Computational Aspects of Thin Groups
Introductory Workshop
(3–7 June 2024)

ORGANIZING COMMITTEE

<u>Co-chairs</u>

Bettina Eick
Technische Universität Braunschweig

Eamonn O'Brien
The University of Auckland

Alan W. Reid
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Ser Peow Tan
National University of Singapore

Venue

IMS Auditorium

Institute for Mathematical Sciences

3 Prince George's Park Singapore 118402

For more information: https://ims.nus.edu.sg/events/computational-aspects-of-thin-groups

Introductory Workshop
3–7 June 2024

Monday, 03 June 2024

Time	Title	Speaker
0930–1000	Registration	
1000–1100	Computation with finitely-presented groups	Heiko Dietrich *Monash University, Australia*
1100–1130	Break	
1130–1230	Integral packings and Number Theory	Katherine Stange *University of Colorado Boulder, USA*
1230–1430	Lunch Break	
1430–1530	Computational aspects of strong approximation	Dane Flannery *University of Galway, Ireland*
1530–1600	Break	
1600–1730	Problem session I	

Tuesday, 04 June 2024

Time	Title	Speaker
0945–1000	Registration	
1000–1100	Computation with finitely-presented groups	Heiko Dietrich *Monash University, Australia*
1100–1130	Break	
1130–1230	Integral packings and Number Theory	Katherine Stange *University of Colorado Boulder, USA*
1230–1430	Lunch Break	
1430–1530	Computational aspects of strong approximation	Dane Flannery *University of Galway, Ireland*
1530–1600	Break	
1600–1730	Problem session II	

Wednesday, 05 June 2024		
Time	**Title**	**Speaker**
0945–1000	Registration	
1000–1100	Computation with finitely-presented groups	Heiko Dietrich *Monash University, Australia*
1100–1130	Break	
1130–1230	Integral packings and Number Theory	Katherine Stange *University of Colorado Boulder, USA*

Thursday, 06 June 2024		
Time	**Title**	**Speaker**
0945–1000	Registration	
1000–1100	Computational aspects of strong approximation	Dane Flannery *University of Galway, Ireland*
1100–1130	Group Photo & Coffee Break	
1130–1145	Subarithmetic convex projective structures and computations	Michael Zshornack *University of California, Santa Barbara, USA*
1145–1200	Thinness of some symplectic hypergeometric groups of rank three	Shashank Vikram Singh *IISER Mohali, Panjab, India*
1200–1215	On the conjugacy problem in integral classical groups	Adem Zeghib *University of Grenoble Alpes, France*
1215–1230	Recognition and constructive membership for discrete finitely generated subgroups of SL(2, R)	Ari Markowitz *The University of Auckland, New Zealand*
1230–1430	***Lunch Reception at IMS***	
1430–1445	The not-so-local-global conjecture	James Rickards *University of Colorado Boulder, USA*
1445–1500	Lower dimensional Betti numbers of homogeneous spaces of Lie groups	Chandan Maity *IISER Berhampur, India*
1500–1515	Computational methods in search of units and zero-divisors of torsion-free group rings	Manisha Garg *University of Illinois, USA*
1515–1530	Zaremba's Conjecture for Geometric Sequences	Elias Dubno *University of Zurich, Switzerland*
1530–1600	Break	
1600–1730	Problem session III	

Friday, 07 June 2024		
Time	**Title**	**Speaker**
0945–1000	Registration	
1000–1015	Arithmetic and thin groups of origamis	Rogelio Niño Hernandez *Universidad Nacional Autónoma de México, Mexico*
1015–1030	Maximal Solvable Subgroups	Mikko Korhonen *Southern University of Science and Technology, China*
1030–1045	Reversibility in special linear groups	Tejbir *ITT Kanpur, India*
1045–1100	Periodic order-preserving outer automorphisms of free and surface groups	Khanh Le *Rice University, USA*
1100–1130	Break	
1130–1145	Combinatorial rigidity of circle packing limit sets	Yongquan Zhang *Stony Brook University, USA*
1145–1200	Combinatorial Growth of Reciprocal Geodesics in Hecke Groups	Debattam Das *IISER Mohali, Panjab, India*
1200–1215	Strong density and hyperbolic geometry	Ricky Lee *University of California, Santa Barbara, USA*
1215–1230		
1230–1430	Lunch Break	
1430–1600	Problem session IV	

This schedule is accurate as of 29 May 2024 and is subjected to changes.