Workshop on
“Geometric and Asymptotic Group Theory with Applications 2023 - Groups and Dynamics”
July 17 - 21, 2023
organized by
Christopher Cashen (U of Vienna), Javier de la Nuez González (KIAS, Seoul), Alexandra Edletzberger (U of Vienna), Yash Lodha (U of Hawaii, Honolulu)

- Monday, July 17th, 2023
  09:00 – 09:30 Registration & Welcome
  09:30 – 10:15 Pierre Mathieu (Aix-Marseille)  
      TBA
  10:15 – 11:00 Coffee break
  11:00 – 11:45 Delaram Kahrobaei (CUNY, New York)  
      Post-quantum Blockchains using hash functions using higher dimensional special linear groups over finite fields as platforms
  12:00 – 14:00 Lunch break
  14:00 – 14:40 Tomasz Z. Szarek (BCAM, Bilbao)  
      Pointwise ergodic theorems on nilpotent groups
  14:00 – 14:40 Donggyun Seo (Seoul National U)  
      RAAGs generated by Dehn twists with uniform intersection number
      Parallel session at the Schrödinger Lecture Hall
  14:50 – 14:40 Arman Darbinyan (Vienna)  
      TBA
  14:50 – 15:30 Harry Petyt (U Oxford)  
      Obstructions to coarse cubulation
      Parallel session at the Schrödinger Lecture Hall
  15:30 – 16:00 Coffee break
  16:00 – 16:40 Michele Tiernino (UB)  
      Actions on the circle with at most N fixed points
  16:00 – 16:40 Matt Cordes (ETH Zürich)  
      Coxeter groups with (locally)-connected Morse boundary
      Parallel session at the Schrödinger Lecture Hall
• Tuesday, July 18th, 2023
  09:00 – 09:45 Volodymyr Nekrashevych (TAMU, College Station)
  Topological and conformal dimensions of self-similar groups
  10:00 – 10:45 Tom Hutchcroft (Cal Tech)
  TBA
  10:45 – 11:15 Coffee break
  11:15 – 12:00 Quick Talks
  11:17 – 11:27 Henry Bradford (U Cambridge)
  Equations with constants in some hyperbolic and linear groups
  11:28 – 11:38 Davide Spriano (Oxford)
  11:39 – 11:49 Hanna Oppelmayer (U of Innsbruck)
  Amenable IRAs
  11:50 – 12:00 Kevin Li (Regensburg)
  12:00 – 14:00 Lunch break
  14:00 – 14:40 James Hyde (U of Copenhagen)
  Finitely Presented Simple Groups of Homeomorphisms of the Reals
  14:00 – 14:40 Ariel Yadin (Ben-Gurion)
  Metric-functional boundary of Cayley graphs
  Parallel session at the Schrödinger Lecture Hall
  14:50 – 15:30 Francesco Fournier-Facio (ETH Zürich)
  Ulam stability of Thompson groups
  14:50 – 15:30 Adam Dor-On (Haifa U.)
  Ratio-limit boundaries for random walks on relatively hyperbolic groups.
  Parallel session at the Schrödinger Lecture Hall
  15:30 – 16:00 Coffee break
  16:00 – 16:40 Javier de la Nuez González (KIAS, Seoul)
  Minimality of the compact-open topology on diffeomorphism and homeomorphism groups
  16:00 – 16:40 Ecaterina Sava-Huss (U of Innsbruck)
  Abelian sandpile Markov chains
  Parallel session at the Schrödinger Lecture Hall

• Wednesday, July 19th, 2023
  09:00 – 09:45 Richard Sharp (U Warwick)
  A non-symmetric Kesten criterion for random walks on groups
  10:00 – 10:45 Alexander Stottmeister (ITP Hannover)
  Operator Algebras, the Renormalization Group, and Jones’ Actions of Thompson’s Groups
  10:45 – 11:15 Coffee break
  11:00 – 11:45 Poster Session
  11:45 – 12:30 Problem Session
  12:30 – 16:40 Free collaboration time/time to solve the problems from the Problem Session

• Thursday, July 20th, 2023
  09:00 – 09:45 Collin Bleak (U of St Andrews)
  Embeddings into Finitely Presented Simple Groups
10:00 – 10:45  Clara Löh (U Regensburg)
Vanishing of logarithmic torsion homology growth via dynamics

10:45 – 11:15  Coffee break

11:15 – 12:00  Nicolás Matte Bon (Institute Camille Jordan, U Lyon)
Liouville property for self-similar groups via conformal dimension

12:00 – 14:00  Lunch break

14:00 – 14:40  Rémi Coulon (U Rennes 1)
Equations in periodic groups

14:00 – 14:40  Joseph Maher (CUNY, New York)
Singularity of measures for Cannon-Thurston maps
Parallel session at the Schrödinger Lecture Hall

14:50 – 15:30  Jean Lécureux (Orsay) Jean Lécureux (U Paris-Saclay)
“Homogeneous” measures for \( \tilde{A}_2 \) buildings and a normal subgroup theorem

14:50 – 15:30  Rhiannon Dougall (Durham)
TBA Parallel session at the Schrödinger Lecture Hall

15:30 – 16:00  Coffee break

16:00 – 16:40  Samuel Tapie (U Lorraine)
Entropy at infinity in negative curvature and applications

16:00 – 16:40  Talia Fernos (UNC Greensboro)
TBA Parallel session at the Schrödinger Lecture Hall

• Friday, July 21st, 2023

10:00 – 10:45  Pim van der Hoorn (TU Eindhoven)
Convergence of Ollivier-Ricci curvature in random geometric graphs on Riemannian manifolds

10:45 – 11:15  Coffee break

11:15 – 12:00  Kasra Rafi (Toronto)
TBA

12:00 – 14:00  Lunch break

14:00 – 14:40  Cagri Sert (Zurich)
TBA

14:00 – 14:40  Yulan Qing (Fudan)
Boundary of Groups
Parallel session at the Schrödinger Lecture Hall

14:50 – 15:30  Thomas Koberda (U Virginia)
First order theory of homeomorphism groups of compact manifolds

14:50 – 15:30  Ilya Gekhtman (Technion Haifa)
Stationary random subgroups and injectivity radius of hyperbolic manifolds
Parallel session at the Schrödinger Lecture Hall

15:30 – 16:00  Coffee break

The main sessions take place at ESI Boltzmann Lecture Hall. The parallel sessions at the ESI Schrödinger Lecture Hall! Zoom coordinates for attending online are available on request by sending an email to secr@esi.ac.at latest by Friday, July 14, 2 p.m. After registering as an online-participant zoom coordinates will be provided.