Computational Aspects of Thin Groups

Introductory Workshop

(3-7 June 2024)



ORGANIZING COMMITTEE

Co-chairs

Bettina Eick Technische Universität Braunschweig

> Eamonn O'Brien The University of Auckland

> > Alan W. Reid Rice University

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			
Tuesday, 04 Ju	ne 2024		
Tuesday, 04 Jun Time	ne 2024 Title	Speaker	
		Speaker	
Time	Title	Speaker Heiko Dietrich Monash University, Australia	
Time 0945–1000	Title Registration	Heiko Dietrich	
Time 0945–1000 1000–1100	Title Registration Computation with finitely-presented groups	Heiko Dietrich	
Time 0945–1000 1000–1100 1100–1130	Title Registration Computation with finitely-presented groups Break	Heiko Dietrich Monash University, Australia Katherine Stange University of Colorado Boulder,	
Time 0945–1000 1000–1100 1100–1130 1130–1230	Title Registration Computation with finitely-presented groups Break Integral packings and Number Theory	Heiko Dietrich Monash University, Australia Katherine Stange University of Colorado Boulder,	
Time 0945–1000 1000–1100 1100–1130 1130–1230 1230–1430	Title Registration Computation with finitely-presented groups Break Integral packings and Number Theory Lunch Break	Heiko Dietrich Monash University, Australia Katherine Stange University of Colorado Boulder, USA Dane Flannery	

Introductory Workshop

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		

1145-1200Ninness of some symplectic hypergeometric groups frank threeShashak Vikram Singh ISER Mohal, Panjab, India1200-1215On the conjugacy problem in integral classical groupsAdem Zeghib <i>Diviersity of Grenoble Alpes,</i> <i>Prance</i> 1215-1230Recognition and constructive membership for screne finitely generated subgroups of SL(2 R)AlfWarkowitz <i>The University of Auckland, New</i> <i>Zealand</i> 1230-1430 <i>Luck Reception at IMS</i> Jinfer Stickards <i>University of Colorad Boal der,</i> <i>University of Colorad Boal der,</i>	1130–1145	computations	University of California, Santa Barbara, USA
1200-1215On the conjugacy problem in integral classical groupsUniversity of Grenoble Alpes, France1215-1230Recognition and constructive membership for discrete finitely generated subgroups of SL(2, R)Ari Markowitz The University of Auckland, New 	1145-1200		-
1215-1230Recognition and constructive membership for discrete finitely generated subgroups of SL(2, R)The University of Auckland, New Zealand1230-1430Lunch Reception at IMS1430-1445The not-so-local-global conjectureJames Rickards University of Colorado Boulder, USA1445-1500Lower dimensional Betti numbers of homogeneous spaces of Lie groupsChandan Maity IISER Berhampur, India1500-1515Computational methods in search of units and zero- divisors of torsion-free group ringsManisha Garg University of Illinois, USA1515-1530Zaremba's Conjecture for Geometric SequencesElias Dubno University of Zurich, Switzerland1530-1600BreakHomodetal	1200-1215	On the conjugacy problem in integral classical groups	University of Grenoble Alpes,
1430-1445The not-so-local-global conjectureJames Rickards University of Colorado Boulder, USA1445-1500Lower dimensional Betti numbers of homogeneous spaces of Lie groupsChandan Maity IISER Berhampur, India1500-1515Computational methods in search of units and zero- divisors of torsion-free group ringsManisha Garg University of Illinois, USA1515-1530Zaremba's Conjecture for Geometric SequencesElias Dubno University of Zurich, Switzerland1530-1600BreakV	1215-1230		The University of Auckland, New
1430-1445The not-so-local-global conjectureUniversity of Colorado Boulder, USA1445-1500Lower dimensional Betti numbers of homogeneous spaces of Lie groupsChandan Maity IISER Berhampur, India1500-1515Computational methods in search of units and zero- divisors of torsion-free group ringsManisha Garg University of Illinois, USA1515-1530Zaremba's Conjecture for Geometric SequencesElias Dubno University of Zurich, Switzerland1530-1600BreakKomputational Methods	1230-1430	Lunch Reception at IMS	
1445-1500spaces of Lie groupsIISER Berhampur, India1500-1515Computational methods in search of units and zero- divisors of torsion-free group ringsManisha Garg University of Illinois, USA1515-1530Zaremba's Conjecture for Geometric SequencesElias Dubno University of Zurich, Switzerland1530-1600BreakVolume Sequences	1430-1445	The not-so-local-global conjecture	University of Colorado Boulder,
1500-1515divisors of torsion-free group ringsUniversity of Illinois, USA1515-1530Zaremba's Conjecture for Geometric SequencesElias Dubno University of Zurich, Switzerland1530-1600BreakElias Dubno University of Zurich, Switzerland	1445-1500	<u> </u>	2
1515-1530 Zaremba's Conjecture for Geometric Sequences University of Zurich, Switzerland 1530-1600 Break	1500-1515		J
	1515-1530	Zaremba's Conjecture for Geometric Sequences	
1600–1730Problem session III	1530-1600	Break	
	1600-1730	Problem session III	

Introductory Workshop

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 <i>ITT Kanpur, India</i>
1045-1100	Periodic order-preserving outer automorphisms of free and surface groups	Khanh Le <i>Rice University, USA</i>
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.