

Diophantine Analysis and Related Fields 2024

March 4-6, 2024

Gunma University, Kiryu, Japan

Organizers:

Shigeki Akiyama (Univ. Tsukuba), Masaaki Amou (Gunma Univ.)
Masanori Katsurada (Keio Univ.), Hajime Kaneko (Univ. Tsukuba)
Taka-aki Tanaka (Keio Univ.), Noriko Hirata-Kohno (Nihon Univ.)
Leo Murata (Meiji Gakuin Univ.)

Local Organizers:

Masaaki Amou (Gunma Univ.), Hirofumi Nagoshi (Gunma Univ.)
Takafumi Miyazaki (Gunma Univ.)

Supported in part by JSPS KAKENHI Grant Number JP21K03171

Conference Information

Dates : Monday, March 4th - Wednesday, March 6th
Place : Gunma University (Japan) Room 5401, 4th Floor
Graduate School of Science and Technology, Bldg. No. 5
<https://www.gunma-u.ac.jp/access>
1-5-1 Tenjin-cho, Kiryu, Japan

Program

Monday 4th March

- 13:20–13:30 Opening
- 13:30–14:20 Shinichi Yasutomi (Toho Univ.)
Simultaneous convergent continued fraction algorithm with two places
- 14:30–15:20 Yu Yasufuku (Nihon Univ.)
Bounding GCD's of evaluations of two trivariate polynomials
- 15:40–16:20 Yuta Suzuki (Rikkyo Univ.)
Some remarks on counting relatively prime pairs
- 16:30–17:10 Wataru Takeda (Tokyo Univ. Science)
Multiplicative Titchmarsh divisor problem for the $[x/n]$ -sequence
- 17:20–18:00 Tomohiro Yamada (Osaka Univ.)
On Gauss-Kraitchik formula for cyclotomic polynomials via symmetric function

Tuesday 5th March

- 9:20–10:10 István Pink (Univ. Debrecen), Takafumi Miyazaki (Gunma Univ.)
Number of solutions to a special type of unit equations in two unknowns III
- 10:20–11:10 Noriko Hirata-Kohno (Nihon Univ.)
Diophantine approximations and O-Minimality
- 11:20–12:00 Makoto Kawashima (Nihon Univ.)
Gauss' continued fraction and irrationality
- 14:00–14:50 Yasutsugu Fujita (Nihon Univ.)
Bounding the size of $D(\pm 1)$ -tuples in imaginary quadratic rings
- 15:00–15:50 Taka-aki Tanaka (Keio Univ.)
On a certain function invariant under group action with remarkable algebraic independence properties
- 16:10–16:50 Shintaro Murakami (Hirosaki Univ.)
Linear independence of certain infinite series with monomial orders
- 17:00–17:40 Motoya Teranishi (Kyoto Univ.)
On potential density of integral points on the complement of some subvarieties in the projective space
- 18:30–20:30 Reception

Wednesday 6th March

- 9:20~10:10 Takumi Noda (Nihon Univ.)
On the generating Dirichlet series of the Riemann zeta-function
- 10:30~11:10 Kota Saito (Univ. Tsukuba)
The simple normality of the fractional powers of two and the Riemann zeta function
- 11:20~12:00 Hajime Kaneko (Univ. Tsukuba)
Markoff and Lagrange spectra on one-sided shift spaces with cylinder orders
- 12:00–12:10 Closing