Computational Aspects of Thin Groups
(03 Jun 2024–14 Jun 2024)

List of Speakers and Talk Titles

Name & Affiliation	Talk Title
Lecture Series	
Heiko Dietrich *Monash University, Australia*	Computation with finitely-presented groups
Dane Flannery *University of Galway, Ireland*	Computational aspects of strong approximation
Katherine Stange *University of Colorado Boulder, USA*	Integral packings and Number Theory
Ng Kong Beng Public Lecture Series	
Jordan Ellenberg *University of WisconsinMadison, USA*	From mosquitoes to ChatGPT -- the birth and strange life of the random walk
Conference Talk	
Jacques Audibert *Max-Planck-Institut for Mathematics in the Sciences, Germany*	Constructing thin surface subgroups via Hitchin representations
Emmanuel Breuillard *Oxford University, UK*	Random character varieties
Nic Brody *University of California, Santa Cruz*	Rational Fuchsian groups
Alla Detinko *University of Huddersfield, UK*	Zariski density and algorithms for linear groups
Alexander Hulpke *Colorado State University, USA*	Computing with Congruence Images
Sang-hyun Kim *Korea Institute for Advanced Study, S.Korea*	Non-freeness of certain two-parabolic groups
Emmanuel Kowalski *ETH Zürich, Switzerland*	The sieve in discrete groups
Alex Kontorovich *Rutgers University, USA*	Applications of Thin Orbits

Name & Affiliation	Talk Title
Gaven Martin *Massey University, New Zealand*	The thin Heckoid groups
Chen Meiri *Technion–Israel institute of Technology, Israel*	Problems of Waring type in arithmetic groups
Andrei Rapinchuk *University of Virginia, USA*	Groups with bounded generation
Jeroen Schillewaert *University of Auckland, New Zealand*	Discrete two-generator subgroups of over non-archimedean local field
Anne Thomas *University of Sydney, Australia*	The geometry of conjugation in Euclidean isometry groups
Stephan Tornier *University of Newcastle, Australia*	Recent developments in groups acting on trees
Tyakal N. Venkataramana *Tata Institute of Fundamental Research, India*	A question of Grothendieck on integral linear groups
Student Talk	
Debattam Das *IISER Mohali, Panjab, India*	Combinatorial Growth of Reciprocal Geodesics in Hecke Groups
Elias Dubno *University of Zurich, Switzerland*	Zaremba's Conjecture for Geometric Sequences
Manisha Garg *University of Illinois, USA*	Computational methods in search of units and zero-divisors of torsion-free group rings
Rogelio Niño Hernandez *Universidad Nacional Autónoma de México, Mexico*	Arithmetic and thin groups of origamis
Mikko Korhonen *Southern University of Science and Technology, China*	Maximal Solvable Subgroups
Khanh Le *Rice University, USA*	Periodic order-preserving outer automorphisms of free and surface groups
Ricky Lee *University of California, Santa Barbara, USA*	Strong density and hyperbolic geometry
Chandan Maity *IISER Berhampur, India*	Lower dimensional Betti numbers of homogeneous spaces of Lie groups

Name & Affiliation	Talk Title
Ari Markowitz *The University of Auckland, New Zealand*	Recognition and constructive membership for discrete finitely generated subgroups of SL(2, R)
James Rickards *University of Colorado Boulder, USA*	The not-so-local-global conjecture
Shashank Vikram Singh *IISER Mohali, Panjab, India*	Thinness of some symplectic hypergeometric groups of rank three
Katherine Stange *University of Colorado Boulder, USA*	*Lecture Series* Integral packings and Number Theory
Tejbir *ITT Kanpur, India*	Reversibility in special linear groups
Adem Zeghib *University of Grenoble Alpes, France*	On the conjugacy problem in integral classical groups
Yongquan Zhang *Stony Brook University, USA*	Combinatorial rigidity of circle packing limit sets
Michael Zshornack *University of California, Santa Barbara, USA*	Subarithmetic convex projective structures and computations