

- Collaborative works are presented by the underlined authors. The talks with \* mark are presented through document camera, while  $\flat$  marks denote presentations on whiteboards. The speakers with  $\star$  marks are professors emeriti.

## Algebra

September 25th (Thu)      Conference Room II

### 9:30–12:00

02-01-0049	1 <u>Hiroko Yanaba</u> (Hiroo Gakuen) Takahiro Shishikura (Hiroo Gakuen)	On some results of the function associated with the Euler function $\varphi(a)$ ..... 10
02-01-0002	2 Shigeru Iitaka (Gakushuin Univ.)*	On a function associated with $\sigma(a)$ ..... 10
02-01-0009	3 Yasutoshi Nomura	* Primality and divisibility of Stirling numbers of the 2nd kind ..... 10
02-01-0006	4 <u>Isao Kiuchi</u> (Yamaguchi Univ.)* <u>Makoto Minamide</u> (Yamaguchi Univ.) Yoshio Tanigawa (Nagoya Univ.)	On a sum involving the Möbius function ..... 10
02-01-0012	5 Eiji Miyanohara (Waseda Univ.)	Transcendence of digital expansions generated by a cyclic permutation and $k$ -adic expansion ..... 10
02-01-0008	6 <u>Takeshi Kurosawa</u> (Tokyo Univ. of Sci.) Iekata Shiokawa	Algebraic independence of components of certain trigonometric functions ..... 10
02-01-0047	7 Yohei Tachiya (Hirosaki Univ.)	Arithmetical properties of the values of the generalized divisor function series ..... 10
02-01-0017	8 Kazuki Sato (Tohoku Univ.)	Rational points on diagonal cubic surfaces ..... 10
02-01-0042	9 Akiko Ito (Kanagawa Univ.)*	On the 3-divisibility of the class numbers of certain quadratic fields (II) ..... 10
02-01-0005	10 <u>Soichi Ikeda</u> (Nagoya Univ.)* Kaneaki Matsuoka (Nagoya Univ.)	Mean values of multiple zeta-functions ..... 10
02-01-0048	11 Tomokazu Onozuka (Nagoya Univ.)	Zero-free regions of multiple zeta star functions ..... 10
02-01-0033	12 Yumiko Hironaka (Waseda Univ.)*	Zeta functions of finite groups by counting numbers of subgroups ..... 15
<b>14:15–16:15</b>		
02-01-0035	13 Hiroto Inoue (Kyushu Univ.) $\flat$	Expansion of the completed Riemann zeta function in Meixner–Pollaczek polynomials and its zeros ..... 10
02-01-0016	14 Yoshikatsu Yashiro (Nagoya Univ.)*	Distribution of zeros and zero-density estimate for the derivatives of $L$ -function attached to cusp form ..... 10
02-01-0026	15 Takahiro Wakasa (Nagoya Univ.)*	An explicit upper bound of the argument of Dirichlet $L$ -functions on the generalized Riemann hypothesis ..... 10
02-01-0024	16 Kohhta Gejima (Osaka Univ.)	Shintani functions on $SL(2, \mathbf{C})$ and Heun's differential equations ..... 15
02-01-0011	17 <u>Shingo Sugiyama</u> (Osaka Univ.) Masao Tsuzuki (Sophia Univ.)	Existence of Hilbert cusp forms with non-vanishing $L$ -values ..... 15

- 02-01-0044  
18 Shuichi Hayashida (Joetsu Univ. of Edu.) Generalizations of the Maass relation of Siegel modular forms ..... 15
- 02-01-0028  
19 Hirotaka Kodama (Kinki Univ.) On the mod  $p$  kernel of the theta operator ..... 10  
Shoyu Nagaoka (Kinki Univ.)
- 02-01-0032  
20 Hidehiko Mishou (Tokyo Denki Univ.) Joint  $d$ -universality for Dirichlet  $L$ -functions with real characters and  
Hirofumi Nagoshi (Gunma Univ.) multi-dimensional denseness of quadratic class numbers ..... 10

**16:30–17:30 Talk invited by Algebra Section**

- 02-02-0004  
Hidehiko Mishou (Tokyo Denki Univ.) An overview of the theory of universality for zeta functions

September 26th (Fri) Conference Room II

**9:30–11:50**

- 02-01-0004  
21 Sin-Ei Takahasi (Toho Univ.)\* The structure of ordered topological semigroups on the real space  $\mathbb{R}$   
Yuji Kobayashi (Toho Univ.) ..... 15  
Yasuo Nakasuji (Open Univ. of Japan)  
Makoto Tsukada (Toho Univ.)
- 02-01-0036  
22 Shuheii Kamioka (Kyoto Univ.) Tilings of the Aztec diamonds and biorthogonal polynomials ..... 15
- 02-01-0014  
23 Hiro-Fumi Yamada (Okayama Univ.) A partition identity and the character table of the symmetric groups  
Hiroshi Mizukawa ..... 15  
(Nat. Defense Acad. of Japan)
- 02-01-0030  
24 Akiyoshi Tsuchiya (Osaka Univ.) Ehrhart polynomials with negative coefficients ..... 15  
Akihiro Higashitani (Kyoto Univ.)  
Takayuki Hibi (Osaka Univ.)  
Koutarou Yoshida (Osaka Univ.)
- 02-01-0022  
25 Takayuki Hibi (Osaka Univ.) Facets of (0,1)-polytopes with squarefree initial ideals ..... 15  
Akihiro Higashitani (Kyoto Univ.)
- 02-01-0054  
26 Kazunori Matsuda (Rikkyo Univ.)\* Reverse lexicographic Gröbner bases and strongly Koszul toric rings  
Hidefumi Ohsugi ..... 10  
(Kwansei Gakuin Univ.)
- 02-01-0037  
27 Tomohiro Okuma (Yamagata Univ.)\* Good ideals and  $p_g$ -ideals for two-dimensional normal singularities ... 10  
Kei-ichi Watanabe (Nihon Univ.)  
Ken-ichi Yoshida (Nihon Univ.)
- 02-01-0043  
28 Futoshi Hayasaka \* A computation of Buchsbaum–Rim functions of two variables ..... 10  
(Hokkaido Univ. of Edu.)
- 02-01-0018  
29 Tadahito Harima (Niigata Univ.)\* Completely  $\mathfrak{m}$ -full ideals and componentwise linear ideals ..... 10  
Junzo Watanabe (Tokai Univ.)

**13:20–14:20 Talk invited by Algebra Section**

- 02-02-0003  
Masato Okado (Osaka City Univ.) Tetrahedron equation and quantum groups

## September 27th (Sat) Conference Room II

**9:30–11:25**

02-01-0027

30 Yugen Takegahara (Muroan Inst. of Tech.) 2-adic properties for the numbers of involutions in the alternating groups ..... 15

02-01-0007

31 Yuki Kanakubo (Sophia Univ.)<sup>b</sup> Cluster variables on double Bruhat cells and monomial realizations of  
Toshiki Nakashima (Sophia Univ.) crystal bases ..... 15

02-01-0046

32 Toshiyuki Abe (Ehime Univ.) A commutant of a 4-cyclic permutation orbifold model of affine vertex  
Hiromichi Yamada (Hitotsubashi Univ.) operator algebra of type  $A_1$  ..... 10

02-01-0015

33 Kenichiro Tanabe (Hokkaido Univ.) On modules with logarithmic terms over vertex algebras ..... 15

02-01-0019

34 Masahide Konishi (Nagoya Univ.) Basicalization of KLR algebras ..... 15

02-01-0020

35 Ayako Itaba (Tokyo Univ. of Sci.) On the decomposition of the Hochschild cohomology group of a mono-  
Takahiko Furuya (Meikai Univ.) mial algebra satisfying a separability condition ..... 10  
Katsunori Sanada (Tokyo Univ. of Sci.)

02-01-0029

36 Tomohiro Itagaki (Tokyo Univ. of Sci.) On the cyclic homology of an algebra associated with a cyclic quiver  
and a monic polynomial ..... 10

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

02-02-0001

Hiroyuki Minamoto (Osaka Pref. Univ.)<sup>b</sup> Derived bi-duality and DG-completion

**15:30–17:30**

02-01-0053

37 Hiroki Miyahara (Univ. of Yamanashi) A construction of Auslander-regular rings and its application ..... 10

02-01-0040

38 Mitsuo Hoshino (Univ. of Tsukuba) Group-graded and group-bigraded rings ..... 15  
Noritsugu Kameyama (Shinshu Univ.)  
Hirotaka Koga (Tokyo Denki Univ.)

02-01-0041

39 Kazutoshi Koike (Okinawa Nat. Coll. of Tech.) Self-duality of finite triangular extensions ..... 10

02-01-0038

40 Hirotaka Koga (Tokyo Denki Univ.) On standard derived equivalences ..... 15

02-01-0045

41 Satoshi Yamanaka (Okayama Univ.)<sup>b</sup> On Morita equivalence in ring extensions ..... 10

02-01-0001

42 Ryo Kanda (Nagoya Univ.)<sup>b</sup> Classification of categorical subspaces of locally noetherian schemes .. 15

02-01-0034

43 Shunsuke Tsuchioka (Univ. of Tokyo) On graded generalized Cartan invariants of the symmetric groups .... 15  
Anton Evseev (Univ. of Birmingham)

02-01-0050

44 Taiki Shibata (Univ. of Tsukuba) On integrals for algebraic supergroups ..... 10

## September 28th (Sun) Conference Room II

**9:15–12:00**

02-01-0003

45 Tomohiro Iwami (Kyushu Sangyo Univ.) \* An analogue of Clemens–Griffiths components for certain three-dimensional  
log pairs in the weak sense and the associated rationality criterion ... 10

02-01-0010

46 Jo Suzuki (Osaka Univ.) Klein's fundamental second kind 2-form for the  $C_{ab}$  curves ..... 15

<a href="#">02-01-0023</a>			
47	Yoshifumi Tsuchimoto (Kochi Univ.)	Non commutative Kähler manifolds	15
<a href="#">02-01-0031</a>			
48	<u>Hiroki Ito</u> (Nagoya Univ.) <sup>*</sup> Hisanori Ohashi (Tokyo Univ. of Sci.)	On the classification of involutions on Enriques surfaces	15
<a href="#">02-01-0039</a>			
49	Yuki Yamamoto (Kanazawa Univ.)	Divisorial contractions to cDV points with discrepancy $> 1$	15
<a href="#">02-01-0013</a>			
50	Hirokazu Nasu (Tokai Univ.)	Obstructions to deforming space curves lying on a smooth quartic surface	15
<a href="#">02-01-0051</a>			
51	Daizo Ishikawa (Waseda Univ.)	Weak Fano bundles of rank 2 on cubic threefolds	15
<a href="#">02-01-0052</a>			
52	Ryo Kawaguchi (Nara Medical Univ.)	A characterization of toric Fano threefolds	15
<a href="#">02-01-0025</a>			
53	Akihiro Higashitani (Kyoto Univ.)	Equivalent classes for toric Fano 5-folds and higher dimensions	15

**14:15–15:15 Talk invited by Algebra Section**

<a href="#">02-02-0002</a>			
	Isamu Iwanari (Tohoku Univ.) <sup>b</sup>	Tannaka duality for higher categories	