

# *Diophantine Analysis and Related Fields 2015*

March 5–7, 2015

Meeting Room 1, 4th Floor, Kiryu City Performing Arts Center

Organizers:

Shigeki Akiyama (*Tsukuba Univ.*)  
Masaaki Amou (*Gunma Univ.*)  
Ryotaro Okazaki  
Masanori Katsurada (*Keio Univ.*)  
Takao Komatsu (*Wuhan Univ.*)  
Noriko Hirata-Kohno (*Nihon Univ.*)

## PROGRAM

### **Thursday 5 March**

- 13:35–13:40 Opening
- 13:40–14:30 Takafumi Miyazaki (Nihon Univ.)  
A polynomial-exponential Diophantine equation related to the sum of consecutive  $k$ -th powers
- 14:40–15:20 Tomohiro Ooto (Tsukuba Univ.)  
Quadratic approximation of continued fractions with low complexity in  $F_q((T^{-1}))$
- 15:40–16:30 Takumi Noda (Nihon Univ.)  
Confluent hypergeometric type Ramanujan's formulas
- 16:40–17:30 Yasutsugu Fujita (Nihon Univ.)  
Bounds for Diophantine quintuples

### **Friday 6 March**

- 9:30–10:10 Jonathan Caalim (Tsukuba Univ.)  
Rotational beta expansion:Ergodicity and Soficness
- 10:20–11:10 Yu Yasufuku (Nihon Univ.)  
Logarithmic Kodaira dimension and Diophantine equations
- 11:20–12:10 Masanori Katsurada (Keio Univ.)  
Asymptotic expansions for the Laplace-Mellin and Riemann-Liouville transforms of Lerch zeta-functions

- 14:00–14:50 Hajime Kaneko (Tsukuba Univ.)  
On the beta-expansions of algebraic numbers by a Pisot or Salem number beta
- 15:00–15:40 Junya Iwaki (Gunma Univ.)  
Linear independence measures for the values of certain Mahler functions
- 16:00–16:40 Akinari Goto (Keio Univ.), Takaaki Tanaka (Keio Univ.)  
Algebraic independence of the values of Mahler functions in a certain case of positive characteristic
- 16:50–17:40 Makoto Kawashima (Osaka Univ.)  
Linear independence of values of certain p-adic functions

### Saturday 7 March

- 9:30–10:20 Hirofumi Nagoshi (Gunma Univ.)  
The existence of zeros of non-primitive  $L$ -functions for  $SL(2, \mathbb{Z})$  in the strip  $1/2 < \Re s < 1$
- 10:40–11:30 Takao Komatsu (Wuhan Univ.)  
Associate and restricted Stirling numbers and their applications
- 11:30–11:35 Closing