

Robert Marsh. Curriculum Vitae. June 2018.

Name: Robert James Marsh

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Main research fields: Cluster algebras, Representation theory of finite dimensional algebras, Algebraic groups, Algebraic combinatorics.

Distinctions

- London Mathematical Society Whitehead Prize, July 2009.
- EPSRC Leadership Fellow, "Cluster-tilting theory", 2008-2014.
- Leverhulme Fellowship, "Applications of canonical bases," January to August 2003.
- Member of the EPSRC Peer Review College 1/1/2003 to date.
- University of Leicester Achievement Bonus awarded in March 2001 and June 2004.

Employment:

- Professor, University of Leeds, UK, June 2009 to date.
- Guest Professor, NTNU Trondheim, Norway, August-December 2014.
- Reader, University of Leeds, UK, September 2006 – May 2009.
- Reader, University of Leicester, UK, April 2005 – August 2006.
- Lecturer, University of Leicester, UK, September 1998 – March 2005.
- Research Assistant (to Ken Brown), UK, University of Glasgow, October 1996 – August 1998.
- Research Assistant (to Claus Michael Ringel), University of Bielefeld, Germany, January – September 1996.

Qualifications:

- PhD Mathematics (University of Warwick), 1996. Supervisor: Roger Carter.
- Postgraduate Certificate in Learning and Teaching in Higher Education (University of Leicester), 2001.
- MSc Mathematics, with distinction (University of Warwick), 1994.
- BA Mathematics, First (University of Oxford), 1992.

Research activities

Research grants awarded

- EU Marie Skłodowska-Curie Individual Fellowship (E. Faber, 2018-2020). Grant value approx. €183,000.
- Leadership Fellowship, *Cluster-tilting theory*.
Engineering and Physical Sciences Research Council, EP/G007497/1.
Principal Investigator (no co-investigator).
Funded research and two research associates (24 and 26 months).
1 September 2008 - 31 August 2013, extended to 31 March 2014.
Total grant value £841,641.
- *Cluster algebras and applications*. Engineering and Physical Sciences Research Council, EP/C01040X/1 (Leicester); carried forward as EP/C01040X/2 (Leeds).
Principal Investigator (Co-investigator: J. Scott).
Funds for a Research Associate for 3 years.
1 May 2006 - 17 November 2009. Grant value £170,744.
- *Actions of the braid group on derived categories of representations of simple Lie algebras*.
Engineering and Physical Sciences Research Council, GR/S35387/01.
Principal Investigator (Co-investigator: S. Koenig).
Funds for one Research Associate for 12 months and one for 24 months.
1 June 2004 - 30 November 2007. Grant value £144,018.
- Leverhulme Fellowship, *Applications of canonical bases*.
Leverhulme Trust.
Principal Investigator (no co-investigator).
Funds for a replacement lecturer and travel for grant-holder,
1 January to 31 August 2003. Grant value £18,143.
- *Canonical Bases, Reduced Expressions and Normal Forms*.
Engineering and Physical Sciences Research Council, fast stream grant, GR/R17546/01.
Principal Investigator (no co-investigator).
Funds for a Research Associate for 14 months.
22 January 2001 – 21 September 2003. Grant value £52,708.
- *Algebraic Groups and Related Topics*, one-day meeting at the University of Warwick.
London Mathematical Society Scheme 1 grant.
Jointly held with Dmitriy Rumynin.
October 1999, Grant value £2275.

Research supervision

Postdocs

- S. Fryer, January 2016 to September 2016.
- J. Grant, February 2012 to October 2014.
- Y. Palu, September 2009 to August 2011.
- J. Scott, May 2006 to May 2009.
- K. Baur, July 2005 to August 2007
- I. Muchtadi-Alamsyah, June 2004 – July 2005.
- R. Corran, January 2001 – March 2002.

PhD Students

- I. Webster, October 2015 to date.
- A. Shah, September 2015 to date.
- R. Simoes, April 2008 to March 2012. PhD awarded 2013.
- M. Parsons, October 2003 – September 2007. PhD awarded 2008.

Mentoring

Mentor for colleagues in Leeds.

Refereeing and PhD examining

- Editorial advisor for the *London Mathematical Society journals*.
- PhD examiner (7 external and 8 internal).

Administration

- REF 2021 UoA Lead, Mathematics, University of Leeds, 2017 – to date.
- Member of School Research Committee, 2017 – to date.
- Algebra group coordinator, University of Leeds, 2016 – to date.
- Member of School Strategy Board, 2016 – to date.

Conference/workshop organization

- Joint organiser of conference at the CIRM, Luminy, France. Cluster algebras: Twenty years on. March 2018.
- Joint organiser of a three-day workshop on Mirror Symmetry and Cluster Algebras, University of Leeds, September 2013.
- Organiser of two-day *ARTIN* meeting (*Algebra and Representation Theory in the North*), University of Leeds, May 2012.
- Joint organiser of workshop on Geometry, representation theory and clusters, University of Leicester, UK, June 2012.
- External adviser for conference on *Cluster categories and cluster tilting*, NTNU, Trondheim, Norway, March 2012.
- Joint organiser of one-day meeting on *Cluster Algebras and Representation Theory*, University of Leeds, UK, June 2010.
- Joint organiser of two-day workshop on *Quivers and Integrable Systems*, University of Leeds, UK, May 2009.
- Joint organiser of conference PFS 2008 on *Rings and Modules*, Lisbon, Portugal, September 2008.
- Organiser of two-day *ARTIN* meeting (*Algebra and Representation Theory in the North*), University of Leeds, March 2008.
- Scientific adviser for *Liegrits Workshop* on categorification, cluster theory and other topics, Oxford, UK, January 2008.
- Joint organiser of one-day meeting on *Algebraic Groups and Related Topics*, held at the University of Warwick, UK, October 1999.

Invited conference presentations

- Idun 75: A conference on representation theory of artin algebras on the occasion of Idun Reiten's birthday, NTNU, Trondheim, Norway, May 2017.
- Series of talks at the Workshop of the XVII International Conference on Representations of Algebras (ICRA 2016), Syracuse University, USA, August 2016.
- London Mathematical Society – EPSRC Durham Symposium, Geometric and Algebraic Aspects of Integrability, July – August 2016.
- Workshop on Brauer Graph Algebras, University of Stuttgart, Germany, March 2016.
- Total Positivity: A bridge between Representation Theory and Physics, University of Kent, January 2016.
- Silting theory and related topics, Università degli Studi di Verona, Italy, 2-4 July 2015.
- AMS-EMS-SPM International meeting in Porto, Portugal, 10-13 June 2015.
- Workshop on cluster algebras and finite-dimensional algebras, University of Leicester, UK, 3-5 June 2015.
- Seminar talk at the Programme on Representation Theory at the Mittag-Leffler Institute, Sweden, April 2015.
- Two supplementary lectures at the LMS Invited Lectures of Michael Shapiro at the University of Durham, 16-20 March 2015.
- National Algebra Meeting, University of Oslo, Norway, 6-7 November 2014.
- Workshop on Hall and Cluster Algebras, Centre de Recherches Mathématiques, Montreal, Canada, 8-12 May 2014.
- Representations of quivers and finite dimensional algebras, Mathematisches Institute Oberwolfach, Germany, 16-22 February 2014.
- Cluster Algebras and Combinatorics, Münster, Germany, February 6 - February 8, 2014.
- Groups, combinatorics and non-associative algebras, CIRM, Luminy, France, 30 September 2013–4 October 2013.
- Algebra, Combinatorics and Representation Theory: in memory of Andrei Zelevinsky (1953-2013), Northeastern University, Boston, USA, 24-28 April, 2013.
- Workshop on Triangulations and Mutations, Newcastle University, UK, 18-22 March 2013.
- Cluster Algebras in Combinatorics, Algebra, and Geometry, Mathematical Sciences Research Institute, Berkeley, California, USA, 29 October 2012 to 2 November 2012.
- Cluster categories and cluster tilting, NTNU, Trondheim, Norway, 28-30 March 2012.
- Workshop on cluster algebras and combinatorics 2012, University of Graz, Austria, 8-10 March 2012.
- Colloque Tournant, Théorie de Lie (Lie Theory), Caen, France, 25-27 January 2012.
- New developments in noncommutative algebra and its applications, Sabhal Mòr Ostaig, Isle of Skye, Scotland (ICMS conference), June-July 2011.
- The Abel Symposium 2011: Algebras, quivers and representations, June 2011.
- Representation theory of quivers and finite dimensional algebras, Mathematics Research Institute (MFO), Oberwolfach, Germany, February 2011.
- Homological and geometric methods in algebra, NTNU, Trondheim, Norway, August 2009.

- LMS Durham Symposium on Combinatorial and geometric structures in representation theory, Durham, UK in July 2009.
- Bristol, Leicester, Oxford Colloquium/REPNET meeting, University of Leicester, UK, July 2009.
- Mini-workshop on “Total non-negativity is a quantum phenomenon”, Mathematics Research Institute (MFO), Oberwolfach, Germany, March 2009.
- LMS Workshop on Triangulated categories, Swansea, UK, December 2008.
- Representation theory of finite dimensional algebras, Mathematics Research Institute (MFO), Oberwolfach, Germany, February 2008.
- Plenary talk at the XII International Conference on Representation Theory (ICRA XII), Torun, Poland, August 2007.
- Perspectives in Auslander-Reiten Theory, NTNU, Trondheim, Norway, May 2007.
- Themes in the interface of representation theory and physics. Conference and Workshop, City University, London, UK, December 2006.
- Cluster algebras and cluster-tilted algebras, University of Bielefeld, Germany, May 2006.
- Sixth Century Conference on Representation Theory, University of Aberdeen, UK, October 2005.
- Series of talks at the masterclass on Cluster Algebras, Luminy, France, May 2005.
- Representation theory of finite dimensional algebras, Mathematics Research Institute (MFO), Oberwolfach, Germany, February 2005.
- Morning talk at the British Mathematical Colloquium/Irish Mathematical Society Meeting in Belfast, Northern Ireland, April 2004.
- Meeting on Representations of Finite-Dimensional Algebras at the University of Warwick, UK, December 2003.
- Summer School on Group Representations, Centre for Linear Structures and Combinatorics, Lisbon, Portugal, July 2003 (3 talks).
- American Mathematical Society meeting at Northeastern University, Boston, USA, October 2002.
- Journée d’algèbre (Algebra day) at the University of Caen, France, May 2002.
- Meeting on Algebraic Lie Representations (Path Algebras, Combinatorial Methods and Symmetries), Bielefeld, Germany, February 2002.
- Representation Theory Around the Channel, Université de Picardie, Amiens, France, August 2001.
- Mini-workshop on Schur algebras and quantum groups, Mathematics Research Institute (MFO), Oberwolfach, Germany, February - March 2001.
- LMS Durham Symposium on Quantum Groups, University of Durham, UK, July 1999.
- Enveloping Algebras, Quantum Groups and Representation Theory, Bielefeld, Germany, September 1996.
- Meeting on Groupes Algébriques de Transformations, Luminy, France, October 1996.

Invited seminar talks

- University of Kent, UK, February 2017, Dimer models and cluster categories of Grassmannians.
- London Algebra Colloquium, City University, UK, October 2016, Dimer models and cluster categories of Grassmannians.

- Artin meeting, Newcastle University, UK, September 2016, Dimer models and cluster categories of Grassmannians.
- Durham University, UK, Pure Mathematics Colloquium, May 2016, Braid groups and quiver mutation.
- University of Bonn, Germany (Representation Theory Seminar), April 2016, Braid groups and quiver mutation.
- University of Glasgow, Scotland, March 2016, Braid groups and quiver mutation.
- University of Edinburgh, Scotland, March 2016, Twists of Plücker coordinates as dimer partition functions.
- Integrable day, Loughborough University, November 2015, Braid groups and quiver mutation.
- NTNU, Trondheim, Norway, October 2014, Braid groups and quiver mutation.
- Cardiff University, UK, seminar, May 2014, Twists of Plücker coordinates as dimer partition functions.
- University of Warwick, UK, Colloquium, March 2014, Reflection group presentations arising from cluster algebras.
- NTNU, Trondheim, Norway, October 2013, Twists of Plücker coordinates as dimer partition functions.
- London Algebra Colloquium, October 2013, Twists of Plücker coordinates as dimer partition functions.
- University of Bielefeld, Germany, September 2013. Dimer models with boundary and cluster categories associated to Grassmannians.
- NTNU, Trondheim, Norway, June 2013, Dimer models with boundary and cluster categories associated to Grassmannians.
- Algebra, Logic and Algorithms seminar, University of Leeds, UK, May 2013. Reflection groups, cluster algebras, and signed graphs.
- KFU Graz, Austria, March 2013, From triangulated categories to module categories via localization.
- University of Manchester, UK, February 2013, two talks: Introduction to cluster algebras *and* Reflection group presentations arising from cluster algebras.
- University of California Riverside, USA, November 2012. Reflection group presentations arising from cluster algebras.
- University of Colorado Boulder, USA, October 2012. Reflection group presentations arising from cluster algebras.
- University of Birmingham, UK, May 2012. Cluster algebras and reflection groups.
- University of East Anglia, UK, May 2012. Reflection group presentations arising from cluster algebras.
- University of Oxford, UK, May 2012, Reflection group presentations arising from cluster algebras.
- Queen Mary, University of London, UK, January 2012, Reflection group presentations arising from cluster algebras.
- University of Leicester, UK, December 2011, From triangulated categories to module categories via localisation.
- University of Bielefeld, Germany, October 2011, Cluster presentations of reflection groups.
- University of Bristol, UK, October 2011, From triangulated categories to module categories via localisation.
- Leibniz Universität, Hannover, Germany, June 2011. From triangulated categories to module categories via localisation.

- École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland, April 2011, From triangulated categories to module categories via localisation.
- Institute for Mathematical Research (FIM), ETH, Zürich, Switzerland, March 2011, Trees of relations, clusters and RNA structures.
- NTNU, Trondheim, Norway, January 2011, A geometric model of tube categories.
- NTNU, Trondheim, Norway, January 2011, Trees of relations, clusters and RNA secondary structures.
- University of Bath, UK, December 2010, Cluster mutation-periodic quivers and associated Laurent sequences.
- Lancaster University, UK, June 2010, Categorifying the determinant of a frieze pattern of integers.
- University of York, UK, January 2010, Cluster mutation-periodic quivers and associated Laurent sequences.
- University of Manchester, UK, October 2009, Cluster mutation-periodic quivers and associated Laurent sequences.
- NTNU, Trondheim, Norway, September 2009, Tiling bijections between paths and Brauer diagrams.
- NTNU, Trondheim, Norway, September 2009, Total positivity and cluster algebras.
- University of Bergen, Norway, August 2009, An introduction to cluster algebras.
- ETH, Zurich, Switzerland, June 2009, Two introductory talks on cluster algebras.
- University of Sheffield, UK, March 2009, Pure mathematics colloquium, Cluster structures from 2-Calabi-Yau categories with loops.
- University of Coimbra, Portugal, March 2008, A geometric construction of m -cluster categories.
- University of Kent at Canterbury, November 2007, A geometric construction of m -cluster categories.
- University of York, Leeds-York Lie Theory seminar, November 2007, Parametrizations of flag varieties.
- ETH, Zurich, Switzerland, October 2007, Cluster-tilting theory.
- University of Glasgow, UK, October 2007, Catalan sets, Pascal arrays and towers of algebras.
- University of Newcastle, Artin meeting, October 2007, Denominators of cluster variables.
- University of Bristol, UK, October 2007, A geometric construction of m -cluster categories.
- University of Oxford, UK, April 2007, Catalan sets, Pascal arrays and towers of algebras.
- University of Aberdeen, UK, April 2007, Cluster-tilting theory.
- University of Newcastle, UK, November 2006, A geometric construction of m -cluster categories.
- University of Lisbon (Centro de Algebra da Universidade de Lisboa). Portugal, November 2006, Series of five talks on cluster algebras.
- NTNU, Trondheim, Norway, August 2006, A geometric description of m -cluster categories.
- University of Glasgow, UK, January 2006, Cluster-tilting theory.
- University of Leeds, UK, October 2005, Cluster-tilted algebras.

- One-day workshop on Hopf algebras and Hopf algebroids, University of Warwick, UK, October 2005, Cluster-tilting theory.
- University of Trondheim, Norway, August 2005, The canonical basis and degenerations of quivers.
- One-day workshop on the Representation theory of finite groups and finite-dimensional algebras, University of Hannover, Germany, July 2004.
- University of Paderborn, Germany, July 2004.
- Seminaire Chevalley, Institute Henri Poincare, Paris, France, June 2003.
- Lyon I, France, May 2003.
- University of Trondheim, Norway, April 2003.
- UIA Antwerp, Belgium, March 2003.
- Kings College, London, UK, March 2003.
- Queen Mary College, London, UK, February 2003.
- Northeastern University, Boston, USA, October 2002.
- City University, London, UK, March 2002.
- University of Manchester, UK, February 2002.
- University of Wuppertal, Germany, April and October 2001.
- University of Warwick (Noncommutative geometry and quantum groups one-day meeting), UK, March 2001.
- University of Leeds, UK, October 2001.
- Queen Mary and Westfield College, UK, March 2000.
- University of Edinburgh, UK (Scottish Algebra Day), May 2000.
- University of Wuppertal, Germany, April 1999.
- University of Leeds, UK, November 1998.
- University of Cambridge, UK, May 1997.
- University of Sheffield, UK, February 1997.
- University of Edinburgh, UK, September 1997.
- University of Strasbourg, France, November 1995.

Research Visits

- NTNU, Trondheim, Norway (Aslak Bakke Buan), 9 – 20 May 2017.
- University of Bielefeld, Germany (Bill Crawley-Boevey), 1 – 7 April 2017.
- University of Graz, Austria (Karin Baur), 26 March – 1 April 2017.

- NTNU, Trondheim, Norway (Aslak Bakke Buan), 20 – 31 July 2015.
- University of Leicester, UK (Ilke Çanakçı), 13 – 15 July 2015.
- Kings College, London, UK (Konstanze Rietsch), 29 June 2015 - 1 July 2015.
- Participant of the Representation Theory programme at the Mittag-Leffler Institute, 21 March - 19 April 2015.
- NTNU, Trondheim, Norway (Aslak Bakke Buan and Idun Reiten), Guest Professor 11 August 2014 – 31 December 2014.
- Kings College, London, UK (Konstanze Rietsch), 1 January 2014 – 31 July 2014.
- NTNU, Trondheim, Norway (Aslak Bakke Buan and Idun Reiten), 27 October – 10 November 2013.
- University of Bielefeld CRC 701, Germany, (Jeanne Scott) 15-26 September 2013.
- Institute for Mathematical Research (FIM), ETH, Zürich (Alastair King and Karin Baur) one week, August 2013.
- NTNU, Trondheim (Aslak Bakke Buan and Idun Reiten), 3-21 June 2013.
- KFU Graz, Austria (Karin Baur), 5 days, March 2013.
- Mathematical Sciences Research Institute, Berkeley, California, USA, Cluster Algebras Programme, Research Member 20 August 2012 - 21 December 2012.
- University of Leicester, UK (Sibylle Schroll), 53 days of short visits 2009-2013.
- Kings College, London, UK (Konstanze Rietsch), 67 days of short visits, 2010-2013.
- University of Bielefeld, Germany (Henning Krause), 2 weeks, October 2011.
- NTNU, Trondheim, Norway (Aslak Bakke Buan), 9 days, June 2011.
- Institute for Mathematical Research (FIM), ETH, Zürich (Karin Baur), 3 months, February-June 2011.
- NTNU, Trondheim, Norway (Aslak Bakke Buan), 2 weeks, January 2011.
- Kings College, London, UK (Konstanze Rietsch), two weeks, May 2010.
- Kings College, London, UK (Konstanze Rietsch), one week, November 2009.
- NTNU, Trondheim, Norway, six weeks, August-September 2009.
- Institute for Mathematical Research (FIM), ETH, Zürich (Karin Baur), two weeks, June 2009.
- Kings College, London, UK (Konstanze Rietsch), 4 days, June 2009.
- Lyon 1, France (Philippe Caldero), one week, November 2008.
- Kings College, London, UK (Konstanze Rietsch), two weeks, June-July 2008.
- ETH, Zurich, Switzerland (Karin Baur), 10 days, October-November 2007.
- Cambridge, UK, (Konstanze Rietsch), 10 days, March-April 2007.

- Trondheim, Norway, (Idun Reiten and Aslak Buan), one week, August 2006.
- Trondheim, Norway, (Idun Reiten and Aslak Buan), two weeks, August 2005.
- Kings College, London, UK (Konstanze Rietsch), two days, March 2005.
- Paderborn, Germany (Henning Krause), one week, July 2004.
- Wuppertal, Germany (Markus Reineke), one week, January 2004.
- Aarhus, Denmark (Catharina Stroppel). Five days, November 2003.
- Lyon I, France (Philippe Caldero), three weeks, May 2003.
- Trondheim, Norway (Aslak Bakke Buan and Idun Reiten), two weeks, April 2003.
- Kings College, London, UK (Konstanze Rietsch), 2 months, January-March 2003.
- Northeastern University, Boston, USA (Andrei Zelevinsky) three weeks, October 2002.
- Institute Henri Poincaré, Paris (Ruth Corran), France: one week, June 2002; two months, October-December 2002; one month, June-July 2003.
- Université de Caen, France (Shmuel Zelikson), one week, May 2002.
- Wuppertal, Germany (Markus Reineke), one week, October-November 2001.
- Cambridge, UK (Konstanze Rietsch), one week, July/August 2001.
- Cambridge, UK (Konstanze Rietsch), one week, July 1999.
- Wuppertal, Germany (Markus Reineke), one week, April 1999.
- Isaac Newton Institute, Cambridge, UK (Roger Carter) one week, May 1997.
- University of Bielefeld, Germany (Claus Michael Ringel), 2.5 months, October-December 1995.

Research visitors since 2001

- Aslak Bakke Buan (NTNU, Trondheim, Norway), 12 – 16 February 2018.
- Aslak Bakke Buan (NTNU, Trondheim, Norway), 22 – 31 January 2018.
- Anna Felikson (Durham University, UK), 6 December 2017.
- Aslak Bakke Buan (NTNU, Trondheim, Norway) 14 – 24 November 2017.
- Ana Garcia Elsener (University of Graz, Austria), 10 – 21 November 2017.
- Yudi Mahatma (Institute of Technology, Bandung, Indonesia), 19 October 2017 – 11 January 2018.
- Aslak Bakke Buan (NTNU, Trondheim, Norway), 7 – 20 October 2017.
- Aslak Bakke Buan (NTNU, Trondheim, Norway), 18 – 29 September 2017.
- Karin Baur (University of Graz, Austria), 1 September 2017 - 12 February 2018.

- Lukas Andritsch (University of Graz, Austria), 1 September 2017 – 28 February 2018.
- Aslak Bakke Buan (NTNU, Trondheim, Norway), 2 - 17 August 2017.
- Karin Baur (University of Graz, Austria), 27 – 29 June 2017.
- Karin Baur (University of Graz, Austria), 10 – 17 February 2017.
- Karin Baur (University of Graz, Austria), 15 – 29 September 2016.
- Karin Baur (University of Graz, Austria), 3 February – 13 February 2016.
- Karin Baur (University of Graz, Austria), 23 September – 5 October 2015.
- Lisa Lamberti (ETH, Zürich, Switzerland), 22-28 March 2013.
- Alastair King (University of Bath, UK), 22-25 January 2013.
- Aslak Bakke Buan (NTNU, Trondheim, Norway), 23-28 June 2012
- Hermund Torkildsen (NTNU, Trondheim, Norway), January-April 2012.
- Karin Baur (Graz, Austria), 9-15 February 2012.
- Karin Baur (Graz, Austria), 26-30 September 2011.
- Alastair King (Bath, UK), 26-27 September 2011, 9-11 January 2012
- Aslak Bakke Buan (NTNU, Trondheim, Norway), 19 September 2010 - 2 October 2010.
- Konstanze Rietsch (Kings College, London, UK), 21 June 2010, 14 September 2010.
- Sibylle Schroll (University of Leicester, UK), 21 October 2009, 6-7 March 2014
- Dagfinn Furnes Vatne (PhD student, NTNU, Trondheim, Norway), January-June 2008.
- Aslak Bakke Buan (NTNU, Trondheim, Norway, several visits during 2007-8.
- Aslak Bakke Buan (Trondheim University, Norway), February-June and September - October 2004.
- Philippe Caldero (Lyon I, France), 18-31 August 2002.
- Markus Reineke (Wuppertal University, Germany) and Andrei Zelevinsky (Northeastern University, Boston, USA), 8-14 July 2001.

Publication List

Articles in refereed journals.

- [1] R. J. Marsh and J. Grant. Braid groups and quiver mutation. *Pacific Journal of Mathematics* 290-1, 77–116, 2017
- [2] K. Baur, A. King, and R. J. Marsh. Dimer models and cluster categories of Grassmannians. *Proc. London Math. Soc.* 113(2), 213–260, 2016.

- [3] R. J. Marsh and Y. Palu. Nearly Morita equivalences and rigid objects. *Nagoya Mathematical Journal*, 225, 64–99, 2017.
- [4] R. J. Marsh and I. Reiten. Rigid and Schurian modules over cluster-tilted algebras of tame type. *Mathematische Zeitschrift*, 284(3), 643-682, 2016.
- [5] R. J. Marsh and J. S. Scott. Twists of Plücker coordinates as dimer partition functions. *Comm. Math. Phys.* 341 Issue 3 (2016), 821-884.
- [6] M. Barot and R. J. Marsh, Reflection group presentations arising from cluster algebras. *Trans. Amer. Math. Soc.* 367 (2015), 1945-1967
- [7] R. J. Marsh and S. Schroll. The geometry of Brauer graph algebras and cluster mutations. *J. Algebra* 419, (2014), 141-166.
- [8] R. J. Marsh and S. Schroll. A circular order on edge-coloured trees and RNA m-diagrams. *Adv Appl. Math.* 54 (2014), 11-26.
- [9] R. J. Marsh and Y. Palu. Coloured quivers for rigid objects and partial triangulations: The unpunctured case. *Proc. London Math. Soc.* (2014), 108 (2) 411–440.
- [10] A. B. Buan, K. Baur and R. J. Marsh. Torsion pairs and rigid objects in tubes. *Algebras and Representation Theory* (2014) 17(2): 565-591.
- [11] A. B. Buan and R. J. Marsh. From triangulated categories to module categories via localization II: Calculus of fractions. *Journal of the London Mathematical Society* (2012), 86 (1): 152–170.
- [12] A. B. Buan and R. J. Marsh. From triangulated categories to module categories via localisation. *Transactions of the American Mathematical Society.* *Trans. Amer. Math. Soc.* 365, no. 6 (2013), 2845–2861.
- [13] K. Baur and R. J. Marsh. A geometric model of tube categories. *Journal of Algebra* 362 (2012), 178–191.
- [14] K. Baur and R. J. Marsh, Categorification of a frieze pattern determinant. *Journal of Combinatorial Theory, Series A*, 119 (2012), 1110-1122.
- [15] A. P. Fordy and R. J. Marsh. Cluster mutation-periodic quivers and associated Laurent sequences. *Journal of Algebraic Combinatorics*, 34, no. 1 (2011), 19-66.
- [16] R. J. Marsh and P. Martin. Tiling bijections between paths and Brauer diagrams. *Journal of Algebraic Combinatorics*, 33, no. 3 (2011), 427-453.
- [17] A. B. Buan and R. J. Marsh. Denominators in cluster algebras of affine type. *Journal of Algebra*, 323 no. 8, (2010), pages 2083-2102.
- [18] A. B. Buan, R. J. Marsh and D. F. Vatne. Cluster structures from 2-Calabi-Yau categories with loops. *Mathematische Zeitschrift* 265 no. 4 (2010), pages 951-970.

- [19] A. B. Buan, R. J. Marsh and I. Reiten. Denominators of cluster variables. *Journal of the London Mathematical Society* 79, no. 3 (2009), pages 589-611.
- [20] K. Baur and R. J. Marsh. Frieze patterns for punctured discs. *Journal of Algebraic Combinatorics* 30, Issue 3 (2009), Pages 349-379.
- [21] K. Baur and R. J. Marsh, A geometric description of m -cluster categories, *Transactions of the American Mathematical Society* 360, no. 11 (2008), 5789-5803.
- [22] A. B. Buan, R. J. Marsh and I. Reiten, Cluster mutation via quiver representations, *Commentarii Mathematici Helvetici* 83, no. 1 (2008), 143-177.
- [23] K. Baur and R. J. Marsh, A geometric description of the m -cluster categories of type D_n , *International Mathematics Research Notices* Volume 2007, article ID rnm011, 19 pages, doi:10.1093/imrn/rnm011, 2007.
- [24] A. B. Buan, R. J. Marsh, I. Reiten and G. Todorov, Clusters and seeds in acyclic cluster algebras, Includes appendix by A. B. Buan, R. J. Marsh, P. Caldero, B. Keller, I. Reiten and G. Todorov, *Proceedings of the American Mathematical Society* 135, no. 10 (2007), 3049-3060.
- [25] A. B. Buan, R. J. Marsh and I. Reiten, Cluster-tilted algebras, *Transactions of the American Mathematical Society* 359, no. 1 (2007), 323-332.
- [26] A. B. Buan, R. J. Marsh and I. Reiten, Cluster-tilted algebras of finite representation type, *Journal of Algebra* 306, no. 2 (2006), 412-431.
- [27] A. B. Buan, R. J. Marsh, M. Reineke, I. Reiten and G. Todorov, Tilting theory and cluster combinatorics, *Advances in Mathematics* 204, no. 2 (2006), 572-618.
- [28] P. Caldero, R. J. Marsh and S. Morier-Genoud, Realisation of Lusztig cones, *Representation Theory* 8 (2004), 458-478.
- [29] R. J. Marsh and K. Rietsch, Parametrizations of flag varieties, *Representation Theory* 8 (2004), 212-242.
- [30] P. Caldero and R. J. Marsh, A multiplicative property of quantum flag minors II, *Journal of the London Mathematical Society* 69, Series 2, no. 3 (2004), 608-622.
- [31] R. J. Marsh and M. Reineke, Canonical basis linearity regions arising from quiver representations, *Journal of Algebra* 270, no. 2 (2003), 696-727.
- [32] R. J. Marsh, M. Reineke and A. Zelevinsky, Generalized associahedra via quiver representations, *Transactions of the American Mathematical Society* 355, no. 10 (2003), 4171-4186.
- [33] R. J. Marsh and K. Rietsch, The intersection of opposed big cells in the real flag variety of type G_2 , *Proceedings of the London Mathematical Society* 85, Series 3, no. 1 (2002), 22-42.

- [34] R. J. Marsh, Rectangle diagrams for the Lusztig cones of quantized enveloping algebras of type A, *Journal of Algebra* 249, no.2 (2002), 377-401.
- [35] R. J. Marsh, The Lusztig cones of quantized enveloping algebras of type A, *Journal of Algebra* 244, no.1 (2001), 59-75.
- [36] R. W. Carter and R. J. Marsh, Regions of linearity, Lusztig cones and canonical basis elements for the quantized enveloping algebra of type A_4 , *Journal of Algebra* 234, no.2 (2000), 545-603.
- [37] R. J. Marsh, More tight monomials for quantized enveloping algebras, *Journal of Algebra* 204, no.2 (1998), 711-732.
- [38] R. J. Marsh, Canonical bases and standard monomials, *Proceedings of the Edinburgh Mathematical Society* 41, Series II, no.3 (1998), 611-623.
- [39] R. M. Green and R. J. Marsh, Quantized symmetric powers, *Quarterly Journal of Mathematics* 48, Series 2, no. 192 (1997), 479-492.
- [40] R. J. Marsh, Canonical bases for fundamental modules of quantized enveloping algebras of type A, *Communications in Algebra* 25, no.5 (1997), 1365-1386.
- [41] R. J. Marsh, Canonical bases for the miniscule modules of the quantized enveloping algebras of type B and D, *Communications in Algebra* 25, no.5 (1997), 1387-1411.
- [42] R. J. Marsh, Algorithms to obtain the canonical basis in some fundamental modules of quantum groups, *Journal of Algebra* 186, no. 3 (1996), 831-860.

Book

Lecture Notes on Cluster Algebras, 121pp. Zürich Lectures in Advanced Mathematics, European Mathematical Society, 2014.

Proceedings

K. A. Brown, P. A. Guil Asensio and R. J. Marsh (editors), *Proceedings of the Rings and Modules Conference*, Lisbon, Portugal, September 2008, in honour of Patrick F. Smith's 65th Birthday. Volume 52A of the *Glasgow Mathematical Journal* (Chief Editor, Ian Strachan), July 2010.

Expository articles

R. W. Carter and R. J. Marsh. Canonical bases and piecewise-linear combinatorics, Editor: A. Pressley, *Quantum Groups and Lie Theory* (Durham, 1999), London Mathematical Society Lecture Note Series 290, Pages 33-47, Cambridge, UK, Cambridge University Press, 2001.

A. B. Buan and R. J. Marsh, Cluster-tilting theory, Editors: J. A. de la Pena and R. Bautista, *Trends in Representation Theory of Algebras and Related Topics*, Workshop August 11-14, 2004, Queretaro, Mexico, *Contemporary Mathematics* 406, Pages 1-30, Providence, RI, USA, American Mathematical Society, 2006.

Preprints

- [P1] A. B. Buan and R. J. Marsh. A category of wide subcategories. Preprint arXiv:1802.03812 [math.RT], February 2018.
- [P2] A. B. Buan and R. J. Marsh. τ -exceptional sequences. Preprint arXiv:1802.01169 [math.RT], February 2018.
- [P3] R. J. Marsh and K. Rietsch. The B-model connection and mirror symmetry for Grassmannians. Preprint arXiv:1307.1085 [math.AG], July 2013. Updated December 2015.
- [P4] R. J. Marsh and P. P. Martin. Pascal arrays: counting Catalan sets. Preprint arXiv:math/0612572 [math.CO], 2006.

All preprints are available from <http://www1.maths.leeds.ac.uk/~marsh>.

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