

CONTACT INFORMATION	Laboratoire de Mathématiques Nicolas Oresme, Université de Caen Normandie, 14032 Caen Cedex 5, France	Email: matthew.pressland@unicaen.fr Webpage: https://mdpressland.github.io/ ORCID: 0000-0002-9631-3583 ResearcherID: O-3994-2016
RESEARCH INTERESTS	Representation theory of quivers and algebras, categorical and homological methods. Connections to cluster theory, algebraic and combinatorial geometry. Abelian, exact and triangulated categories, (higher) Auslander–Reiten theory. Non-commutative algebra, connections to geometry, mathematical physics, Lie theory.	
FELLOWSHIPS	EPSRC Postdoctoral Fellowship , 30.03.20–29.09.23 Originally at University of Leeds, UK, transferred to University of Glasgow, UK, 05.01.22. Personal grant, value £375,748, funding full-time postdoctoral research position for myself. Max Planck Institute Guest Programme , Bonn, Germany, 01.04.16–31.03.17 Postdoctoral research fellowship, total value €25,200 plus travel expenses.	
OTHER EMPLOYMENT	Maître de conférences (\approx lecturer), from 01.12.24 LMNO, Université de Caen Normandie , France Research Associate , 30.09.23–29.09.24 School of Mathematics & Statistics, University of Glasgow , UK Temporary Lecturer , 05.01.22–04.04.22 School of Mathematics & Statistics, University of Glasgow , UK Wissenschaftlicher Mitarbeiter (postdoc), 01.04.17–30.03.20 Institut für Algebra und Zahlentheorie, Universität Stuttgart , Germany	
EDUCATION	PhD in Mathematics, completed 2015 University of Bath , UK Adviser: Prof. Alastair King Thesis title: <i>Frobenius categorification of cluster algebras</i>	
FURTHER FUNDING	Hausdorff Junior Trimester Programme : New Trends in Representation Theory, €9,300 Funding to lead a three-person research group during the programme. Foundation Compositio , €6,000 London Mathematical Society Scheme 1 Grant , £5,000 Heilbronn Small Grants Scheme , £4,000 Funding for the conference ‘Quivers, Clusters, Moduli and Stability’, Oxford, January 2023. London Mathematical Society Scheme 3 Grant , £1,200 Funding for the research network CLAN (Clusters and their Applications in the North). Edinburgh Mathematical Society Student Research Bursary , £900 Funding for a student to carry out a summer research project under my supervision. Heilbronn Research Grant , £7,500 Funded research in a seven-person group led by principal investigator A. King.	
PAPERS	12 peer-reviewed publications, 3 preprints and 1 appendix: 1. Quasi-coincidence of cluster structures on positroid varieties To appear in <i>J. Eur. Math. Soc. (JEMS)</i> . 2. Cluster categories for completed infinity-gons I: Categorifying triangulations With İ. Çanakçı, M. Kalck. <i>J. Lond. Math. Soc.</i> 111 (2025), Paper no. e70092. 3. Perfect matching modules, dimer partition functions and cluster characters With İ. Çanakçı, A. King. <i>Adv. Math.</i> 443 (2024), Paper no. 109570. 4. From frieze patterns to cluster categories <i>Modern Trends in Algebra and Representation Theory</i> , London Math. Soc. Lecture Note Ser. Vol. 486, CUP (2023), 109–145. 5. A categorification of acyclic principal coefficient cluster algebras <i>Nagoya Math. J.</i> 252 (2023), 769–809. 6. Calabi–Yau properties of Postnikov diagrams <i>Forum Math. Sigma</i> 10 (2022), Paper no. e56. 7. On quiver Grassmannians and orbit closures for gen-finite modules With J. Sauter. <i>Algebr. Represent. Theory</i> 25 (2022), no. 2, 413–445.	

8. Special tilting modules for algebras with positive dominant dimension

With J. Sauter. *Glasg. Math. J.* **64** (2022), no. 1, 79–105.

9. Mutation of frozen Jacobian algebras

J. Algebra **546** (2020), 236–273.

10. Graded Frobenius cluster categories

With J.E. Grabowski. *Doc. Math.* **23** (2018), 49–76.

11. Internally Calabi–Yau algebras and cluster-tilting objects

Math. Z. **287** (2017), no. 1–2, 555–585.

12. Labelled seeds and the mutation group

With A. King. *Math. Proc. Cambridge Philos. Soc.* **163** (2017), no. 2, 193–217.

13. Cluster structures via representation theory: cluster ensembles, tropical duality, cluster characters and quantisation

With J.E. Grabowski. Preprint, [arXiv:2411.11633](https://arxiv.org/abs/2411.11633).

14. Reduction of Frobenius extriangulated categories

With E. Faber, B. Marsh. Preprint, [arXiv:2308.16232](https://arxiv.org/abs/2308.16232).

15. Extriangulated ideal quotients, with applications to cluster theory and gentle algebras

With X. Fang, M. Gorsky, Y. Palu, P.-G. Plamondon. Preprint, [arXiv:2308.05524](https://arxiv.org/abs/2308.05524).

17. Auslander–Reiten translations for Gorenstein algebras

With S. Kvamme. Appendix to *Monomial Gorenstein algebras and the stably Calabi–Yau property*, by A. García Elsener, *Algebr. Represent. Theory* **24** (2021), 1083–1099.

VISITING
POSITIONS

Invited participant, Cluster Algebras and Representation Theory, 06.09.21–17.12.21

Isaac Newton Institute for Mathematical Sciences, Cambridge, UK

Group leader, New Trends in Representation Theory, 01.09.20–29.11.20

Hausdorff Institute for Mathematics, Bonn, Germany

ESTEEM

Awards

Jon Nimmo Teaching Prize for early career staff, Glasgow, 2022

Invitations

Six invited lecture series and many invited conference talks.

Invitations to exclusive conferences at Oberwolfach (×2), Banff International Research Station, Casa Matemática Oaxaca (×3) and Chennai Mathematical Institute.

Main organiser

ICRA (International Conference on Representations of Algebras), Grenoble, 22.06.26–03.07.26

Journées d’Algèbre, Caen, 18.03.25–19.03.25

Clusters and their Applications in the North, 1st Meeting, Glasgow, 14.02.24

Quivers, Clusters, Moduli and Stability, Oxford, 09–13.01.23

Bridges Between Representation Theory and Algebraic Geometry, Leeds, 24–27.05.22

Representation Theory Working Group, Stuttgart, 2017–18 and 2019–20

Bath Postgraduate Geometry & Algebra Seminar, 2012–15

Bath Postgraduate Seminar Series, 2012–13

Supporting organiser

Algebraic geometry days, Glasgow, 08.05.24–09.05.24

Research network CLAN (Clusters and their Applications in the North), Glasgow organiser

Two Weeks of Silting, Stuttgart, 30.07.19–09.08.19

Calf regional algebraic geometry seminar, Bath, 31.05.12

Refereeing experience

J. Eur. Math. Soc. (JEMS), Adv. Math. (×3), Proc. Lond. Math. Soc., Algebra Number Theory, J. Combin. Theory Ser. A, Int. Math. Res. Not. IMRN, Math. Z., Bull. Lond. Math. Soc., J. Algebraic Combin., Algebr. Represent. Theory (×3), Quart. J. Math. Oxford, Math. Proc. Cambridge Philos. Soc., Appl. Categ. Structures, Monatsh. Math., Glasg. Math. J., SIGMA Symmetry Integrability Geom. Methods Appl., FPSAC.

External examiner

Eight Bachelors’ theses in algebra (three in Norwegian), NTNU Trondheim, 2019

Administrator

FDLIST, mailing list and webpage for representation theory of algebras, with over 400 registered users worldwide, since 2020

Reviewer

MathSciNet, zbMath

Outreach and administration

Invited contributor to ‘Snapshots of modern mathematics from Oberwolfach’, 2023
Royal Institution Masterclass for secondary school students, Glasgow, 26.11.22
Early Career Researcher roundtable with science minister, on UK R&D Roadmap, 24.09.20
Staff–Student Liaison Committee postgraduate representative, Bath, 2013–14
Teaching Assistant for STEP Outreach Programme for sixth-form students, Bath, 2013

COURSES LECTURED

Logique et Raisonnement, Université de Caen Normandie, 2026 (combined lecture/tutorial)
Algèbre 1, Université de Caen Normandie, 2025 (combined lecture/tutorial)
Logique et Raisonnement, Université de Caen Normandie, 2025 (combined lecture/tutorial)
Metric Spaces and Basic Topology, University of Glasgow, 2024
Metric Spaces and Basic Topology, University of Glasgow, 2022 (online, Jon Nimmo Teaching Prize)
Höhere Mathematik II, Universität Stuttgart, 2017 (additional lectures)

SUPERVISION

MSc Project, D.D. Qin, *The McKay correspondence*, Glasgow, 07–09.2023
L3 Research Internship, K. Marandeau, *Cohen–Macaulay representations*, Caen, 05–07.2025
Summer Project, G.C.-D. Fernández, *Frieze patterns*, Glasgow, 06–07.2022

TALKS

Lecture Series

Markov Numbers and the Combinatorics of Cluster Algebras, İstanbul, Turkey, 25–28.08.25
Cluster Algebras and Symplectic Geometry, Banff, Canada, 30.03–04.04.25
Cluster Algebra, Representation Theory and Algebraic Geometry, Hong Kong, 08–12.11.25
Mutations in Representation Theory of Algebras, Online / Isfahan, Iran, 10–12.05.23
Preprojective Algebras and Calabi–Yau Algebras, Online / Ōsaka, Japan, 02–04.03.22
London Mathematical Society Autumn Algebra School, Online, 06–09.10.20

Invited Talks (since 2021)

Séminaire d’Algèbre et Géométries, Grenoble, France, 24.11.25
The RepNet Launch Party, York, UK, 30.07.25
Derived Representation Theory and Triangulated Categories, Thessaloníki, Greece, 27.06.25
Séminaire AG, Versailles, France, 17.06.25
AIMS Conference on Dynamical Systems and Differential Equations, Abu Dhabi, UAE, 18.12.24
Homological Algebra Seminar, Aarhus, Denmark, 23.10.24
Algebra Seminar, Aberdeen, UK, 09.10.24
Séminaire d’Algèbre d’IMJ-PRG, Paris, France, 17.06.24
Séminaire d’Algèbre et de Géométrie, Caen, France, 02.04.24
Séminaire AG, Online / Versailles, France, 19.03.24
London Mathematical Society Northern Regional Meeting, Durham, UK, 25.03.24
Algebraic Topology Seminar, Warwick, UK, 13.03.24
Cluster Algebras and Their Applications, Oberwolfach, Germany, 16.01.24
FD Seminar, Online, 28.09.23
Homological Algebra and Representation Theory, Karlóvasi, Greece, 13.07.23
Nordic Congress of Mathematicians, Aalborg, Denmark, 04.07.23
Combinatorial Aspects of Representation Theory, Oslo, Norway, 28.03.23
Séminaire AG, Versailles, France, 14.03.23
GLEN Algebraic Geometry Seminar, Edinburgh, UK, 09.12.22
Pure Mathematics Seminar, Lancaster, UK, 12.10.22
Geometric and Combinatorial Methods in Homological Algebra, Aarhus, Denmark, 21.07.22
Clusters and Braids Seminar, Online, 06.06.22
Øyvind 60, Trondheim, Norway, 04.06.22
58th ARTIN Meeting, Manchester, UK, 17.03.22
International Workshop on Geometry and Math. Physics, Online / Ulsan, South Korea, 15.02.22
LAGOON Seminar, Online, 10.02.22
Hodge Seminar, Edinburgh, UK, 08.12.21
Séminaire d’Algèbre d’IMJ-PRG, Online / Paris, France, 18.10.21
New Developments in Rep. Theory Arising from Cluster Algebras, Cambridge, UK, 23.09.21
Cluster Algebras and Related Topics, Online / Běijīng, China, 06.06.21
Plymouth Pure Mathematics Seminar, Online / Plymouth, UK, 25.02.21
TRAC Seminar, Online / Sherbrooke, Canada, 17.02.21