

Preface

This volume consists of contributions from participants in the conference on Diophantine problems and arithmetic dynamics which took place at the Institute of Mathematics, Academia Sinica, Taipei from June 24 through 28, 2013. It was attended by over 40 mathematicians from more than 7 countries.

The study of Diophantine equations/problems is an old subject and is one of the important topics in number theory. On the other hand, arithmetic dynamics is still a very new area of research which is referring to the study of number-theoretical questions arising from iterations of morphisms/rational maps on algebraic varieties over global or local fields. Many questions in arithmetic dynamics are motivated by classical Diophantine problems and reminiscence of questions about number-theoretical properties of rational or integral points on algebraic varieties. This conference aims at reflecting progress in both Diophantine geometry and arithmetic dynamics, and providing a platform for closer interactions among experts in these research areas.

We would like to thank all the speakers for their enlightening lectures and the participants for stimulating discussions. We would also like to thank the authors for contributing to this volume and the referees for their invaluable assistance.

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Conference on Diophantine Problems and Arithmetic Dynamics

June 24-28, 2013



Invited Speakers

- Rob Benedetto (Amherst College, USA)
- Chieh-Yu Chang (Tsing Hua University, Taiwan)
- Pietro Corvaja (University of Udine, Italy)
- Dragos Ghioca (UBC, Canada)
- Shu Kawaguchi (Kyoto University, Japan)
- Aaron Levin (Michigan State University, USA)
- Michelle Manes (University of Hawaii, USA)
- Min Ru (University of Houston, USA)
- Thomas Scanlon (U. C. Berkeley, USA)
- Joseph H. Silverman (Brown University, USA)
- Thomas J. Tucker (University of Rochester, USA)
- Paul Vojta (U. C. Berkeley, USA)
- Felipe Voloch (University of Texas at Austin, USA)
- Gisbert Wüstholz (ETH Zürich, Switzerland)
- Yi-Fan Yang (Chiao Tung University, Taiwan)
- Chia-Fu Yu (Academia Sinica, Taiwan)
- Jing Yu (Taiwan University, Taiwan)

Invited Short Talks

- Huei-Jeng Chen (Academia Sinica, Taiwan)
- Chong Gyu Lee (Soongsil University, Korea)
- Jorge Pineiro (Bronx Community College, CUNY, USA)
- Chia-Liang Sun (Academia Sinica, Taiwan)
- Michael Tepper (Penn State Abington, USA)
- Yu Yasufuku (Nihon University, Japan)

Venue: Auditorium, 6F, Astro-Math Building
Institute of Math, Academia Sinica (NTU Campus)

Organizer: Liang-Chung Hsia (Taiwan Normal University),
Julie Tzu-Yueh Wang (Academia Sinica)

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Photo of the participants