

Diophantine Analysis and Related Fields 2011

Dates: From Thursday 3 March to Saturday 5 March, 2011

Venue: Kichijoji Campus, Seikei University, Musashino, Tokyo, Japan

Room: Large Conference Room, 4th Floor, University Building No. 14

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Programme

Thursday 3 March:

- 9:35–9:40 Opening;
- 9:40–10:10 Martin Stein (FHDW Hannover)
Algebraic independence results for reciprocal sums of Fibonacci and Lucas numbers;
- 10:20–10:50 Carsten Elsner (FHDW Hannover)
New algebraic independence results based on a theorem of Y. Nesterenko;
- 11:10–12:00 Nikolay Moshchevitin (Moscow Lomonosow Univ.)
Multi-dimensional Diophantine approximations and their applications;
- 12:00–14:00 Lunch break
- 14:00–14:40 Yohei Tachiya (Keio Univ.)
Algebraic independence of infinite products generated by Fibonacci numbers;
- 14:50–15:20 Takaaki Tanaka (Keio Univ.)
Algebraic independence properties related to certain infinite products and Lambert series;
- 15:40–16:20 Ryotaro Okazaki (Doshisha Univ.)
Weber's class number problem and Pohst's lower bound for algebraic units;
- 16:30–17:00 Ryuta Hashimoto (Kagawa Nat. Col. Tech.)
Searching discriminants with large fundamental units via continued fraction expansions.

Friday 4 March:

- 9:30–10:10 Hajime Kaneko (Kyoto Univ.)
On the b -ary expansions of algebraic irrational numbers;
- 10:20–10:50 Jonathan Sondow (New York)
Some consequences of Schanuel's conjecture;
- 11:10–12:00 Yuri V. Nesterenko (Moscow State Univ.)
On the irrationality measure of some numbers;
- 12:00–14:00 Lunch break

14:00–14:30 Yasutsugu Fujita (Nihon Univ.)

Generators for the elliptic curve $y^2 = x^3 - nx$ II;

14:40–15:30 Pingzhi Yuan (South China Normal Univ.)

Ko's method and its application to Diophantine equations;

15:50–16:20 Takafumi Miyazaki (Tokyo Metropolitan Univ.)

Exceptional cases of Terai's conjecture on Diophantine equations;

16:30–17:00 Tomohiro Yamada (Kyoto Univ.)

On diophantine equation $x^2 = p^g + p^f + p^e + 1$;

17:30–20:00 Reception party.

Saturday 5 March:

9:30–10:20 Shigeki Akiyama (Niigata Univ.)

On the spectrum of $\{-1, 0, 1\}$ polynomials;

10:40–11:10 Takumi Noda (Nihon Univ.)

On generalized Lipschitz-type formulae and applications II;

11:20–11:50 Masanori Katsurada (Keio Univ.)

Shintani zeta-functions of several variables and Lauricella hypergeometric functions;

11:50–11:55 Closing.