Diophantine Analysis and Related Fields 2020

March 5-7, 2020

Kiryu City Performing Arts Center, Kiryu, Japan

Organizers:

Shigeki Akiyama (Tsukuba University), Masaki Amou (Gunma University)
Noriko Hirata-Kohno (Nihon University), Masanori Katsurada (Keio University)
Leo Murata (Meiji Gakuin University), Ryotaro Okazaki
Taka-aki Tanaka (Keio University)

Local Organizers:

Masaki Amou (Gunma University), Hirofumi Nagoshi (Gunma University)
Takafumi Miyazaki (Gunma University)

Conference Information

Dates :   Thursday, March 5th - Saturday, March 7th
Place :   Meeting Room 1, 4th Floor, Kiryu City Performing Arts Center
          http://www.kiryu-piif.jp/gaiyou/index.html
          2-5 Orihime-cho, Kiryu, Japan

Program

Thursday 5th March

13:35–13:40   Opening

13:40–14:30   Yasutsugu Fujita (Nihon University)
              Generators and integral points on quartic curves of the forms
              $u^2 \pm v^4 = m$

14:40–15:30   Alan Filipin (University of Zagreb)
              The extension of parametric Diophantine triples in the ring of
              Gaussian integer

15:50–16:40   Shinichi Yasutomi (Toho University)
              (Joint work with Rao Hui (Central China Normal University) and
              Jiang Zhu (Huazhong University of Science and Technology))
              Ergodicity for p-adic multidimensional continued fraction algorithms

16:50–17:40   Kota Saito (Nagoya University)
              Distribution of arithmetic progressions of Piatetski-Shapiro sequences

Friday 6th March

10:00–10:50   Hajime Kaneko (Tsukuba University)
Application of Hensel's lemma for the base-b expansions of integers

11:10–12:00   István Pink (University of Debrecen)
Some applications of Baker's method to Diophantine equations

14:00–14:50   Seiji Nishioka (Yamagata University)
Applications of difference algebra to Mahler functions

15:00–15:50   Yu Yasufuku (Nihon University)
Towards Vojta's conjecture on blowups of $\mathbb{P}^2$

16:10–17:00   Makoto Kawashima (Osaka University)
Rodligues' formula and irrationality

17:10–18:00   Tomohiro Yamada (Osaka University)
Irrationality measure of $(\arctan 1/2)/\pi$

Saturday 7th March

9:30–10:20   Masanori Katsurada (Keio University)
Complete asymptotic expansions for the product average of higher derivatives of Lerch zeta-functions

10:40–11:30   Takuya Aoki (Waseda University)
On class number calculations of the intermediate fields of the cyclotomic $\mathbb{Z}_2$-extension over $\mathbb{Q}(\sqrt{5})$

11:40–12:30   Ryotaro Okazaki
On total capitulation in CM-fields and Scholz reflection theorem

12:30–12:35   Closing