

# ***Diophantine Analysis and Related Fields***

March 6–8, 2014

筑波大学数理物質系 自然系学系棟 D509

## **Organizers:**

秋山茂樹(筑波大学)  
天羽雅昭(群馬大学)  
桂田昌紀(慶應大学)  
小松尚夫(弘前大学)  
岡崎龍太郎(同志社大学)  
平田典子(日本大学)

## **6 March**

13:00 ~ 13:40 **Attila Bérczes** (Univ. Debrecen)

Effective results for Diophantine equations over finitely generated domains.

13:50 ~ 14:30 **野田 工**(日本大・工), **桂田 昌紀**(慶應大・経)

Transformation formulae and asymptotic expansions for double holomorphic Eisenstein series of two variables.

14:40 ~ 15:20 **川島 誠**(大阪大)

Formal Laplace transform of Laurent series expansion in Beukers' approximation.

15:30 ~ 16:10 **鷲尾 勇介**(日大理工)

Irrationality criterion related to polylogarithms.

16:20 ~ 17:00 **田村 純一**(津田塾大), **安富 真一**(東邦大)

New classes of multidimensional continued fraction algorithms for algebraic number fields of higher degree and their applications.

## **7 March**

9:00 ~ 9:40 **Yilmaz Simsek**(Akdeniz Univ.)

Remarks on the Bernstein basis functions and their applications.

9:50 ~ 10:30 **金子 元**(日大理工)

Problems on the normality of algebraic numbers in integral and non-integral bases.

10:40 ~ 11:20 **若狭 尊裕**(名古屋大)

関数  $S_1(t)$  の  $\Omega$ -result の明示的な評価について

11:30 ~ 12:10 **Tünde Kovács** (日大理工)

New algorithms to determine the  $S$ -integral points on elliptic curves.

14:00 ~ 15:00 **天羽 雅昭**(群馬大)

Recent topics on Mahler functions and their values.

15:10 ~ 15:50 **金子 寛**(筑波大)

三次体の格子における極小点の求め方およびある三次体の無限族について

16:00 ~ 16:40 **伊藤 俊次**(東邦大), **古門 麻貴**(横浜国大), **安富 真一**(東邦大)

Stepped surfaces and its application to number theory.

16:50 ~ 17:30 **宮崎 隆史**(日大理工)

An explicit refinement of a theorem of F. Luca on Teraï's conjecture.

## 8 March

9:00 ~ 9:40 **黒沢 健**(東京理科大), **塩川 宇賀**

Algebraic independence of components of certain trigonometric functions.

9:50 ~ 10:30 **Lajos Hajdu**(Univ. Debrecen)

An exponential Hasse-type principle and its applications for exponential diophantine equations.

10:40 ~ 11:20 **大音 智弘**(筑波大)

A certain class of transcendental  $p$ -adic continued fractions.

11:30 ~ 12:10 **藤田 育嗣**(日大生産工), **奈良 忠央**(東北学院大)

Generators for twists of Fermat's cubic and congruent number curves.