kyoto 603-8555

Contact to: Kyoto Sangyo University, Faculty of Science

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Mathematical Society of Japan

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	I Bldg. 11 Rm. 11304	II Bldg. 6 Rm. 514	III Bldg. 6 Rm. 515	IV Bldg. 6 Rm. 518	V Bldg. 5 Rm. 5405	VI Bldg. 5 Rm. 5406	VII Bldg. 5 Rm. 5407	VIII Bldg. 5 Rm. 5301	IX Bldg. 5 Rm. 5302	X Bldg. 5 Rm. 5303
13th (Sun)		Algebra 9:15–11:50 15:30–18:00	Applied Mathematics 9:30–12:00 14:15–16:20	Infinite Analysis 9:30–12:00	Topology 9:50–12:00 15:30–17:15	Functional Equations 9:00–12:00 14:15–16:15	Statistics and Probability 9:30–12:00 14:15–14:45	Functional Analysis 14:30–16:30	Complex Analysis 9:30–12:00 14:15–16:15	Geometry 9:50–12:00 14:15–16:45
	Featured Invited Talks 13:00–14:00									
		Invited Talk 14:15–15:15	Invited Talk 16:40–17:40	Invited Talk 14:15–15:15	Invited Talk 14:15–15:15	Invited Talk 16:30–17:30	Invited Talks 15:00–16:00 16:15–17:15	Invited Talk 17:00–18:00	Invited Talk 16:30–17:30	
14th (Mon)		Algebra 9:15–12:00 Invited Talk 13:10–14:10	Applied Mathematics 9:15–11:45 Invited Talk 13:15–14:15	Infinite Analysis 9:30–12:00 Invited Talk 13:00–14:00		Functional Equations 9:00–12:00 Invited Talk 13:15–14:15	Statistics and Probability 9:30–11:30	Functional Analysis 9:30–12:00 Invited Talk 13:30–14:30	Complex Analysis 9:30–12:00 Invited Talk 13:15–14:15	Geometry & Topology Invited Talks 13:15–14:15 10:50–11:50
	MSJ Prizes Presentation (Kamiyama Hall) (14:50–15:20) Plenary Talks (Kamiyama Hall) MSJ Autumn Prize Winner (15:30–16:30) Hisashi Okamoto (Kyoto Univ.) (16:45–17:45) Official Party (Kamiyama Hall, Lounge “Furusato”) (18:00–20:00)									
15th (Tue)	Found. of Math. and History of Math. 9:55–11:25 14:15–16:00	Algebra 9:30–11:25 15:30–17:50	Applied Mathematics 14:15–17:25 Special Session 9:30–11:55	Real Analysis 9:30–12:00 14:15–16:25	Topology 9:50–12:00 14:15–15:45	Functional Equations 9:00–12:00 14:15–16:15	Statistics and Probability 9:30–12:00 14:15–15:15	Functional Analysis 9:00–12:00 14:15–16:45	Complex Analysis 9:15–12:00	Geometry 10:00–12:00 14:15–16:25
	Featured Invited Talks 13:00–14:00									
	Invited Talk 16:15–17:15	Invited Talk 14:15–15:15		Invited Talk 16:40–17:40	Invited Talk 16:15–17:15	Invited Talk 16:30–17:30	Invited Talks 15:30–16:30 16:40–17:40	Invited Talk 17:00–18:00		Invited Talk 16:45–17:45
16th (Wed)	Found. of Math. and History of Math. 9:30–11:20	Algebra 9:30–12:00 14:15–15:45	Applied Mathematics 9:30–12:00 14:15–16:45	Real Analysis 9:15–12:00 14:15–15:15		Functional Equations 9:00–12:00	Statistics and Probability 9:30–12:00			Geometry 10:00–12:00 14:15–16:15
	Featured Invited Talks 13:00–14:00									
		Invited Talk 16:00–17:00	Invited Talk 17:00–18:00	Invited Talk 15:30–16:30		Invited Talk 14:15–15:15				Invited Talk 16:45–17:45

Plenary Talks

September 14th (Mon) Kamiyama Hall

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|-------------------------------|--|---------------|
| MSJ Autumn Prize Winner | | (15:30–16:30) |
| Hisashi Okamoto (Kyoto Univ.) | Difficulties arising in mathematical fluid mechanics | (16:45–17:45) |

Featured Invited Talks

September 13th (Sun)

Conference Room III

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|----------------------------------|--|---------------|
| Mariko Hagita (Ochanomizu Univ.) | Existence properties on error-correcting sequences | (13:00–14:00) |
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Conference Room IV

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|-------------------------------|--|---------------|
| Toshiaki Maeno (Meijo Univ.)* | Schubert polynomials and Schur polynomials | (13:00–14:00) |
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Conference Room VI

Guest Talk from Korean Mathematical Society

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|-------------------------------|---|---------------|
| Dongho Chae (Chung-Ang Univ.) | The incompressible Euler equations and the Liouville/unique continuation theorems | (13:00–14:00) |
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September 15th (Tue)

Conference Room I

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|-----------------------------|---|---------------|
| Makoto Kikuchi (Kobe Univ.) | The Incompleteness Theorems: The Bounds and Possibilities of Formalized Mathematics | (13:00–14:00) |
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Conference Room V

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|-------------------------------|-----------------------------------|---------------|
| Isao Nakai (Ochanomizu Univ.) | Some topics in Web geometry | (13:00–14:00) |
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September 16th (Wed)

Conference Room II

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|-----------------------------|--|---------------|
| Seidai Yasuda (Osaka Univ.) | Motivic multiple zeta values and finite multiple zeta values | (13:00–14:00) |
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Conference Room IV

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|-------------------------------------|---|---------------|
| Toyohiko Aiki (Japan Women's Univ.) | On mathematical models for concrete carbonation | (13:00–14:00) |
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Talks Invited by Research Sections and Special Session

September 13th (Sun)

Algebra (Conference Room II)

Hidefumi Ohsugi (Kwansei Gakuin Univ.) Gröbner bases of toric ideals and their application (14:15–15:15)

Complex Analysis (Conference Room IX)

Noriaki Suzuki (Meijo Univ.)* Polynomial approximation and potential theory (16:30–17:30)

Functional Equations (Conference Room VI)

Toshiyuki Mano (Univ. of Ryukyus) A generalization of differential equations of Okubo type to several variables case and flat structure (16:30–17:30)

Functional Analysis (Conference Room VIII)

Mitsuteru Kadowaki (Univ. of Shiga Pref.) Spectral analysis for wave propagation in two-layered media (17:00–18:00)

Statistics and Probability (Conference Room VII)

Yuichi Shiozawa (Okayama Univ.) Global properties of symmetric Markov processes and Dirichlet forms (15:00–16:00)

Fumio Hiroshima (Kyushu Univ.) Application of Feynman–Kac type formula to quantum field theory (16:15–17:15)

Applied Mathematics (Conference Room III)

Haruhide Matsuda (Shibaura Inst. of Tech.) On trees and connected factors of graphs (16:40–17:40)

Topology (Conference Room V)

Yuichi Nohara (Kagawa Univ.) Lagrangian fibrations on Grassmannians and mirror symmetry (14:15–15:15)

Infinite Analysis (Conference Room IV)

Toshiro Kuwabara (Higher School of Economics) Jet bundles on symplectic manifolds and vertex algebras .. (14:15–15:15)

September 14th (Mon)

Algebra (Conference Room II)

Sho Hei Ma (Tokyo Tech)^b On the Kodaira dimension of certain orthogonal modular varieties (13:10–14:10)

Geometry and Topology (Conference Room X)

Award Lecture for the 2015 MSJ Geometry Prize
Hiroshi Iritani (Kyoto Univ.) Mirror symmetry for toric varieties (10:50–11:50)

Award Lecture for the 2015 MSJ Geometry Prize
Osamu Saeki (Kyushu Univ.) Stable maps and topology of manifolds (13:15–14:15)

Complex Analysis (Conference Room IX)

Takeo Ohsawa (Nagoya Univ.)^b L^2 extension theorems and Suita conjecture (13:15–14:15)

Functional Equations (Conference Room VI)

Fumihiko Hirosawa (Yamaguchi Univ.) Linear wave equations with time dependent coefficients and its applications (13:15–14:15)

Functional Analysis (Conference Room VIII)

Sho Matsumoto (Kagoshima Univ.) Weingarten calculus and harmonic analysis on symmetric groups (13:30–14:30)

Applied Mathematics (Conference Room III)

Hiroyuki Ochiai (Kyushu Univ./JST CREST) Mathematics for image synthesis (13:15–14:15)

Infinite Analysis (Conference Room IV)

Gen Kuroki (Tohoku Univ.) On canonical quantization of τ -functions for Painlevé systems (13:00–14:00)

September 15th (Tue)

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

Takako Nemoto (JAIST)^b Determinacy of infinite games in second order arithmetic .. (16:15–17:15)

Algebra (Conference Room II)

Shunsuke Tsuchioka (Univ. of Tokyo) KOR conjecture and beyond (14:15–15:15)

Geometry (Conference Room X)

Masato Mimura (Tohoku Univ.)* Strong algebraization of fixed point properties (16:45–17:45)

Functional Equations (Conference Room VI)

Kazuhiro Takimoto (Hiroshima Univ.) Entire solutions to some types of parabolic Hessian equations (16:30–17:30)

Real Analysis (Conference Room IV)

Kichi-Suke Saito (Niigata Univ.)* Recent development on geometric structure of Banach spaces (16:40–17:40)

Functional Analysis (Conference Room VIII)

Osamu Hatori (Niigata Univ.) Isometries on substructures of function algebras and operator algebras (17:00–18:00)

Statistics and Probability (Conference Room VII)

Toshihiro Abe (Nanzan Univ.) On some cylindrical distributions and their related topics .. (15:30–16:30)

Kengo Kamatani (Osaka Univ.) Asymptotic theory of Markov chain Monte Carlo method in high-dimension (16:40–17:40)

Topology (Conference Room V)

Zhi Lu (Fudan Univ.) Equivariant unitary bordism and equivariant cohomology Chern numbers (16:15–17:15)

September 16th (Wed)

Algebra (Conference Room II)

Tomoki Mihara (Univ. of Tokyo/Keio Univ.) Characterisation of the Berkovich spectrum of the Banach algebra of p -adic continuous functions (16:00–17:00)

Geometry (Conference Room X)

Tomohiro Fukaya (Tohoku Univ.) Boundary of relatively hyperbolic group and the coarse geometry (16:45–17:45)

Functional Equations (Conference Room VI)

Nobu Kishimoto (Kyoto Univ.) Unconditional uniqueness of solutions for nonlinear dispersive equations (14:15–15:15)

Real Analysis (Conference Room IV)

Sachiko Ishida (Tokyo Univ. of Sci.) Mathematical analysis of chemotaxis-Navier–Stokes systems and related models (15:30–16:30)

Applied Mathematics (Conference Room III)

Tomoyuki Miyaji (Meiji Univ.) A billiard problem in nonlinear and nonequilibrium problem: a computer-assisted analysis (17:00–18:00)

Open Lectures for Citizens

— Centennial Anniversary of the Birth of Kiyosi Itô —

Date: September 12th (Sat) 14:00–16:30

Venue: Kamiyama Hall

Sponsored by: Mathematical Society of Japan

Co-sponsored by: Kyoto Sangyo University / RIMS, Kyoto University

Under the auspice of: Institute of Actuaries of Japan

Program: Opening Speech (14:00–14:10)

Motoko Kotani (President of MSJ/Tohoku Univ.)

Terumasa Oshiro (President of Kyoto Sangyo Univ.)

Lecture “Kiyosi Itô and His Mathematics” (14:10–15:10)

Shinzo Watanabe (Emeritus Prof. of Kyoto Univ.)

Panel Discussion “Kiyosi Itô and His Mathematics” (15:30–16:30)

Chair: Ichiro Shigekawa (Kyoto Univ.)

Panelists: Nobuyuki Ikeda (Emeritus Prof. of Osaka Univ.)

Hiroshi Kunita (Emeritus Prof. of Kyushu Univ.)

Shigeo Kusuoka (Emeritus Prof. of Univ. of Tokyo)

Makiko Nisio (Emeritus Prof. of Kobe Univ.)

Hiroshi Sugita (Osaka Univ.)

Web Page: <http://mathsoc.jp/en/meeting/kyoto-sangyo15sept/>

Panel Exhibition and Video Screening

— Life of Kiyosi Itô —

Date: September 12th (Sat) 13:00–17:00 (only the panel exhibition)

September 13th (Sun)–15th (Tue) 10:00–17:00

September 16th (Wed) 10:00–12:00

Place: Panel Exhibition

Kamiyama Hall, Lobby

(September 12th)

Bldg. 5, 3F Rm. 5321 / 1F Rm. 5191

(September 13th–16th)

Video Screening

Bldg. 5, 3F Rm. 5324

Sponsored by: Mathematical Society of Japan

Contents: Panel Exhibition and Video Screening

Web Page: <http://mathsoc.jp/en/meeting/kyoto-sangyo15sept/>

Foundation of Mathematics and History of Mathematics

September 15th (Tue) Conference Room I

9:55–11:25

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|---|---|--|----|
| 1 | Shigeru Masuda
(Res. Workshop of Classical Fluid Dynamics) | The fluid dynamics and the heat theory by Poisson | 15 |
| 2 | Shigeru Masuda
(Res. Workshop of Classical Fluid Dynamics) | The historical derivatives of the particular value and the particular function in the wave and heat theory | 15 |
| 3 | Shotaro Tanaka | * Method of finding values of approximate expressions and cosets of Suida power series | 15 |
| 4 | Shunzi Horiguchi
(Niigata Sangyo Univ.) | Handwriting analysis of Chinese characters in the picture scroll of Kikugenpou Betsuden Ichimaki-Hihachiji and 1000 characters that are written by Koutaku Hosoi | 15 |
| 5 | Shunzi Horiguchi
(Niigata Sangyo Univ.) | Comparison of the picture scroll of Kikugenpou Betsuden Ichimaki-Hihachiji and the catalog of kikugenpou betsuden-catalog illustration of hihachi | 15 |

11:30–12:00 Mathematics History Team Meeting

14:15–16:00

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|----|----------------------------------|---|----|
| 6 | Yoshihiro Abe (Kanagawa Univ.) | How to define isocoherence | 15 |
| 7 | Toshimichi Usuba (Kobe Univ.) | On elementary submodel topology | 15 |
| 8 | Makoto Takahashi (Kobe Univ.) | On frame systems of axiom A posets | 15 |
| 9 | Kota Takeuchi (Univ. of Tsukuba) | Ramsey property of free amalgamation classes | 15 |
| 10 | Koichiro Ikeda (Hosei Univ.) | Generic structures with SOP_3 | 15 |
| 11 | 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

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|---------------|----------------------|--|
| Takako Nemoto | (JAIST) ^b | Determinacy of infinite games in second order arithmetic |
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September 16th (Wed) Conference Room I

9:30–11:20

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|----|------------------------------------|--|----|
| 12 | Takashi Oyabu | ^b World of phenomena: $\text{Aut}(\mathbb{R})$, and other 5 talks | 5 |
| 13 | Hideto Ishihara (Kyoto Univ.) | Sorites paradox | 15 |
| 14 | Kyohei Yokomizo (Nihon Univ.) | A conservativity problem on fragments of intermediate propositional logics | 15 |
| 15 | Nobu-Yuki Suzuki (Shizuoka Univ.) | Axiom schemata preserving disjunction and existence properties of intuitionistic predicate logic | 15 |
| 16 | Toshio Suzuki (Tokyo Metro. Univ.) | A solution to Yamakami's problem on advised context-free languages | 15 |

- 17 Kohtaro Tadaki (Chubu Univ.) The principle of typicality: A refinement of the probabilistic interpretation of quantum mechanics 15
- 18 Kenshi Miyabe (Meiji Univ.) Characterization of 3-randomness via complexity 15

11:30–12:00 Research Section Assembly

Algebra

September 13th (Sun) Conference Room II

9:15–11:50

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

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

15:30–18:00

11	Ryo Kanda (Nagoya Univ.) ^b	Atom-molecule correspondence in Grothendieck categories	15
12	Hideto Asashiba (Shizuoka Univ.)	Cohen–Montgomery duality for bimodules and its applications to equivalences given by bimodules	15
13	Takeshi Usa (Univ. of Hyogo)	Universal families of homological shells, Koszul domains, and Koszul graph maps	15
14	Ayako Itaba (Shizuoka Univ.)	Finite condition (Fg) for self-injective Koszul algebras	10
15	Satoshi Yamanaka (Okayama Univ.)	On weakly separable polynomials and weakly quasi-separable polynomials in skew polynomial rings	10
16	Mitsuo Hoshino (Univ. of Tsukuba) Noritsugu Kameyama (Shinshu Univ.) Hirotaka Koga (Tokyo Denki Univ.)	Crossed products for matrix rings	10
17	Takahide Adachi (Nagoya Univ.)	Brauer star algebras and triangulations	15
18	Yuya Mizuno (Nagoya Univ.)	Preprojective algebras of Dynkin type, tilting theory and Weyl group	15
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
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) Conference Room II

9:15–12:00

21	Tomohiro Iwami (Kyushu Sangyo Univ.)	* Some remarks on Fano fibrations	10
22	Katsuki Asa Masahiro Watari (Okinawa Nat. Coll. of Tech.)	Plane curves with small polar degree	10
23	Katsumi Akahori (Gifu Pharmaceutical Univ.)	Remarks on normal generation of special line bundles on algebraic curves	15
24	Takanori Ayano (Osaka City Univ.)	On Jacobi inversion problem for telescopic curves	15
25	Yoshifumi Tsuchimoto (Kochi Univ.)	The Dolbeault complex of non commutative projective spaces	15
26	Tomoo Matsumura (Okayama Univ. of Sci.) Takeshi Ikeda (Okayama Univ. of Sci.) Hiroshi Naruse (Univ. of Yamanashi) Thomas Hudson (Postech)	K -theoretic Segre classes	15
27	Tomoo Matsumura (Okayama Univ. of Sci.) Takeshi Ikeda (Okayama Univ. of Sci.) Hiroshi Naruse (Univ. of Yamanashi) Thomas Hudson (Postech)	Determinant formula of the K -theory Schubert classes	15

- 28 Narutaka Ozawa (Kyoto Univ.) Noncommutative real algebraic geometry of Kazhdan's property (T) 15
- 29 Makoto Enokizono (Osaka Univ.) Slopes of fibered surfaces with a finite cyclic automorphism 15
- 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

- Sho Hei Ma (Tokyo Tech)^b On the Kodaira dimension of certain orthogonal modular varieties

September 15th (Tue) Conference Room II

9:30–11:25

- 31 Tatsuki Kuwagaki (Univ. of Tokyo) The nonequivariant coherent-constructible correspondence for toric surfaces 15
- 32 Tomoaki Shirato (Nagoya Univ.) Frobenius splitting for elliptic fibrations with wild fiber and applications 15
- 33 Masataka Tomari (Nihon Univ.)* Normal two-dimensional singularities where the normalized tangent cone is reduced 15
- 34 Kiwamu Watanabe (Saitama Univ.)* Uniform families of minimal rational curves on Fano manifolds 15
- 35 Hiroyuki Nakasora (Okayama Univ.)* On the support t -designs of extremal binary doubly even self-dual codes 10
- 36 Kazufumi Kimoto (Univ. of Ryukyus) Analog of group determinants for group-subgroup pairs 10
Masato Wakayama (Kyushu Univ.)
- 37 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**

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

15:30–17:50

- 38 Fumihito Oda (Kinki Univ.) The units of a partial Burnside ring relative to the Young subgroups of
Yugen Takegahara (Muroran Inst. of Tech.) a symmetric group 10
Tomoyuki Yoshida (Hokusei Gakuen Univ.)
- 39 Shigeto Kawata (Osaka City Univ.)* On height zero lattices and Auslander–Reiten components for blocks of
finite groups 10
- 40 Taiki Shibata (Univ. of Tsukuba) On irreducible representations of quasireductive supergroups 15
- 41 Kenichi Shimizu (Nagoya Univ.) Internal character theory 15
- 42 Maki Nakasuji (Sophia Univ.) Casselman problem and duality 15
Hiroshi Naruse (Univ. of Yamanashi)
- 43 Kazutoshi Kariyama (Onomichi City Univ.)* A remark on Jacquet–Langlands correspondence and invariant s 10

44	Kazuya Kawasetsu (Univ. of Tokyo)	\mathcal{W} -algebras with non-admissible levels and the Deligne exceptional series	15
45	Kazuya Kawasetsu (Univ. of Tokyo)	The generalized principal subspaces and an intermediate vertex subalgebra	15
46	Tomoyuki Arakawa (Kyoto Univ.) Anne Moreau (Univ. Poitiers)	Joseph ideals and lisse minimal W -algebras	15

September 16th (Wed) Conference Room II

9:30–12:00

47	Shigeru Iitaka (Gakushuin Univ.*)	General Mersenne numbers and Wieferich prime with respect to P ...	10
48	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
49	Takao Komatsu (Wuhan Univ.)	Some explicit formulas of Bernoulli and Cauchy polynomials in terms of r -Stirling numbers	15
50	Soichi Ikeda (Nagoya Univ.)* Kaneaki Matsuoka (Nagoya Univ.)	On the lcm-sum function	10
51	Tomohiro Ikkai (Nagoya Univ.)	On counting binomial coefficients not divided by a prime along polynomial curves	10
52	Yuta Suzuki (Nagoya Univ.)	A mean value on the sum of two primes in arithmetic progressions	10
53	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
54	Genki Shibukawa (Osaka Univ.)	New elliptic function identities and an elliptic analogue of reciprocity laws of generalized Dedekind sums	15
55	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
56	Debika Banerjee (Harish-Chandra Res. Inst.) Makoto Minamide (Yamaguchi Univ.)	* On nonsquare-free integers	10
57	Debika Banerjee (Harish-Chandra Res. Inst.) Makoto Minamide (Yamaguchi Univ.)	* On non k -free integers	10
58	Yoshio Tanigawa (Nagoya Univ.)*	Mean square estimate in short intervals	10

14:15–15:45

59	Yuichi Sakai Masanobu Kaneko (Kyushu Univ.) Kiyokazu Nagatomo (Osaka Univ.)	The 3rd order modular linear differential equations	15
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11 Algebra / Geometry

- 60 Seiichi Hanamoto (Kyushu Univ.) Zeros of weakly holomorphic modular forms of level 5 10
- 61 Kazuki Utsumi (Ritsumeikan Univ.) Mordell–Weil generators of a certain elliptic $K3$ surface 10
Masato Kuwata (Chuo Univ.)
- 62 Kazuto Ota (Tohoku Univ.) On the Mazur–Tate refined conjecture of BSD type 10
- 63 Fumio Sairaji (Hiroshima Int. Univ.)^b On the class numbers of the fields of the p^n -torsion points of elliptic
Takuya Yamauchi (Kagoshima Univ.) curves over \mathbb{Q} with conductor p 10
- 64 Yasushi Mizusawa * On the Galois group of a certain real tamely ramified 2-extension 10
(Nagoya Inst. of Tech.)
- 65 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

- 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) Conference Room X

9:50–12:00

- 1 Hirotaka Ebisui (Oval Research Center) Ebisui-Papus-Papus theorem 5
- 2 Hiroaki Izumi The SYNC 10
- 3 Hiromasa Tanabe Geometry of ruled real hypersurfaces in a nonflat complex space form
(Matsue Coll. of Tech.) 15
Maeda Sadahiro (Saga Univ.)
- 4 Makoto Sakaki (Hirosaki Univ.)* Lorentzian stationary surfaces in 4-dimensional space forms of index 2
(II) 10
- 5 Shintaro Akamine (Kyushu Univ.) Causal characters of zero mean curvature surfaces of Riemann-type in
the Lorentz–Minkowski 3-space 15
- 6 Kosuke Naokawa (Kobe Univ.) Isometric deformations of cuspidal edges 15
Masaaki Umehara (Tokyo Tech)
Kotaro Yamada (Tokyo Tech)
- 7 Kosuke Naokawa (Kobe Univ.) The topology of developable closed strips on given knots in spaces of
constant curvature 10
- 8 Naoya Ando (Kumamoto Univ.) C^1 -umbilics with arbitrarily high indices 15
Masaaki Umehara (Tokyo Tech)
Toshifumi Fujiyama (Univ. of Tokyo)

- 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**
- 10 Takahiro Hashinaga (Hiroshima Univ.) Local isometric embeddings of three-dimensional Lie groups 10
Yoshio Agaoka (Hiroshima Univ.)
- 11 Kurando Baba Examples of austere orbits of the isotropy representations for semisimple
(Fukushima Nat. Coll. of Tech.) pseudo-Riemannian symmetric spaces 10
- 12 Shinji Ohno (Tokyo Metro. Univ.) Biharmonic homogeneous hypersurfaces in compact symmetric spaces
Takashi Sakai (Tokyo Metro. Univ.) 15
Hajime Urakawa (Tohoku Univ.*)
- 13 Shinji Ohno (Tokyo Metro. Univ.) Weakly reflective submanifolds in compact symmetric spaces 15
- 14 Makiko Tanaka (Tokyo Univ. of Sci.)* Maximal antipodal subgroups of compact Lie groups 15
Hiroyuki Tasaki (Univ. of Tsukuba)
- 15 Makiko Tanaka (Tokyo Univ. of Sci.)* Isometries of extrinsic symmetric spaces 15
Jost-Hinrich Eschenburg
(Univ. of Augsburg)
Peter Quast (Univ. of Augsburg)
- 16 Kotaro Kawai (Univ. of Tokyo) Cohomogeneity one coassociative submanifolds 15
- 17 Naoyuki Koike (Tokyo Univ. of Sci.) Volume-preserving mean curvature flow for tubes in a symmetric space
..... 15
- 18 Hajime Ono (Saitama Univ.) Almost all Lagrangian torus orbits in $\mathbb{C}P^n$ are not Hamiltonian volume
Hiroshi Iriyeh (Ibaraki Univ.) minimizing 10

September 14th (Mon) Conference Room X

10:30–10:45 Presentation Ceremony for the 2015 MSJ Geometry Prize

10:50–11:50 Award Lecture for the 2015 MSJ Geometry Prize

Hiroshi Iritani (Kyoto Univ.) Mirror symmetry for toric varieties

13:15–14:15 Award Lecture for the 2015 MSJ Geometry Prize

Osamu Saeki (Kyushu Univ.) Stable maps and topology of manifolds

September 15th (Tue) Conference Room X

10:00–12:00

- 19 Takashi Komatsu (Tohoku Univ.) Limiting distributions of discrete-time quantum walks on the square
lattice 15
- 20 Masaru Hasegawa (Univ. de São Paulo) Parabolic, ridge and sub-parabolic curves of implicit surfaces with
singularities 10

- 21 Takeyuki Nagasawa (Saitama Univ.)^{*} The Möbius invariance of decomposed Möbius energies 15
Aya Ishizeki (Saitama Univ.)
- 22 Yasushi Homma (Waseda Univ.) The Rarita–Schwinger operator on Einstein spin manifolds 10
- 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
- 24 Satoshi Nakamura (Tohoku Univ.) K-stability with a divisor and Log-Futaki invariant 10
- 25 Genki Hosono (Univ. of Tokyo)^{*} Approximations and examples of singular Hermitian metrics on vector bundles 15
- 26 Masao Jinzenji (Hokkaido Univ.) Toward direct proof of mirror theorem of projective hypersurfaces 15
- 14:15–16:25**
- 27 Keita Kunikawa (Tohoku Univ.) Splitting theorem for translating solitons in arbitrary codimension ... 15
- 28 Homare Tadano (Osaka Univ.) An upper diameter bound for compact Ricci solitons with applications to the Hitchin–Thorpe inequality 15
- 29 Ryosuke Takahashi (Nagoya Univ.) Asymptotic stability for Kähler–Ricci solitons 15
- 30 Tomoya Nakamura (Waseda Univ.) The deformation of symplectic structures by a moment mapping 15
- 31 Suguru Ishikawa (Kyoto Univ.) Spectral invariants of distance functions 10
- 32 Yoshihiro Sugimoto (Kyoto Univ.)^b Energy-capacity inequality of Hofer’s pseudo metric of Lagrangian submanifolds 10
- 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**
- Masato Mimura (Tohoku Univ.)^{*} Strong algebraization of fixed point properties

September 16th (Wed) Conference Room X

10:00–12:00

- 34 Jin-ichi Itoh (Kumamoto Univ.) Quadratic surfaces as the surfaces generated by circles or rectangular hyperbolas 10
Yutaro Yamashita
(Mimata Junior High School)
- 35 Jin-ichi Itoh (Kumamoto Univ.) Moderate smoothness of most Alexandrov surfaces 10
Joël Rouyer (IMRA, Bucharest)
Costin Vilcu (IMRA, Bucharest)
- 36 Nobuhiro Innami (Niigata Univ.) Voronoi diagrams and cut loci in a surface 10
- 37 Youhei Sakurai (Univ. of Tsukuba) Rigidity of manifolds with boundary under a lower weighted Ricci curvature bound 15
- 38 Yu Kitabeppu (Kyoto Univ.) A finite diameter theorem on RCD spaces 10
- 39 Kota Hattori (Keio Univ.)^{*} The nonuniqueness of the tangent cone at infinity of Ricci-flat manifolds 15
- 40 Asuka Takatsu (Tokyo Metro. Univ.)^b High-dimensional metric-measure limit of Stiefel manifolds 15
Takashi Shioya (Tohoku Univ.)

- 41 Asuka Takatsu (Tokyo Metro. Univ.)^b Riemannian Wasserstein geometry on the space of Gaussian measures
Hiroshi Kawabi (Okayama Univ.) over the Wiener space 15

14:15–16:15

- 42 Nobuhiko Otaba (Keio Univ.)^{*} Metrics of constant scalar curvature on sphere bundles 15
Jimmy Petean (CIMAT)
- 43 Yoshihiro Umehara (Tohoku Univ.) Distribution of the pair of two conformal invariant on a 3-dimensional
closed manifold 15
- 44 Yoshihiko Matsumoto (Tokyo Tech) Harmonic maps between asymptotically hyperbolic manifolds 15
Kazuo Akutagawa (Tokyo Tech)
- 45 Yoshihiko Matsumoto (Tokyo Tech) Q -curvature of Weyl connections and asymptotically hyperbolic Ein-
Kengo Hirachi (Univ. of Tokyo) stein manifolds 15
Christian Lübbe
(Birkbeck, Univ. of London)
- 46 Jun Nonaka The growth rates of ideal Coxeter polyhedra in hyperbolic 3-space ... 15
(Waseda Univ. Senior High School)
- 47 Ryokichi Tanaka (Tohoku Univ.) Vershik's question on Gromov hyperbolic groups 10
- 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

- Tomohiro Fukaya (Tohoku Univ.) Boundary of relatively hyperbolic group and the coarse geometry

Complex Analysis

September 13th (Sun) Conference Room IX

9:30–12:00

- 1 Katsuyuki Nishimoto ^{*} The solutions to the Laplace's non-homogeneous ordinary differential
(Descartes Press Co.) equations by means of the N -fractional calculus 15
- 2 Shigeyoshi Owa (Yamato Univ.)^{*} Notes on some conditions for univalence 10
- 3 Kazuo Kuroki Some starlikeness conditions concerned with the second coefficient ... 15
(Osaka Univ. of Health and Sport Sci.)
- 4 Toshio Hayami (Setsunan Univ.) Notes on the convex combinations of harmonic univalent functions ... 15
- 5 Rintaro Ohno (Tohoku Univ.) Conditions and properties of concave functions 15
- 6 Narufumi Tsuboi (Tokyo Tech)^{*} The defects of power series in the unit disk with Hadamard gaps 15

15 Complex Analysis

- 7 Takao Ohno (Oita Univ.)* Trudinger's inequality for Riesz potentials of functions in Musielak–Tetsu Shimomura (Hiroshima Univ.) Orlicz spaces on metric measure spaces 15
- 8 Masaharu Nishio (Osaka City Univ.)^b Reproducing kernel for iterated parabolic operators on the upper half space 15
- 9 Kiyoki Tanaka (Osaka City Univ.) Polyharmonic Bergman space and its reproducing kernel 10
- 14:15–16:15**
- 10 Masashi Kisaka (Kyoto Univ.) A mechanism of appearing small copies of the Mandelbrot set 15
Tomoki Kawahira (Tokyo Tech)
- 11 Junghun Lee (Nagoya Univ.) J -stability of immediately expanding rational maps in non-Archimedean dynamics 10
- 12 Yūsuke Okuyama (Kyoto Inst. Tech.) Equidistribution of rational functions having a superattracting periodic point 15
- 13 Hiroki Sumi (Osaka Univ.) Complex analogues of the Takagi function in random complex dynamics 15
- 14 Johannes Jaerisch (Shimane Univ.) Hölder regularity of the complex analogues of the Takagi function 15
Hiroki Sumi (Osaka Univ.)
- 15 Shizuo Nakane Stretching rays for complex cubic polynomials 15
(Tokyo Polytechnic Univ.)
- 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

- Noriaki Suzuki (Meijo Univ.)* Polynomial approximation and potential theory

September 14th (Mon) Conference Room IX

9:30–12:00

- 17 Yohei Komori (Waseda Univ.) On the growth rate of ideal Coxeter groups in hyperbolic 3-space 15
Tomoshige Yukita (Waseda Univ.)
- 18 Katsuhiko Matsuzaki (Waseda Univ.) Barycentric extension of circle diffeomorphisms 15
- 19 Hiroshige Shiga (Tokyo Tech) On the number of Teichmüller curves 15
- 20 Masanori Amano (Tokyo Tech) On families of asymptotic Jenkins–Strebel rays 15
- 21 Hideki Miyachi (Osaka Univ.) Extremal length functions are log-plurisubharmonic 15
- 22 Toshihiro Nakanishi (Shimane Univ.)* Parametrization of Teichmüller spaces by trace functions and mapping class group 15
Gou Nakamura (Aichi Inst. of Tech.)
- 23 Hidetaka Hamada The Schwarz lemma and the Schwarz–Pick lemma in several complex variables 10
(Kyushu Sangyo Univ.)
Gabriela Kohr (Babeş-Bolyai Univ.)
- 24 Hidetaka Hamada The Landau theorem in several complex variables 10
(Kyushu Sangyo Univ.)
Gabriela Kohr (Babeş-Bolyai Univ.)

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

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

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

September 15th (Tue) Conference Room IX

9:15–12:00

- 26 Shinichi Tajima (Univ. of Tsukuba)* A method for computing Bruce–Roberts' Milnor numbers via local cohomology 15
Katsusuke Nabeshima (Univ. of Tokushima)
- 27 Shinichi Tajima (Univ. of Tsukuba)* Algorithms for computing holonomic D-modules associated with a hypersurface 10
Katsusuke Nabeshima (Univ. of Tokushima)
- 28 Shinichi Tajima (Univ. of Tsukuba)* Algorithms for computing holonomic D-modules associated with a hypersurface II 10
Katsusuke Nabeshima (Univ. of Tokushima)
- 29 Yūsuke Okuyama (Kyoto Inst. Tech.) Lehto–Virtanen, Marty, and Zalcman-type theorems and their applications to Kobayashi hyperbolic geometry 15
- 30 Tatsuhiro Honda (Hiroshima Inst. of Tech.) Growth, distortion and coefficient bounds on complex Banach spaces 15
Ian Graham (Univ. of Toronto)
Hidetaka Hamada (Kyushu Sangyo Univ.)
Gabriela Kohr (Babeş-Bolyai Univ.)
Kwang Ho Shon (Pusan Nat. Univ.)
- 31 Takayuki Koike (Univ. of Tokyo)* Toward a higher codimensional Ueda theory 10
- 32 Sachiko Hamano (Fukushima Univ.) Variational formula for L_s -canonical semi-exact differential and application 15
- 33 Satoru Shimizu (Tohoku Univ.)* Structure and equivalence of a class of tube domains with solvable groups of automorphisms 15
- 34 Takeo Ohsawa (Nagoya Univ.)^b Application and simplified proof of a sharp L^2 extension theorem 15
- 35 Junjiro Noguchi (Univ. of Tokyo)*^b On convergence radius of the inverse of Abelian integrals and Levi's problem for ramified domains 15
-

Functional Equations

September 13th (Sun) Conference Room VI

9:00–12:00

- 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)
- 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)
- 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
- 4 Sunao Ōuchi (Sophia Univ.)* A functional equation with solutions of irregular singular type. 10
- 5 Shingo Takeuchi Complete (p, q) -elliptic integral and its application to Bhatia–Li’s mean
(Shibaura Inst. of Tech.) 12
- 6 Nobuki Takayama (Kobe Univ.) Evaluation of A -hypergeometric polynomials by difference equations .. 12
Katsuyoshi Ohara (Kanazawa Univ.)
- 7 Yoshiaki Goto (Kobe Univ.) Contiguity relations and intersection matrices for hypergeometric functions of type (k, n) 12
- 8 Kunihiko Taniguchi* Permanence for a nonautonomous Lotka–Volterra competition system
(Kobe City Coll. of Tech.) with finite delays 10
- 9 Masakazu Onitsuka Uniform asymptotic stability and global exponential stability for two-dimensional half-linear differential systems 10
(Okayama Univ. of Sci.)
- 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.)
- 11 Kazuki Himoto (Osaka Pref. Univ.) The limits of the solutions of a linear integral delay system 12
Hideaki Matsunaga (Osaka Pref. Univ.)
- 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.)
- 13 Hajime Koba (Waseda Univ.)* Generalized quasi-reversibility method for a backward heat equation
Hideki Matsuoka (Univ. of Tokyo) with a fractional Laplacian 7

14:15–16:15

- 14 Toshio Horiuchi (Ibaraki Univ.) Radial symmetry and its breaking in the Caffarelli–Kohn–Nirenberg type inequalities for $p = 1$ 10
Naoki Chiba
- 15 Motohiro Sobajima Remarks on higher-order weighted Rellich inequalities in L^p 12
(Tokyo Univ. of Sci.)

- 16 Masaru Ikehata (Hiroshima Univ.)* The enclosure method for the evaluation of the spot welding area using
Hironichi Itou (Tokyo Univ. of Sci.) a solution of the Laplace equation 12
Akira Sasamoto
(Nat. Inst. of Adv. Industrial Sci. and Tech.)
- 17 Shigeru Sakaguchi (Tohoku Univ.)* Neutrally coated inclusions in three dimensions 12
Hyeonbae Kang (Inha Univ.)
Hyundae Lee (Inha Univ.)
- 18 Ryuji Kajikiya (Saga Univ.) A priori estimate for the first eigenvalue of the p -Laplacian 12
- 19 Xiaojing Liu (Ibaraki Univ.) Remarks on the strong maximum principle involving p -Laplacian 10
Toshio Horiuchi (Ibaraki Univ.)
- 20 Kunihiro 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

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

September 14th (Mon) Conference Room VI

9:00–12:00

- 21 Satoshi Tanaka (Okayama Univ. of Sci.) Uniqueness of sign-changing radial solutions for the scalar field equation
in some ball and annulus 12
- 22 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.)
- 23 Tetu Makino (Yamaguchi Univ.)* On spherically symmetric solutions to the Einstein–Euler equations
(Supplement) 12
- 24 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
- 25 Keisuke Takasao (Univ. of Tokyo)* Existence of weak solution for volume preserving mean curvature flow
via phase field method 10
- 26 Keisuke Takasao (Univ. of Tokyo)* Gradient estimates for mean curvature flow with transport term and
Masashi Mizuno (Nihon Univ.) Neumann boundary condition 10
- 27 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)
- 28 Masahiko Shimojyou Asymptotic behavior on a free boundary problem for the curvature flow
(Okayama Univ. of Sci.) with driving force 10
Hiroshi Matano (Univ. of Tokyo)
Jong-Shenq Guo (Tamkang Univ.)
Chang Hong Wu (Nat. Univ. of Tainan)

29	<u>Takashi Kagaya</u> (Tokyo Tech) Masahiko Shimojyou (Okayama Univ. of Sci.)	Exponential stability of a traveling wave for an area preserving curvature motion	10
30	Motohiko Sato (Wakoh Univ.)	Dynamic boundary conditions for the singular degenerate parabolic equations	10
31	<u>Jin Takahashi</u> (Tokyo Tech) Toru Kan (Tokyo Tech)	Solutions with time-dependent singularities in semilinear heat equations	10
32	<u>Hirotsada Honda</u> (Keio Univ.) Atsushi Tani (Keio Univ.*)	On the vanishing diffusion limit of Sakaguchi–Kuramoto equation	12
33	<u>Norisuke Ioku</u> (Ehime Univ.) Kazuhiro Ishige (Tohoku Univ.) Eiji Yanagida (Tokyo Tech)	Sharp decay estimates in Lebesgue spaces for nonnegative Schrödinger heat semigroups	12
34	<u>Masahiro Suzuki</u> (Tokyo Tech) Toru Kan (Tokyo Tech)	Time-periodic solutions to the drift-diffusion model for semiconductors	12

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

Fumihiko Hirosawa (Yamaguchi Univ.)	Linear wave equations with time dependent coefficients and its applications
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September 15th (Tue) Conference Room VI

9:00–12:00

35	<u>Kentarou Fujie</u> (Tokyo Univ. of Sci.) Takasi Senba (Kyushu Inst. of Tech.)	Global existence and boundedness of radial solutions to a parabolic-parabolic Keller–Segel system with general sensitivity	12
36	Noriko Mizoguchi (Tokyo Gakugei Univ.)	Nonexistence of type I blowup solutions to parabolic-parabolic Keller–Segel system	12
37	Yūki Naito (Ehime Univ.)	Global attractivity in the weighted norm for a supercritical semilinear heat equation	12
38	<u>Kimie Nakashima</u> (Tokyo Univ. of Marine Sci. and Tech.) Wei-Ming Ni (Univ. of Minnesota)	Uniqueness and stability of multi-layered steady-state in a spatially inhomogeneous reaction diffusion equation	12
39	<u>Hiroshi Matsuzawa</u> (Numazu Nat. Coll. of Tech.) Yihong Du (Univ. of New England) Maolin Zhou (Univ. of New England)	Spreading speed and sharp asymptotic profiles of solutions in free boundary problems for nonlinear diffusion equations in high dimensions	12
40	<u>Hiroko Yamamoto</u> (Meiji Univ.) Izumi Takagi (Tohoku Univ.)	Concentration points in stationary solutions of a singularly perturbed reaction-diffusion equation with variable coefficients	10
41	Takashi Suzuki (Osaka Univ.)	2D Smoluchowski–Poisson equation: quantization of blowup in infinite time	8
42	Masaru Ikehata (Hiroshima Univ.)*	The enclosure method for inverse obstacle scattering using a solution of the Maxwell system in the time domain	12
43	Eiji Onodera (Kochi Univ.)	Uniqueness of a fourth-order dispersive flow for closed curves on compact Riemann surfaces with constant sectional curvature	10

- 44 Tokio Matsuyama (Chuo Univ.) * Gevrey class solutions of the Kirchhoff equation 12
 Michael Ruzhansky
 (Imperial Coll. London)
- 45 Yusuke Sugiyama (Tokyo Univ. of Sci.) Degeneracy in finite time of some quasilinear wave equation 12
- 46 Kyouhei Wakasa (Hokkaido Univ.) * The lifespan of solutions to semilinear damped wave equations in one
 space dimension 10
- 47 Kazuyoshi Yokoyama * Life span of small solutions to a system of wave equations 10
 (Hokkaido Univ. of Sci.)
 Kunio Hidano (Mie Univ.)
- 48 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

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

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

September 16th (Wed) Conference Room VI

9:00–12:00

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

- 59 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.)
- 60 Shintaro Kondo (Meiji Univ.) Almost-periodic solution of Hasegawa–Wakatani equations with vanishing resistivity 12
- 61 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)
- 62 Takahiro Okabe (Hirosaki Univ.)* Navier–Stokes flow in the weighted Hardy space with applications to time decay problem 12
Yohei Tsutsui (Shinshu Univ.)
- 63 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.)
- 64 Takahito Kashiwabara (Tokyo Tech) Global well-posedness of the primitive equations in L^p -spaces 10
Matthias Hieber (TU Darmstadt)
- 65 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.)
- 66 Itsuko Hashimoto Decay rate of Radially symmetric solutions for Burgers equation 10
(Toyama Nat. Coll. of Tech.)
- 67 Yoshiyuki Kagei (Kyushu Univ.) Traveling waves bifurcating from Poiseuille flow in viscous compressible fluid 12
Takaaki Nishida (Kyoto Univ.)
- 68 Shouta Enomoto (Kyushu Univ.) Stability of spatially periodic stationary solutions to the compressible Navier–Stokes equation in periodic layer 10
Yoshiyuki Kagei (Kyushu Univ.)
- 69 Jan Prüß (Univ. Halle) Local existence of compressible two-phase flows with phase transitions 12
Senjo Shimizu (Kyoto Univ.)
- 70 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.)
- 71 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

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

Real Analysis

September 15th (Tue) Conference Room IV

9:30–12:00

- 1 Yoshifumi Ito (Univ. of Tokushima*) On the relativity of motion 15

2	Yoshifumi Ito (Univ. of Tokushima*)	Fourier transformation of L^2_{loc} -functions. Revisited	15
3	Kiyohisa Tokunaga (Yamaguchi Univ.)	A triangular double integral by the arithmetic sequence	15
4	Shigehiro Sakata (Waseda Univ.)	Power concavity of Poisson's integral for the upper half space	15
5	Yukio Kasahara (Hokkaido Univ.) Akihiko Inoue (Hiroshima Univ.) Mohsen Pourahmadi (Texas A&M Univ.)	Rigidity for matrix-valued Hardy functions	10
6	Shin-ya Matsushita (Akita Pref. Univ.) Li Xu (Akita Pref. Univ.)	On the best approximation problem	15
7	Toshikazu Watanabe (Nihon Univ.) Masashi Toyoda (Tamagawa Univ.)	Some applied results of a fixed point theorem in partially ordered sets to boundary value problems for a fractional order differential equations	15
8	Takeshi Iida (Fukushima Nat. Coll. of Tech.)	The Adams inequality on weighted Morrey spaces of higher order commutators	15
9	Hiroki Saito (Kogakuin Univ.) Hitoshi Tanaka (Univ. of Tokyo)	Some remarks on the Kakeya maximal operator and A^*_∞ weights	15
14:15–16:25			
10	Denny Iveral Hakim (Tokyo Metro. Univ.) Yoshihiro Sawano (Tokyo Metro. Univ.)	Interpolation of closed subspaces of Morrey spaces	15
11	Denny Iveral Hakim (Tokyo Metro. Univ.) Eiichi Nakai (Ibaraki Univ.) Yoshihiro Sawano (Tokyo Metro. Univ.)	Linear operators on generalized Morrey spaces	15
12	Saburou Saitoh (Gunma Univ.)* ^b Yoshihiro Sawano (Tokyo Metro. Univ.)	Generalized delta functions as generalized reproducing kernels	15
13	Naohito Tomita (Osaka Univ.) Akihiko Miyachi (Tokyo Woman's Christian Univ.)	Flag paraproducts on Hardy spaces	15
14	Sachiko Atsushiba (Univ. of Yamanashi)	Fixed points, attractive points and convergence theorems for nonlinear mappings	15
15	Jun Kawabe (Shinshu Univ.)	Nonadditive portmanteau theorem	15
16	Ryotaro Tanaka (Niigata Univ.)	A new extremal structure in Banach spaces and its application	15
17	Hiroyasu Mizuguchi (Niigata Univ.) Kichi-Suke Saito (Niigata Univ.)	On the upper bound of geometric constants in absolute normalized normed spaces	15

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

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

September 16th (Wed) Conference Room IV

9:15–12:00

- 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
- 19 Kentarou Fujie (Tokyo Univ. of Sci.) Global solvability and asymptotic behavior of solutions to a chemotaxis model for tumor invasion with nonlinear diffusion 15
Sachiko Ishida (Tokyo Univ. of Sci.)
Akio Ito
Tomomi Yokota (Tokyo Univ. of Sci.)
- 20 Alexander Leonidovich Skubachevskii (Peoples' Friendship Univ. of Russia) Solvability of Vlasov–Poisson systems in a half-space 15
Yutaka Tsuzuki (Tokyo Univ. of Sci.)
- 21 Shun Uchida (Waseda Univ.) Periodic problem for double-diffusive convection system in \mathbb{R}^N with $N = 3, 4$ 15
Mitsuharu Ôtani (Waseda Univ.)
- 22 Takeshi Fukao (Kyoto Univ. of Edu.) Convergence of Cahn–Hilliard systems to the Stefan problem with dynamic boundary conditions 15
- 23 Motohiro Sobajima (Tokyo Univ. of Sci.) On the threshold for Kato's selfadjointness problem and its L^p -generalization 15
- 24 Kentarou Yoshii (Tokyo Univ. of Sci.) Nonlocal solutions of hyperbolic type equations 15
Luisa Malaguti (Univ. of Modena and Reggio Emilia)
- 25 Hiroshi Watanabe (Salesian Polytech.) Asymptotic behavior of solutions to non-isothermal mathematical models of grain boundary motions 15
Ken Shirakawa (Chiba Univ.)
- 26 Ken Shirakawa (Chiba Univ.) Kobayashi–Warren–Carter type models with anisotropic effects 15
Hiroshi Watanabe (Salesian Polytech.)
Salvador Moll (Univ. of Valencia)
- 27 Noriaki Yamazaki (Kanagawa Univ.) Remarks on numerical experiments of Allen–Cahn equations with constraint via Yosida approximation 15
Tomoyuki Suzuki (Kanagawa Univ.)
Keisuke Takasao (Univ. of Tokyo)

14:15–15:15

- 28 Risei Kano (Kochi Univ.) The existence of solutions for the weak-variational inequalities by the perfect plasticity model 15
Takeshi Fukao (Kyoto Univ. of Edu.)
- 29 Akio Ito Mathematical model for brewing Japanese Sake with stirring process and its approximated problems 15
Nobuyuki Kenmochi
Yusuke Murase (Meijo Univ.)
- 30 Kota Kumazaki (Tomakomai Nat. Coll. of Tech.) Solvability of a mathematical model for concrete carbonation process consisting of moisture and carbon dioxide transport 15
- 31 Naoki Sato (Nagaoka Nat. Coll. of Tech.) Existence theorems of periodic solutions for one dimensional free boundary problems for adsorption phenomena 15
Toyohiko Aiki (Japan Women's Univ.)

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

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

Functional Analysis

September 13th (Sun) Conference Room VIII

14:30–16:30

- 1 Toshinao Kagawa (Tokyo City Univ.) The Hermite function expansions of the Heaviside function 15
- 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.)
- 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.)
- 4 Koichi Taniguchi (Chuo Univ.)* L^p -boundedness of functions of Schrödinger operators 15
Tsukasa Iwabuchi (Osaka City Univ.)
Tokio Matsuyama (Chuo Univ.)
- 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.)
- 6 Hiroaki Niikuni Spectral structure of periodic Schrödinger operators with two potentials on the degenerate zigzag nanotubes 15
(Maebashi Inst. of Tech.)
- 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

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

September 14th (Mon) Conference Room VIII

9:30–12:00

- 8 Masatoshi Kitagawa (Univ. of Tokyo) Classification of multiplicity-free holomorphic discrete series representations 15
- 9 Ryosuke Nakahama (Univ. of Tokyo) Laguerre semigroups for functions on symmetric cones and the Bessel functions 15
- 10 Toshihisa Kubo (Univ. of Tokyo) On the reducible points for the generalized Verma modules 15
Haian He (BICMR)
Roger Zierau (Oklahoma State Univ.)

- 11 Atsumu Sasaki (Tokai Univ.) Remarks on visible actions on spherical nilpotent orbits 15
- 12 Hideyuki Ishi (Nagoya Univ.)* The Laplace transforms and the Legendre transforms of functions on a convex cone 15
- 13 Takashi Yamasaki (Kyushu Univ.)* Realizing homogeneous convex cones through oriented graphs 15
Takaaki Nomura (Kyushu Univ.)
- 14 Tatsuya Tsurii (Osaka Pref. Univ.) A hypergroup arising from characters of a compact hypergroup and its subhypergroup 15
Satoe Yamanaka (Nara Women's Univ.)
Satoshi Kawakami (Nara Univ. of Edu.)
- 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

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

September 15th (Tue) Conference Room VIII

9:00–12:00

- 16 Hiroshi Isa (Maebashi Inst. of Tech.) Divergences on the paths $A \natural_x B$ and $A \sharp_{x,r} B$ 15
Masatoshi Ito (Maebashi Inst. of Tech.)
Hiroaki Tohyama (Maebashi Inst. of Tech.)
Eizaburo Kamei
Masayuki Watanabe (Maebashi Inst. of Tech.)
- 17 Yoichi Udagawa (Tokyo Univ. of Sci.) Some properties of weighted operator means due to Pálfi and Petz 10
Takeaki Yamazaki (Toyo Univ.)
Masahiro Yanagida (Tokyo Univ. of Sci.)
- 18 Yuki Seo (Osaka Kyoiku Univ.) On the generalized Tsallis relative operator entropy 10
- 19 Masatoshi Fujii (Osaka Kyoiku Univ.) Inequalities associated with Heron mean for positive operators 15
Shigeru Furuichi (Nihon Univ.)
Ritsuo Nakamoto
- 20 Junichi Fujii (Osaka Kyoiku Univ.) From Fibonacci matrix to a matrix representation for anyons 15
- 21 Hiroyuki Osaka (Ritsumeikan Univ.) Symmetric operator monotone functions and operator means 15
Shuhei Wada (Kisarazu Nat. Coll. of Tech.)
Yukihiro Tsurumi (Ritsumeikan Univ.)
- 22 Yasuo Watatani (Kyushu Univ.)* Relative position of three subspaces in a Hilbert space containig a pentagon as a direct summand 15
Masatoshi Enomoto
- 23 Kengo Matsumoto (Joetsu Univ. of Edu.)* Strongly continuous orbit equivalence of topological Markov shifts and Cuntz–Krieger algebras 15
- 24 Narutaka Ozawa (Kyoto Univ.) The Furstenberg boundary and C^* -simplicity 15

- 25 Kei Hasegawa (Kyushu Univ.) K -nuclearity of amalgamated free product C^* -algebras 15
- 26 Rui Okayasu (Osaka Kyoiku Univ.) Haagerup approximation property via bimodules 15
 Narutaka Ozawa (Kyoto Univ.)
 Reiji Tomatsu (Hokkaido Univ.)

14:15–16:45

- 27 Yusuke Isono (Kyoto Univ.) Unique prime factorization and bicentralizer problem for a class of type III factors 15
- 28 Reiji Tomatsu (Hokkaido Univ.) A characterization of fullness of continuous cores of free product factors 15
 Yoshimichi Ueda (Kyushu Univ.)
- 29 Toshihiko Masuda (Kyushu Univ.) Classification of outer actions of discrete amenable groups (G -kernels) on injective factors 15
- 30 Satoshi Goto (Sophia Univ.) Remarks on the flat part commuting squares 10
- 31 Kenjiro Yanagi (Yamaguchi Univ.) On some generalized inequalities related to fidelity and trace distance 15
- 32 Sin-Ei Takahasi (Toho Univ.) A characterization of multipliers of a Lau algebra constructed by semisimple commutative Banach algebras 15
- 33 Toshikazu Abe (Niigata Univ.) Algebraic structures on metric spaces 15
- 34 Keiji Izuchi (Niigata Univ./Niigata Univ.) * Path connected components in weighted composition operators on the disk algebra with the essential operator norm. 15
 Yuko Izuchi
- 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

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

Statistics and Probability

September 13th (Sun) Conference Room VII

9:30–12:00

- 1 Naoki Kubota (Nihon Univ.) Lower Gaussian concentration for the crossing random walk in random potentials 15
- 2 Masato Takei (Yokohama Nat. Univ.) On linearly edge-reinforced random walks on the half-line 10
- 3 Yoshihiro Abe (Kyoto Univ.) Maximum and minimum of local times for two-dimensional random walk 10

- 4 Katusi Fukuyama (Kobe Univ.) * Metric discrepancy results for complex geometric progressions 5
Noriyuki Kuri
(Daido Life Insurance Co.)
- 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.)
- 6 Yuji Hamana (Kumamoto Univ.) The hitting time and the Wiener sausage of Brownian motion with
Hiroyuki Matsumoto constant drift 15
(Aoyama Gakuin Univ.)
- 7 Yuki Suzuki (Keio Univ.) * A diffusion process with a random potential consisting of two contracted
self-similar processes 15
- 8 Takashi Imamura (Chiba Univ.) Determinantal structures in the O’Connell–Yor directed random poly-
Tomohiro Sasamoto (Tokyo Tech) mer model 15
- 9 Hirofumi Osada (Kyushu Univ.) Cores of Dirichlet forms related to infinite particle systems 10
Hideki Tanemura (Chiba Univ.)
- 10 Yu Ito (Osaka Univ.) Differential equations driven by rough paths: an approach via fractional
calculus 15
- 14:15–14:45**
- 11 Hiroaki Hata (Shizuoka Univ.) Risk-sensitive asset management with general factor models 15
- 12 Kazutoshi Yamazaki (Kansai Univ.) Optimal double stopping of a Brownian bridge 15
- 15:00–16:00 Talk Invited by Statistics and Probability Section**
Yuichi Shiozawa (Okayama Univ.) Global properties of symmetric Markov processes and Dirichlet forms
- 16:15–17:15 Talk Invited by Statistics and Probability Section**
Fumio Hiroshima (Kyushu Univ.) Application of Feynman–Kac type formula to quantum field theory

September 14th (Mon) Conference Room VII

9:30–11:30

- 13 Hiroki Sako (Niigata Univ.) The arcsine law, quantum classical correspondence, and orthogonal
Hayato Saigo polynomials 15
(Nagahama Inst. of Bio-Sci. and Tech.)
- 14 Kohei Tanaka (Shinshu Univ.) Quantum probability theory from the categorical viewpoint 15
Hitoshi Motoyama
(Aoyama Gakuin Univ.)
- 15 Ayako Hasegawa (Ochanomizu Univ.) On limit spectral measures of Marchenko–Pastur limit of random ma-
Noriyoshi Sakuma (Aichi Univ. of Edu.) trices with dependent entries and an application of fluctuations 15
Hiroaki Yoshida (Ochanomizu Univ.)
- 16 Tomonori Nakatsu (Ritsumeikan Univ.) Integration by parts formulas concerning maxima of some one-dimen-
sional SDEs with applications 15

17	<u>Dai Taguchi</u> (Ritsumeikan Univ.) Hoang-Long Ngo (Hanoi Nat. Univ. of Edu.)	Approximation for non-smooth functionals of SDEs with irregular drift	15
18	<u>Takafumi Amaba</u> (Ritsumeikan Univ.) Gô Yûki (Ritsumeikan Univ.) Dai Taguchi (Ritsumeikan Univ.)	Convergence implications via dual flow method	15
19	<u>Kazuhiro Yoshikawa</u> (Ritsumeikan Univ.) Takafumi Amaba (Ritsumeikan Univ.)	SLK martingales and representations of the Virasoro algebra	10
20	Shigeyoshi Ogawa (Ritsumeikan Univ.) <u>Hideaki Uemura</u> (Aichi Univ. of Edu.)	On the derivation of noncausal function from its Haar-SFCs	10

11:30–12:00 Research Section Assembly

September 15th (Tue) Conference Room VII

9:30–12:00

21	<u>Tamio Koyama</u> (Univ. of Tokyo)	Differential systems for the normalizing constant of Fisher distribution on the special orthogonal group	15
22	<u>Takahiro Suto</u> (Tokyo Univ. of Sci.) Kiyotaka Iki (Tokyo Univ. of Sci.) Sadao Tomizawa (Tokyo Univ. of Sci.)	An asymmetry model with m -additional parameters for square contin- gency tables with ordered categories	15
23	<u>Akira Shibuya</u> (Tokyo Univ. of Sci.) Kiyotaka Iki (Tokyo Univ. of Sci.) Sadao Tomizawa (Tokyo Univ. of Sci.)	Generalized diagonal exponent symmetry model and its orthogonal decomposition in square contingency tables with ordered categories ...	15
24	<u>Ryotaro Maeda</u> (Tokyo Univ. of Sci.) Kouji Tahata (Tokyo Univ. of Sci.) Sadao Tomizawa (Tokyo Univ. of Sci.)	Extended double linear diagonals-parameter symmetry model for con- tingency table	10
25	<u>Ayaka Yagi</u> (Tokyo Univ. of Sci.) Takashi Seo (Tokyo Univ. of Sci.)	On the likelihood ratio test for mean vectors with monotone missing data in two-sample problem	15
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
27	<u>Kazuyoshi Yata</u> (Univ. of Tsukuba) Makoto Aoshima (Univ. of Tsukuba)	Two-sample tests for high-dimensional data and their optimality	15
28	Yoshihiro Suto (Waseda Univ.)	Shrinkage estimation for the autocovariance matrix of vector-valued Gaussian stationary processes	10
29	<u>Hideaki Nagahata</u> (Waseda Univ.) Yan Liu (Waseda Univ.) Hirotaka Uchiyama (Waseda Univ.) Masanobu Taniguchi (Waseda Univ.)	Discriminant and cluster analysis of high-dimensional time series data	15
30	<u>Yoshihiko Maesono</u> (Kyushu Univ.) Taku Moriyama (Kyushu Univ.)	On asymptotic representation of kernel type estimator of density ratio	10

14:15–15:15

- 31 Hiroshi Takahashi (Nihon Univ.) A note on the Bahadur representation of sample quantiles for \mathcal{M} -dependent random variables 10
 Ken-ichi Yoshihara
 (Yokohama Nat. Univ.*)
- 32 Teppei Ogihara (Inst. of Stat. Math.) Maximum-likelihood-type estimation for high-frequency financial data 15
- 33 Koji Tsukuda (Kurume Univ.) Estimating the large mutation parameter of the Ewens sampling formula 15
- 34 Shintaro Hashimoto (Univ. of Tsukuba) Reference prior via α -divergence in a non-regular multi-parametric case 15
 Ken-ichi Koike (Univ. of Tsukuba)

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

- Toshihiro Abe (Nanzan Univ.) On some cylindrical distributions and their related topics

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

- Kengo Kamatani (Osaka Univ.) Asymptotic theory of Markov chain Monte Carlo method in high-dimension

September 16th (Wed) Conference Room VII

9:30–12:00

- 35 Yutaka Saito (Niigata Univ.) A generalization of some minimax inequality theorem into set-valued maps via scalarizaion 10
 Tamaki Tanaka (Niigata Univ.)
 Syuuji Yamada (Niigata Univ.)
- 36 Satoshi Suzuki (Shimane Univ.) Characterizations of the solution set for quasiconvex programming ... 15
 Daishi Kuroiwa (Shimane Univ.)
- 37 Xiao-Nan Lu (Nagoya Univ.) Applications of difference families to graceful labeling of digraphs 15
 Masakazu Jimbo (Chubu Univ.)
- 38 Shohei Satake (Nagoya Univ.) Some results on the asymmetry of digraphs and probabilistic methods 15
 Masanori Sawa (Kobe Univ.)
 Masakazu Jimbo (Chubu Univ.)
- 39 Masanori Sawa (Kobe Univ.) Developing design theory for measure spaces III —Sobolev’s theorem and its generalization 15
- 40 Masahide Kuwada Existence conditions for balanced fractional 2^m factorial designs of resolution $R^*(\{1\}|\Omega_4)$ with $N < \nu_4(m)$ 15
 (Int. Inst. for Nat. Sci.)
 Yoshifumi Hyodo
 (Okayama Univ. of Sci./Int. Inst. for Nat. Sci.)
 Hiromu Yumiba (Int. Inst. for Nat. Sci.)
- 41 Kazuki Matsubara (ChuoGakuin Univ.) Pairwise additive 1-rotational BIB designs 15
 Sanpei Kageyama (Tokyo Univ. of Sci.)
- 42 Satoshi Aoki (Kobe Univ.) Markov chain Monte Carlo methods for the Box–Behnken designs and centrally symmetric configurations 15
 Takayuki Hibi (Osaka Univ.)
 Hidefumi Ohsugi
 (Kwansei Gakuin Univ.)

43	Masatake Hirao (Aichi Pref. Univ.)	QMC design sequences generated by determinantal point processes on the sphere	15
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Applied Mathematics

September 13th (Sun) Conference Room III

9:30–12:00

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

14:15–16:20

11	<u>Shinya Fujita</u> (Yokohama City Univ.) Michitaka Furuya (Tokyo Univ. of Sci.) Reza Naserasr (Univ. Paris-Sud 11) Kenta Ozeki (Nat. Inst. of Information/JST ERATO)	A new approach towards a conjecture on intersecting three longest paths	10
12	<u>Akira Saito</u> (Nihon Univ.) Nawarat Ananchuen (Silpakorn Univ.) Watcharaphong Ananchuen (Sukhothai Thammathirat Open Univ.)	Extendability of the complementary prism of a bipartite graph	15

- 13 Akito Suzuki (Shinshu Univ.) The spectral mapping theorem and the generator of a quantum walk
Etsuo Segawa (Tohoku Univ.) 15
- 14 Etsuo Segawa (Tohoku Univ.) Birth eigenspace of the Grover walks on infinite trees 15
Yusuke Higuchi (Showa Univ.)
- 15 Kaname Matsue (Inst. of Stat. Math.) Simplicial quantum walks: construction and problems 15
Osamu Ogurisu (Kanazawa Univ.)
Etsuo Segawa (Tohoku Univ.)
- 16 Shin Harase (Ritsumeikan Univ.) On the SFMT pseudorandom number generators 15
Takamitsu Kimoto
(Recruit Holdings Co.)
- 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

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

September 14th (Mon) Conference Room III

9:15–11:45

- 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
- 19 Shunzi Horiguchi Extensions of three types of Halley method 15
(Niigata Sangyo Univ.)
- 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)
- 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)
- 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.)
- 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.)
- 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.)

- 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)
- 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

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

September 15th (Tue) Conference Room III

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

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

14:15–17:25

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

- 36 Aoi Honda (Kyushu Inst. of Tech.) Inclusion-exclusion integral —Integral with respect to nonadditive mono-
Yoshiaki Okazaki tone measure— 15
(Fuzzy Logic Systems Inst.)
- 37 Fuminori Sakaguchi (Univ. of Fukui) Two possible relationships between rapidly converging generalized con-
tinued fractions and an integer-type algorithm for ODEs using quasi-
orthogonalizations 15

September 16th (Wed) Conference Room III

9:30–12:00

- 38 Masahiro Watari Branching pattern models of two subtropical tree species in Okinawa
(Okinawa Nat. Coll. of Tech.) Island I 15
- 39 Masahiro Watari Branching pattern models of two subtropical tree species in Okinawa
(Okinawa Nat. Coll. of Tech.) Island II 10
- 40 Ryusuke Kon (Univ. of Miyazaki) Bifurcation of cycles in nonlinear semelparous Leslie matrix models .. 15
- 41 Takeshi Gotoda (Kyoto Univ.) Existence of enstrophy dissipating solution for 3-body problem in α
point vortex system 15
- 42 Yoshitaro Tanaka (Meiji Univ.) Singular limit problem in a reaction diffusion model for phyllotactic
Hirokazu Ninomiya (Meiji Univ.) formation 15
Masayasu Mimura (Meiji Univ.)
- 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)
- 44 Koichi Anada On Type II Blow-up Solutions to a quasi-linear parabolic partial differ-
(Waseda Univ. Senior High School/Shibaura Inst. of Tech.) ential equations 15
Tetsuya Ishiwata
(Shibaura Inst. of Tech.)
- 45 Hisasi Tani (Meiji Univ.) Inertial effect on weakly nonlinear analysis for two-phase Hele-Shaw
problem 15
- 46 Shigetoshi Yazaki (Meiji Univ.) Structure-preserving numerical scheme for Hele-Shaw problems by the
Koya Sakakibara (Univ. of Tokyo) method of fundamental solutions 15

14:15–16:45

- 47 Issei Oikawa (Waseda Univ.) On finite element solutions when triangles are almost flat 15
- 48 Takiko Sasaki (Univ. of Tokyo) Error analysis of splitting methods for abstract Cauchy problems 15
Masahito Ohta (Tokyo Univ. of Sci.)
- 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.)

50	<u>Yoshitaka Watanabe</u> (Kyushu Univ./JST CREST)	Some consideration of numerical verifications for the Kolmogorov problem	15
51	<u>Takehiko Kinoshita</u> (Kyoto Univ./Kyoto Univ.) Yoshitaka Watanabe (Kyushu Univ./JST CREST) Mitsuhiro T. Nakao (Sasebo Nat. Coll. of Tech.)	Some remarks for the solutions of Poisson equations with H^3 regularities on the polygonal domain	10
52	Tomoya Kemmochi (Univ. of Tokyo)	On the discretization of an adhesive obstacle problem with a higher order term	15
53	<u>Yusuke Imoto</u> (Kyushu Univ.) Daisuke Tagami (Kyushu Univ.)	Error estimates of a time implicit particle method for the heat equation	15
54	Xuefeng Liu (Niigata Univ.)	Verified lower eigenvalue bound for self-adjoint differential operator ..	15
55	<u>Koya Sakakibara</u> (Univ. of Tokyo) Shigetoshi Yazaki (Meiji Univ.)	On the charge simulation method using dummy points and weighted-average condition	15

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

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

September 13th (Sun) Conference Room V

9:50–12:00

1	<u>Yusuke Takimura</u> (Gakushuin Boys' Junior High School) Noboru Ito (Waseda Univ.)	Strong and weak (1, 2, 3) homotopies on knot projections	15
2	Noboru Ito (Waseda Univ.)	Based chord diagrams for spherical curves	10
3	Tomo Murao (Univ. of Tsukuba)	On the extension of a fundamental theorem in braid theory for handlebody-braids	10
4	<u>Masaaki Suzuki</u> (Meiji Univ.) Jae Choon Cha (POSTECH)	Non-meridional epimorphisms of knot groups	10
5	Masakazu Teragaito (Hiroshima Univ.)	Quasi-alternating links and Kauffman polynomials	10
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
7	Tetsuya Itoh (Kyoto Univ.)	Generalized Jones–Kawamuro conjecture	10
8	<u>Atsushi Ishii</u> (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

- 9 Kouki Sato (Tokyo Tech) Heegaard Floer d -invariant of 1-surgeries of $(2, q)$ -cablings 10
- 10 Shinya Harada (Tokyo Tech) Hasse–Weil zeta functions of SL_2 -character varieties of certain closed arithmetic hyperbolic 3 manifolds 10
- 11 Yuichi Yamada Four dimensional manifolds constructed by lens space surgeries 10
(Univ. of Electro-Comm.)
Motoo Tange (Univ. of Tsukuba)

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

- Yuichi Nohara (Kagawa Univ.) Lagrangian fibrations on Grassmannians and mirror symmetry

15:30–17:15

- 12 Inasa Nakamura (Univ. of Tokyo) On addition of 1-handles with chart loops to 2-dimensional braids 10
- 13 Takahiro Oba (Tokyo Tech) Compact Stein surfaces and braided surfaces 15
- 14 Akiko Shima (Tokai Univ.) C-minimal 5-charts with four crossings 15
Teruo Nagase (Tokai Univ.*)
- 15 Kenta Hayano (Hokkaido Univ.) A monodromy of a genus-3 Lefschetz pencil on the 4-torus 15
Noriyuki Hamada (Univ. of Tokyo)
- 16 Genki Omori (Tokyo Tech) A finite generating set for the level 2 twist subgroup of the mapping class group of a closed non-orientable surface 15
Ryoma Kobayashi
(Ishikawa Nat. Coll. of Tech.)
- 17 Yasushi Kasahara On simple closed curves and a visualization of the linearity for mapping class group of surface 10
(Kochi Univ. of Tech.)
- 18 Takuya Sakasai (Univ. of Tokyo) Tautological algebra of mapping class group and representation theory 15
Masaaki Suzuki (Meiji Univ.)
Shigeyuki Morita
(Univ. of Tokyo*/Tokyo Tech*)

September 14th (Mon) Conference Room X

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

- Hiroshi Iritani (Kyoto Univ.) Mirror symmetry for toric varieties

13:15–14:15 Award Lecture for the 2015 MSJ Geometry Prize

- Osamu Saeki (Kyushu Univ.) Stable maps and topology of manifolds

September 15th (Tue) Conference Room V

9:50–12:00

- 19 Hiromichi Nakayama Surface diffeomorphisms with connected but not path-connected minimal sets containing arcs 15
(Aoyama Gakuin Univ.)
- 20 Takahiro Yamamoto Cobordism group of Morse functions on surfaces with boundary 15
(Kyushu Sangyo Univ.)

21	<u>Naohiko Kasuya</u> (Aoyama Gakuin Univ.) Antonio Jose Di Scala (Politecnico di Torino) Daniele Zuddas (KIAS)	Almost complex submanifolds in the even dimensional Euclidean spaces	15
22	<u>Naohiko Kasuya</u> (Aoyama Gakuin Univ.) Antonio Jose Di Scala (Politecnico di Torino) Daniele Zuddas (KIAS)	Non-Kähler complex structures on \mathbb{R}^4	15
23	<u>Kouichi Yasui</u> (Hiroshima Univ.)	Corks, exotic 4-manifolds and knot concordance	15
24	<u>Selman Akbulut</u> (Michigan State Univ.) <u>Kouichi Yasui</u> (Hiroshima Univ.)	Contact 5-manifolds admitting open books with exotic Stein pages ...	10
25	<u>Tomohiro Horiuchi</u> (Chuo Univ.) Yoshihiko Mitsumatsu (Chuo Univ.)	Reeb components of leafwise complex foliations and their symmetries	15
26	<u>Atsuhide Mori</u> (Osaka City Univ.)*	Contact structures and leafwise symplectic foliations	15
14:15–15:45			
27	<u>Eiichi Matsuhashi</u> (Shimane Univ.) Benjamin Espinoza (Univ. of Pittsburgh at Greensburg)	Arcwise increasing maps	10
28	<u>Huhe Han</u> (Yokohama Nat. Univ.) Takashi Nishimura (Yokohama Nat. Univ.)	The spherical dual transform is an isometry for spherical Wulff shapes	15
29	<u>Takayuki Masuda</u> (Osaka Univ.)	A gluing theorem of Lorentzian transformation groups	10
30	<u>Kenshi Ishiguro</u> (Fukuoka Univ.) Takahiro Koba (Fukuoka Univ.)	Modular invariants and Weyl groups	10
31	<u>Yusuke Suyama</u> (Osaka City Univ.)	Simplicial 2-spheres obtained from non-singular complete fans	10
32	<u>Miho Hatanaka</u> (Osaka City Univ.)	On the relation between root systems and facet vectors of graph associahedrons	10
33	<u>Mikiya Masuda</u> (Osaka City Univ.) ^b Hiraku Abe (Osaka City Univ./Univ. of Toronto) Megumi Harada (McMaster Univ.) Tatsuya Horiguchi (Osaka City Univ.)	The cohomology of regular Hessenberg varieties and representations of the symmetric group	15
16:15–17:15 Talk Invited by Topology Section			
	<u>Zhi Lu</u> (Fudan Univ.)	Equivariant unitary bordism and equivariant cohomology Chern numbers	

Infinite Analysis

September 13th (Sun) Conference Room IV

9:30–12:00

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

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

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| Toshiro Kuwabara
(Higher School of Economics) | Jet bundles on symplectic manifolds and vertex algebras |
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September 14th (Mon) Conference Room IV

9:30–12:00

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

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

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

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.

The talks with * mark are presented through document camera, while b 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 program15sept@mathsoc.jp. Collaborative works are presented by the underlined authors.

Each conference room is equipped with a whiteboard or blackboard, a document camera, and a projector with VGA interface for PC presentation. You are asked to use your own PC and necessary accessory (for example, HDMI-VGA adapter) for a PC presentation. The time for connecting your PC to the projector is included in the assigned duration of your talk. You are recommended to check beforehand if your PC can be connected to the projector in the conference room. We strongly advise you to prepare an alternative method to present your talk such as a copy of the PDF file of your sheets on a USB flash drive or printed sheets for the document camera in case your PC does not fit to the projector.

Information for Participants

Smoking is prohibited in the campus. Smokers are kindly asked to smoke in some smoking area.

There is no parking area for visitors in the campus.

You can take lunch at the restrans in Heirakukan. There are two convenience stores in the campus.

Wireless LAN connection (Wi-Fi) is available in discussion rooms (Bldg. 5, 3F Rm. 5322, Bldg. 5, 4F Rm. 5401 and Bldg. 6, 2F Rm. 519). If you want to use it, please ask the staff in the rooms; note that it is necessary to prepare PCs etc. for Wi-Fi connection by yourself.

Official Party

Date: September 14th (Mon) 18:00–20:00

Venue: Kamiyama Hall, 4F Lounge “Furusato”

Participants are asked to pay 5,000 JPY at the party.

Directions

2015 MSJ AUTUMN MEETING

Dates : September 13th (Sun)–16th (Wed), 2015

Venue : Kyoto Sangyo University
Motoyama, Kamikamo, Kita-ku, Kyoto 603-8555

Contact to : Kyoto Sangyo University
Faculty of Science, Department of Mathematics
Motoyama, Kamikamo, Kita-ku, Kyoto 603-8555
E-mail kyoto-sangyo15sept@mathsoc.jp
Phone +81 (0) 90 1791 3483 (During session)

Web Site : <http://mathsoc.jp/en/meeting/kyoto-sangyo15sept/>

Conference Rooms

	Place	Research Sections
Conference Room I	Bldg. 11, 3F Rm. 11304	Foundation of Mathematics and History of Mathematics, Featured Invited Talk
Conference Room II	Bldg. 6, 4F Rm. 514	Algebra, Featured Invited Talk
Conference Room III	Bldg. 6, 4F Rm. 515	Applied Mathematics, Featured Invited Talk
Conference Room IV	Bldg. 6, 2F Rm. 518	Infinite Analysis, Real Analysis, Featured Invited Talks
Conference Room V	Bldg. 5, 4F Rm. 5405	Topology, Featured Invited Talk
Conference Room VI	Bldg. 5, 4F Rm. 5406	Functional Equations, Featured Invited Talk
Conference Room VII	Bldg. 5, 4F Rm. 5407	Statistics and Probability
Conference Room VIII	Bldg. 5, 3F Rm. 5301	Functional Analysis
Conference Room IX	Bldg. 5, 3F Rm. 5302	Complex Analysis
Conference Room X	Bldg. 5, 3F Rm. 5303	Geometry
Plenary Talks	Kamiyama Hall	
Open Lectures for Citizens	Kamiyama Hall	

Other Rooms

Membership Fee & Extended Abstracts	Bldg. 5, 2F Rm. 5229
Discussion Rooms	Bldg. 5, 4F Rm. 5401/Rm. 5402 Bldg. 5, 3F Rm. 5322/Rm. 5323 Bldg. 5, 1F Rm. 5191/Bldg. 6, 2F Rm. 519
Book Display and Sale	Bldg. 11, 3F Rm. 11303 (15th–16th)
Executive Committee, MSJ President	Bldg. 5, 2F Rm. 5297/Rm. 5298
Official Party	Bldg. 11, 2F Rm. 11201 Kamiyama Hall, 4F Lounge “Furusato”