Curriculum Vitae

A/Prof James Parkinson
School of Mathematics and Statistics
Carslaw building, F07
University of Sydney, NSW, 2006
Australia

jamesp@maths.usyd.edu.au
http://www.maths.usyd.edu.au/u/jamesp/

Employment history

- **Associate Professor:** University of Sydney, Australia — 2020–present
- **Senior Lecturer:** University of Sydney, Australia — 2014–2019
- **Lecturer:** University of Sydney, Australia — 2009–2013
- **Postdoctoral Fellow:** Technische Universität Graz, Austria — 2008
- **Visiting Assistant Professor:** Cornell University, New York, U.S.A. — 2007
- **Postdoctoral Fellow:** University of Wisconsin, Madison, U.S.A. — 2006

Education

- **Ph.D. Pure Mathematics** (University of Sydney, Australia) — 2002–2005
  Title: Buildings and Hecke Algebras
  Supervisor: Dr. Donald Cartwright
  Award: T.G. Room medal (outstanding thesis in pure mathematics)
  Scholarship: Australian Postgraduate Award
- **B.Sc.(Adv) Pure Mathematics** (University of Sydney, Australia) — 1998–2001
  Thesis title: Regularised Products and Zeta Functions
  Supervisor: Dr. Adrian Nelson
  Grade: Honours class I

Teaching qualifications

- **Graduate Certificate in Higher Education** — 2010
  University of Sydney, graduated with Merit
- **Principals & Practice of University Teaching** — 2009
  University of Sydney
- **Development Program for Research Supervision** — 2009
  University of Sydney

Short term visiting positions

- **CRM-Simons Scholar:** Centre de Recherches Mathématiques, Montréal Canada — June 2024
- **Visiting Professor:** Universite Francois Rebelais de Tours, France — Nov 2017
- **Research in Pairs:** CIRM, Aix-Marseille University, France — Oct 2017
- **Visiting Professor:** Technische Universität Graz, Austria — July–Aug 2017
- **Research in Pairs:** CIRM, Aix-Marseille University, France — June 2014
- **Visiting Professor:** Technische Universität Graz, Austria — Sept–Oct 2013
- **Visiting Professor:** University of Gent, Belgium — July–Aug 2013
- **Visiting Professor:** Technische Universität Graz, Austria — Oct 2010
- **Visiting Scholar:** Département de Mathématiques d'Orsay, France — Oct 2008
- **Visiting Scholar:** University of Sydney — Jan–June 2006, June–Oct 2007, Mar 2008

Research grants and funding

- **New Directions in Hecke Algebras** (ARC discovery DP200100712) $453,000   2021–2025
  James Parkinson (Chief Investigator)
  Jérémie Guilhot (Partner Investigator)
  Bernhard Mühlherr (Partner Investigator)
- **The Geometry of Loop Groups** (ARC discovery DP110103205) $143,200   2011–2015
  James Parkinson (Chief Investigator)
  Joel Kamnitzer (Partner Investigator)
- **MATRIX conference funding** $17,000   2020
  (with A. Devillers, J. Schillerwaert, A. Thomas)
- **Near-Miss grant** $50,000   2016–2017
  University of Western Australia
  (with Alice Devillers, Hendrik Van Maldeghem, Bernhard Mühlherr)
- **Seed Funding** $11,000   2016–2017
  University of Sydney
- **Start-up Grant** $12,000   2009–2010
  University of Sydney

Editorial roles

- **Editor in Chief**   2021–present
  Innovations in Incidence Geometry.
- **Editor**   2017–2020
  Innovations in Incidence Geometry.
- **Editor**   2017–present
  Bulletin of the Australian Mathematical Society.

Conference organisation

- **Special session organiser**   2024
  Groups and Geometries,
  Joint meeting of the NZMS, AustMS, and AMS, Auckland, New Zealand,
  (co-organisers: K.-U. Bux, J. Schillerwaert, A. Thomas).
- **Conference organiser**   2020
  Groups and Geometries,
  MATRIX, Australia (co-organisers: A. Devillers, J. Schillerwaert, A. Thomas).
- **Special session organiser**   2017
  AustMS annual conference, Algebra
- **Conference organiser**   2017
  Workshop on Buildings and Symmetry
  University of Western Australia, Perth
  Co-organisers: A. Devillers, B. Mühllherr, H. Van Maldeghem.
- **Special session organiser**   2013
  PRIMA2013 conference, Shanghai,
  Representation Theory and Categorification
- **Member of Scientific Committee**   2011
  AustMS annual conference
- **Special session organiser**   2011
  AustMS annual conference, Algebra and Number Theory

Publications and preprints

Authorship is listed in alphabetical order.

- **Automorphisms of Lie incidence geometries with spectral gaps**
  (Y. Neyt, J. Parkinson, H. Van Maldeghem)
  Submitted, 26 pages (2025)

- **Bounded weight functions on regular languages and groups**
  (J. Guilhot, E. Little, J. Parkinson)
  Submitted, 19 pages (2025)

- **Automorphisms and opposition in spherical buildings of exceptional type, V: The E_8 case**
  (J. Parkinson, H. Van Maldeghem)
  Submitted, 47 pages (2025)

- **The asymptotic Plancherel formula and Lusztig's asymptotic algebra for $\tilde{\mathsf{A}}_n$**
  (N. Chapelier-Laget, J. Guilhot, E. Little, J. Parkinson)
  Submitted, 57 pages (2024)

- **Automorphisms and opposition in spherical buildings of exceptional type, IV: The E_7 case**
  (Y. Neyt, J. Parkinson, H. Van Maldeghem, M. Victoor)
  Submitted, 68 pages, (2024)

- **Uniclass automorphisms of spherical buildings**
  (Y. Neyt, J. Parkinson, H. Van Maldeghem)
  Geometriae Dedicata, **219**, Article Number 34, 54 pages, (2025)

- **Automorphisms and opposition in spherical buildings of classical type**
  (J. Parkinson, H. Van Maldeghem)
  Advances in Geometry, **24**, 287–321, (2024)

- **On J-folded alcove paths and combinatorial representations of affine Hecke algebras**
  (J. Guilhot, E. Little, J. Parkinson)
  Algebras and Representation Theory, **27**, 2131–2185, (2024)

- **Automorphisms and opposition in spherical buildings of exceptional type, II: Moufang Hexagons**
  (J. Parkinson, H. Van Maldeghem)
  Innovations in Incidence Geometry, **20**, 443–470, (2023)

- **Cone types, automata, and regular partitions in Coxeter groups**
  (J. Parkinson, Y. Yau)
  Advances in Mathematics, **398**, 1–66, (2022)

- **Automorphisms and opposition in spherical buildings of exceptional type, I**
  (J. Parkinson, H. Van Maldeghem)
  Canadian Journal of Mathematics, **74**, 1517–1578 (2022)

- **Patterns in sets of positive density in trees and affine buildings**
  (M. Björklund, A. Fish, J. Parkinson)
  Groups, Geometry and Dynamics, **15**, 1267–1295 (2021)

- **Coxeter systems for which the Brink-Howlett automaton is minimal**
  (J. Parkinson, Y. Yau)
  Journal of Algebra, **527**, 437–446 (2019)

- **Opposition diagrams for automorphisms of small spherical buildings**
  (J. Parkinson, H. Van Maldeghem)
  Innovations in Incidence Geometry, **17**, 141–188 (2019)

- **Balanced representations, the asymptotic Plancherel formula, and Lusztig's conjectures for $\tilde{\mathsf{C}}_2$**
  (J. Guilhot, J. Parkinson)
  Algebraic Combinatorics, **2**, 969–1031 (2019)

– **Opposition diagrams for automorphisms of large spherical buildings**
(J. Parkinson, H. Van Maldeghem)
Journal of Combinatorial Theory, Series A, **162**, 118–166 (2019)

– **A proof of Lusztig's conjectures for affine type G_2 with arbitrary parameters**
(J. Guilhot, J. Parkinson)
Proceedings of the London Mathematical Society, **118**, 1188–1244 (2019)

– **Scale and tidy subgroups for Weyl-transitive automorphism groups of buildings**
(U. Baumgartner, J. Parkinson, J. Ramagge)
Journal of Algebra, **520**, 460–478 (2019)

– **Limit Theorems for random walks on Fuchsian buildings and Kac-Moody groups**
(L. Gilch, S. Müller, J. Parkinson)
Groups, Geometry and Dynamics, **12**, 1069–1121 (2018)

– **Buildings, groups of Lie type, and random walks**
(J. Parkinson)
Groups, Graphs and Random Walks, London Math. Soc. Lec. Notes, **436**, 391–443, (2017)

– **Distance regularity in buildings and structure constants in Hecke algebras**
(P. Abramenko, J. Parkinson, H. Van Maldeghem)
Journal of Algebra, **481**, 158–187 (2017)

– **Asymptotic entropy of random walks on Fuchsian buildings and Kac-Moody groups**
(L. Gilch, S. Müller, J. Parkinson)
Mathematische Zeitschrift, **285**, 707–738 (2017)

– **Regular sequences and random walks in affine buildings**
(J. Parkinson, W. Woess)
Annales de l'Institut Fourier, **65**, 675–707 (2015)

– **The combinatorics of automorphisms and opposition in generalised polygons**
(J. Parkinson, B. Temmermans, H. Van Maldeghem)
Annals of Combinatorics **19**, 567–619 (2015)

– **On calibrated representations and the Plancherel Theorem for affine Hecke algebras**
(J. Parkinson)
Journal of Algebraic Combinatorics, **40**, 331–371, (2014)

– **Automorphisms and opposition in twin buildings**
(A. Devillers, J. Parkinson, H. Van Maldeghem)
Journal of the Australian Mathematical Society, **94**, 189–201 (2013)

– **A classification of commutative parabolic Hecke algebras**
(P. Abramenko, J. Parkinson, H. Van Maldeghem)
Journal of Algebra, **385**, 115–133 (2013)

– **A local limit theorem for random walks on the chambers of $\tilde{\mathsf{A}}_2$ buildings**
(J. Parkinson, B. Schapira)
Progress in Probability, **64**, Birkhäuser, 15–53 (2011)

– **Combinatorics in affine flag varieties**
(J. Parkinson, A. Ram, C. Schwer)
Journal of Algebra, **321**, 3469–3493, (2009)

– **Isotropic random walks on affine buildings**
(J. Parkinson)
Annales de l'institut Fourier, **57**, 379–419 (2007)

– **Spherical harmonic analysis on affine buildings**
(J. Parkinson)
Mathematische Zeitschrift, **253**, 571–606 (2006)

– **Buildings and Hecke algebras**
(J. Parkinson)
Journal of Algebra, **297**, 1–49 (2006)

Editor

- **Innovations in Incidence Geometry: Algebraic, Topological and Combinatorial**, **20**, No 2–3, 2023
  Special issue in honour of Jacques Tits
  Editors: A. Betten, D. Leemans, B. Mühlherr, J. Parkinson, K. Thas, H. Van Maldeghem.

Conference, seminar, and colloquium talks

- **Recognising cells and Lusztig's asymptotic algebra**   Jan. 2026
  Algebra in Akaroa, Akaroa, New Zealand

- **Displacement spectra for automorphisms of spherical buildings**   Sep. 2025
  Buildings workshop, UCLouvain, Belgium (invited speaker)

- **Lusztig's asymptotic algebra for affine type A**   June 2025
  Algebraic Combinatorics Conference, Le Croisic, France (invited speaker)

- **On Lusztig's asymptotic algebra**   June 2024
  Quebec Mathematical Sciences Colloquium, Montreal, Canada (invited speaker)

- **Opposition diagrams**   Sep. 2022
  Polygons, Buildings, and related Geometries, Gent, Belgium (invited speaker)

- **Cone types, automata, and regular partitions in Coxeter groups**   Jul. 2022
  Algebraic Combinatorics of the Symmetric Groups and Coxeter Groups II, Cetraro, Italy

- **Cone types, automata, and regular partitions in Coxeter groups**   May 2022
  Algebra Seminar, University of Sydney, Australia

- **Automorphisms and opposition in spherical buildings**   Mar. 2022
  Symmetry in Newcastle seminar, University of Newcastle, Australia

- **Automata for Coxeter groups**   Aug. 2021
  Symmetry in Newcastle seminar, University of Newcastle, Australia

- **Patterns in sets of positive density in trees and affine buildings**   Dec. 2020
  Mathematics C Seminar, University of Graz, Austria

- **Patterns in sets of positive density in trees and affine buildings**   Oct. 2019
  Buildings workshop, Magdeburg, Germany

- **Path models in Kazhdan-Lusztig theory**   Aug. 2019
  Flags, Galleries and Reflection Groups (invited speaker), University of Sydney, Australia

- **Hecke algebras with unequal parameters II: Plancherel Theorems**   Mar. 2019
  IFS Seminar, University of Sydney, Australia

- **Hecke algebras with unequal parameters I: Cells and the a-function**   Mar. 2019
  IFS Seminar, University of Sydney, Australia

- **Automorphisms and opposition in spherical buildings**   May 2018
  Geometry, Topology and Analysis seminar, University of Sydney, Australia

- **On Lusztig's conjectures P1–P15**   May 2018
  Algebra seminar, University of Sydney, Australia

- **Affine Hecke algebras, buildings, and random walks**   Jan. 2018
  Invited minicourse (3 hours), Auckland, New Zealand

- **Random walks on buildings**   Nov. 2017
  Colloquium, Laboratoire de Mathématiques et Physique Thérique, Tours, France

- **Large deviation principles and the Martin compactification**   Aug. 2017
  Mathematics C Seminar, University of Graz, Austria

- **A multiplicative ergodic theorem for p-adic Lie groups**   July 2016
  Ergodic Theory and its Applications, Conference, Sydney

- **Affine Hecke algebras, buildings, and probability theory** June 2016
  Invited minicourse (5 hours), Tours, France

- **A multiplicative ergodic theorem for p-adic Lie groups and buildings** June 2016
  MADACA: Random Walks and Dunkl Processes (invited speaker), Sologne, France

- **On automorphisms and opposition in spherical buildings** Nov. 2015
  Seminar, University of Western Australia

- **Domesticity in spherical buildings** Sept. 2015
  Buildings workshop, Münster, Germany

- **A multiplicative ergodic theorem for p-adic Lie groups** Nov. 2014
  Seminar, Gent University, Belgium

- **A multiplicative ergodic theorem for p-adic Lie groups** Sept. 2014
  University of Sydney Geometry, Topology and Analysis Seminar, Australia.

- **Random walks on buildings** June 2014
  Groups, Graphs, and Random Walks (invited speaker), Cortona, Italy

- **Automorphisms of generalised polygons** Mar. 2014
  University of Sydney Algebra Seminar, Australia.

- **Generalised polygons** Nov. 2013
  University of Wollongong Colloquium, Australia.

- **Automorphisms and opposition in generalised polygons** Oct. 2013
  Buildings workshop, Münster, Germany

- **Generalised polygons: An introduction** Oct. 2013
  Doctoral program, Technische Universität Graz, Austria.

- **Automorphisms of generalised polygons** Sept. 2013
  Algebra seminar, University of Glasgow, Scotland.

- **A Multiplicative Ergodic Theorem for p-adic Lie groups** Jul. 2012
  Analysis seminar, University of Ottawa, Canada.

- **Harmonic analysis for Coxeter groups and Hecke algebras** May 2012
  Operator algebras seminar, University of Wollongong, Australia

- **Plancherel Theorems for Hecke algebras and Coxeter groups** Feb. 2012
  AMSI workshop on Symmetry, Wollongong, Australia

- **On automorphisms and opposition in twin buildings** Feb. 2012
  Incidence geometry and buildings, University of Ghent, Belgium

- **On Plancherel Theorems** Feb. 2012
  Group theory seminar, University of Milano (Bicocca), Italy

- **Regular sequences in affine buildings** Feb. 2012
  Mathematics C Seminar, University of Graz, Austria

- **Plancherel Theorems for Hecke algebras and Coxeter groups** Nov. 2011
  Computational approaches to Coxeter groups and Kac-Moody algebras, USyd, Australia

- **A classification of commutative parabolic Hecke algebras** Sept. 2011
  AustMS annual conference, University of Wollongong, Australia

- **The Gindikin-Karpelevich formula** Aug. 2011
  Infinite groups seminar, University of Sydney, Australia

- **Plancherel Theorems and Gindikin-Karpelevich formulas** July 2011
  Seminar, University of Toronto, Canada

- **Classifying commutative parabolic Hecke algebras** Apr. 2011
  Algebra Seminar, University of Sydney, Australia

- **Commutativity of parabolic Hecke algebras** — Feb. 2011
  Seminar, Gent University, Belgium

- **Semi-isotropic random walks on affine buildings** — Nov. 2010
  Seminar, Centre de Mathématiques et Informatique, Marseille, France

- **Regular sequences in affine buildings** — Oct. 2010
  Workshop on buildings, Universität Münster, Germany

- **Random walks on homogeneous trees** — Apr. 2010
  Applied Mathematics Seminar, University of Sydney, Australia

- **Representations of Affine Hecke Algebras** — Mar. 2010
  Algebra Seminar, University of Sydney, Australia

- **Random walks on affine buildings** — Oct. 2009
  Workshop on buildings, Universität Münster, Germany

- **Random walks on p-adic groups and affine buildings** — Sept. 2009
  AustMS annual conference, University of South Australia

- **Random walks on p-adic groups and buildings** — July 2009
  Workshop on boundaries (invited speaker), Technische Universität Graz, Austria

- **Random walks on buildings and reps of Hecke algebras** — June 2009
  Algebra seminar, University of Sydney, Australia

- **Harmonic analysis on p-adic Lie groups** — Oct. 2008
  Colloquium, MAPMO, Orléans, France

- **Combinatorics and harmonic analysis on p-adic Lie groups** — Oct. 2008
  Colloquium, Département de Mathématiques d'Orsay, France

- **Horocyclic products of buildings and Borel subgroups** — Sept. 2008
  Buildings 2008 workshop, Münster, Germany

- **Horocyclic products of affine buildings** — Aug. 2008
  Groups and infinite graphs, Erwin Schrödinger International Institute, Vienna, Austria

- **Alcove walks and harmonic analysis** — Apr. 2008
  Harmonic analysis and group actions in analysis, geometry, and probability, Zakopane, Poland

- **Alcove walks in Lie theory** — Mar. 2008
  Colloquium, University of Sydney, Australia

- **Constructing positively folded alcove walks** — Mar. 2008
  Seminar, Technische Universität Graz, Austria

- **An introduction to buildings II: Examples** — Nov. 2007
  Seminar, Technische Universität Graz, Austria

- **An introduction to buildings I: Basic theory** — Nov. 2007
  Seminar, Technische Universität Graz, Austria

- **Path combinatorics and retractions in the affine flag variety** — Sept. 2007
  Pure mathematics seminar, University of Wollongong, Australia

- **Path combinatorics in loop groups** — Aug. 2007
  Algebra seminar, University of Sydney, Australia

- **Kac-Moody groups and Hecke algebras** — Apr. 2007
  Lie theory seminar, Cornell University, USA.

- **Basics of buildings** — Apr. 2007
  Buildings and combinatorial representation theory, American Institute Math., Palo Alto, USA.

- **The affine Grassmannian and alcove walks** — Mar. 2007
  Topology and geometric group theory seminar, Cornell University, USA.

- **A path model for Chevalley groups** — Nov. 2006
  AMS special session, Combinatorial representation theory, Arkansas, Fayetteville, USA.
- **Alcove walks** — Nov. 2006
  Representation theory and applications workshop, Oberwolfach, Germany
- **Iwahori cosets and alcove walks** — Nov. 2006
  Research seminar, Universität zu Köln, Germany
- **Iwahori cosets and alcove walks** — Oct. 2006
  Combinatorics Seminar, University of Wisconsin, Madison, USA.
- **Buildings, Hecke algebras, and spherical functions** — Sep. 2006
  Lie Theory Seminar, University of Wisconsin, Madison, USA.
- **Isotropic random walks on trees and buildings** — Mar. 2006
  Workshop on Discrete Probability, Erwin Schrödinger Institute, Vienna, Austria
- **Random walks on affine buildings** — Mar. 2006
  Seminar, Technische Universität Graz, Austria
- **Buildings and Hecke algebras** — Sep. 2005
  Algebra Seminar, University of Sydney, Australia
- **Spherical harmonic analysis on affine buildings** — Oct. 2005
  Australian Mathematical Society annual conference, University of Western Australia
- **Random walks on trees and grids** — May 2005
  ΣUMS talk, University of Sydney, Australia
- **Averaging operators on buildings** — Oct. 2004
  AustMS annual conference, Royal Melbourne Institute of Technology, Australia

Teaching Experience

- **Rings fields and Galois Theory** — 2015, 2016, 2017, 2018, 2019, 2020
  Third year Advanced, USyd
- **Functional Analysis** — 2011, 2012, 2013, 2022, 2023
  Fourth year honours, USyd
- **Representation Theory and Random Walks** — 2010
  Postgraduate course, Graz, Austria
- **Groups with BN-pairs** — 2009
  Fourth year honours course, AMSI summer school, Wollongong
- **Graph Theory** — 2011
  Reading course, USyd
- **Advanced Integral Calculus** — 2009, 2010, 2011, 2012, 2021
  First year undergraduate, USyd
- **Advanced Vector Calculus** — 2009, 2010, 2011, 2012, 2014
  Second year undergraduate, USyd
- **Vector Calculus** — 2022
  Second year undergraduate, USyd
- **Linear and abstract algebra (Advanced)** — 2025
  Second year undergraduate, USyd
- **Differential Calculus** — 2006, 2009, 2010, 2013, 2021
  First year undergraduate, USyd
- **Advanced Multivariable Calculus and Modelling** — 2018, 2019, 2022, 2023, 2024
  First year undergraduate, USyd

- **Advanced Differential Calculus** — 2014, 2015, 2016
  First year undergraduate, USyd
- **Multivariable calculus** — 2007
  Senior undergraduate, Cornell University, U.S.A.
- **Integral calculus** — 2006
  First year undergraduate, USyd
- **Linear algebra I** — 2005, 2011, 2012, 2014, 2015, 2016, 2025
  First year undergraduate, various levels, USyd
- **Linear algebra II** — 2004, 2005
  Second year undergraduate, Summer school, USyd
- **Symmetries of Platonic solids** — 2014, 2015, 2016
  Undergraduate talented student program, USyd
- **Fermat's Last Theorem modulo p** — 2019, 2023
  Undergraduate talented student program, USyd
- **Finite Simple Groups** — 2016
  Reading course, USyd

Students and Postdoctoral Researchers Supervised

- **Postdoctoral Researchers:**

  - **Nathan Chapelier** — 2023
  - **Yeeka Yau** — 2021–2022
  - **Tommaso Terragni** — 2012

- **Ph.D. Students:**

  - **Eloise Little** (Supervisor: J. Parkinson, Associate Supervisor: O. Yacobi) — 2022–2025
    Path models and Kazhdan-Lusztig theory
  - **Yeeka Yau** (Supervisor: J. Parkinson, Associate Supervisor: O. Yacobi) — 2017–2021
    Automatic structures for Coxeter groups
  - **Kamil Bulinski** (Supervisor: A. Fish, Associate Supervisor: J. Parkinson) — 2014–2017
    Ergodic theory and combinatorial number theory

- **Masters Students:**

  - **Chester Yau** (Supervisor: N. Brownlowe, Associate Supervisor: J. Parkinson) — 2021–2024
    Skew-product graph of groups and their toolkits
  - **Phil Bos** (Supervisor: J. Parkinson, Associate Supervisor: D. Cartwright) — 2013–2017
    On Ramanujan's τ-function, Modular Forms, and Hecke Operators

- **Honours Students:**

  - **Max Mikkelsen** — 2022–2023
    Kazhdan-Lusztig theory with arbitrary parameters
  - **Eloise Little** — 2020–2021
    Coxeter groups and Kazhdan-Lusztig cells
  - **Thomas Arblaster** — 2019 (disc)
    The inverse Galois problem
  - **Lillie Scarlet** — 2019 (disc)
    Kazhdan-Lusztig cells
  - **Jacob Loader** — 2019
    Random walks on groups
  - **Yeeka Yau** — 2016
    Automata for Coxeter groups
  - **Zhenglyu Huang** — 2016
    Projective geometry

- **Christopher Shaw** 2014–2015
  Automatic groups
- **David Manescu** 2014
  Parameters of generalised polygons
- **Jon Xu** 2012
  Generalised polygons
- **Audra McMillan** 2011
  Hecke algebras: Theory and applications
- **Matthias Wong** 2010
  Harmonic analysis on homogeneous trees

- **Vacation Scholars:**
  - **Oliver Chambers** 2011
    Representations and random walks
  - **Yiming Deng** 2010
    Random walks on $\mathbb{Z}^d$ and affine Coxeter groups

- **Other:**
  - **Christian Habighorst** 2010
    Diploma student (Münster, Germany): *Brownian motion on affine buildings*

Ph.D. Juries

- **Johannes Roth**, University of Gent 2021
- **Magali Victoor**, University of Gent 2024
- **Yannick Neyt**, University of Gent 2025
- **Dan Rijpert**, University of Gent 2025

Service

- **Strategic Promotion Advice and Mentoring program** 2025
  (A program in Science aimed at addressing the gender imbalance at senior academic levels)
- **Academic Plan Lead – Disability, Faculty of Science** 2025
- **Honours Lead, Faculty of Science** 2023
- **LPC promotions committee, Business School** (core external member) 2022
- **LPC promotions committee, Business School** (core external member) 2021
- **Advanced Stream Working Group** (USyd) 2021
- **LPC promotions committee, Business School** (core external member) 2020
- **Faculty Assessments, Quality, and Standards Working Group** (USyd) 2019, 2020
- **International Visitor Program** (Selection committee member) 2017, 2018
- **Education committee** (USyd Mathematics) 2021
- **Academic program committee** (USyd Mathematics) 2014, 2015, 2016, 2017
- **Undergraduate studies committee** (USyd) 2014, 2015, 2016, 2017
- **Management Committee** (USyd Mathematics) 2018, 2019
- **Academic board** (USyd) 2018, 2019, 2020, 2021, 2022, 2023
- **Student Support Scheme Committee** 2016–2018
  Australian Mathematical Society
- **Curriculum review committee** (USyd Mathematics) 2016, 2017
- **USyd Correspondent to Australian Mathematical Society Gazette** 2009–2011

- **USyd Second year pure mathematics coordinator** 2010–2013
- **Seminar organiser** 2006
  Lie Theory, University of Wisconsin-Madison, U.S.A.
- **Referee** (various journals) 2007–
- **Lecturer at MANSW talented student day** 2010
  Random walks: an introduction
- **Mathematics coordinator for Science in The City** 2009, 2010, 2011
- **Mathematics coordinator for Sydney Open Day** 2009, 2010, 2011