

Around Functional Transcendence

Andrew Wiles Building
University of Oxford
26-29 June 2018

Programme:

Tuesday, 26th June

- 09:20 - 09:30 Opening
- 09:30 - 10:15 **Thomas Scanlon**, University of California, Berkeley
Differential algebraic Zilber-Pink theorems
- 10:25 - 11:10 **Harry Schmidt**, University of Manchester
Counting rational points and iterated polynomial equations
- 11:10 - 11:40 Tea
- 11:40 - 12:25 **Giuseppina Terzo**, Università degli Studi della Campania
Generic solutions of exponential equations
- *** Lunch ***
- 14:30 - 15:15 **Bruno Klingler**, Humboldt Universität, Berlin
Definability of period maps and algebraicity of Hodge loci
- 15:25 - 16:10 **Philipp Habegger**, Universität Basel
Variation of the Néron-Tate Height in a Family of Abelian Varieties
- 16:10 - 16:40 Tea
- 16:40 - 17:25 **Jonathan Kirby**, University of East Anglia
Local interdefinability of elliptic functions
- 17:30 *** Reception ***

Wednesday, 27th June

- 09:30 - 10:15 **Umberto Zannier**, Scuola Normale Superiore di Pisa
On a question of Katz-Oort I
- 10:25 - 11:10 **David Masser**, Universität Basel
On a question of Katz-Oort II
- 11:10 - 11:40 Tea
- 11:40 - 12:25 **Sai-Kee Yeung**, Purdue University
Revisit of some cases of the conjectures of Coleman and Oort
- *** Lunch ***
- 14:30 - 15:15 **Paola D'Aquino**, Università degli Studi della Campania
Spectrum of $\hat{\mathbb{Z}}$ and finite adeles over \mathbb{Q}
- 15:25 - 16:10 **Jacob Tsimerman**, University of Toronto
O-minimality for Hodge Structures
- 16:10 - 16:40 Tea
- 16:40 - 17:25 **Alex Wilkie**, University of Oxford
Around Functional Transcendence in o-minimal structures

Thursday, 28th June

- 09:30 - 10:15 **Kobi Peterzil**, University of Haifa
The image of a definable set in a compact nilmanifold
- 10:25 - 11:10 **Boris Zilber**, University of Oxford
Pseudo-analytic structures and abelian Galois extensions of number fields
- 11:10 - 11:40 Tea
- 11:40 - 12:25 **Joel Nagloo**, City University New York
The Ax-Lindemann-Weierstrass with derivative and the genus 0 Fuchsian Groups
- *** Lunch ***
- 15:25 - 16:10 **Gal Byniamini**, Weizmann Institute of Science
Using functional transcendence to sharpen the Pila-Wilkie theorem
- 16:10 - 16:40 Tea
- 16:40 - 17:25 **Ngaiming Mok**, University of Hong-Kong
Curvature, Rescaling and Uniformization Problems on Bounded Symmetric Domains
- 19:00 *** Conference Dinner (Wolfson College Buttery) ***

Friday, 29th June

- 09:30 - 10:15 **Vahagn Aslanyan**, Carnegie Mellon University
Weak Modular Zilber-Pink with Derivatives
- 10:25 - 11:10 **Daniel Bertrand**, IMJ-PRG, Université Pierre et Marie-Curie, Paris
Logarithmic Ax and special curves in a mixed Shimura threefold
- 11:10 - 11:40 Tea
- 11:40 - 12:25 **Sergei Starchenko**, University of Notre-Dame
Remarks on definable fundamental sets in o-minimal structures

All the talks will be in room **L5** in the Mathematical Institute Mezzanine.

Conference Dinner: The conference dinner will take place at the Wolfson College Buttery, situated in Linton Road, Oxford OX2 6UD. There will be a pre-dinner aperitif at 19:00 and then the dinner at 19:30.