

## 注 意 事 項

※講演者名の順序は講演申し込み時に入力された順序であり、必ずしも筆頭者が登壇者であることを意味しません。共同発表の場合は登壇者には下線が引かれています。

(単独発表の場合は下線は引かれていません。)

※先頭の講演者氏名／所属の右側にある\*印は書画カメラ使用の講演、b印は黒板のみでの講演を表しています。プロジェクタを使用して持参PC／タブレット等で行う講演には印がついていません。

※所属右の\*印は名誉教授を示しています。

※講演題目右の数字は講演時間(分)です。プログラム編成の都合により、希望講演時間より短くなっている場合があります。

※氏名、所属、講演題目等で\UTF、\CID、\GAIJI命令を用いた箇所は青字で印字されています。

一般社団法人 日本数学会

## 目 次

数学基礎論および歴史 . . . . .	2
代数学 . . . . .	5
幾何学 . . . . .	13
函数論 . . . . .	17
函数方程式論 . . . . .	20
実函数論 . . . . .	29
函数解析学 . . . . .	34
統計数学 . . . . .	38
応用数学 . . . . .	43
トポロジー . . . . .	50
無限可積分系 . . . . .	53

# 数 学 基 礎 論 お よ び 歴 史

9月26日(水)

9:30~11:25

01-99-0001

1 大 藪 卓

Takashi Oyabu

連続体仮説と構成可能集合, 他 5 件 ..... 5  
Continuum hypothesis and constructible set, and other 5 talks

01-01-0005

2 依 岡 輝 幸 (静 岡 大 理)

Teruyuki Yorioka (Shizuoka Univ.)

ランダム強制法による拡大モデルの中での弱い Martin's Axiom ..... 15  
Fragments of Martin's Axiom in the extension with random forcing

01-01-0006

3 矢 島 幸 信 (神 奈 川 大 工)

平 田 康 史 (神 奈 川 大 工)

Yukinobu Yajima (Kanagawa Univ.)

Yasushi Hirata (Kanagawa Univ.)

Undecidability of the cardinality of  $C^*$ -embedded discrete subsets in products of natural numbers ..... 15  
Undecidability of the cardinality of  $C^*$ -embedded discrete subsets in products of natural numbers

01-01-0009

4 薄 葉 季 路 (早 大 理 工)

Toshimichi Usuba (Waseda Univ.)

Extendible cardinals and the mantle ..... 15  
Extendible cardinals and the mantle

01-01-0010

5 岡 部 峻 典 (神 戸 大 シ ス テ ム 情 報)

Shunsuke Okabe (Kobe Univ.)

On width of automorphism groups of countable structures with stationary independence relations ..... 15  
On width of automorphism groups of countable structures with stationary independence relations

01-01-0013

6 板 井 昌 典 (東 海 大 理)

Masanori Itai (Tokai Univ.)

A remark on geometric isomorphism and Morita equivalence ..... 15  
A remark on geometric isomorphism and Morita equivalence

01-01-0015

7 桔 梗 宏 孝 (神 戸 大 シ ス テ ム 情 報)

Hiroataka Kikyo (Kobe Univ.)

Hrushovski の「擬平面」について ..... 15  
On Hrushovski's "pseudoplanes"

01-01-0018

8 池 田 宏 一 郎 (法 政 大 経 営)

Koichiro Ikeda (Hosei Univ.)

真に安定なジェネリック構造について ..... 15  
On strictly stable generic structures

14:15~16:15

01-99-0003

9 熊 澤 昌 明 (箕 面 自 由 学 園 高)

Masaaki Kumazawa

(Mino-Jiyu Gakuen High School)

BCK-代数における可換元の存在と下限の存在の関係について ..... 10  
On the relationship between the existence of commutative elements and the existence of infimums in BCK-algebras

01-01-0011

10 鈴 木 信 行 (静 岡 大 理)

Nobu-Yuki Suzuki (Shizuoka Univ.)

中間述語論理における選言特性とその弱い変種についての注意 ..... 15  
Remarks on disjunction property and its weak variants in intermediate predicate logics

01-01-0007

11 倉 橋 太 志 (木 更 津 工 高 専)

Taishi Kurahashi

(Nat. Inst. of Tech., Kisarazu Coll.)

様相論理 **KD** の算術的完全性 ..... 15  
Arithmetical completeness of the modal logic **KD**

01-01-0016

12 菊 池 誠 (神 戸 大 シ ス テ ム 情 報)

Makoto Kikuchi (Kobe Univ.)

幾何学の基礎に関するフレイゲとヒルベルトの論争について ..... 15  
On the Frege–Hilbert controversy over the foundations of geometry

01-01-0021

13 只 木 孝 太 郎 (中 部 大 工)

Kohtaro Tadaki (Chubu Univ.)

アルゴリズム的ランダムネスによる量子力学の再構成 III: その物理的帰結 ..... 15  
A refinement of quantum mechanics by algorithmic randomness III: Its consequences

## 3 数学基礎論および歴史

01-01-0019

- 14 田中一之 (東北大理) Modal  $\mu$ -calculus and its one-variable hierarchy ..... 15  
 李文娟 (Nanyang Tech. Univ.)  
 Kazuyuki Tanaka (Tohoku Univ.) Modal  $\mu$ -calculus and its one-variable hierarchy  
 Li Wenjuan (Nanyang Tech. Univ.)

01-01-0014

- 15 黒田 覚 (群馬県女大文) Forcing in bounded arithmetic for small complexity classes ..... 15  
 Satoru Kuroda Forcing in bounded arithmetic for small complexity classes  
 (Gunma Pref. Women's Univ.)

01-01-0012

- 16 重水美香 (首都大東京理) 高さが2の多分岐 AND-OR 木上の独立分布 ..... 15  
 鈴木登志雄 (首都大東京理)  
 宇佐美紘貴 (首都大東京理)  
 Mika Shigemizu (Tokyo Metro. Univ.) Independent distributions on a multi-branching AND-OR tree of height  
 Toshio Suzuki (Tokyo Metro. Univ.) 2  
 Koki Usami (Tokyo Metro. Univ.)

## 16:30~17:30 特別講演

01-02-0002

- 樋口幸治郎 (日大工) Computable prestructures  
 Kojiro Higuchi (Nihon Univ.) Computable prestructures

9月27日(木)

## 9:00~10:50

01-01-0002

- 17 増田 茂 (流体数理古典理論研) Poisson' "sloughs" in his final works in life, "A Study of Mathematical  
 Physics" ..... 15  
 Shigeru Masuda Poisson' "sloughs" in his final works in life, "A Study of Mathematical  
 (Res. Workshop of Classical Fluid Dynamics) Physics"

01-01-0003

- 18 増田 茂 (流体数理古典理論研) The celestial mechanics in conformity to the mathematical physics by  
 Poisson ..... 15  
 Shigeru Masuda The celestial mechanics in conformity to the mathematical physics by  
 (Res. Workshop of Classical Fluid Dynamics) Poisson

01-01-0004

- 19 増田 茂 (流体数理古典理論研) The Poisson's integral owing to Legendre's formulae and his own ..... 15  
 Shigeru Masuda The Poisson's integral owing to Legendre's formulae and his own  
 (Res. Workshop of Classical Fluid Dynamics)

01-99-0002

- 20 田中昭太郎 \* 分数関数の展開の境界値を求める —ローラン展開と衰滅展開— ..... 15  
 Shotaro Tanaka To express fractions into power series by Suida expansion

01-01-0020

- 21 斎藤 憲 エウクレイデス『原論』全文の構文解析の進行状況 ..... 15  
 (四日市大関孝和数学研)  
 Ken Saito (Yokkaichi Univ.) Syntactic analysis of the whole text of Euclid's Elements (progress re-  
 port)

01-01-0008

- 22 森本光生 <sup>b</sup> 大成算経 首篇, 卷之一, 二, 三 ..... 15  
 (四日市大関孝和数学研・上智大\*)  
 Mitsuo Morimoto Preliminary Volume, and Volumes 1, 2 and 3 of the Taisei Sankei  
 (Yokkaichi Univ./Sophia Univ.\*)

01-01-0017

- 23 張替俊夫 『海島算経』の比例計算について ..... 15  
 (大阪産大全学教育機構)  
 Toshio Harikae (Osaka Sangyo Univ.) On proportionality in "The Sea Island Mathematical Manual"

4 数学基礎論および歴史

**11:00～12:00 特別講演**

01-02-0001

佐藤 賢一 (電通大) 関孝和と同時代の数学者たち

Kenichi Sato (Univ. of Electro-Comm.) SEKI Takakazu and his contemporary mathematicians

**12:00～12:30 数学基礎論および歴史分科会総会**

**12:30～13:00 歴史部門懇談会**

## 代 数 学

9月24日(月)

9:15~11:45

02-01-0028

- 1 神代真也(千葉大理) トレース加群の遍在性からみた Gorenstein 性の解析 ..... 10  
 後藤四郎(明大\*)  
 磯部遼太郎(千葉大理)  
 Shinya Kumashiro (Chiba Univ.) The Gorenstein property and correspondences between trace ideals and  
 Shiro Goto (Meiji Univ.\*) birational finite extensions  
 Ryotaro Isobe (Chiba Univ.)

02-01-0030

- 2 磯部遼太郎(千葉大理) The structure of chains of Ulrich ideals in Cohen–Macaulay local rings  
 後藤四郎(明大\*) of dimension one ..... 10  
 神代真也(千葉大理)  
 Ryotaro Isobe (Chiba Univ.) The structure of chains of Ulrich ideals in Cohen–Macaulay local rings  
 Shiro Goto (Meiji Univ.\*) of dimension one  
 Shinya Kumashiro (Chiba Univ.)

02-01-0059

- 3 松井紘樹(名大多元数理) Remarks on a conjecture of Huneke and Wiegand ..... 10  
 Hiroki Matsui (Nagoya Univ.) Remarks on a conjecture of Huneke and Wiegand

02-01-0023

- 4 土谷昭善(阪大情報) Edge rings with 3-linear resolutions ..... 10  
 日比孝之(阪大情報)  
 松田一徳(北見工大工)  
 Akiyoshi Tsuchiya (Osaka Univ.) Edge rings with 3-linear resolutions  
 Takayuki Hibi (Osaka Univ.)  
 Kazunori Matsuda  
 (Kitami Inst. of Tech.)

02-01-0036

- 5 土谷昭善(阪大情報) 辺凸多面体に付随する反射的凸多面体 ..... 10  
 長岡高広(京大理)  
 Akiyoshi Tsuchiya (Osaka Univ.) Reflexive polytopes arising from edge polytopes  
 Takahiro Nagaoka (Kyoto Univ.)

02-01-0037

- 6 土谷昭善(阪大情報) 反射的凸多面体の depth ..... 10  
 日比孝之(阪大情報)  
 Akiyoshi Tsuchiya (Osaka Univ.) The depth of a reflexive polytope  
 Takayuki Hibi (Osaka Univ.)

02-01-0073

- 7 東平光生(明大研究・知財) Semi-unmixed とする二部グラフの辺イデアルについて ..... 10  
 Hirotaka Higashidaira (Meiji Univ.) On the edge ideal of semi-unmixed bipartite graphs

02-01-0016

- 8 宮崎充弘(京都教育大) Canonical and anticanonical analytic spreads of a Hibi ring ..... 10  
 Mitsuhiro Miyazaki  
 (Kyoto Univ. of Edu.) Canonical and anticanonical analytic spreads of a Hibi ring

02-01-0017

- 9 宮崎充弘(京都教育大) Limit T-complexity of Ehrhart rings and limit Frobenius complexity of  
 Hibi rings ..... 10  
 Mitsuhiro Miyazaki  
 (Kyoto Univ. of Edu.) Limit T-complexity of Ehrhart rings and limit Frobenius complexity of  
 Hibi rings

- 02-01-0054  
10 柴田 孝祐 (岡山大自然) Strongly stable ideal の alternative polarization とその Alexander 双対  
柳川 浩二 (関西大システム理工) について ..... 10  
Kohsuke Shibata (Okayama Univ.) Alternative polarizations of strongly stable ideals, and their Alexander  
Kohji Yanagawa (Kansai Univ.) duals
- 02-01-0031  
11 矢澤 明喜子 (信州大総合理工) 木の母関数から構成される環の強 Lefschetz 性 ..... 10  
Akiko Yazawa (Shinshu Univ.) The Lefschetz property for an algebra constructed from a graph
- 02-01-0010  
12 張 閻 忠 人 (新潟大教育)\* 一次式の積で定義される完全交叉の強いレフシェッツ性について ..... 10  
和地 輝仁 (北教大釧路) Tadahito Harima (Niigata Univ.) The strong Lefschetz property for complete intersections defined by  
渡辺 純三 (東海大\*) Akihit Wachi (Hokkaido Univ. of Edu.) products of linear forms  
Junzo Watanabe (Tokai Univ.\*)
- 02-01-0071  
13 小野 舞子 (岡山大自然) DG 加群の持ち上げについて ..... 10  
吉野 雄二 (岡山大自然) On liftings of DG modules  
Maiko Ono (Okayama Univ.)  
Yuji Yoshino (Okayama Univ.)
- 14:15~15:15 特別講演**  
02-02-0002  
浅芝 秀人 (静岡大理)<sup>b</sup> 2 圏論的被覆理論と導来同値  
Hideto Asashiba (Shizuoka Univ.) 2-categorical covering theory and derived equivalences
- 15:30~17:10**  
02-01-0008  
14 佐藤 眞久 唯一の極大部分加群を持つ射影加群について ..... 10  
(愛知大地域政策・山梨大\*) Projective module with unique maximal submodule  
Masahisa Sato (Aichi Univ./Univ. of Yamanashi\*)
- 02-01-0070  
15 加瀬 遼一 (岡山理大総合情報)  $\tau$ -傾半順序構造からの多元環の復元 ..... 10  
Ryoichi Kase (Okayama Univ. of Sci.) From support  $\tau$ -tilting posets to algebras
- 02-01-0013  
16 百合草 寿哉 (名大多元数理) Combinatorial cluster expansion formulas from triangulated surfaces .. 10  
Toshiya Yurikusa (Nagoya Univ.) Combinatorial cluster expansion formulas from triangulated surfaces
- 02-01-0020  
17 水野 有哉 (静岡大理) Torsion pairs for quivers and the Coxeter groups ..... 10  
Yuya Mizuno (Shizuoka Univ.) Torsion pairs for quivers and the Coxeter groups
- 02-01-0065  
18 足立 崇英 (阪府大) Silting objects and  $t$ -structures ..... 10  
水野 有哉 (静岡大理) Silting objects and  $t$ -structures  
Takahide Adachi (Osaka Pref. Univ.)  
Yuya Mizuno (Shizuoka Univ.)
- 02-01-0062  
19 浅井 聡太 (名大多元数理) 煉瓦が定める Grothendieck 群の部屋構造 ..... 10  
Sota Asai (Nagoya Univ.) The chamber structures of the Grothendieck groups coming from bricks
- 02-01-0048  
20 塚本 真由 (阪市大理) On upper bound for global dimension of Auslander–Dlab–Ringel algebras ..... 10  
Mayu Tsukamoto (Osaka City Univ.) On upper bound for global dimension of Auslander–Dlab–Ringel algebras

02-01-0051 21 馬場 良始 (大阪教育大)	弱余原田列による両側原田環の特徴付けについて	10
Yoshitomo Baba (Osaka Kyoiku Univ.)	On Harada rings and weak co- $H$ -sequences	
02-01-0027 22 板場 綾子 (東京理大理)	点スキームが楕円曲線である幾何的代数の代数同型および森田同値を除く分類について	10
松野 仁樹 (静岡大理)		
Ayako Itaba (Tokyo Univ. of Sci.)	Classifications of geometric algebras whose point schemes are elliptic curves	
Masaki Matsuno (Shizuoka Univ.)		

9月25日(火)

## 9:30~12:00

02-01-0024 23 辻 栄 周 平	On chromatic symmetric functions of trivially perfect graphs and cographs	10
(広島国際学院大情報文化)		
Shuhei Tsujie	On chromatic symmetric functions of trivially perfect graphs and cographs	
(Hiroshima Kokusai Gakuin Univ.)		
02-01-0043 24 松村 朝雄 (岡山理大理)	A tableau formula of the double Grothendieck polynomials associated to 321 avoiding permutations	10
Tomoo Matsumura	A tableau formula of the double Grothendieck polynomials associated to 321 avoiding permutations	
(Okayama Univ. of Sci.)		
02-01-0044 25 堀口 達也 (阪大情報)	正則な冪零ヘッセンバーク多様体のコホモロジー環とシューベルト多項式	10
Tatsuya Horiguchi (Osaka Univ.)	The cohomology rings of regular nilpotent Hessenberg varieties and Schubert polynomials	
02-01-0060 26 黒澤 恵光 (沼津工高専)	$\mathbb{B}$ 型の重み付きクイバーに付随する概均質ベクトル空間の相対不変式の構成	10
Yoshiteru Kurosawa	Construction of relative invariants of prehomogeneous vector spaces associated with valued quivers of type $\mathbb{B}$	
(Numazu Nat. Coll. of Tech.)		
02-01-0012 27 渋谷 元樹 (神戸大理)	The Fibonacci numbers and Kostka numbers	10
Genki Shibukawa (Kobe Univ.)	The Fibonacci numbers and Kostka numbers	
02-01-0068 28 柴田 大樹 (岡山理大理)	On centers of Chevalley supergroups	10
Taiki Shibata (Okayama Univ. of Sci.)	On centers of Chevalley supergroups	
02-01-0019 29 米澤 康好 (名大多元数理)	Categorification of Howe representations of $U_q(\mathfrak{gl}_m)$ and the quiver Hecke algebra	10
Yasuyoshi Yonezawa (Nagoya Univ.)	Categorification of Howe representations of $U_q(\mathfrak{gl}_m)$ and the quiver Hecke algebra	
02-01-0032 30 中岡 宏行 (鹿児島大理工)	On a unification of exact categories and triangulated categories	10
Hiroyuki Nakaoka (Kagoshima Univ.)	On a unification of exact categories and triangulated categories	
02-01-0042 31 速水 孝夫 (北海学園大工)	On Hochschild cohomology ring and integral cohomology ring for the semidihedral group	10
Takao Hayami (Hokkai-Gakuen Univ.)	On Hochschild cohomology ring and integral cohomology ring for the semidihedral group	
02-01-0053 32 若竹 昌洋 (近畿大総合理工)	The unit group of a partial Burnside ring of a reducible Coxeter group of type A	10
Masahiro Wakatake (Kindai Univ.)	The unit group of a partial Burnside ring of a reducible Coxeter group of type A	

- 02-01-0072  
33 佐々木 洋城 (信州大教育)\* ブロック・イデアルのソース多元環の加群構造について ..... 10  
Hiroki Sasaki (Shinshu Univ.) On module structures of source algebras of block ideals
- 02-01-0033  
34 澤 正 憲 (神戸大システム情報) 古典準直交多項式の判別式の明示公式とその応用 ..... 10  
内 田 幸 寛 (首都大東京理)  
Masanori Sawa (Kobe Univ.) Compact formulas for discriminants of classical quasi-orthogonal poly-  
Yukihiro Uchida (Tokyo Metro. Univ.) nomials, with their applications
- 13:00~14:00 特別講演**  
02-02-0004  
山 崎 義 徳 (愛媛大理) Schur 多重ゼータ関数について  
Yoshinori Yamasaki (Ehime Univ.) On Schur multiple zeta functions

9月26日(水)

**9:15~11:25**

- 02-01-0026  
35 矢 城 東 (東京電機大先端) L字型 window に関する離散トモグラフィ ..... 10  
南 綾 寧 (東京電機大理工)  
Tabane Yashiro (Tokyo Denki Univ.) Discrete tomography for the L-shaped window  
Ayane Minami (Tokyo Denki Univ.)
- 02-01-0046  
36 小 塚 和 人 (都城工高専)\*  $p$ 進 Dedekind 和の modular 行列に関連した相互関係式 ..... 10  
Kazuhito Kozuka Reciprocity relations for  $p$ -adic Dedekind sums related to modular ma-  
(Miyakonjo Nat. Coll. of Tech.) trices
- 02-01-0022  
37 D. Banerjee ( IISER ) \* Mean square of the double zeta function ..... 10  
南 出 真 (山口大理)  
谷 川 好 男  
Debika Banerjee (IISER) Mean square of the double zeta function  
Makoto Minamide (Yamaguchi Univ.)  
Yoshio Tanigawa
- 02-01-0063  
38 井 上 翔 太 (名大多元数理) A relation between the estimate of  $S(t)$  and the zero density estimate  
in short intervals ..... 10  
Shota Inoue (Nagoya Univ.) A relation between the estimate of  $S(t)$  and the zero density estimate  
in short intervals
- 02-01-0011  
39 中 筋 麻 貴 (上智大理工) Hook Schur 型多重ベルヌーイ数 ..... 10  
中 村 直 樹 (上智大理工)  
Maki Nakasuji (Sophia Univ.) Hook Schur type poly-Bernoulli numbers  
Naoki Nakamura (Sophia Univ.)
- 02-01-0057  
40 広 瀬 稔 (九大数理) 多重ゼータ値に対する正規化定理の多項式拡張 ..... 10  
村 原 英 樹 (中村学園大)  
斎 藤 新 悟 (九大基幹教育院)  
Minoru Hirose (Kyushu Univ.) Polynomial generalization of the regularization theorem for multiple  
Hideki Murahara zeta values  
(Nakamura Gakuen Univ.)  
Shingo Saito (Kyushu Univ.)
- 02-01-0075  
41 梅 澤 瞭 太 (名大多元数理) 多重ゼータ値と log-sine 積分について ..... 10  
Ryota Umezawa (Nagoya Univ.) On multiple zeta values and log-sine integrals



02-01-0003 42	飯高 茂 (学習院大*) Shigeru Iitaka (Gakushuin Univ.*)	スーパー完全数の平行移動 ..... 10 Super perfect numbers with translation parameters $m$
02-01-0009 43	松田 康雄 (久留米工高専) Yasuo Matsuda (Kurume Nat. Coll. of Tech.)	対称的な漸化式 ..... 10 On the symmetric recurrent formula
02-01-0035 44	齋藤 耕太 (名大多元数理) 吉田 裕哉 (名大多元数理) Kota Saito (Nagoya Univ.) Yuuya Yoshida (Nagoya Univ.)	小湾曲列中の等差数列 ..... 10 Arithmetic progressions in the graphs of slightly curved sequences
02-01-0058 45	丸山 文綱 出口 洋三 豊泉 正男 (東洋大理工) Fumitsuna Maruyama Yozo Deguchi Masao Toyozumi (Toyo Univ.)	On the cardinality of subsets of the matrix ring over certain residue ring ..... 10 On the cardinality of subsets of the matrix ring over certain residue ring
<b>11:30~12:00 代数学分科会総会</b>		
<b>14:15~15:15 特別講演</b>		
02-02-0003 山崎 隆雄 (東北大理)	Takao Yamazaki (Tohoku Univ.)	モジュラス付きモチーフと混合 Hodge 構造 Motives and mixed Hodge structures with modulus
<b>15:30~17:40</b>		
02-01-0064 46	渡辺 文彦 (防衛大)* Humihiko Watanabe (Nat. Defense Acad. of Japan)	テータ因子の補集合の基本群 ..... 10 Fundamental group of the complement of theta divisors
02-01-0006 47	武田 涉 (名大多元数理) Wataru Takeda (Nagoya Univ.)	The finiteness of solutions of Diophantine equation over number fields ..... 10 The finiteness of solutions of Diophantine equation over number fields
02-01-0007 48	小関 祥康 (神奈川大理) Yoshiyasu Ozeki (Kanagawa Univ.)	アーベル多様体のねじれ部分群と Lubin–Tate 拡大 ..... 10 Torsion of abelian varieties and Lubin–Tate extensions
02-01-0015 49	兒玉 浩尚 (工学院大学習支援センター) Hirotaka Kodama (Kogakuin Univ.)	A note on the Sturm bound for Siegel modular forms of type $(k, 2)$ ... 10 A note on the Sturm bound for Siegel modular forms of type $(k, 2)$
02-01-0061 50	境 優一 (九大多重ゼータ研究センター) Yuichi Sakai (Kyushu Univ.)	Modular linear differential equations in general form ..... 10 Modular linear differential equations in general form
02-01-0055 51	河本 史紀 (学習院大理) 岸 康弘 (愛知教育大教育) 鈴木 浩志 (名大多元数理) 富田 耕史 (名城大理工) Fuminori Kawamoto (Gakushuin Univ.) Yasuhiro Kishi (Aichi Univ. of Edu.) Hiroshi Suzuki (Nagoya Univ.) Koshi Tomita (Meijo Univ.)	偶数周期の最小元の性質について ..... 10 On some properties of the minimal elements with even period

02-01-0056	52 河本 史紀 (学習院大理)	ある実2次体の系列における類数の下からの評価	10
	岸 康弘 (愛知教育大教育)		
	鈴木 浩志 (名大多元数理)		
	富田 耕史 (名城大理工)		
	Fuminori Kawamoto (Gakushuin Univ.)	A lower bound for the class number of certain real quadratic fields	
	Yasuhiro Kishi (Aichi Univ. of Edu.)		
	Hiroshi Suzuki (Nagoya Univ.)		
	Koshi Tomita (Meijo Univ.)		
02-01-0004	53 塩見 大輔 (山形大理)	2次の導手を持つ cyclotomic function field の類数の $p$ 可除性について	10
	Daisuke Shiomi (Yamagata Univ.)	On the $p$ -divisibility of class numbers of cyclotomic function fields with conductor of degree two	
02-01-0039	54 山本 康太 (名工大)	二次多項式写像から生じる代数体の反復拡大について	10
	Kota Yamamoto (Nagoya Inst. of Tech.)	On iterated extensions of number fields arising from quadratic polynomial maps	
02-01-0018	55 菅本 守 (アプリズム)	ガロア理論を適用した量子力学	10
	菅本 晶夫 (お茶の水女大理・放送大)		
	Mamoru Sugamoto (apprhythm inc.)	Galois theory and quantum mechanics	
	Akio Sugamoto (Ochanomizu Univ./Open Univ. of Japan)		
02-01-0047	56 金子 元 (筑波大数理物質)	ベキ級数に代数的整数を代入した値の超越性	10
	Hajime Kaneko (Univ. of Tsukuba)	On the transcendence of the values of power series at algebraic integer points	

## 9月27日(木)

## 9:15~12:00

02-01-0066	57 鳥居 猛 (岡山大自然)	3次行列環の部分代数のモジュライ (2)	10
	中本 和典 (山梨大医)		
	Takeshi Torii (Okayama Univ.)	On the moduli of subalgebras of the full matrix ring of degree 3 (Part II)	
	Kazunori Nakamoto (Univ. of Yamanashi)		
02-01-0067	58 鳥居 猛 (岡山大自然)	An application of Hochschild cohomology to the moduli of subalgebras of the full matrix ring	10
	中本 和典 (山梨大医)		
	Takeshi Torii (Okayama Univ.)	An application of Hochschild cohomology to the moduli of subalgebras of the full matrix ring	
	Kazunori Nakamoto (Univ. of Yamanashi)		
02-01-0041	59 佐藤 悠介 (名大多元数理)	$\text{Hilb}^G(\mathbb{C}^4)$ and crepant resolutions of certain abelian group in $\text{SL}(4, \mathbb{C})$	10
	Yusuke Sato (Nagoya Univ.)	$\text{Hilb}^G(\mathbb{C}^4)$ and crepant resolutions of certain abelian group in $\text{SL}(4, \mathbb{C})$	
02-01-0038	60 泊 昌孝 (日大文理)*	$n$ 次元 weighted homogeneous 正規特異点の座標系が被約元を与えるひとつの条件について	10
	Masataka Tomari (Nihon Univ.)	A condition for a weighted homogeneous singularity to have a reduced coordinate function	

02-01-0040	61 柴田 崇 広 (京 大 理)*	Ample canonical heights for endomorphisms on projective varieties ... 10
	Takahiro Shibata (Kyoto Univ.)	Ample canonical heights for endomorphisms on projective varieties
02-01-0014	62 山形 颯 (北 大 理)	Braid 配置の一般化とその組合せ論的構造について ..... 10
	So Yamagata (Hokkaido Univ.)	Generalization of braid arrangement and its combinatorics
02-01-0034	63 工藤 陸 (早 大 理 工)	About counterexamples for Generalized Zariski Cancellation Problem ..... 10
	Riku Kudou (Waseda Univ.)	About counterexamples for Generalized Zariski Cancellation Problem
02-01-0074	64 榎園 誠 (阪 大 理)	種数 4 の Eisenbud–Harris 特殊なファイバー曲面のスロープ等式 ..... 10
	Makoto Enokizono (Osaka Univ.)	Slope equality of Eisenbud–Harris special fibrations of genus 4
02-01-0025	65 藤原 宏 道 (早 大 理 工)	$(2, 2, 2, 2, 2; \lambda_1, \lambda_2)$ 型重み付き射影直線上の階数 2 直既約ベクトル束に関 して ..... 10
	Hiromichi Fujiwara (Waseda Univ.)	On indecomposable vector bundles of rank two on a wighted projective line of type $(2, 2, 2, 2, 2; \lambda_1, \lambda_2)$
02-01-0050	66 山田 紀 美 子 (岡 山 理 大 理)	Obstructed stable sheaves on elliptic surfaces —canonical singularities— ..... 10
	Kimiko Yamada (Okayama Univ. of Sci.)	Obstructed stable sheaves on elliptic surfaces —canonical singularities—
02-01-0052	67 山田 紀 美 子 (岡 山 理 大 理)	Obstructed stable sheaves on elliptic surfaces —not determined by degree- two terms— ..... 10
	Kimiko Yamada (Okayama Univ. of Sci.)	Obstructed stable sheaves on elliptic surfaces —not determined by degree- two terms—
02-01-0001	68 須山 雄 介 (阪 大 理)	Building set に伴うトーリック Fano 多様体 ..... 10
	Yusuke Suyama (Osaka Univ.)	Toric Fano varieties associated to building sets
02-01-0002	69 須山 雄 介 (阪 大 理)	Graph cubeahedron に伴うトーリック Fano 多様体 ..... 10
	Yusuke Suyama (Osaka Univ.)	Toric Fano varieties associated to graph cubeahedra
<b>14:15~15:15 特別講演</b>		
02-02-0001	阿部 拓 郎 (九 大 I M I)	超平面配置の対数的ベクトル場とその自由性
	Takuro Abe (Kyushu Univ.)	Logarithmic vector fields and freeness of hyperplane arrangements
<b>15:30~16:40</b>		
02-01-0021	70 Eunjeong Lee	<sup>b</sup> Generic torus orbit closures in Schubert varieties ..... 10
	(KAIST・韓国基礎科研)	
	柘田 幹 也 (阪 市 大 理)	
	Eunjeong Lee (KAIST/IBS)	Generic torus orbit closures in Schubert varieties
	Mikiya Masuda (Osaka City Univ.)	
02-01-0049	71 川口 良 (奈 良 県 医 大)	トーリック多様体における Castelnuovo 多様体の性質 ..... 10
	Ryo Kawaguchi (Nara Medical Univ.)	The properties of toric Castelnuovo varieties
02-01-0069	72 南 範 彦 (名 工 大)	Covering Higher Fano varieties by rational varieties ..... 10
	Norihiko Minami (Nagoya Inst. of Tech.)	Covering Higher Fano varieties by rational varieties

<a href="#">02-01-0029</a>			
73	鈴木 拓 (宇都宮大教育)	ファノ多様体上の高階直線族 .....	10
	Taku Suzuki (Utsunomiya Univ.)	Higher order families of lines on Fano manifolds	
<a href="#">02-01-0005</a>			
74	岩見 智宏 (九工大工)*	Bogomolov–Miyaoka–Yau type inequality for a coherent system associated to certain 3-fold .....	10
	Tomohiro Iwami (Kyushu Inst. of Tech.)	Bogomolov–Miyaoka–Yau type inequality for a coherent system associated to certain 3-fold	
<a href="#">02-01-0045</a>			
75	土基 善文 (高知大理)	Non-commutative Kähler projective varieties .....	10
	Yoshifumi Tsuchimoto (Kochi Univ.)	Non-commutative Kähler projective varieties	

## 幾何学

9月24日(月)

9:40~11:40

03-01-0004

- 1 齋藤三郎 (群馬大\*・再生核研)\* Division by zero calculus in figures —Our new space since Euclid—  
奥村博 (Draft) ..... 10  
Saburoou Saitoh Division by zero calculus in figures —Our new space since Euclid—  
(Gunma Univ.\*/Inst. of Reproducing Kernels) (Draft)  
Hiroshi Okumura

03-01-0005

- 2 齋藤三郎 (群馬大\*・再生核研)\* Applications of the division by zero calculus to Wasan geometry ..... 10  
奥村博  
Saburoou Saitoh Applications of the division by zero calculus to Wasan geometry  
(Gunma Univ.\*/Inst. of Reproducing Kernels)  
Hiroshi Okumura

03-01-0011

- 3 古場一 (阪大基礎工) Double bubble 内の濃度拡散の数値モデリング ..... 12  
Hajime Koba (Osaka Univ.) Mathematical modeling of diffusion system on an evolving double bubble

03-01-0006

- 4 佐藤雄一郎 (首都大東京理) 3次元特異擬ユークリッド空間  $\mathbb{R}^{0,2,1}$  内の  $d$ -極小曲面 ..... 15  
Yuichiro Sato (Tokyo Metro. Univ.)  $d$ -minimal surfaces in three-dimensional singular semi-Euclidean space  $\mathbb{R}^{0,2,1}$

03-01-0028

- 5 Joseph Cho (神戸大理) 平均曲率一定曲面とポジットン型解 ..... 15  
緒方勇太 (沖縄工高専)  
Joseph Cho (Kobe Univ.) Constant mean curvature surfaces and positon-like solutions  
Yuta Ogata  
(Okinawa Nat. Coll. of Tech.)

03-01-0023

- 6 赤嶺新太郎 (名大多元数理) 時間的 Thomsen 曲面の分類と変形について ..... 15  
Joseph Cho (神戸大理)  
緒方勇太 (沖縄工高専)  
Shintaro Akamine (Nagoya Univ.) Classification of timelike Thomsen surfaces and their deformations  
Joseph Cho (Kobe Univ.)  
Yuta Ogata  
(Okinawa Nat. Coll. of Tech.)

03-01-0014

- 7 榎吉奏子 Principal curvatures of homogeneous hypersurfaces in a Grassmann  
(お茶の水女大人間文化創成) manifold  $\widetilde{\text{Gr}}_3(\text{Im}\mathbb{O})$  by the  $G_2$ -action ..... 15  
Kanakou Enoyoshi (Ochanomizu Univ.) Principal curvatures of homogeneous hypersurfaces in a Grassmann  
manifold  $\widetilde{\text{Gr}}_3(\text{Im}\mathbb{O})$  by the  $G_2$ -action

03-01-0013

- 8 塚田和美 (お茶の水女大理) Examples of transversally complex submanifolds of the associative Grass-  
榎吉奏子 mann manifold ..... 10  
(お茶の水女大人間文化創成)  
Kazumi Tsukada (Ochanomizu Univ.) Examples of transversally complex submanifolds of the associative Grass-  
mann manifold  
Kanakou Enoyoshi (Ochanomizu Univ.)

**14:15~16:15**

03-01-0008

- 9 前田 陽 一 (東海大理) 実特殊線形変換群  $SL(2, \mathbb{R})$  の3次元球面への埋め込みと,  $SL(2, \mathbb{Z})$  の対称行列が形作る双曲的パターン ..... 10

Yoichi Maeda (Tokai Univ.) Embedding of  $SL(2, \mathbb{R})$  into the three-dimensional sphere and a hyperbolic pattern of symmetric matrices of  $SL(2, \mathbb{Z})$

03-01-0030

- 10 島本 直 弥 (東大数理) Description of infinite orbits on multiple flag varieties: projective space case ..... 15

Naoya Shimamoto (Univ. of Tokyo) Description of infinite orbits on multiple flag varieties: projective space case

03-01-0027

- 11 前多 啓 一 (東大数理) コンパクト Clifford–Klein 形を持つ分解不可能な符号  $(2, 2)$  の擬 Riemann 対称空間の分類 ..... 15

Keiichi Maeta (Univ. of Tokyo) The classification of indecomposable pseudo Riemannian symmetric spaces with signature  $(2, 2)$  which admit compact Clifford–Klein forms

03-01-0025

- 12 権藤 暁 則 (広島大理) 非連結リー群による非コンパクト型対称空間への余等質性1作用 ..... 10

Akinori Gondo (Hiroshima Univ.) Cohomogeneity one actions of disconnected Lie groups on symmetric spaces of noncompact type

03-01-0024

- 13 大野 晋 司 (日大文理) 球面内の等質二重調和部分多様体 ..... 15

Shinji Ohno (Nihon Univ.) Homegeneous biharmonic submanifolds in spheres

03-01-0026

- 14 大野 晋 司 (日大文理) 一般化された  $s$  多様体の対蹠集合 ..... 15

酒井 高 司 (首都大東京理)  
寺内 泰 紀

Shinji Ohno (Nihon Univ.) Antipodal sets of generalized  $s$ -manifolds

Takashi Sakai (Tokyo Metro. Univ.)

Yasunori Tereuchi

03-01-0020

- 15 田中 真 紀 子 (東京理大理工) 古典型コンパクト対称空間の極大対蹠集合 I ..... 15

田崎 博 之 (筑波大数理物質)

Makiko Sumi Tanaka (Tokyo Univ. of Sci.) Maximal antipodal sets of classical compact symmetric spaces I

(Tokyo Univ. of Sci.)

Hiroyuki Tasaki (Univ. of Tsukuba)

**16:30~17:30 特別講演**

03-02-0004

- 森田 陽 介 (京大理) 非 Riemann 等質空間のコンパクト商のコホモロジー

Yosuke Morita (Kyoto Univ.) On the cohomology of compact quotients of non-Riemannian homogeneous spaces

9月25日(火)

**10:10~10:25 2018年度日本数学会幾何学賞授賞式****10:30~11:30 2018年度日本数学会幾何学賞受賞特別講演 (トポロジー分科会と合同)**

03-02-0001

- 本多 正 平 (東北大理) Ricci 曲率が下に有界な特異空間上の幾何解析

Shouhei Honda (Tohoku Univ.) Geometric analysis on metric measure spaces with Ricci bounds from below

**13:15~14:15 特別講演**

03-02-0003

- 久本 智 之 (名大多元数理) 変分法から見た Kähler–Einstein 問題

Tomoyuki Hisamoto (Nagoya Univ.) A variational aspect of the Kähler–Einstein problem

9月26日(水)

**9:50~11:40**

03-01-0015

16 大鳥羽暢彦 (Univ. Regensburg)\* スカラー曲率一定計量の分岐と調和な Riemann 沈め込み ..... 15  
 J. Petean ( CIMAT )

Nobuhiko Otaba (Univ. Regensburg) Bifurcation for the constant scalar curvature equation and harmonic  
Jimmy Petean (CIMAT) Riemannian submersions

03-01-0016

17 大鳥羽暢彦 (Univ. Regensburg) 直積 Riemann 多様体の多重共形類とスカラー曲率 ..... 15  
 S. Roos ( MPIM )

Nobuhiko Otaba (Univ. Regensburg) Scalar curvature and the multiconformal class of a direct product Rie-  
Saskia Roos (MPIM) mannian manifold

03-01-0021

18 池田 薫 (慶大経済) <sup>b</sup> Heisenberg 群に関する symplectic 構造と実係数の特性類について ..... 15

Kaoru Ikeda (Keio Univ.) The symplectic structures on the Heisenberg groups and real character-  
 istic classes

03-01-0010

19 池田 憲明 (立命館大理工) On the relation of Lie algebroids to constrained Hamiltonian systems  
 and their BV/BFV formulation ..... 15

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

03-01-0019

20 小澤龍ノ介 (阪大理) Stability of Riemannian curvature dimension condition under concen-  
横田 巧 (京大数理研) tration topology ..... 15

Ryunosuke Ozawa (Osaka Univ.) Stability of Riemannian curvature dimension condition under concen-  
Takumi Yokota (Kyoto Univ.) tration topology

03-01-0009

21 高津飛鳥 (首都大東京理) <sup>b</sup> 退化した circle pattern に収束するトーラス上の組合せリッチ流 ..... 15

Asuka Takatsu (Tokyo Metro. Univ.) Convergence of combinatorial Ricci flows on tori to degenerated circle  
 patterns

**14:15~16:15**

03-01-0007

22 伊敷喜斗 (筑波大数理物質) カントール距離空間の擬対称不変性質 ..... 15

Yoshito Ishiki (Univ. of Tsukuba) Quasi-symmetric invariant properties of Cantor metric spaces

03-01-0022

23 竹内 秀 (東北大理) 距離空間上のカレントと  $\flat$  距離 ..... 15

Shu Takeuchi (Tohoku Univ.) Currents in metric spaces and flat distances

03-01-0018

24 國川慶太 (東北大 AIMR) トランスレーティングソリトンの安定性とトポロジー ..... 15

齋藤俊輔 (東北大 AIMR)

Keita Kunikawa (Tohoku Univ.) Stability and topology of translating solitons

Shunsuke Saito (Tohoku Univ.)

03-01-0003

25 只野 誉 (東京理大理) Some Cheeger–Gromov–Taylor type theorems for Finsler manifolds ... 15

Homare Tadano (Tokyo Univ. of Sci.) Some Cheeger–Gromov–Taylor type theorems for Finsler manifolds

03-01-0012

26 澤井 洋 (沼津工高専) LCK 可解多様体における Vaisman 構造と複素構造について ..... 15

Hiroshi Sawai Vaisman structures and complex structures on LCK solvmanifolds

(Numazu Nat. Coll. of Tech.)

03-01-0002

27 橋本義規 Twisted constant scalar curvature Kähler metrics with a large twist .. 15

(Univ. degli Studi di Firenze)

Yoshinori Hashimoto

(Univ. degli Studi di Firenze)

Twisted constant scalar curvature Kähler metrics with a large twist

03-01-0001

28 本間 泰史 (早大理工) The kernel of the Rarita–Schwinger operator on Riemannian spin manifolds ..... 15  
 U. Semmelmann (Univ. Stuttgart)

Yasushi Homma (Waseda Univ.) The kernel of the Rarita–Schwinger operator on Riemannian spin manifolds  
 Uwe Semmelmann (Univ. Stuttgart)

**16:30～17:30 特別講演**

03-02-0002

藤田 玄 (日本女大理) シンプレクティック多様体上のディラック型作用素の指数とその局所化について

Hajime Fujita (Japan Women's Univ.) Index of Dirac-type operator on symplectic manifolds and its localization



## 函数論

9月24日(月)

9:00~11:50

- 04-01-0001  
1 齋藤 三郎 (群馬大\*・再生核研)\* Division by zero calculus ..... 15  
Saburoou Saitoh Division by zero calculus  
(Gunma Univ.\*/Inst. of Reproducing Kernels)
- 04-01-0002  
2 齋藤 三郎 (群馬大\*・再生核研)\* The Descartes circles theorem and division by zero calculus ..... 15  
奥村 博 The Descartes circles theorem and division by zero calculus  
Saburoou Saitoh  
(Gunma Univ.\*/Inst. of Reproducing Kernels)  
Hiroschi Okumura
- 04-01-0014  
3 須川 敏幸 (東北大情報) 双曲的穴あき球面の最短閉測地線の長さについて ..... 15  
張 坦然 (蘇州大)  
Toshiyuki Sugawa (Tohoku Univ.) On the length of the shortest closed geodesics in a hyperbolic punctured  
Tanran Zhang (Soochow Univ.) sphere
- 04-01-0023  
4 米谷 文男 挙動 Span について ..... 15  
Fumio Maitani Spans of meromorphic differentials restricted by boundary behavior
- 04-01-0026  
5 柴 雅和 (広島大\*) 開リーマン面の closings —周期行列の複素正規化と方向モジュラスおよびそれらの応用 ..... 15  
Masakazu Shiba (Hiroshima Univ.\*) Closings of an open Riemann surface —Hydrodynamic period matrices,  
directional moduli and their applications
- 04-01-0015  
6 石崎 克也 (放送大) Entire and meromorphic solutions of the functional equation  $f^n + g^n +$   
木村 直文 (放送大)  $h^n = 1$  and differential equations ..... 15  
Katsuya Ishizaki (Open Univ. of Japan) Entire and meromorphic solutions of the functional equation  $f^n + g^n +$   
Naofumi Kimura (Open Univ. of Japan)  $h^n = 1$  and differential equations
- 04-01-0028  
7 松崎 克彦 (早大教育) Myrberg limit set and horospheric limit set ..... 15  
K. Falk  
(Christian-Albrechts-Univ. zu Kiel)  
Katsuhiko Matsuzaki (Waseda Univ.) Myrberg limit set and horospheric limit set  
Kurt Falk  
(Christian-Albrechts-Univ. zu Kiel)
- 04-01-0016  
8 平田 賢太郎 (広島大理) 半線形楕円型問題の正值解に対する評価 ..... 15  
Kentarō Hirata (Hiroshima Univ.) An estimate for positive solutions of a semilinear elliptic problem
- 04-01-0025  
9 神本 丈 (九大数理) Non-polar singularities of local zeta functions in some smooth case ... 15  
野瀬 敏洋 (福岡工大)  
Joe Kamimoto (Kyushu Univ.) Non-polar singularities of local zeta functions in some smooth case  
Toshihiro Nose (Fukuoka Inst. of Tech.)
- 04-01-0027  
10 野瀬 敏洋 (福岡工大) Meromorphy of local zeta functions in smooth model cases ..... 15  
神本 丈 (九大数理)  
Toshihiro Nose (Fukuoka Inst. of Tech.) Meromorphy of local zeta functions in smooth model cases  
Joe Kamimoto (Kyushu Univ.)

**14:15~15:15 特別講演**

04-02-0002

中村 豪 (愛知工大)

Gou Nakamura (Aichi Inst. of Tech.)

極値的円板を許容する閉リーマン面

Closed Riemann surfaces admitting extremal disks

**15:30~16:20**

04-01-0017

11 中根 静 男 (東京工芸大)

Shizuo Nakane

(Tokyo Polytechnic Univ.)

Fiber Julia sets for maps with super-saddle fixed points ..... 15

Fiber Julia sets for maps with super-saddle fixed points

04-01-0004

12 松谷 茂 樹 (佐世保工高専)

米田 二 良 (神奈川工大)

E. Previato (Boston Univ.)

Shigeki Matsutani

(Sasebo Nat. Coll. of Tech.)

Jiryo Komeda (Kanagawa Inst. of Tech.)

Emma Previato (Boston Univ.)

Jacobi inversion formulae for a compact Riemann surface via Weierstrass normal form ..... 15

Jacobi inversion formulae for a compact Riemann surface via Weierstrass normal form

04-01-0005

13 松谷 茂 樹 (佐世保工高専)

米田 二 良 (神奈川工大)

E. Previato (Boston Univ.)

Shigeki Matsutani

(Sasebo Nat. Coll. of Tech.)

Jiryo Komeda (Kanagawa Inst. of Tech.)

Emma Previato (Boston Univ.)

On  $\sigma$  function for the curve,  $y^3 = x(x-s)(x-b_1)(x-b_2)$  and its limit of  $s \rightarrow 0$  ..... 15On  $\sigma$  function for the curve,  $y^3 = x(x-s)(x-b_1)(x-b_2)$  and its limit of  $s \rightarrow 0$ **16:35~17:35 特別講演**

04-02-0001

泊 昌 孝 (日大文理)\*

Masataka Tomari (Nihon Univ.)

2次元正規複素特異点の特異点解消過程による最近の研究

On recent studies on normal two-dimensional complex singularities via resolution process

9月25日(火)

**9:00~11:45**

04-01-0009

14 岩井 雅 崇 (東大数理)

Masataka Iwai (Univ. of Tokyo)

多重随伴束の順像に関する大域切断生成性について ..... 15

On the global generation of direct images of pluri-adjoint line bundles

04-01-0010

15 岩井 雅 崇 (東大数理)

Masataka Iwai (Univ. of Tokyo)

ベクトル束の特異エルミート計量に関する消滅定理 ..... 15

Vanishing theorems of vector bundles with singular Hermitian metrics

04-01-0011

16 岩井 雅 崇 (東大数理)

Masataka Iwai (Univ. of Tokyo)

特異エルミート計量を用いたねじれない接続層の弱正值性の特徴付け ..... 15

Characterization of weakly positive torsion-free coherent sheaves by singular Hermitian metrics

04-01-0019

17 丸 亀 泰 二 (台湾中研院)

Taiji Marugame (Academia Sinica)

Self-dual Einstein ACH metric and CR GJMS operators in dimension three ..... 15

Self-dual Einstein ACH metric and CR GJMS operators in dimension three

04-01-0008

18 足立 真 訓 (静岡大理)

Masanori Adachi (Shizuoka Univ.)

非定数有界正則関数を持たない超凸多様体 ..... 10

On a hyperconvex manifold without non-constant bounded holomorphic functions

04-01-0006	19 千葉 優 作 (お茶の水女大基幹)	Cohomology of non-pluriharmonic loci	15
	Yusaku Tiba (Ochanomizu Univ.)	Cohomology of non-pluriharmonic loci	
04-01-0012	20 大 沢 健 夫 (名大多元数理) <sup>b</sup>	西野の剛性定理の $L^2$ 拡張定理による別証	15
	Takeo Ohsawa (Nagoya Univ.)	$L^2$ proof of Nishino's rigidity theorem	
04-01-0013	21 阿 部 幸 隆 (富山大理工) <sup>b</sup>	Geometrically simple quasi-abelian varieties	15
	Yukitaka Abe (Univ. of Toyama)	Geometrically simple quasi-abelian varieties	
04-01-0003	22 児 玉 秋 雄 (金 沢 大*) <sup>b</sup>	A group-theoretic characterization of the Fock–Bargmann–Hartogs domains	15
	Akio Kodama (Kanazawa Univ.*)	A group-theoretic characterization of the Fock–Bargmann–Hartogs domains	
04-01-0007	23 清 水 悟 (東 北 大 理) <sup>b</sup>	等質有界領域の準局所的特徴付け	15
	Satoru Shimizu (Tohoku Univ.)	A semi-local characterization of homogeneous bounded domains	
<b>13:15~14:20</b>			
04-01-0024	24 正 岡 弘 照 (京 都 産 大 理)	開 Riemann 面上の Heins 型定理について	15
	Hiroaki Masaoka (Kyoto Sangyo Univ.)	On a Heins-type theorem on open Riemann surfaces	
04-01-0018	25 濱 田 英 隆 (九州産大理工)	A Schwarz lemma at the boundary for pluriharmonic mappings	10
	Hidetaka Hamada (Kyushu Sangyo Univ.)	A Schwarz lemma at the boundary for pluriharmonic mappings	
04-01-0020	26 濱 田 英 隆 (九州産大理工)	A Schwarz lemma at the boundary on finite dimensional irreducible bounded symmetric domains	15
	Hidetaka Hamada (Kyushu Sangyo Univ.)	A Schwarz lemma at the boundary on finite dimensional irreducible bounded symmetric domains	
04-01-0021	27 I. Graham (Univ. of Toronto)	A Schwarz lemma at the boundary on complex Hilbert balls and applications to starlike mappings	15
	濱 田 英 隆 (九州産大理工)		
	G. Kohr (Babeş-Bolyai Univ.)		
	Ian Graham (Univ. of Toronto)	A Schwarz lemma at the boundary on complex Hilbert balls and applications to starlike mappings	
	Hidetaka Hamada (Kyushu Sangyo Univ.)		
	Gabriela Kohr (Babeş-Bolyai Univ.)		
04-01-0022	28 I. Graham (Univ. of Toronto)	A boundary rigidity theorem for holomorphic self-mappings of Hilbert balls	5
	濱 田 英 隆 (九州産大理工)		
	G. Kohr (Babeş-Bolyai Univ.)		
	Ian Graham (Univ. of Toronto)	A boundary rigidity theorem for holomorphic self-mappings of Hilbert balls	
	Hidetaka Hamada (Kyushu Sangyo Univ.)		
	Gabriela Kohr (Babeş-Bolyai Univ.)		

# 函数方程式論

9月24日(月)

9:15~12:00

05-01-0072

- 1 小川原 弘士 (熊本大先端) 三角作用素と関数方程式系の解について ..... 10  
 Hiroshi Ogawara (Kumamoto Univ.) On solutions for a system of functional equations with triangular operators

05-01-0080

- 2 松原 宰栄 (神戸大理) 時間遅れ付き定数係数線形偏微分方程式系の Ehrenpreis–Malgrange 型定理に対する留数 current による接近法 ..... 10  
 Saiei-Jaeyoung Matsubara-Heo (Kobe Univ.) Residue current approach to Ehrenpreis–Malgrange type theorem for linear partial differential equations with constant coefficients and commensurate time lags

05-01-0045

- 3 松原 宰栄 (神戸大理) GKZ 超幾何函数の Euler 型積分表示とねじれサイクルの交点理論 ..... 10  
 Saiei-Jaeyoung Matsubara-Heo (Kobe Univ.) Euler integral representations of GKZ hypergeometric functions and intersection theory of twisted cycles

05-01-0076

- 4 広田 高輝 (立命館大理工)<sup>▷</sup> Real eigenvalues of the semiclassical Zakharov–Shabat operator with  $PT$ -like symmetry ..... 10  
 Koki Hirota (Ritsumeikan Univ.) Real eigenvalues of the semiclassical Zakharov–Shabat operator with  $PT$ -like symmetry

05-01-0008

- 5 松永 秀章 (阪府大理) ある 2 次元分数型差分方程式の解の漸近挙動の分類 ..... 10  
 鈴木 理菜  
 Hideaki Matsunaga (Osaka Pref. Univ.) Classification of global behavior of a system of rational difference equations  
 Rina Suzuki

05-01-0032

- 6 宇佐美 広介 (岐阜大工)\* 一般化サイクロイドに関する逆問題 ..... 10  
 青木 一央 (郡上高)  
 Hiroyuki Usami (Gifu Univ.) Inverse problems for generalized cycloids  
 Kazuhiro Aoki (Gujo High School)

05-01-0028

- 7 佐野 めぐみ (東工大) 単調減少ではない球対称ポテンシャル関数をもつ臨界 Hardy 不等式に関連した最小化問題 ..... 10  
 Megumi Sano (Tokyo Tech) Minimization problems related to the critical Hardy inequalities with radial potential functions which are not monotone decreasing.

05-01-0037

- 8 濱本 直樹 (阪市大理) Curl-free ベクトル場に対する Hardy–Leray 及び Rellich–Leray 不等式について ..... 10  
 高橋 太 (阪市大理)  
 Naoki Hamamoto (Osaka City Univ.) Hardy–Leray and Rellich–Leray inequalities for curl-free vector fields  
 Futoshi Takahashi (Osaka City Univ.)

05-01-0034

- 9 高橋 太 (阪市大理) 一般有界領域上での臨界 Hardy 不等式について ..... 10  
 Jaeyoung Byeon (KAIST)  
 Futoshi Takahashi (Osaka City Univ.) Hardy’s inequality in a limiting case on general bounded domains  
 Jaeyoung Byeon (KAIST)

05-01-0023

- 10 猪奥 倫左 (愛媛大理)<sup>▷</sup> Attainability of the best Sobolev constants in a ball ..... 10  
 Norisuke Ioku (Ehime Univ.) Attainability of the best Sobolev constants in a ball

05-01-0035

- 11 柴田将敬(東工大 理) Asymptotic property of ground states for a class of quasilinear Schrödinger equation with  $H^1$ -critical growth ..... 10  
 足達慎二(静岡大 工)  
 渡辺達也(京都産大 理)

Masataka Shibata (Tokyo Tech)  
 Shinji Adachi (Shizuoka Univ.)  
 Tatsuya Watanabe  
 (Kyoto Sangyo Univ.)

Asymptotic property of ground states for a class of quasilinear Schrödinger equation with  $H^1$ -critical growth

05-01-0006

- 12 豊田洋平(阪大基礎工) 2D Trudinger–Moser inequality for Boltzmann–Poisson equation with continuously distributed multi-intensities ..... 10  
 鈴木貴(阪大 MMDS)  
 Yohei Toyota (Osaka Univ.) 2D Trudinger–Moser inequality for Boltzmann–Poisson equation with continuously distributed multi-intensities  
 Takashi Suzuki (Osaka Univ.)

05-01-0067

- 13 大塚厚二 鞍点型変分問題での形状感度解析と一般 J 積分 ..... 10  
 (広島国際学院大情報文化)

V. A. Kovtunenکو  
 (Karl-Franzens-Univ. Graz)

Kohji Ohtsuka  
 (Hiroshima Kokusai Gakuin Univ.)

Victor A. Kovtunenکو  
 (Karl-Franzens-Univ. Graz)

Shape sensitivity analysis via min-max differentiability and Generalized J-integral

14:15~16:15

05-01-0068

- 14 西口純矢(東北大 RACMaS) 遅延微分方程式に対する岡村の距離関数と解の一意性のための十分条件 ..... 10

Junya Nishiguchi (Tohoku Univ.)

Okamura's distance function and a sufficient condition for the uniqueness of solutions for delay differential equations

05-01-0060

- 15 上田好寛(神戸大海事) Stability analysis for a general system of linear differential equations with discrete delays ..... 10  
 桐侑也(アズビル)

Yoshihiro Ueda (Kobe Univ.)  
 Yuya Kiri (Azbil Corp.)

Stability analysis for a general system of linear differential equations with discrete delays

05-01-0018

- 16 A. Rodríguez Mulet 非一様な断面を持つ細い柱状型弾性体の固有振動の漸近挙動 ..... 10  
 (北大 理)

Albert Rodríguez Mulet  
 (Hokkaido Univ.)

Asymptotic behavior of eigenfrequencies of a thin elastic rod with non-uniform cross-section

05-01-0081

- 17 竹内慎吾  $L^q$ -Lyapunov inequality for the one-dimensional  $p$ -Laplacian ..... 10  
 (芝浦工大システム理工)

Shingo Takeuchi  
 (Shibaura Inst. of Tech.)

$L^q$ -Lyapunov inequality for the one-dimensional  $p$ -Laplacian

05-01-0002

- 18 柴田徹太郎(広島大 工) Global and local structures of oscillatory bifurcation curves ..... 10  
 Tetsutaro Shibata (Hiroshima Univ.)

Global and local structures of oscillatory bifurcation curves

05-01-0054

- 19 長谷川翔一(東工大 理) Intersection property of solutions to semilinear elliptic equations and its application to a Liouville-type result ..... 10

Shoichi Hasegawa (Tokyo Tech)

Intersection property of solutions to semilinear elliptic equations and its application to a Liouville-type result

- 05-01-0012  
20 田中 敏 (岡山理大理) Symmetry-breaking bifurcation of positive solutions to the Moore–Nehari differential equation ..... 10  
梶木屋龍治 (佐賀大理工)  
I. Sim (蔚山大)
- Satoshi Tanaka (Okayama Univ. of Sci.) Symmetry-breaking bifurcation of positive solutions to the Moore–Nehari differential equation  
Ryuji Kajikiya (Saga Univ.)  
Inbo Sim (Univ. of Ulsan)
- 05-01-0013  
21 内藤雄基 (愛媛大理) Singular extremal solutions for supercritical elliptic equations in a ball ..... 10  
宮本安人 (東大数理)  
Yūki Naito (Ehime Univ.) Singular extremal solutions for supercritical elliptic equations in a ball  
Yasuhito Miyamoto (Univ. of Tokyo)
- 05-01-0003  
22 石井裕太 (首都大東京理) 空間非一様な係数を持つ Schnakenberg model の対称な 1-ピーク定常解の構成と安定性解析 ..... 10  
倉田和浩 (首都大東京理)  
Yuta Ishii (Tokyo Metro. Univ.) Construction and stability analysis of one-peak symmetric stationary solutions for the Schnackenberg model with heterogeneity  
Kazuhiro Kurata (Tokyo Metro. Univ.)
- 16:30~17:30 特別講演**
- 05-02-0003  
三町勝久 (阪大情報) 古典超幾何函数とその周辺  
Katsuhisa Mimachi (Osaka Univ.) Classical hypergeometric functions and related topics
- 9月25日(火)
- 9:15~12:00**
- 05-01-0017  
23 P. van Meurs Evolutionary convergence of positive and negative dislocations in 2D ..... 10  
(金沢大国際基幹教育院)  
Patrick van Meurs (Kanazawa Univ.) Evolutionary convergence of positive and negative dislocations in 2D
- 05-01-0026  
24 館山翔太 (東北大理) On  $L^p$ -viscosity solutions of bilateral obstacle problems with unbounded ingredients ..... 10  
小池茂昭 (東北大理)  
Shota Tateyama (Tohoku Univ.) On  $L^p$ -viscosity solutions of bilateral obstacle problems with unbounded ingredients  
Shigeaki Koike (Tohoku Univ.)
- 05-01-0055  
25 井上順平 (電通大) 定常ロジスティック方程式における最適棲息分布 ..... 10  
久藤衡介 (電通大)  
Junpei Inoue (Univ. of Electro-Comm.) Optimal distribution of a species in the stationary logistic equation  
Kousuke Kuto (Univ. of Electro-Comm.)
- 05-01-0052  
26 久藤衡介 (電通大情報理工) Bifurcation from infinity in a shadow system for the Shigesada–Kawasaki–Teramoto model ..... 10  
Yaping Wu (首都師範大) Bifurcation from infinity in a shadow system for the Shigesada–Kawasaki–Teramoto model  
Kousuke Kuto (Univ. of Electro-Comm.)  
Yaping Wu (Capital Normal Univ.)
- 05-01-0016  
27 松澤 寛 (沼津工高専) Spreading and vanishing in a free boundary problem for nonlinear diffusion equations with a given forced moving boundary ..... 10  
兼子裕大 (早大理工)  
Hiroshi Matsuzawa (Numazu Nat. Coll. of Tech.) Spreading and vanishing in a free boundary problem for nonlinear diffusion equations with a given forced moving boundary  
Yuki Kaneko (Waseda Univ.)

05-01-0066

- 28 兼子 裕大 (早大理工) 反応拡散方程式の自由境界問題における spreading 解の漸近形状と漸近速度 ..... 10  
 山田 義雄 (早大理工)  
 Yuki Kaneko (Waseda Univ.) Asymptotic profiles and speeds on spreading solutions to a free boundary problem for a reaction-diffusion equation  
 Yoshio Yamada (Waseda Univ.)

05-01-0014

- 29 國谷 紀良 (神戸大システム情報) 非局所的な拡散を伴う SIR 感染症モデルの漸近挙動 ..... 10  
 Jinliang Wang (黒竜江大)  
 Toshikazu Kuniya (Kobe Univ.) Asymptotic behavior of an SIR epidemic model with nonlocal diffusion  
 Jinliang Wang (Heilongjiang Univ.)

05-01-0029

- 30 大西 勇 (広島大理) リーゼガング現象の一次元ケラー=ルビノウモデルに対する数理解析 .. 10  
 Isamu Ohnishi (Hiroshima Univ.) A mathematical study of the one-dimensional Keller and Rubirow model for Liesegang bands

05-01-0030

- 31 大西 勇 (広島大理) On mathematical standard structure of a binary digit of memory in a cell and its application to biological or life science phenomena ..... 10  
 Isamu Ohnishi (Hiroshima Univ.) On mathematical standard structure of a binary digit of memory in a cell and its application to biological or life science phenomena

05-01-0038

- 32 下條 昌彦 (岡山理大理) 特異性をもつ被食-捕食型シャドーシステム ..... 10  
 郭 忠勝 (淡江大)  
 A. Ducrot (Univ. de Bordeaux) Shadow system of a singular prey-predator system  
 Masahiko Shimojyou (Okayama Univ. of Sci.)  
 Jong Shenq Guo (Tamkang Univ.)  
 Arnaud Ducrot (Univ. de Bordeaux)

05-01-0039

- 33 下條 昌彦 (岡山理大理) 特異性被食-捕食モデルの時間大域解の漸近挙動 ..... 10  
 郭 忠勝 (淡江大)  
 Masahiko Shimojyou Asymptotic behavior of global solutions to a singular prey-predator model  
 (Okayama Univ. of Sci.)  
 Jong Shenq Guo (Tamkang Univ.)

05-01-0050

- 34 谷口 雅治 (岡山大自然) Axially non-symmetric traveling fronts in balanced bistable reaction-diffusion equations ..... 10  
 Masaharu Taniguchi (Okayama Univ.) Axially non-symmetric traveling fronts in balanced bistable reaction-diffusion equations

**13:15~14:15 特別講演**

05-02-0001

- 川上 竜樹 (龍谷大理工) 動的境界条件付き半線形楕円型方程式  
 Tatsuki Kawakami (Ryukoku Univ.) A semilinear elliptic equation with a dynamical boundary condition

9月26日(水)

**9:15~12:00**

05-01-0044

- 35 梶原 直人 (東大数理) 力学的境界条件を持つ Cahn-Hilliard 方程式の大域可解性 ..... 10  
 Naoto Kajiwara (Univ. of Tokyo) Global solvability of the Cahn-Hilliard equations with dynamic boundary conditions

- 05-01-0024  
36 尾上文彦 (東大数理) A varifold formulation of mean curvature flow with Dirichlet or dynamic boundary conditions ..... 10  
儀我美一 (東大数理)  
高棹圭介 (京大理)  
Fumihiko Onoue (Univ. of Tokyo) A varifold formulation of mean curvature flow with Dirichlet or dynamic boundary conditions  
Yoshikazu Giga (Univ. of Tokyo)  
Keisuke Takasao (Kyoto Univ.)
- 05-01-0015  
37 中村恒平 (埼玉大理工) 平面閉曲線に対する等周比を用いた補間不等式とその非局所曲率流への応用 ..... 10  
長澤壯之 (埼玉大理工)  
Kohei Nakamura (Saitama Univ.) Interpolation inequalities between the deviation of curvature and the isoperimetric ratio with applications to geometric flows  
Takeyuki Nagasawa (Saitama Univ.)
- 05-01-0022  
38 猪奥倫左 (愛媛大理) Critical dissipative estimate for a heat semigroup with the inverse square potential ..... 10  
小川卓克 (東北大理工)  
Norisuke Ioku (Ehime Univ.) Critical dissipative estimate for a heat semigroup with the inverse square potential  
Takayoshi Ogawa (Tohoku Univ.)
- 05-01-0073  
39 向井晨人 (東大数理) Large time behavior of solutions of the heat equation with inverse square potential ..... 10  
Asato Mukai (Univ. of Tokyo) Large time behavior of solutions of the heat equation with inverse square potential
- 05-01-0051  
40 比佐幸太郎 (東北大理工) Existence of solutions for a fractional semilinear parabolic equation with singular initial data ..... 10  
石毛和弘 (東大数理)  
Kotaro Hisa (Tohoku Univ.) Existence of solutions for a fractional semilinear parabolic equation with singular initial data  
Kazuhiro Ishige (Univ. of Tokyo)
- 05-01-0069  
41 関行宏 (九大数理) On type II blow-up mechanisms in a semilinear heat equation with supercritical nonlinearity ..... 10  
Yukihiro Seki (Kyushu Univ.) On type II blow-up mechanisms in a semilinear heat equation with supercritical nonlinearity
- 05-01-0027  
42 山本征法 (新潟大自然) 準地衡近似方程式の解の空間遠方での減衰について ..... 10  
杉山裕介 (滋賀県大工)  
Masakazu Yamamoto (Niigata Univ.) Spatial decay of solutions to the quasi-geostrophic equation  
Yuusuke Sugiyama (Univ. of Shiga Pref.)
- 05-01-0001  
43 T. Black (Univ. Paderborn) Global generalized solutions of a Keller–Segel–Stokes system with singular sensitivity ..... 10  
J. Lankeit (Univ. Paderborn)  
水上雅昭 (東京理大理)  
Tobias Black (Univ. Paderborn) Global generalized solutions of a Keller–Segel–Stokes system with singular sensitivity  
Johannes Lankeit (Univ. Paderborn)  
Masaaki Mizukami (Tokyo Univ. of Sci.)
- 05-01-0056  
44 少林文孝 (早大理工) The Keller–Segel system of parabolic-parabolic type in Morrey space ..... 10  
Fumitaka Wakabayashi (Waseda Univ.) The Keller–Segel system of parabolic-parabolic type in Morrey space



- 05-01-0061  
45 岡田 晃 (京大人間環境) 齊次 Besov 空間に初期値をとる drift-diffusion 方程式の解の解析性について ..... 10  
Akira Okada (Kyoto Univ.) Spatial analyticity of solutions to the drift-diffusion equation with initial data in homogeneous Besov space
- 05-01-0074  
46 和久井洋司 (東北大理) 質量優臨界指数における退化移流拡散方程式の解の非有界性 ..... 10  
Hiroshi Wakui (Tohoku Univ.) Unboundedness for solutions to a degenerate drift-diffusion equation with the mass supercritical exponent
- 05-01-0047  
47 吉田夏海 (立命館大OIC総合研究機構) Global asymptotic stability of rarefaction waves to the Cauchy problem for the generalized Korteweg–de Vries–Burgers–Kuramoto equation ... 10  
Natsumi Yoshida (Ritsumeikan Univ.) Global asymptotic stability of rarefaction waves to the Cauchy problem for the generalized Korteweg–de Vries–Burgers–Kuramoto equation
- 05-01-0048  
48 吉田夏海 (立命館大OIC総合研究機構) Decay structure of solutions toward rarefaction waves to the Cauchy problem for the scalar conservation law with nonlinear viscosity ..... 10  
Natsumi Yoshida (Ritsumeikan Univ.) Decay structure of solutions toward rarefaction waves to the Cauchy problem for the scalar conservation law with nonlinear viscosity
- 14:15~16:15**  
05-01-0075  
49 廣澤史彦 (山口大理) On the energy estimate for Klein–Gordon type equations with time dependent singular mass ..... 10  
Fumihiko Hirose (Yamaguchi Univ.) On the energy estimate for Klein–Gordon type equations with time dependent singular mass
- 05-01-0011  
50 道久寛載 (広島大理) 強摩擦項をもつ波動方程式の発展作用素の展開に関して ..... 10  
Hironori Michihisa (Hiroshima Univ.) Expanding methods for evolution operators of strongly damped wave equations
- 05-01-0078  
51 高村博之 (東北大理)\* 強い時間減衰を伴う消散項付き非線形波動方程式に対する解の波動的な爆発と lifespan 評価 ..... 10  
頼宇安 (麗水学院) Wave-like blow-up and lifespan estimate for solutions of nonlinear wave equations with strong time-decaying damping  
Hiroyuki Takamura (Tohoku Univ.)  
Ning-An Lai (Lishui Univ.)
- 05-01-0063  
52 側島基宏 (東京理大理工) On a test function method for blowup of solutions to semilinear damped wave equations ..... 10  
池田正弘 (理化学研・慶大理工) On a test function method for blowup of solutions to semilinear damped wave equations  
Motohiro Sobajima (Tokyo Univ. of Sci.)  
Masahiro Ikeda (RIKEN/Keio Univ.)
- 05-01-0064  
53 側島基宏 (東京理大理工) Sharp lifespan estimates for solutions to two-dimensional semilinear heat equation in exterior domains ..... 10  
Motohiro Sobajima Sharp lifespan estimates for solutions to two-dimensional semilinear heat equation in exterior domains  
(Tokyo Univ. of Sci.)
- 05-01-0083  
54 佐々木多希子 (明大理工) The blow-up curve for semilinear wave equations with small spatial velocity ..... 10  
Takiko Sasaki (Meiji Univ.) The blow-up curve for semilinear wave equations with small spatial velocity
- 05-01-0019  
55 水谷治哉 (阪大理) Strichartz estimates for Schrödinger equations with slowly decaying potentials ..... 10  
Haruya Mizutani (Osaka Univ.) Strichartz estimates for Schrödinger equations with slowly decaying potentials

05-01-0053

56 深谷 法良 (東京理大理)  
太田 雅人 (東京理大理)Noriyoshi Fukaya (Tokyo Univ. of Sci.)  
Masahito Ohta (Tokyo Univ. of Sci.)Strong instability of standing waves for nonlinear Schrödinger equations  
with attractive inverse power potential ..... 10Strong instability of standing waves for nonlinear Schrödinger equations  
with attractive inverse power potential

05-01-0021

57 平山 浩之  
(宮崎大テニュアトラック推進機構)  
池田 正弘  
(理化学研 AIP・慶大理工)Hiroyuki Hirayama (Univ. of Miyazaki)  
Masahiro Ikeda (RIKEN/Keio Univ.)

非線形 4 階シュレディンガー方程式の適切性について ..... 10

Well-posedness for the nonlinear fourth order Schrödinger equations

## 16:30~17:30 特別講演

05-02-0002

ベズ ニール (埼玉大理工)<sup>b</sup>  
Neal Bez (Saitama Univ.)

Geometric estimates arising in the analysis of Zakharov systems

Geometric estimates arising in the analysis of Zakharov systems

## 9月27日(木)

## 9:15~12:00

05-01-0057

58 浜野 大 (埼玉大理工)

Masaru Hamano (Saitama Univ.)

空間 5 次元における 2 次の非線形項をもつシュレディンガー方程式系の  
解の時間大域挙動について ..... 10Long time behavior of the solutions for the Schrödinger system with  
quadratic nonlinear terms in 5d

05-01-0058

59 田中 智之 (名大多元数理)

Tomoyuki Tanaka (Nagoya Univ.)

3 次 Benjamin-Ono 方程式の時間局所適切性について ..... 10

On the local well-posedness of the third order Benjamin-Ono equation

05-01-0062

60 岡本 葵 (信州大工)

Mamoru Okamoto (Shinshu Univ.)

Asymptotic behavior of solutions to a higher-order KdV-type equation  
with critical nonlinearity ..... 10Asymptotic behavior of solutions to a higher-order KdV-type equation  
with critical nonlinearity

05-01-0070

61 F. Linares ( IMPA )

宮崎 隼人 (津山工高専)

G. Ponce ( UCSB )

Felipe Linares (IMPA)

Hayato Miyazaki

(Tsuyama Nat. Coll. of Tech.)

Gustavo Ponce (UCSB)

低次のべきの非線形項を持つ一般化 KdV 方程式の初期値問題について  
..... 10The initial value problem for the generalized KdV equation with low  
degree of nonlinearity

05-01-0059

62 山崎 陽平 (広島大理)

Yohei Yamazaki (Hiroshima Univ.)

Zakharov-Kuznetsov 方程式の線状進行波の周りの中心安定多様体につ  
いて ..... 10Center stable manifolds around line solitary waves of Zakharov-Kuznetsov  
equation

05-01-0036

63 木下 真也 (名大多元数理)

平山 浩之

(宮崎大テニュアトラック推進機構)

Shinya Kinoshita (Nagoya Univ.)

Hiroyuki Hirayama (Univ. of Miyazaki)

非線形シュレディンガー方程式系に対する双線形評価とその適切性への  
応用 ..... 10Sharp bilinear estimates and its application to a system of quadratic  
derivative nonlinear Schrödinger equations

- 05-01-0042  
64 上田好寛 (神戸大海事) Dissipative structures for thermoelastic plate equations with Cattneo's law ..... 10  
R. Racke (Univ. Konstanz)  
Yoshihiro Ueda (Kobe Univ.) Dissipative structures for thermoelastic plate equations with Cattneo's law  
Reinhard Racke (Univ. Konstanz)
- 05-01-0041  
65 上田好寛 (神戸大海事) Optimal decay estimates of a regularity-loss type system with constraint condition ..... 10  
Yoshihiro Ueda (Kobe Univ.) Optimal decay estimates of a regularity-loss type system with constraint condition
- 05-01-0040  
66 上田好寛 (神戸大海事) New structural condition on decay property for symmetric hyperbolic systems with relaxation ..... 10  
Renjun Duan (香港中文大)  
川島秀一 (早大理工)  
Yoshihiro Ueda (Kobe Univ.) New structural condition on decay property for symmetric hyperbolic systems with relaxation  
Renjun Duan  
(Chinese Univ. of Hong Kong)  
Shuichi Kawashima (Waseda Univ.)
- 05-01-0043  
67 上田好寛 (神戸大海事) New stability criterion for the dissipative linear system ..... 10  
Yoshihiro Ueda (Kobe Univ.) New stability criterion for the dissipative linear system
- 05-01-0077  
68 古川賢 (東大数理) Primitive 方程式における静水圧近似の正当化 ..... 10  
儀我美一 (東大数理)  
A. Hussein (TU Darmstadt)  
M. Hieber (TU Darmstadt)  
柏原崇人 (東大数理)  
M. Wrona (TU Darmstadt)  
Ken Furukawa (Univ. of Tokyo) On justification of hydrostatic approximation on the Primitive equation  
Yoshikazu Giga (Univ. of Tokyo)  
Amru Hussein (TU Darmstadt)  
Matthias Hieber (TU Darmstadt)  
Takahito Kashiwabara (Univ. of Tokyo)  
Marc Wrona (TU Darmstadt)
- 05-01-0009  
69 古場一 (阪大基礎工) 境界を持つ時間発展する曲面上における熱の伝わりや濃度拡散の数理モデリング ..... 10  
Hajime Koba (Osaka Univ.) Mathematical modeling of diffusion and heat systems on an evolving surface with boundaries
- 05-01-0010  
70 古場一 (阪大基礎工) 境界を持つ時間発展する曲面上における圧縮性流体の流れの数理モデリング ..... 10  
Hajime Koba (Osaka Univ.) Mathematical modeling of compressible fluid system on an evolving surface with boundaries
- 05-01-0007  
71 佐藤一輝 (阪大基礎工) エネルギー変分法を用いた非ニュートン流体の数理モデリング ..... 10  
古場一 (阪大基礎工)  
Kazuki Sato (Osaka Univ.) Energetic variational approaches for non-Newtonian fluid systems  
Hajime Koba (Osaka Univ.)
- 14:15~16:15**  
05-01-0046  
72 中里亮介 (東北大理) 臨界 Besov 空間における密度依存型磁気流体方程式系の解の正則性判定条件について ..... 10  
Ryosuke Nakasato (Tohoku Univ.) A regularity criterion for the density-dependent magnetohydrodynamics system in critical Besov spaces

- 05-01-0004  
73 阿部 健 (阪市大理) 軸対称流の零粘性極限 ..... 10  
Ken Abe (Osaka City Univ.) Vanishing viscosity of axisymmetric flows
- 05-01-0005  
74 金丸 諒 (早大理工) Brezis–Gallouet–Wainger 型不等式と Navier–Stokes 方程式の時間局所的強解のアプリオリ評価 ..... 10  
Ryo Kanamaru (Waseda Univ.) Brezis–Gallouet–Wainger type inequalities and a priori estimates of time local strong solutions to Navier–Stokes equations
- 05-01-0031  
75 檜垣 充朗 (京大理) On stationary two-dimensional flows around a fast rotating disk ..... 10  
前川 泰則 (京大理) I. Gallagher (École Norm. Sup.)  
Mitsuo Higaki (Kyoto Univ.) On stationary two-dimensional flows around a fast rotating disk  
Yasunori Maekawa (Kyoto Univ.)  
Isabelle Gallagher (École Norm. Sup.)
- 05-01-0033  
76 鶴見 裕之 (早大理工) Ill-posedness of the stationary Navier–Stokes equations in scaling invariant homogeneous Besov spaces ..... 10  
Hiroyuki Tsurumi (Waseda Univ.) Ill-posedness of the stationary Navier–Stokes equations in scaling invariant homogeneous Besov spaces
- 05-01-0082  
77 神保 秀一 (北大理) フリクション付きスリップ境界条件を課したストークス方程式の多重度のある固有値に対するアダマル変分公式について ..... 10  
牛越 恵理佳 (横浜国大環境情報) Shuichi Jimbo (Hokkaido Univ.) Hadamard variational formula for the multiple eigenvalue of the Stokes equations with friction slip boundary conditions  
Erika Ushikoshi (Yokohama Nat. Univ.)
- 05-01-0071  
78 齋藤 平和 (東京理大基礎工) Local solvability of the Navier–Stokes–Korteweg equations in the maximal regularity class ..... 10  
Hirokazu Saito (Tokyo Univ. of Sci.) Local solvability of the Navier–Stokes–Korteweg equations in the maximal regularity class
- 05-01-0079  
79 柴田 良弘 (早大理工) Navier–Stokes–Korteweg 方程式の全空間における時間大域的適切性について ..... 10  
村田 美帆 (神奈川大工) Yoshihiro Shibata (Waseda Univ.) Global well-posedness for the Navier–Stokes–Korteweg system in  $\mathbb{R}^N$   
Miho Murata (Kanagawa Univ.)
- 05-01-0049  
80 高田 了 (九大数理) Strongly stratified limit for the 3D inviscid Boussinesq equations ..... 10  
Ryo Takada (Kyushu Univ.) Strongly stratified limit for the 3D inviscid Boussinesq equations
- 16:30~17:30 特別講演**  
05-02-0004  
福泉 麗佳 (東北大情報) Bose–Einstein 凝縮モデルにおける温度効果  
Reika Fukuizumi (Tohoku Univ.) Temperature effects in Bose–Einstein condensation

# 実函数論

9月26日(水)

9:00~12:00

- 06-01-0002  
1 伊東由文 (徳島大\*) 測度と積分の公理的方法 (III). ルベーク測度の定義と存在定理 ..... 15  
Yoshifumi Ito (Tokushima Univ.\*) Axiomatic method of measure and integration (III). Definition and existence theorem of the Lebesgue measure
- 06-01-0003  
2 伊東由文 (徳島大\*) 測度と積分の公理的方法 (IV). ルベーク積分の定義とその基本性質 ..... 15  
Yoshifumi Ito (Tokushima Univ.\*) Axiomatic method of measure and integration (IV). Definition of the Lebesgue integral and its fundamental properties
- 06-01-0022  
3 山崎洋平  $C^0$  級での無向の広さと無向積分 ..... 15  
Yōhei Yamasaki Non-oriented volume and non-oriented integral in the  $C^0$  class
- 06-01-0023  
4 山崎洋平 Minkowski content, 直積原理をみたく低次元の広さ ..... 15  
Yōhei Yamasaki Minkowski content, the volume that admits the cartesian product property
- 06-01-0031  
5 福田亮治 (大分大理工) Pan 積分, Lehrer 積分の収束定理 ..... 15  
本田あおい (九工大情報工) 岡崎悦明 (ファジィシステム研)  
Ryoji Fukuda (Oita Univ.) convergence theorems for Pan and Lehrer integrals  
Aoi Honda (Kyushu Inst. of Tech.)  
Yoshiaki Okazaki  
(Fuzzy Logic Systems Inst.)
- 06-01-0036  
6 福田亮治 (大分大理工) 代数積包除積分の収束定理 ..... 15  
本田あおい (九工大情報工) 岡崎悦明 (ファジィシステム研)  
Ryoji Fukuda (Oita Univ.) Convergence theorem of algebraic product inclusion-exclusion integral  
Aoi Honda (Kyushu Inst. of Tech.)  
Yoshiaki Okazaki  
(Fuzzy Logic Systems Inst.)
- 06-01-0020  
7 鈴木智成 (九工大工) 距離空間上の写像に関する縮小条件 ..... 15  
Tomonari Suzuki Contractive conditions on mappings on metric spaces  
(Kyushu Inst. of Tech.)
- 06-01-0013  
8 木村泰紀 (東邦大理) 測地距離空間における均衡問題とリゾルベント ..... 15  
Yasunori Kimura (Toho Univ.) Equilibrium problems on geodesic spaces and their resolvents
- 06-01-0024  
9 笠原健吾 (東邦大理) 完備 CAT(1) 空間上の2つのリゾルベント作用素による Mann 型近似列 ..... 15  
木村泰紀 (東邦大理)  
Kengo Kasahara (Toho Univ.) Mann type iterative sequence for two resolvents in a complete CAT(1)  
Yasunori Kimura (Toho Univ.) space
- 06-01-0029  
10 渡辺俊一 (東京情報大総合情報) Boundary value problems involving a fractional differential equation .. 15  
Toshikazu Watanabe Boundary value problems involving a fractional differential equation  
(Tokyo Univ. of Information Sci.)

06-01-0035

- 11 厚 芝 幸 子 (山 梨 大 教 育) Attractive point, fixed point and convergence theorems for generalized hybrid-type mappings ..... 15  
 Sachiko Atsushiba Attractive point, fixed point and convergence theorems for generalized hybrid-type mappings  
 (Univ. of Yamanashi)

14:15~16:30

06-01-0017

- 12 齋 藤 耕 太 (名 大 多 元 数 理) 漸近的に任意の方向に等差数列を含むがフラクタル次元が1である集合の構成 ..... 10  
 Kota Saito (Nagoya Univ.) Construction of a one-dimensional set which asymptotically and omnidirectionally contains arithmetic progressions

06-01-0005

- 13 飯 田 毅 士 (福 島 工 高 専) Orlicz-fractional maximal operators on weighted  $L^p$  spaces ..... 15  
 澤 野 嘉 宏 (首 都 大 東 京 理) Orlicz-fractional maximal operators on weighted  $L^p$  spaces  
 Takeshi Iida (Fukushima Nat. Coll. of Tech.)  
 Yoshihiro Sawano (Tokyo Metro. Univ.)

06-01-0006

- 14 石 明 磊 (茨 城 大 理 工) Campanato spaces and commutators of generalized fractional integral operators on Orlicz spaces ..... 15  
 新 井 龍 太 郎 (茨 城 大 理 工) Campanato spaces and commutators of generalized fractional integral operators on Orlicz spaces  
 中 井 英 一 (茨 城 大 理) Eiichi Nakai (Ibaraki Univ.)  
 Minglei Shi (Ibaraki Univ.)  
 Ryutaro Arai (Ibaraki Univ.)

06-01-0009

- 15 川 澄 亮 太 Pointwise multipliers on weak Orlicz spaces ..... 15  
 中 井 英 一 (茨 城 大 理) Pointwise multipliers on weak Orlicz spaces  
 Ryota Kawasumi (Ibaraki Univ.)  
 Eiichi Nakai (Ibaraki Univ.)

06-01-0010

- 16 新 井 龍 太 郎 (茨 城 大 理 工) Fractional integrals on martingale Orlicz spaces ..... 15  
 中 井 英 一 (茨 城 大 理) Fractional integrals on martingale Orlicz spaces  
 貞 末 岳 (大 阪 教 育 大) Gaku Sadasue (Osaka Kyoiku Univ.)  
 Ryutaro Arai (Ibaraki Univ.)  
 Eiichi Nakai (Ibaraki Univ.)

06-01-0018

- 17 鶴 見 裕 之 (早 大 理 工) Counter examples of the bilinear estimates of the Hölder type inequality in homogeneous Besov spaces ..... 10  
 Hiroyuki Tsurumi (Waseda Univ.) Counter examples of the bilinear estimates of the Hölder type inequality in homogeneous Besov spaces

06-01-0011

- 18 笠 原 雪 夫 (北 大 理) Matricial Baxter's theorem with a Nehari sequence ..... 10  
 N. H. Bingham Matricial Baxter's theorem with a Nehari sequence  
 (Imperial Coll. London)  
 Yukio Kasahara (Hokkaido Univ.)  
 Nicholas H. Bingham (Imperial Coll. London)

- 06-01-0025  
19 齋藤 洋樹 (日大理工) Composition of maximal operators with weighted Hausdorff content ··· 15  
田中 仁 (筑波技術大)  
渡辺 俊一 (東京情報大総合情報)  
Hiroki Saito (Nihon Univ.) Composition of maximal operators with weighted Hausdorff content  
Hitoshi Tanaka  
(Tsukuba Univ. of Tech.)  
Toshikazu Watanabe  
(Tokyo Univ. of Information Sci.)
- 06-01-0032  
20 筒井 容平 (信州大理) A sparse bound for local smoothing operators ········· 15  
Youhei Tsutsui (Shinshu Univ.) A sparse bound for local smoothing operators
- 16:45~17:45 特別講演**  
06-02-0002  
河邊 淳 (信州大工) A unified approach to convergence theorems of distribution-based non-linear integrals  
Jun Kawabe (Shinshu Univ.) A unified approach to convergence theorems of distribution-based non-linear integrals
- 9月27日(木)
- 9:15~12:00**  
06-01-0001  
21 水上 雅昭 (東京理大理) Boundedness in a chemotaxis-haptotaxis system with signal-dependent sensitivity ········· 15  
大塚 裕彦 (東京理大理)  
横田 智巳 (東京理大理)  
Masaaki Mizukami  
(Tokyo Univ. of Sci.) Boundedness in a chemotaxis-haptotaxis system with signal-dependent sensitivity  
Hirohiko Otsuka (Tokyo Univ. of Sci.)  
Tomomi Yokota (Tokyo Univ. of Sci.)
- 06-01-0004  
22 来間 俊介 (東京理大理) 非有界領域における非局所項をもつ Cahn–Hilliard 方程式について ····· 15  
Shunsuke Kurima (Tokyo Univ. of Sci.) A nonlocal Cahn–Hilliard equation on an unbounded domain
- 06-01-0021  
23 香川 溪一郎 (早大理工) Initial boundary value problem of the viscous Cahn–Hilliard equation ········· 15  
大谷 光春 (早大理工)  
Keiichiro Kagawa (Waseda Univ.) Initial boundary value problem of the viscous Cahn–Hilliard equation  
Mitsuharu Ôtani (Waseda Univ.)
- 06-01-0026  
24 喜多 航佑 (早大理工) Bounds for global solutions of a reaction diffusion system ········· 15  
大谷 光春 (早大理工)  
Kosuke Kita (Waseda Univ.) Bounds for global solutions of a reaction diffusion system  
Mitsuharu Ôtani (Waseda Univ.)
- 06-01-0034  
25 黒田 隆徳 (早大理工) Periodic solutions for complex Ginzburg–Landau equations in bounded domains ········· 15  
大谷 光春 (早大理工)  
Takanori Kuroda (Waseda Univ.) Periodic solutions for complex Ginzburg–Landau equations in bounded domains  
Mitsuharu Ôtani (Waseda Univ.)

- 06-01-0014  
26 高橋 美羽 (日本女大理) ソレー効果に関連する実験を記述する初期値境界値問題の数値解法につ  
愛木 豊彦 (日本女大理) いて ..... 15  
M. Anthonissen  
(Eindhoven Univ. of Tech.)  
Miu Takahashi (Japan Women's Univ.) Numerical method for initial boundary value problem describing a real  
Toyohiko Aiki (Japan Women's Univ.) experiment related to Soret effect.  
Martijn Anthonissen  
(Eindhoven Univ. of Tech.)
- 06-01-0015  
27 中屋 敷亮太 (千葉大理) 力学的境界条件を含む結晶粒界モデルの漸近挙動 ..... 15  
Ryota Nakayashiki (Chiba Univ.) Large-time behavior of the solutions to the system of grain boundary  
motion including dynamic boundary condition
- 06-01-0033  
28 佐々木 善雅 (新潟大自然) 不連続な流束をもつ保存則方程式の一意可解性について ..... 15  
應和 宏樹 (新潟大自然) On the existence and uniqueness of solutions to scalar conservation laws  
Yoshimasa Sasaki (Niigata Univ.) with discontinuous flux functions  
Hiroki Ohwa (Niigata Univ.)
- 06-01-0027  
29 渡邊 紘 (大分大理工) 非等方的拡散項を持つ非局所的放物型・双曲型保存則系の適切性 ..... 15  
Hiroshi Watanabe (Oita Univ.) Well-posedness for nonlocal parabolic-hyperbolic conservation laws with  
anisotropic diffusion terms
- 06-01-0030  
30 岩 瀨 司 (東北大理) The semigroup generated by the Dirichlet Laplacian of fractional order  
..... 15  
Tsukasa Iwabuchi (Tohoku Univ.) The semigroup generated by the Dirichlet Laplacian of fractional order
- 14:15~16:00**
- 06-01-0037  
31 都 築 寛 (広島修道大経済) Initial-boundary value problems for Vlasov–Poisson equations with an-  
gle error in a half-space ..... 15  
Yutaka Tsuzuki  
(Hiroshima Shudo Univ.) Initial-boundary value problems for Vlasov–Poisson equations with an-  
gle error in a half-space
- 06-01-0019  
32 加 納 理 成 (高知大教育) 非線形硬化現象を記述する1次元モデルの可解性について ..... 15  
Risei Kano (Kochi Univ.) The existence of solutions for the non-linear hardening models
- 06-01-0028  
33 熊 崎 耕 太 (長崎大教育) 水分膨張を記述するある自由境界問題の時間大域解の存在について ..... 15  
A. Muntean (Karlstad Univ.) Existence of a global solution for a moving boundary problem describing  
Kota Kumazaki (Nagasaki Univ.) swelling  
Adrian Muntean (Karlstad Univ.)
- 06-01-0016  
34 白 川 健 (千葉大教育) A class of optimal control problems for one-dimensional Kobayashi–  
山 崎 教 昭 (神奈川大工) Warren–Carter type systems ..... 15  
H. Antil (George Mason Univ.)  
Ken Shirakawa (Chiba Univ.) A class of optimal control problems for one-dimensional Kobayashi–  
Noriaki Yamazaki (Kanagawa Univ.) Warren–Carter type systems  
Harbir Antil (George Mason Univ.)
- 06-01-0007  
35 山 崎 教 昭 (神奈川大工) Double quasi-variational evolution equations governed by time-dependent  
剣 持 信 幸 (Univ. of Warsaw) subdifferentials ..... 15  
白 川 健 (千葉大教育) Double quasi-variational evolution equations governed by time-dependent  
Noriaki Yamazaki (Kanagawa Univ.) subdifferentials  
Nobuyuki Kenmochi (Univ. of Warsaw)  
Ken Shirakawa (Chiba Univ.)



06-01-0008

36 伊藤 昭夫

Akio Ito

Evolution inclusion on a real Hilbert space with quasi-variational structure for inner product —Existence of global-in-time solutions— . . . . . 15

Evolution inclusion on a real Hilbert space with quasi-variational structure for inner product —Existence of global-in-time solutions—

**16:15~17:15 特別講演**

06-02-0001

鈴木 敏行 (神奈川大工)

Toshiyuki Suzuki (Kanagawa Univ.)

Semilinear Schrödinger evolution equations with inverse-square potentials

Semilinear Schrödinger evolution equations with inverse-square potentials

# 函数解析学

9月24日(月)

## 10:30~12:00

- 07-01-0032  
1 井上 寛 (第一薬大) 一般化リース系に基づく非自己共役ハミルトニアンの研究 (1) ..... 10  
Hiroshi Inoue (Daiichi Univ. of Pharm.) Non-self-adjoint Hamiltonian based on generalized Riesz systems (1)
- 07-01-0033  
2 井上 寛 (第一薬大) 一般化リース系に基づく非自己共役ハミルトニアンの研究 (2) ..... 10  
Hiroshi Inoue (Daiichi Univ. of Pharm.) Non-self-adjoint Hamiltonians based on generalized Riesz systems (2)
- 07-01-0009  
3 神澤 健雄 (東京理大理工) Criteria for the reducibilities of linear systems ..... 10  
Takeo Kamizawa (Tokyo Univ. of Sci.) Criteria for the reducibilities of linear systems
- 07-01-0003  
4 渡辺 秀司 (群馬大理工)\* 超伝導のBCS-Bogoliubovモデルにおける2次相転移とその作用素論的証明 ..... 15  
Shuji Watanabe (Gunma Univ.) The second-order phase transition in the BCS-Bogoliubov model of superconductivity and its operator-theoretical proof
- 07-01-0018  
5 和田 和幸 (八戸工高専) 量子ウォークにおける波動作用素の非存在 ..... 15  
Kazuyuki Wada (Nat. Inst. of Tech., Hachinohe Coll.) Absence of wave operators for quantum walks
- 07-01-0001  
6 森岡 悠 (同志社大理工) Detection of edge defects by embedded eigenvalues of quantum walks ..... 15  
瀬川 悦生 (東北大情報) ..... 15  
Hisashi Morioka (Doshisha Univ.) Detection of edge defects by embedded eigenvalues of quantum walks  
Etsuo Segawa (Tohoku Univ.)
- 14:15~16:15
- 07-01-0028  
7 中村 周 (東大数理) Essential self-adjointness of pseudodifferential operators on Euclidean spaces ..... 15  
平良 晃一 (東大数理) ..... 15  
Shu Nakamura (Univ. of Tokyo) Essential self-adjointness of pseudodifferential operators on Euclidean spaces  
Kouichi Taira (Univ. of Tokyo)
- 07-01-0029  
8 只野 之英 (東大数理) Long-range scattering theory for discrete Schrödinger operators on hexagonal lattice ..... 15  
Yukihide Tadano (Univ. of Tokyo) Long-range scattering theory for discrete Schrödinger operators on hexagonal lattice
- 07-01-0008  
9 川本 昌紀 (東京理大理) Klein-Gordon equations with homogeneous time-dependent electric fields ..... 15  
Masaki Kawamoto (Tokyo Univ. of Sci.) Klein-Gordon equations with homogeneous time-dependent electric fields
- 07-01-0037  
10 渡部 拓也 (立命館大理工) エネルギー交差におけるレゾナンスの準古典分布 ..... 15  
藤家 雪朗 (立命館大理工) ..... 15  
A. Martinez (Univ. Bolongna) ..... 15  
Takuya Watanabe (Ritsumeikan Univ.) Semiclassical distribution of resonances near an energy-level crossing  
Setsuro Fujiié (Ritsumeikan Univ.)  
André Martinez (Univ. Bolongna)

07-01-0026

- 11 山田 修 宣 (立命館大理工) A refined trace theorem and its application to uniform resolvent estimates of Dirac operators ..... 15  
大鍛 治隆 司 (京 大 理)  
 H. Kalf  
 (Math. Inst. der LMU München)

Osanobu Yamada (Ritsumeikan Univ.)  
Takashi Okaji (Kyoto Univ.)  
 Hubert Kalf  
 (Math. Inst. der LMU München)

A refined trace theorem and its application to uniform resolvent estimates of Dirac operators

07-01-0024

- 12 浅原 啓 輔 (北 大 理) 一般化された対相互作用モデルのスペクトル解析 ..... 15  
船川 大 樹 (北海学園大工)  
Keisuke Asahara (Hokkaido Univ.) Spectral analysis of a generalized pair-interaction model  
Daiju Funakawa (Hokkai-Gakuen Univ.)

07-01-0016

- 13 日高 建 準相対論的パウリ・フィールツ模型の基底状態の存在について ..... 15  
廣島 文 生 (九 大 数 理)  
佐々木 格 (信 州 大 理)  
Takeru Hidaka  
Fumio Hiroshima (Kyushu Univ.)  
Itaru Sasaki (Shinshu Univ.)

On the existence of the ground state for the semi-relativistic Pauli–Fierz model

**16:30~17:30 特別講演**

07-02-0001

- 宮尾 忠 宏 (北 大 理) 磁石と作用素不等式  
Tadahiro Miyao (Hokkaido Univ.) Magnetism and operator inequalities

9月25日(火)

**9:15~12:00**

07-01-0014

- 14 藤井 淳 一 (大阪教育大) Power difference mean の表現関数の PM 性について ..... 15  
Junichi Fujii (Osaka Kyoiku Univ.) On PM-property for the representing functions of power difference means

07-01-0017

- 15 瀬尾 祐 貴 (大阪教育大教育) 負パラメータをもつ量子 Tsallis 相対エントロピー ..... 10  
Yuki Seo (Osaka Kyoiku Univ.) Quantum Tsallis relative entropy of negative order

07-01-0020

- 16 伊藤 公 智 (前橋工科大) Estimations of the weighted power mean by the Heron mean ..... 10  
Masatoshi Ito (Maebashi Inst. of Tech.) Estimations of the weighted power mean by the Heron mean

07-01-0021

- 17 遠山 宏 明 (前橋工科大) Some relations among the  $n$ -th relative operator entropies and the  $n$ -th operator divergences II ..... 15  
伊佐 浩 史 (前橋工科大)  
亀井 栄 三 郎

渡邊 雅 之 (前橋工科大)  
Hiroaki Tohyama  
 (Maebashi Inst. of Tech.)  
Hiroshi Isa (Maebashi Inst. of Tech.)  
Eizaburo Kamei  
Masayuki Watanabe  
 (Maebashi Inst. of Tech.)

Some relations among the  $n$ -th relative operator entropies and the  $n$ -th operator divergences II

07-01-0002	18 内山 充 (島根大*・立命館大総合科学技術研究機構) L. G. Brown (Purdue Univ.) Mitsuru Uchiyama (Shimane Univ.* / Ritsumeikan Univ.) Lawrence G. Brown (Purdue Univ.)	Strongly operator convex functions ..... 15  Strongly operator convex functions
07-01-0034	19 木本 一史 (琉球大理)	完全グラフの正規化ラプラシアン行列に対するアルファ行列式の極限挙動 ..... 15  Limit behavior of alpha determinants for normalized Laplacian matrices of complete graphs
07-01-0027	20 伊藤 稔 (鹿児島大理) Minoru Itoh (Kagoshima Univ.)	高階の Cayley–Hamilton 定理を用いたある不変式環の記述 ..... 15  A description of an invariant theory using the Cayley–Hamilton theorem of higher order
07-01-0015	21 織田 寛 (拓殖大工) Hiroschi Oda (Takushoku Univ.)	複素簡約 Lie 環上のベクトル値多項式に対する変数分離定理 ..... 15  Separation of variables theorem for vector-valued polynomials on com- plex reductive Lie algebras
07-01-0030	22 田森 宥好 (東大数理) Hiroyoshi Tamori (Univ. of Tokyo)	実単純リー群の極小表現の構成 ..... 15  Realization of minimal representations of real simple Lie groups
07-01-0025	23 示野 信一 (関西学院大理工) Nobukazu Shimeno (Kwansei Gakuin Univ.)	Dunkl 解析における Hobson の公式とその応用 ..... 15  Hobson's formula in Dunkl analysis and its applications
<b>13:15~14:15 特別講演</b>		
07-02-0003	和地 輝仁 (北教大釧路) Akihito Wachi (Hokkaido Univ. of Edu.)	Capelli 恒等式と概均質ベクトル空間の $b$ -関数  Capelli identities and $b$ -functions of prehomogeneous vector spaces
9月26日(水)		
<b>9:30~12:00</b>		
07-01-0011	24 松本 健吾 (上越教育大)* Kengo Matsumoto (Joetsu Univ. of Edu.)	Flow equivalence of topological Markov shifts and extended Ruelle al- gebras ..... 15  Flow equivalence of topological Markov shifts and extended Ruelle al- gebras
07-01-0004	25 鈴木 悠平 (名大多元数理) Yuhei Suzuki (Nagoya Univ.)	Eigenvalue set for etale groupoids and constructions of distinguished minimal actions ..... 15  Eigenvalue set for etale groupoids and constructions of distinguished minimal actions
07-01-0019	26 縄田 紀夫 (大阪教育大教育) Norio Nawata (Osaka Kyoiku Univ.)	中心列 $C^*$ -環の無限性について ..... 15  Infiniteness of central sequence $C^*$ -algebras
07-01-0006	27 榎本 雅俊 綿谷 安男 (九大数理) Masatoshi Enomoto Yasuo Watatani (Kyushu Univ.)	* 2つの部分空間の有界同型の不変量 ..... 15  A bounded isomorphic invariant of two subspace systems

- 07-01-0038  
28 澤田 友 佑 (名大多元数理)  $CP_0$ -半群の伸張の構成について ..... 15  
Yusuke Sawada (Nagoya Univ.) On the constructions of minimal dilations of  $CP_0$ -semigroups
- 07-01-0036  
29 森 迪 也 (東大数理) Isometries between projection lattices of von Neumann algebras ..... 15  
Michiya Mori (Univ. of Tokyo) Isometries between projection lattices of von Neumann algebras
- 07-01-0022  
30 安藤 浩志 (千葉大理) Structure of bicentralizer algebras and inclusions of type III factors ... 15  
U. Haagerup  
C. Houdayer (Univ. Paris-Sud)  
A. Marrakchi (Univ. Paris-Sud)  
Hirosi Ando (Chiba Univ.) Structure of bicentralizer algebras and inclusions of type III factors  
Uffe Haagerup  
Cyril Houdayer (Univ. Paris-Sud)  
Amine Marrakchi (Univ. Paris-Sud)
- 07-01-0031  
31 戸松 玲治 (北大理) On minimal actions of compact groups on full factors ..... 15  
Reiji Tomatsu (Hokkaido Univ.) On minimal actions of compact groups on full factors
- 14:15~15:00**
- 07-01-0013  
32 宮島 静雄 (東京理大理) Characterization of closed balls via metric projections, II ..... 10  
齊藤 功 (東京理大理)  
Shizuo Miyajima (Tokyo Univ. of Sci.) Characterization of closed balls via metric projections, II  
Isao Saito (Tokyo Univ. of Sci.)
- 07-01-0010  
33 羽鳥 理 (新潟大自然) A geometric inequality and isometries on the positive cone ..... 15  
阿部 敏一 (茨城大工)  
Osamu Hatori (Niigata Univ.) A geometric inequality and isometries on the positive cone  
Toshikazu Abe (Ibaraki Univ.)
- 07-01-0023  
34 渡辺 恵一 (新潟大理) ムビウスの演算に関連する Cauchy–Bunyakovsky–Schwarz 型の不等式 · 15  
Keiichi Watanabe (Niigata Univ.) Cauchy–Bunyakovsky–Schwarz type inequalities related to the Möbius addition
- 15:15~16:15 特別講演**
- 07-02-0002  
三浦 毅 (新潟大理) 関数空間上の全射等距離写像  
Takeshi Miura (Niigata Univ.) Surjective isometries on function spaces

## 統計数学

9月24日(月)

## 9:30~12:00

08-01-0039

- 1 小山民雄(立教大理)  $\mathcal{A}$ -超幾何分布のパラメータ空間について ..... 15  
 Tamio Koyama (Rikkyo Univ.) Parameter space of  $\mathcal{A}$ -hypergeometric distributions

08-01-0005

- 2 高橋博樹(慶大理工) Large Deviation Principle for arithmetic mean of digits in continued fraction expansion ..... 15  
 Hiroki Takahashi (Keio Univ.) Large Deviation Principle for arithmetic mean of digits in continued fraction expansion

08-01-0004

- 3 高橋勇人(早大教育) Inclusion-exclusion principles on partially ordered sets and the distributions of the number of pattern occurrences in finite samples ..... 15  
 Hayato Takahashi (Waseda Univ.) Inclusion-exclusion principles on partially ordered sets and the distributions of the number of pattern occurrences in finite samples

08-01-0036

- 4 那須笑梨奈(横浜国大工) 2次元パーコレーションにおける lowest horizontal crossing の幅について ..... 10  
 竹居正登(横浜国大工)  
 Erina Nasu (Yokohama Nat. Univ.) On the width of the lowest horizontal crossing in two-dimensional percolation  
 Masato Takei (Yokohama Nat. Univ.)

08-01-0037

- 5 佐久間紀佳(愛知教育大教育) A modified logarithmic Sobolev inequality for canonical Lévy processes and its applications ..... 10  
 鈴木良一(慶大理工)  
 Noriyoshi Sakuma (Aichi Univ. of Edu.) A modified logarithmic Sobolev inequality for canonical Lévy processes and its applications  
 Ryoichi Suzuki (Keio Univ.)

08-01-0028

- 6 四丸直人(岡山理大理) Partial sum of irrational rotations: mean ..... 15  
 高嶋恵三(岡山理大理)  
 Naoto Shimaru (Okayama Univ. of Sci.) Partial sum of irrational rotations: mean  
 Keizo Takashima  
 (Okayama Univ. of Sci.)

08-01-0029

- 7 四丸直人(岡山理大理) Partial sum of irrational rotations: variance ..... 10  
 高嶋恵三(岡山理大理)  
 Naoto Shimaru (Okayama Univ. of Sci.) Partial sum of irrational rotations: variance  
 Keizo Takashima  
 (Okayama Univ. of Sci.)

08-01-0023

- 8 星野浄生(阪府大理) 正則基底に関して Ogawa 可積分な乱関数の SFC による同定 ..... 15  
 Kiyoki Hoshino (Osaka Pref. Univ.) Identification from the SFCs of random functions Ogawa-integrable with respect to regular basis

08-01-0018

- 9 村山拓也(京大理) Chordal Komatu–Loewner equation for a family of continuously growing hulls ..... 15  
 Takuya Murayama (Kyoto Univ.) Chordal Komatu–Loewner equation for a family of continuously growing hulls

## 14:15~15:00

08-01-0010

- 10 嶽村智子(奈良女大理) Dirichlet forms corresponding to diffusion processes in a tube and the time changed process ..... 15  
 Tomoko Takemura  
 (Nara Women's Univ.) Dirichlet forms corresponding to diffusion processes in a tube and the time changed process

08-01-0015	11 竹内 敦 司 (阪 市 大 理)	Convergence rates of extreme value distributions via the Stein equations .....	15
	Atsushi Takeuchi (Osaka City Univ.)	Convergence rates of extreme value distributions via the Stein equations	
08-01-0001	12 濱 名 裕 治 (熊 本 大 理)	Radial Ornstein–Uhlenbeck 過程の到達時刻について .....	10
	Yuji Hamana (Kumamoto Univ.)	On the first hitting time of the radial Ornstein–Uhlenbeck process	
<b>15:15~16:15 特別講演</b>			
08-02-0001	土 田 兼 治 (防 衛 大)	対称マルコフ過程における加法的汎関数の大偏差原理	
	Kaneharu Tsuchida (Nat. Defense Acad. of Japan)	Large deviation principles of additive functionals for symmetric Markov processes	
<b>16:30~17:30 特別講演</b>			
08-02-0003	星 野 壯 登 (九 大 数 理)	A relation between regularity structures and paracontrolled calculus	
	Masato Hoshino (Kyushu Univ.)	A relation between regularity structures and paracontrolled calculus	
9月25日(火)			
<b>9:30~11:30</b>			
08-01-0021	13 千 野 由 喜 ( Leiden Univ. )	Random walk in cooling random environment .....	15
	Yuki Chino (Leiden Univ.)	Random walk in cooling random environment	
08-01-0038	14 森 隆 大 (京 大 数 理 研)	マルコフ過程の交差測度に対する大偏差原理 .....	15
	Takahiro Mori (Kyoto Univ.)	Large deviations for intersection measures of some Markov processes	
08-01-0040	15 植 田 優 基 (北 大 理)	Free infinite divisibility for the class of Generalized Power distributions with Free Poisson term .....	15
	森 下 順 貴 (北 大 理)	Free infinite divisibility for the class of Generalized Power distributions with Free Poisson term	
	Yuki Ueda (Hokkaido Univ.)	Free infinite divisibility for the class of Generalized Power distributions with Free Poisson term	
	Junki Morishita (Hokkaido Univ.)	Free infinite divisibility for the class of Generalized Power distributions with Free Poisson term	
08-01-0030	16 勝 田 敏 之 (関西学院大理工)	客の離脱を伴う複数クラス単一サーバー待ち行列の安定性条件 .....	15
	Toshiyuki Katsuda (Kwansei Gakuin Univ.)	Stability condition for a multiclass single-server queue with abandon- ment	
08-01-0032	17 濱 口 雄 史 (京 大 理)	無限次元後退確率微分方程式の解の有限次元近似 .....	12
	Yushi Hamaguchi (Kyoto Univ.)	Finite-dimensional approximation of solutions of infinite-dimensional BSDEs	
08-01-0033	18 影 山 正 幸 (名古屋市大芸術工)	MDPs with some risk utility functions .....	15
	Masayuki Kageyama (Nagoya City Univ.)	MDPs with some risk utility functions	

## 11:30~12:00 統計数学分科会総会

9月26日(水)

## 9:40~12:00

08-01-0016

- 19 澤 正 憲 (神戸大システム情報) 強さ 3 の巡回的準直交配列の構成法と機能的 MRI 実験への応用 ..... 15  
 吉 田 和 輝 (神戸大システム情報)  
 佐 竹 翔 平 (神戸大システム情報)  
 Masanori Sawa (Kobe Univ.) A construction of circulant almost orthogonal arrays of strength 3 and  
 Kazuki Yoshida (Kobe Univ.) its applications in functional MRI experiments  
 Shohei Satake (Kobe Univ.)

08-01-0034

- 20 佐 竹 翔 平 (神戸大システム情報) 強さ 3 の巡回的準直交配列の構成法と存在性について ..... 15  
 吉 田 和 輝 (神戸大システム情報)  
 澤 正 憲 (神戸大システム情報)  
 Shohei Satake (Kobe Univ.) On constructions and existence of circulant almost orthogonal arrays  
 Kazuki Yoshida (Kobe Univ.) with strength 3  
 Masanori Sawa (Kobe Univ.)

08-01-0024

- 21 松 原 和 樹 (中央学院大商) Cyclically near-resolvable splitting-balanced block designs with block  
 景 山 三 平 size  $2 \times 2$  ..... 15  
 (東京理大理数センター)  
 Kazuki Matsubara (ChuoGakuin Univ.) Cyclically near-resolvable splitting-balanced block designs with block  
 Sanpei Kageyama (Tokyo Univ. of Sci.) size  $2 \times 2$

08-01-0027

- 22 地 嵯 頌 子 (東京理大理工) Combinatorial designs for dropout in deep learning ..... 15  
 宮 本 暢 子 (東京理大理工)  
 藤 原 良 叔 (筑 波 大\*)  
 Shoko Chisaki (Tokyo Univ. of Sci.) Combinatorial designs for dropout in deep learning  
 Nobuko Miyamoto (Tokyo Univ. of Sci.)  
 Ryoh Fuji-Hara (Univ. of Tsukuba\*)

08-01-0019

- 23 藤 森 洸 (早 大 理 工) The variable selection by the Dantzig selector for Cox's proportional  
 hazards model ..... 10  
 Kou Fujimori (Waseda Univ.) The variable selection by the Dantzig selector for Cox's proportional  
 hazards model

08-01-0035

- 24 中 川 智 之 (東京理大理工) ロバストなベイズ推定に対する客観事前分布 ..... 15  
 Tomoyuki Nakagawa Objective priors for the robust Bayesian inference  
 (Tokyo Univ. of Sci.)

08-01-0006

- 25 八 木 文 香 (東京理大理) 単調型欠測をもつ成長曲線モデルにおける推定 ..... 15  
 瀬 尾 隆 (東京理大理)  
 藤 越 康 祝 (広 島 大\*)  
 Ayaka Yagi (Tokyo Univ. of Sci.) Estimation of parameters in the growth curve model with monotone  
 Takashi Seo (Tokyo Univ. of Sci.) missing data pattern  
 Yasunori Fujikoshi (Hiroshima Univ.\*)

08-01-0009

- 26 佃 康 司 (東大総合文化) Poisson-Dirichlet 分布に従う母集団からの標本が保持する情報量について  
 間 野 修 平 (統計数理研) ..... 15  
 Koji Tsukuda (Univ. of Tokyo) Fisher information of multiple samples from the Poisson-Dirichlet pop-  
 Shuhei Mano (Inst. of Stat. Math.) ulations



## 12:15~12:30 2018年度日本数学会解析学賞授賞式

## 14:15~15:05

08-01-0012

- 27 若木宏文(広島大理) Laplace approximation of the distribution function of the Bartlett–Nanda–Pillai test ..... 15

Hirofumi Wakaki (Hiroshima Univ.)

Laplace approximation of the distribution function of the Bartlett–Nanda–Pillai test

08-01-0031

- 28 柿沢佳秀(北大経済) 非対称カーネル密度推定量のバイアス修正の再考察 ..... 15

五十嵐岳(筑波大システム情報)

Yoshihide Kakizawa (Hokkaido Univ.)

Gaku Igarashi (Univ. of Tsukuba)

Bias correction of asymmetric kernel density estimators revisited

08-01-0007

- 29 前園宜彦(九大数理) Mean residual life function estimators for nonnegative data by logarithmic transformation ..... 10

R. R. Fauzi (九大数理)

Yoshihiko Maesono (Kyushu Univ.)

Rizky Reza Fauzi (Kyushu Univ.)

Mean residual life function estimators for nonnegative data by logarithmic transformation

## 15:20~16:20 特別講演

08-02-0002

間野修平(統計数理研)

Shuhei Mano (Inst. of Stat. Math.)

分割, 超幾何系, Dirichlet 過程と統計的推測

Partitions, hypergeometric systems, Dirichlet processes, and their statistical inferences

## 16:40~17:40 特別講演

08-02-0004

劉言(京大情報)

Yan Liu (Kyoto Univ.)

時系列の予測・補間問題と推定問題

From prediction and interpolation problem to parameter estimation problem of time series

9月27日(木)

## 9:40~11:30

08-01-0013

- 30 後藤佑一(早大理工) Zero crossings 推定量の漸近理論と頑健性 ..... 10

谷口正信(早大理工)

Yuichi Goto (Waseda Univ.)

Masanobu Taniguchi (Waseda Univ.)

Asymptotic theory and robustness of zero crossings estimator

08-01-0014

- 31 後藤佑一(早大理工) バイナリ時系列に基づく判別解析 ..... 10

谷口正信(早大理工)

Yuichi Goto (Waseda Univ.)

Masanobu Taniguchi (Waseda Univ.)

Discriminant analysis based on binary time series

08-01-0022

- 32 谷田義行(早大理工) 時系列における経験ベイズ推定量 ..... 10

谷口正信(早大理工)

Yoshiyuki Tanida (Waseda Univ.)

Masanobu Taniguchi (Waseda Univ.)

Empirical Bayesian estimators for time series

08-01-0011

- 33 中山優吾(筑波大数理物質) Robust support vector machines for high-dimensional data ..... 15

Yugo Nakayama (Univ. of Tsukuba)

Robust support vector machines for high-dimensional data

08-01-0026

- 34 石井 晶 (東京理大理工) Strongly spiked eigenvalue モデルにおける高次元相関ベクトルの検定について ..... 15  
 矢田 和善 (筑波大数理物質)  
 青嶋 誠 (筑波大数理物質)

Aki Ishii (Tokyo Univ. of Sci.)  
 Kazuyoshi Yata (Univ. of Tsukuba)  
 Makoto Aoshima (Univ. of Tsukuba)

Correlation test for high-dimensional data under the strongly spiked eigenvalue model

08-01-0008

- 35 矢田 和善 (筑波大数理物質) 高次元平均ベクトルの一致推定について ..... 15  
 青嶋 誠 (筑波大数理物質)

Kazuyoshi Yata (Univ. of Tsukuba)  
 Makoto Aoshima (Univ. of Tsukuba)

Consistency of high-dimensional mean vectors

08-01-0003

- 36 柳原 宏和 (広島大理) High-dimensionality adjusted asymptotically loss efficient  $GC_p$  in normal multivariate linear models ..... 15

Hirokazu Yanagihara (Hiroshima Univ.)

High-dimensionality adjusted asymptotically loss efficient  $GC_p$  in normal multivariate linear models

**14:15~15:05**

08-01-0020

- 37 明石 郁哉 (早大理工) 一般化経験尤度法による球面上分布の回転対称性の検定 ..... 15  
 Fumiya Akashi (Waseda Univ.)

GEL method for tests of rotational symmetry on spheres

08-01-0041

- 38 加藤 昇吾 (統計数理研) A class of circulas obtained through a Fourier series based approach ..... 15

A. Pewsey  
 (Univ. of Extremadura)

M. C. Jones (The Open Univ.)

Shogo Kato (Inst. of Stat. Math.)

Arthur Pewsey (Univ. of Extremadura)

M. C. Jones (The Open Univ.)

A class of circulas obtained through a Fourier series based approach

08-01-0025

- 39 布能 英一郎 (関東学院大経済) Pooling incomplete samples における Kullback 情報量の分解 ..... 10

Eiichiro Funo (Kanto Gakuin Univ.)

Decomposition of the Kullback–Leibler information on pooling incomplete samples

## 応用数学

9月24日(月)

9:00~12:00

09-01-0005

1 藤村 丞

(福岡大情報基盤センター)

白石修二(福岡大理)

Sho Fujimura (Fukuoka Univ.)

Shuji SHIRAISHI (Fukuoka Univ.)

On the number of perfect matchings of line graphs II ..... 10

On the number of perfect matchings of line graphs II

09-01-0007

2 田中康平(信州大経法)

Kohei Tanaka (Shinshu Univ.)

Topological and combinatorial methods in motion planning problem .. 15

Topological and combinatorial methods in motion planning problem

09-01-0022

3 佐竹翔平(神戸大システム情報)

Shohei Satake (Kobe Univ.)

On quadratic residues and circulant almost orthogonal arrays ..... 15

On quadratic residues and circulant almost orthogonal arrays

09-01-0035

4 生田卓也(神戸学院大法)

宗政昭弘(東北大情報)

Takuya Ikuta (Kobe Gakuin Univ.)

Akihiro Munemasa (Tohoku Univ.)

Butson-type complex Hadamard matrices and association schemes on

Galois rings of characteristic 4 ..... 10

Butson-type complex Hadamard matrices and association schemes on

Galois rings of characteristic 4

09-01-0039

5 須田 庄(愛知教育大)

G. Greaves (Nanyang Tech. Univ.)

Sho Suda (Aichi Univ. of Edu.)

Gary Greaves (Nanyang Tech. Univ.)

The maximum number of diamonds in tournaments ..... 10

The maximum number of diamonds in tournaments

09-01-0032

6 三枝崎剛(琉球大教育)

大浦 学(金沢大理工)

Tsuyoshi Miezaki (Univ. of Ryukyus)

Manabu Oura (Kanazawa Univ.)

完全巡回指数の導入 ..... 10

On the complete cycle index

09-01-0006

7 三枝崎剛(琉球大教育)

大浦 学(金沢大理工)

佐久間雅(山形大理)

篠原英裕(山形大非常勤)

Tsuyoshi Miezaki (Univ. of Ryukyus)

Manabu Oura (Kanazawa Univ.)

Tadashi Sakuma (Yamagata Univ.)

Hidehiro Shinohara (Yamagata Univ.)

タット多項式の高種数化 ..... 10

On the Tutte polynomials in genus  $g$ 

09-01-0003

8 善本 潔(日大理工)

Kiyoshi Yoshimoto (Nihon Univ.)

Structures of edge-colored complete bipartite graphs ..... 15

Structures of edge-colored complete bipartite graphs

09-01-0001

9 安藤 清

(国立情報学研・JST ERATO)

Kiyoshi Ando

(Nat. Inst. of Information/JST ERATO)

A local condition for  $k$ -contractible edges ..... 15A local condition for  $k$ -contractible edges

09-01-0042

10 大野由美子(横浜国大環境情報)

松本直己(成蹊大理工)

Yumiko Ohno (Yokohama Nat. Univ.)

Naoki Matsumoto (Seikei Univ.)

球面上の偶三角形分割の facial achromatic number ..... 15

Facial achromatic number of even triangulations on the sphere

09-01-0045

- 11 小関 健太 (横浜国大環境情報) 4-連結グラフの交差数とハミルトン性 ..... 15  
 C. Zamfirescu ( Ghent Univ. )  
 Kenta Ozeki (Yokohama Nat. Univ.) Hamiltonicity of 4-connected graphs with few crossing number  
 Carol Zamfirescu (Ghent Univ.)

09-01-0029

- 12 盧 暁南 (東京理大理工) On separably existentially closed graphs ..... 15  
 Xiao-Nan Lu (Tokyo Univ. of Sci.) On separably existentially closed graphs

**14:20~16:30**

09-01-0015

- 13 吉江 佑介 (東北大情報) 距離正則グラフ上量子ウォークの定常状態 ..... 15  
樋口 雄介 (昭和大教養)  
瀬川 悦生 (東北大情報)  
 Mohamed Fuard Mohamed Sabri  
 (東北大情報)  
 Yusuke Yoshie (Tohoku Univ.) Stationary state of quantum walks on distance-regular graphs  
 Yusuke Higuchi (Showa Univ.)  
 Etsuo Segawa (Tohoku Univ.)  
 Mohamed Fuard Mohamed Sabri  
 (Tohoku Univ.)

09-01-0021

- 14 齋藤 正顕 Ihara zeta 関数の収束半径に関する不等式 ..... 10  
 (名古屋文理大基礎教育センター)  
 Seiken Saito (Nagoya Bunri Univ.) The inequalities of the radii of convergence of Ihara zeta-functions

09-01-0033

- 15 樋口 雄介 (昭和大教養) 量子ウォークから誘導される力学系 ..... 15  
 M. F. Sabri (東北大情報)  
瀬川 悦生 (東北大情報)  
 吉江 佑介 (東北大情報)  
 Yusuke Higuchi (Showa Univ.) A dynamical system induced by discrete-time quantum walk  
 Mohamed Fuard Sabri (Tohoku Univ.)  
 Etsuo Segawa (Tohoku Univ.)  
 Yusuke Yoshie (Tohoku Univ.)

09-01-0034

- 16 井手 勇介 (北陸先端大) Cycle・Path 上の離散時間量子ウォークの固有解析 ..... 15  
 Choon-Lin Ho (淡江大)  
 今野 紀雄 (横浜国大工)  
 Yusuke Ide (JAIST) Spectral analysis of discrete-time quantum walks on cycle and path  
 Choon-Lin Ho (Tamkang Univ.) graphs  
 Norio Konno (Yokohama Nat. Univ.)

09-01-0040

- 17 船川 大樹 (北海学園大工) 2次元スプリットステップ量子ウォークの レゾナンスについて ..... 15  
 布田 徹 (国土館大理工)  
 笹山 智司 (北大理)  
 鈴木 章斗 (信州大工)  
 Daiju Funakawa (Hokkai-Gakuen Univ.) About the resonance of a 2-dimensional split-step quantum walk  
 Toru Fuda (Kokushikan Univ.)  
 Satoshi Sasayama (Hokkaido Univ.)  
 Akito Suzuki (Shinshu Univ.)

09-01-0046	18 寺西功哲(北大理)	ユニタリ作用素に対する時間作用素	15
	佐々木格(信州大理)		
	鈴木章斗(信州大工)		
	船川大樹(北海学園大工)		
	松澤泰道(信州大教育)		
	Noriaki Teranishi (Hokkaido Univ.)	A note on time operators with respect to a unitary operator	
	Itaru Sasaki (Shinshu Univ.)		
	Akito Suzuki (Shinshu Univ.)		
	Daiju Funakawa (Hokkai-Gakuen Univ.)		
	Yasumichi Matsuzawa (Shinshu Univ.)		
09-01-0025	19 久保田匠(東北大情報)	Periodicity of Grover walks on some trees	10
	吉江佑介(東北大情報)		
	Sho Kubota (Tohoku Univ.)	Periodicity of Grover walks on some trees	
	Yusuke Yoshie (Tohoku Univ.)		
09-01-0047	20 小松 堯(横浜国大理工)	量子ウォークの固有値問題から誘導される定常測度	10
	今野紀雄(横浜国大工)		
	Takashi Komatsu	Stationary measure induced by eigenvalue problem of quantum walk	
	(Yokohama Nat. Univ.)		
	Norio Konno (Yokohama Nat. Univ.)		
16:40~17:40	特別講演		
09-02-0005	今野紀雄(横浜国大工)	量子ウォーク 2.0	
	Norio Konno (Yokohama Nat. Univ.)	Quantum walk 2.0	

9月25日(火)

9:00~12:00			
09-01-0017	21 奈良知恵(明大MIMS)	N次元超立方体の正方形面からなる2-スケルトンの連続平坦化	15
	伊藤仁一(相山女学園大教育)		
	Chie Nara (Meiji Univ.)	Continuous flatenning of the 2-skeleton of the square faces in a hyper-cube	
	Jin-ichi Itoh (Sugiyama Jogakuen Univ.)		
09-01-0023	22 中本敦浩(横浜国大環境情報)	多角形の幾何学的四角形分割について	15
	松本直己(成蹊大理工)		
	川谷 元(東京理大理)		
	J. Urrutia (UNAM)		
	Atsuhiko Nakamoto	Geometric quadrangulations of a polygon	
	(Yokohama Nat. Univ.)		
	Naoki Matsumoto (Seikei Univ.)		
	Gen Kawatani (Tokyo Univ. of Sci.)		
	Jorge Urrutia (UNAM)		
09-01-0026	23 野口健太(東京理大理工)	1-平面的グラフの連結度とハミルトン性	15
	Kenta Noguchi (Tokyo Univ. of Sci.)	Connectivity and Hamiltonicity of 1-planar graphs	
09-01-0030	24 松本直己(成蹊大理工)	オイラーグラフ上の帰還ゲームについて	15
	長尾篤樹(お茶の水女大基幹)		
	Naoki Matsumoto (Seikei Univ.)	Feedback game on Eulerian graphs	
	Atsuki Nagao (Ochanomizu Univ.)		

09-01-0038			
25	平 沼 駿 (横浜国大環境情報)	グラフの直積からなる domatically full なグラフについて	15
	川 谷 元 (東京理大理)		
	松 本 直 己 (成蹊大理工)		
	Syun Hiranuma (Yokohama Nat. Univ.)	Domatically full graphs obtained from Cartesian products of graphs	
	Gen Kawatani (Tokyo Univ. of Sci.)		
	Naoki Matsumoto (Seikei Univ.)		
09-01-0013			
26	藤 田 慎 也 (横浜市大データサイエンス)	On the weighted safe set problem on paths and cycles	10
	T. Jensen (Aarhus Univ.)		
	B. Park (亜 洲 大)		
	佐 久 間 雅 (山 形 大 理)		
	Shinya Fujita (Yokohama City Univ.)	On the weighted safe set problem on paths and cycles	
	Tommy Jensen (Aarhus Univ.)		
	Boram Park (Ajou Univ.)		
	Tadashi Sakuma (Yamagata Univ.)		
09-01-0050			
27	三 橋 秀 生 (法政大理工)	有限グラフ上の四元数量子ウォークの左固有値について	15
	今 野 紀 雄 (横浜国大理工)		
	佐 藤 巖 (小山工高専)		
	Hideo Mitsuhashi (Hosei Univ.)	Left eigenvalues of quaternionic quantum walks on graphs	
	Norio Konno (Yokohama Nat. Univ.)		
	Iwao Sato (Oyama Nat. Coll. of Tech.)		
09-01-0049			
28	齋 藤 溪 (横浜国大理工)	正則グラフ上の Fourier 量子ウォークの周期性	15
	Kei Saito (Yokohama Nat. Univ.)	Periodicity for the Fourier quantum walk on regular graphs	
09-01-0053			
29	齋 藤 溪 (横浜国大理工)	空間発展過程による量子ウォークの定常測度の解析	15
	Kei Saito (Yokohama Nat. Univ.)	Analysis of the stationary measure of quantum walk by position-evolution process	
09-01-0014			
30	佐 藤 巖 (小山工高専)	The spectral analysis of the unitary matrix of a 2-tessellable staggered quantum walk on a graph	15
	今 野 紀 雄 (横浜国大工)		
	井 手 勇 介 (北陸先端大)		
	Iwao Sato (Oyama Nat. Coll. of Tech.)	The spectral analysis of the unitary matrix of a 2-tessellable staggered quantum walk on a graph	
	Norio Konno (Yokohama Nat. Univ.)		
	Yusuke Ide (JAIST)		

9月26日(水)

## 10:00~12:00 特別セッション「機械学習の数学的課題: 深層学習の理論を中心に」

09-02-0001			
	園 田 翔 (理化学研 AIP)	深層ニューラルネット理論の近況	45
	Sho Sonoda (RIKEN)	Recent developments on deep neural network theory	
09-02-0003			
	鈴 木 大 慈 (東 大 工)	深層学習の汎化誤差理論とそのモデル解析への応用	45
	Taiji Suzuki (Univ. of Tokyo)	Generalization error theory of deep learning and its application to model analysis	
14:15~16:20			
09-01-0043			
31	今 井 淳 (千葉大理)	自己インダクタンスの正則化	15
	Jun O'Hara (Chiba Univ.)	Regularization of the self-inductance	

- 09-01-0041  
32 川原田 茜 (京都教育大) ある非線型セル・オートマトンの生成パターンと特異関数との関係について ..... 10  
行木 孝夫 (北大理) Relation between spatio-temporal patterns generated by a nonlinear cellular automaton and a singular function  
Akane Kawaharada (Kyoto Univ. of Edu.)  
Takao Namiki (Hokkaido Univ.)
- 09-01-0019  
33 森 竜樹 (阪大基礎工) Numerical approach to existence and stability of stationary solutions to a SKT cross-diffusion equation ..... 15  
鈴木 貴 (阪大MMDS) Numerical approach to existence and stability of stationary solutions to a SKT cross-diffusion equation  
四ツ谷 晶二 (龍谷大理工) Numerical approach to existence and stability of stationary solutions to a SKT cross-diffusion equation  
Tatsuki Mori (Osaka Univ.)  
Takashi Suzuki (Osaka Univ.)  
Shoji Yotsutani (Ryukoku Univ.)
- 09-01-0018  
34 松井 一徳 (金沢大理工) 混合境界条件を課した圧力ポアソン問題について ..... 15  
Kazunori Matsui (Kanazawa Univ.) A pressure-Poisson problem with mixed boundary conditions
- 09-01-0024  
35 千葉 悠喜 (東大数理) 滑らかな領域上の Robin 境界条件を持つ Poisson 方程式に対する Nitsche 法 ..... 15  
齊藤 宣一 (東大数理) Nitsche's method for Poisson equations with a Robin boundary condition in a smooth domain  
Yuki Chiba (Univ. of Tokyo)  
Norikazu Saito (Univ. of Tokyo)
- 09-01-0028  
36 中西 徹 (東大数理) 有限要素法による高次元半線形熱方程式の球対称解の数値解析 ..... 15  
齊藤 宣一 (東大数理) Numerical analysis for the radially symmetric solutions of multidimensional semilinear heat equations by finite element method  
Toru Nakanishi (Univ. of Tokyo)  
Norikazu Saito (Univ. of Tokyo)
- 09-01-0027  
37 高安 亮紀 (筑波大システム情報) 微分方程式の爆発解の精度保証付き数値計算 — 指数関数非線型項を持つ場合 — ..... 15  
松江 要 (九大IMI・九大I2CNER) Numerical validation of blow-up solutions for differential equations with exponential nonlinearity  
Akitoshi Takayasu (Univ. of Tsukuba)  
Kaname Matsue (Kyushu Univ./Kyushu Univ.)
- 09-01-0031  
38 渡部 善隆 2階線形楕円型作用素に対する可逆性検証と精度保証付きノルム評価の改善 ..... 15  
(九大情報基盤研究開発センター) An improvement for verifying the existence and bounds of the inverse of second-order elliptic operators  
木下 武彦 (早大理工) Takehiko Kinoshita  
中尾 充宏 (早大理工) Mitsuihiro T. Nakao (Waseda Univ.)  
Yoshitaka Watanabe (Kyushu Univ.)
- 16:40~17:40 特別講演  
09-02-0004  
深尾 武史 (京都教育大) 総体積保存則に拘束される偏微分方程式と発展方程式による抽象論的接近 ..... 15  
Takeshi Fukao (Kyoto Univ. of Edu.) Abstract approach of evolution equation to partial differential equations with total mass conservation

9月27日(木)

- 10:00~11:40  
09-01-0010  
39 後藤 田 剛 (北大電子研) Convergence of the filtered solutions to the 2D Euler equations with vortex sheet initial data ..... 15  
Takeshi Gotoda (Hokkaido Univ.) Convergence of the filtered solutions to the 2D Euler equations with vortex sheet initial data

- 09-01-0036  
40 清水雄貴 (京大理) 極小曲面上の点渦力学系: 1. 理論解析 ..... 15  
榊原航也 (京大理)  
Yuuki Shimizu (Kyoto Univ.) Point vortex dynamics on minimal surfaces: 1. Theoretical analysis  
Koya Sakakibara (Kyoto Univ.)
- 09-01-0037  
41 榊原航也 (京大理) 極小曲面上の点渦力学系: 数値解析 ..... 15  
清水雄貴 (京大理)  
Koya Sakakibara (Kyoto Univ.) Point vortex dynamics on minimal surfaces: Numerical analysis  
Yuuki Shimizu (Kyoto Univ.)
- 09-01-0002  
42 三宅常時 (宇部工高専) 4個の発振器を環状に結合した回路の対称性を用いた解析 ..... 10  
勝田祐司 (宇部工高専)  
George Miyake An analysis of four coupled oscillators circuits in a ring by using the  
(Ube Nat. Coll. of Tech.) symmetry of the circuits  
Yuji Katsuta (Ube Nat. Coll. of Tech.)
- 09-01-0004  
43 坂口文則 (福井大工) 固有関数消去法による微分作用素の整数型固有値計算法の改良 ..... 15  
Fuminori Sakaguchi (Univ. of Fukui) An improvement of integer-type algorithm for eigenvalues of differential  
operators by means of the elimination of eigenfunctions
- 09-01-0020  
44 中田行彦 (島根大総理工) ある遅延微分方程式の陽的な周期解について ..... 15  
Yukihiko Nakata (Shimane Univ.) An explicit periodic solution of a delay differential equation
- 14:15~15:50**
- 09-01-0044  
45 矢ヶ崎一幸 (京大情報) Chaos in randomly perturbed dynamical systems ..... 15  
Kazuyuki Yagasaki (Kyoto Univ.) Chaos in randomly perturbed dynamical systems
- 09-01-0048  
46 本永翔也 (京大情報) Nonintegrability of parametrically forced nonlinear oscillators ..... 15  
矢ヶ崎一幸 (京大情報)  
Shoya Motonaga (Kyoto Univ.) Nonintegrability of parametrically forced nonlinear oscillators  
Kazuyuki Yagasaki (Kyoto Univ.)
- 09-01-0052  
47 石塚裕大 (京大理) Understanding of dynamical reconstruction based on delay embedding  
中野直人 (京大国際高等教育院) through Gröbner basis ..... 15  
Yasuhiro Ishitsuka (Kyoto Univ.) Understanding of dynamical reconstruction based on delay embedding  
Naoto Nakano (Kyoto Univ.) through Gröbner basis
- 09-01-0008  
48 李聖林 (広島大理) 動的変形ドメインによるパターン形成 ..... 15  
Sungrim Seirin Lee (Hiroshima Univ.) Pattern formation induced by domain deformation
- 09-01-0009  
49 後藤田剛 (北大電子研) 角層剥離の数理モデリング ..... 15  
上坂正晃 (北大電子研)  
安ヶ平裕介 (北大理)  
小林康明 (お茶の水女大理)  
北畑裕之 (千葉大理)  
傳田光洋 (資生堂)  
長山雅晴 (北大電子研)  
Takeshi Gotoda (Hokkaido Univ.) Mathematical modeling for epidermal desquamation  
Masaaki Uesaka (Hokkaido Univ.)  
Yusuke Yasugahira (Hokkaido Univ.)  
Yasuaki Kobayashi (Ochanomizu Univ.)  
Hiroyuki Kitahata (Chiba Univ.)  
Mitsuhiro Denda (Shiseido Co., Ltd.)  
Masaharu Nagayama (Hokkaido Univ.)



- 09-01-0011  
50 鈴木 貴 (阪大 MMDS) 血管新生モデリング —走化性パラドクスの解消 ..... 5  
Takashi Suzuki (Osaka Univ.) Modeling angiogenesis —resolution of chemotactic paradox
- 09-01-0012  
51 鈴木 貴 (阪大 MMDS) 細胞変形モデリング —自由境界とリュービルの定理 ..... 5  
Takashi Suzuki (Osaka Univ.) Modeling cell deformation —free boundaries and Liouville's theorem
- 16:10~17:10 特別講演**  
09-02-0002  
大林 一平 パーシステントホモロジー —数学と計算機科学の融合による「かたち」  
(理化学研 AIP・東北大 AIMR) のデータ解析  
Ipei Obayashi (RIKEN/Tohoku Univ.) Persistent homology —Analysis of the shape of data by the combination  
of mathematics and computer science

## トポロジー

9月24日(月)

9:20~12:00

10-01-0005

- 1 宮澤 治子 (津田塾大数学・計算機研) 絡み目のバーンサイド群と  $n$  変形について ..... 10  
 和田 康 載 (早 大 教 育)  
 安原 晃 (早 大 商)  
 Haruko Miyazawa (Tsuda Coll.) Burnside groups and  $n$ -moves for links  
 Kodai Wada (Waseda Univ.)  
 Akira Yasuhara (Waseda Univ.)

10-01-0006

- 2 宮澤 治子 (津田塾大数学・計算機研) ウェルデッド絡み目における仮想化変形の一般化について ..... 10  
 和田 康 載 (早 大 教 育)  
 安原 晃 (早 大 商)  
 Haruko Miyazawa (Tsuda Coll.) Generalized virtualization on welded links  
 Kodai Wada (Waseda Univ.)  
 Akira Yasuhara (Waseda Univ.)

10-01-0001

- 3 寺垣内政一 (広島大教育) 長さ3のプレッツェル結び目の結び目群の正規生成元 ..... 10  
 Masakazu Teragaito (Hiroshima Univ.) Weight elements of the knot groups of some 3-strand pretzel knots

10-01-0010

- 4 鈴木 正 明 (明大総合数理) Genera of two-bridge knots and epimorphisms of their knot groups ... 10  
 A. T. Tran  
 (Univ. of Texas at Dallas)  
 Masaaki Suzuki (Meiji Univ.) Genera of two-bridge knots and epimorphisms of their knot groups  
 Anh T. Tran (Univ. of Texas at Dallas)

10-01-0012

- 5 斎藤 敏 夫 (上越教育大) Tunnel number of knots and generalized tangles ..... 10  
 Toshio Saito (Joetsu Univ. of Edu.) Tunnel number of knots and generalized tangles

10-01-0027

- 6 滝岡 英 雄 (阪市大数学研) 結び目の  $2n$  移動と  $\Gamma$  多項式 ..... 10  
 Hideo Takioka (Osaka City Univ.)  $2n$ -moves and the  $\Gamma$ -polynomial for knots

10-01-0008

- 7 中西 康 剛 (神戸大理) Differences of Alexander polynomials for knots caused by a single crossing change, II ..... 10  
 Yasutaka Nakanishi (Kobe Univ.) Differences of Alexander polynomials for knots caused by a single crossing change, II

10-01-0028

- 8 嘉藤 桂 樹 (東工大 理) A mirroring formula for the interior polynomial of a bipartite graph ... 10  
 Keiju Kato (Tokyo Tech) A mirroring formula for the interior polynomial of a bipartite graph

10-01-0013

9 M. Khovanov (Columbia Univ.)  
A. D. Lauda  
(Univ. of Southern California)

J. Sussan  
(City Univ. of New York)

米澤康好 (名大多元数理)

Mikhail Khovanov (Columbia Univ.)

Aaron D. Lauda  
(Univ. of Southern California)

Joshua Sussan (City Univ. of New York)

Yasuyoshi Yonezawa (Nagoya Univ.)

Braid group actions from categorical symmetric Howe duality on deformed Webster algebras ..... 15

10-01-0011

10 笠原 泰 (高知工科大)  
Yasushi Kasahara  
(Kochi Univ. of Tech.)

On  $2g + 1$ -dimensional linear representations of mapping class groups of genus  $g$

種数  $g$  の写像類群の  $2g + 1$  次元線型表現について ..... 10

10-01-0009

11 中村伊南沙 (金沢大理工)  
Inasa Nakamura (Kanazawa Univ.)

Simplifying branched covering surface-knots with a non-zero number of branch points

ブランチ点をもつ分岐被覆曲面結び目の単純化数 ..... 10

10-01-0022

12 福田瑞季 (東北大理)  
Mizuki Fukuda (Tohoku Univ.)

Gluck twist along branched twist spins

Gluck twist along branched twist spins ..... 10

10-01-0029

13 丹下基生 (筑波大数理物質)†  
Motoo Tange (Univ. of Tsukuba)

4-manifolds with  $E_8$  intersection form and their correction terms

$E_8$  交差形式をもつ 4 次元多様体と correction term ..... 15

14:15~14:55

10-01-0021

14 阿部翠空星 (阪市大数学研)  
Sukuse Abe (Osaka City Univ.)

Quantum  $U_q(\mathfrak{g})$  invariants of genus 2 handlebody-knots

種数 2 のハンドル体結び目の量子  $U_q(\mathfrak{g})$  不変量 ..... 15

10-01-0018

15 湯浅 亘 (京大理)  
Wataru Yuasa (Kyoto Univ.)

$A_2$  colored polynomials of rigid vertex graphs

$A_2$  colored polynomials of rigid vertex graphs ..... 10

10-01-0019

16 湯浅 亘 (京大理)  
Wataru Yuasa (Kyoto Univ.)

$A_2$  skein representations of pure braid groups

$A_2$  skein representations of pure braid groups ..... 10

15:10~16:10 特別講演

10-02-0001

渡 邊 忠 之 (島根大総合理工)  
Tadayuki Watanabe (Shimane Univ.)

Characteristic classes for  $\text{Diff}(S^4)$  and clasper surgery for families

$\text{Diff}(S^4)$  の特性類と族のクラスパー手術 ..... 15

9月25日(火)

13:15~14:15

10-01-0003

17 山岸義和 (龍谷大理工)  
須志田隆道 (北大電子研)

Voronoi tilings on Archimedean spiral lattices

アルキメデス螺旋格子上のボロノイタイリング ..... 10

Yoshikazu Yamagishi (Ryukoku Univ.)

Takamichi Sushida (Hokkaido Univ.)

10-01-0017

18 一木俊助 (横浜国大環境情報)  
Shunsuke Ichiki (Yokohama Nat. Univ.)

Characterization of generic transversality

Characterization of generic transversality ..... 15

- 10-01-0024  
19 山本卓宏 (東京学大教育) 境界付き曲面の安定写像による平面像 ..... 15  
Takahiro Yamamoto Apparent contours of stable maps of compact surfaces with boundary  
(Tokyo Gakugei Univ.) into the plane
- 10-01-0020  
20 寺本圭佑 (神戸大理) ある性質を持つカusp辺のガウス写像に現れるカuspの符号について .. 15  
Keisuke Teramoto (Kobe Univ.) On signs of cusps of Gauss maps of cuspidal edges with certain properties

9月26日(水)

**10:20~12:00**

- 10-01-0015  
21 下村尚司 (名経大経済) 零次元同相写像の Bratteli-Vershik モデルの応用 ..... 10  
Takashi Shimomura Applications of the Bratteli-Vershik model for zero-dimensional home-  
(Nagoya Univ. of Economics) omorphisms
- 10-01-0016  
22 下村尚司 (名経大経済)\* 極小代入力学系に於ける代入写像の特徴 ..... 10  
Takashi Shimomura Characterization of substitution map for minimal substitution subshifts  
(Nagoya Univ. of Economics)
- 10-01-0023  
23 見玉大樹 (東大数理) 平坦関数の高階導関数について ..... 15  
増田一男  
三松佳彦 (中大理工)  
Hiroki Kodama (Univ. of Tokyo) Derivatives of flat functions  
Kazuo Masuda  
Yoshihiko Mitsumatsu (Chuo Univ.)
- 10-01-0004  
24 小原まり子 (信州大理) On graded E-infinity rings and projective schemes ..... 15  
Mariko Ohara (Shinshu Univ.) On graded E-infinity rings and projective schemes
- 10-01-0025  
25 井上浩一 (東京都市大共通教育) 対称式と  $Q_m(w_n)$  ..... 15  
Koichi Inoue (Tokyo City Univ.) Symmetric polynomial and  $Q_m(w_n)$
- 10-01-0002  
26 原口忠之 (奈良学園人間教育) 滑らかな CW 複体のホモトピー構造 ..... 15  
Tadayuki Haraguchi Homotopy structures of smooth CW complexes  
(Naragakuen Univ.)

**14:15~14:50**

- 10-01-0007  
27 松雪敬寛 (東工大理) ファイブレーションの特性類とグラフ複体 ..... 15  
Takahiro Matsuyuki (Tokyo Tech) Characteristic classes of fibrations and graph complexes
- 10-01-0026  
28 野坂武史 (東工大理) de Rham theory and cocycles of cubical sets from smooth quandles ... 15  
Takefumi Nosaka (Tokyo Tech) de Rham theory and cocycles of cubical sets from smooth quandles

**15:10~16:10 特別講演**

- 10-02-0002  
鍛冶静雄 (九大IMI) 同変ループ積について  
Shizuo Kaji (Kyushu Univ.) On equivariant loop product

## 無限可積分系

9月24日(月)

## 9:15~10:50

11-01-0004

- 1 加藤 正輝 (神戸大理) 楕円ディガンマ関数の加法型公式 ..... 15  
Masaki Kato (Kobe Univ.) An addition type formula for the elliptic digamma function

11-01-0002

- 2 綾野 孝則 (阪市大数学研) 種数3の超楕円曲線のシグマ因子上の有理型関数を退化させて得られる  
V. M. Buchstaber (Steklov Math. Inst.) KdV 方程式の解について ..... 15  
Takanori Ayano (Osaka City Univ.) Solutions of KdV-equation obtained by the degeneration of meromorphic functions on the sigma divisor of hyperelliptic curves of genus 3  
Victor Matveevich Buchstaber (Steklov Math. Inst.)

11-01-0008

- 3 鈴木 貴雄 (近畿大理工) 自然数の分割  $(n+1, n+1, n+1)$  に対応する  $A$  型ドリinfeld・ソ  
Takao Suzuki (Kindai Univ.) コロフ階層の相似簡約 ..... 15  
A similarity reduction of the Drinfeld-Sokolov hierarchy of type  $A$  corresponding to the partition of natural number  $(n+1, n+1, n+1)$

11-01-0006

- 4 竹村 剛一 (中大理工) On  $q$ -deformations of the Heun equation ..... 15  
Kouichi Takemura (Chuo Univ.) On  $q$ -deformations of the Heun equation

11-01-0014

- 5 大山 陽介 (徳島大理工)  $q$ -超幾何関数  ${}_3\phi_2(a_1, a_2, a_3; 0, 0; q, x)$  の満たす差分方程式の  $q$ -Stokes 係数  
Yousuke Ohyama (Tokushima Univ.) ..... 15  
 $q$ -Stokes phenomenon on a difference equation satisfied by  $q$ -hypergeometric series  ${}_3\phi_2(a_1, a_2, a_3; 0, 0; q, x)$

11-01-0013

- 6 伊藤 雅彦 (琉球大理)  $G_2$  型 Gustafson  $q$ -ベータ積分の楕円化とその無限積表示について ..... 15  
野海 正俊 (神戸大理)  
Masahiko Ito (Univ. of Ryukyus) Elliptic extension of Gustafson's  $q$ -beta integral of type  $G_2$  and its infinite product expression  
Masatoshi Noumi (Kobe Univ.)

## 11:00~12:00 特別講演

11-02-0002

- 岩木 耕平 (名大多元数理) 完全 WKB 解析と位相的漸化式  
Kohei Iwaki (Nagoya Univ.) Exact WKB analysis and topological recursion

## 14:15~16:25

11-01-0012

- 7 水野 勇磨 (東工大情報理工) Jacobian matrices of Y-seed mutations and mutation networks ..... 15  
Yuma Mizuno (Tokyo Tech) Jacobian matrices of Y-seed mutations and mutation networks

11-01-0001

- 8 安東 雅訓 (奈良学園人間教育) 劣正則分割とグレイシャー対応 ..... 15  
Masanori Ando (Naragakuen Univ.) Inferior regular partitions and Glaisher correspondence

11-01-0011

- 9 星野 歩 (広島工大工) Matrix inversion for Koornwinder polynomials with one-column diagram ..... 15  
白石 潤一 (東大数理)  
Ayumu Hoshino Matrix inversion for Koornwinder polynomials with one-column diagram  
(Hiroshima Inst. of Tech.)  
Jun'ichi Shiraishi (Univ. of Tokyo)

11-01-0015

- 10 末武一馬 (名大多元数理) 量子トロイダル代数に付随する  $(q, t)$ -KZ 方程式 ..... 15  
栗田英資 (名大多元数理)  
菅野浩明 (名大多元数理)  
Kazuma Suetake (Nagoya Univ.) The  $(q, t)$ -KZ equation associated with the quantum toroidal algebra  
Hidetoshi Awata (Nagoya Univ.)  
Hiroaki Kanno (Nagoya Univ.)

11-01-0005

- 11 小寺諒介 (神戸大理) On Guay's evaluation map for affine Yangians ..... 15  
Ryosuke Kodera (Kobe Univ.) On Guay's evaluation map for affine Yangians

11-01-0009

- 12 中津了勇 (摂南大理工) Hodge 積分と位相的頂点 ..... 15  
高崎金久 (近畿大理工)  
Toshio Nakatsu (Setsunan Univ.) Hodge integrals and topological vertex  
Kanehisa Takasaki (Kindai Univ.)

11-01-0003

- 13 国場敦夫 (東大総合文化) Matrix product solutions to the reflection equation from three dimensional integrability ..... 15  
V. Pasquier (Univ. Paris-Saclay)  
Atsuo Kuniba (Univ. of Tokyo) Matrix product solutions to the reflection equation from three dimensional integrability  
Vincent Pasquier (Univ. Paris-Saclay)

11-01-0007

- 14 尾角正人 (阪市大理) A 型一般化量子群の KR クリスタル ..... 15  
Jae-Hoon Kwon (ソウル大)  
Masato Okado (Osaka City Univ.) KR crystals of the generalized quantum group of type A  
Jae-Hoon Kwon (Seoul Nat. Univ.)

**16:40~17:40 特別講演**

11-02-0001

- 池田岳 (岡山理大理) K 理論的 Peterson 同型  
Takeshi Ikeda (Okayama Univ. of Sci.) K-theoretic Peterson isomorphism