Personal information

Name	Martin Palmer-Anghel (Note: for publications I use just the first half of my last name, i.e. Palmer)
Current position	Researcher (grade 1), Institute of Mathematics of the Romanian Academy, Bucharest
Nationalities	British and German
Date of birth	9 February 1987
Address	"Simion Stoilow" Mathematical Institute of the Romanian Academy (IMAR), 21 Calea Griviței, 010702 Bucharest, Romania
Email address	mpanghel@imar.ro // martin.palmer.314@gmail.com
Website url	mdp.ac

Qualifications and employment history

2025–	Researcher (grade 1), Institute of Mathematics of the Romanian Academy (IMAR)
2024–2025	Lecturer in Pure Mathematics, University of Leeds
2024	Institute of Mathematics of the Romanian Academy (IMAR): Habilitation Thesis title: *Moduli spaces and their fundamental groups* Submitted: January 2024; defended: June 2024
2023–2024	Researcher (grade 1), Institute of Mathematics of the Romanian Academy (IMAR)
2020–2023	Researcher (grade 3), Institute of Mathematics of the Romanian Academy (IMAR)
2019–2020	Assistant researcher, Institute of Mathematics of the Romanian Academy (IMAR)
2016–2019	Postdoctoral researcher, Universität Bonn
2015–2016	Postdoctoral researcher, Université Paris 13 (now Université Sorbonne Paris Nord)
2013–2015	Postdoctoral researcher, Universität Münster (WWU Münster)
2009–2013	University of Oxford: DPhil — supervised by Prof. Ulrike Tillmann Thesis title: *Configuration spaces and homological stability* Submitted: December 2012; defended: February 2013
2005–2009	University of Oxford: MMath (1st class + Gibbs Prize)

Grants, fellowships, prizes

- *Lucian Bădescu* prize, IMAR (2025).
- Principal Investigator for grant number PN-IV-P1-PCE-2023-2001 from UEFISCDI (*Executive Agency for Higher Education, Research, Development and Innovation Funding*), part of the Romanian Ministry of Education and Research. Duration: 2025–2027. Budget: approx. 250,000€. Webpage: mdp.ac/pce2023.
- *Gheorghe Țițeica* prize of the Romanian Academy (2023).
- Principal Investigator for grant number PN-III-P4-ID-PCE-2020-2798 from UEFISCDI (*Executive Agency for Higher Education, Research, Development and Innovation Funding*), part of the Romanian Ministry of Education and Research. Duration: 2021–2023. Budget: approx. 250,000€. Webpage: mdp.ac/pce2020.
- Fellowship (*Chargé de recherches*), *Fonds de la Recherche Scientifique – FNRS*, Belgium (2016) (declined).

Publications

(21) *Heisenberg homology on surface configurations* (with C. Blanchet and A. Shaukat)
Mathematische Annalen 393 (2025), 1989–2056 (68 pp.)

(20) *Compact and finite-type support in the homology of big mapping class groups* (with X. Wu)
Journal of the London Mathematical Society 112 (2025), e70258 (35 pp.)

(19) *Polynomiality of surface braid and mapping class group representations* (with A. Soulié)
Transactions of the American Mathematical Society 378 (2025), 5769–5843 (75 pp.)

(18) *When the lower central series stops: a comprehensive study for braid groups and their relatives* (with J. Darné and A. Soulié)
Memoirs of the American Mathematical Society 309 (2025), 1563 (130 pp.)

(17) *The pro-nilpotent Lawrence-Krammer-Bigelow representation* (with A. Soulié)
Journal of Pure and Applied Algebra 229.6 (2025), 107952 (39 pp.)

(16) *Action of subgroups of the mapping class group on Heisenberg homologies* (with C. Blanchet and A. Shaukat)
Contemporary Mathematics 813 (2025), 235–255 (21 pp.)

(15) *On the homology of big mapping class groups* (with X. Wu)
Journal of Topology 17.4 (2024), e12358 (41 pp.)

(14) *Topological representations of motion groups and mapping class groups – a unified functorial construction* (with A. Soulié)
Annales Henri Lebesgue 7 (2024), 409–519 (111 pp.)
(13) *Big mapping class groups with uncountable integral homology* (with X. Wu)
Documenta Mathematica 29.1 (2024), 159–189 (31 pp.)
(12) *Homology stability for asymptotic monopole moduli spaces* (with U. Tillmann)
Proceedings of the Royal Society A 479 (2023), 20230300 (16 pp.)
(11) *Motivic homological stability of configuration spaces* (with G. Horel)
Bulletin of the London Mathematical Society 55.2 (2023), 892–913 (22 pp.)
(10) *Point-pushing actions for manifolds with boundary* (with U. Tillmann)
Groups, Geometry, and Dynamics 16.4 (2022), 1179–1224 (46 pp.)
(9) *The Burau representations of loop braid groups* (with A. Soulié)
Comptes Rendus. Mathématique 360 (2022), 781–797 (17 pp.)
(8) *Configuration-mapping spaces and homology stability* (with U. Tillmann)
Research in the Mathematical Sciences 8 (2021) no. 38 (45 pp.)
(7) *Homological stability for moduli spaces of disconnected submanifolds, I*
Algebraic & Geometric Topology 21.3 (2021), 1371–1444 (74 pp.)
(6) *Triple-crossing number and moves on triple-crossing link diagrams* (with C. Adams and J. Hoste)
Journal of Knot Theory and Its Ramifications 28.11 (2019), 1940001 (20 pp.)
(5) *Twisted homological stability for configuration spaces*
Homology, Homotopy and Applications 20.2 (2018), 145–178 (34 pp.)
(4) *Scanning for oriented configuration spaces* (with J. Miller)
Homology, Homotopy and Applications 17.1 (2015), 35–66 (32 pp.)
(3) *A twisted homology fibration criterion and the twisted group-completion theorem* (with J. Miller)
Quarterly Journal of Mathematics 66.1 (2015), 265–284 (20 pp.)
(2) *On homological stability for configuration spaces on closed background manifolds* (with F. Cantero)
Documenta Mathematica 20 (2015), 753–805 (53 pp.)
(1) *Homological stability for oriented configuration spaces*
Transactions of the American Mathematical Society 365 (2013), 3675–3711 (37 pp.)

Preprints

(26) *Embedding groups into acyclic groups* (with X. Wu)
arXiv:2510.16879 (19 pp.)
(25) *Lawrence-Bigelow representations, bases and duality* (with C. Anghel)
arXiv:2011.02388 (25 pp.)
(24) *Stability for moduli spaces of manifolds with conical singularities*
arXiv:1807.07558 (29 pp.)
(23) *A comparison of twisted coefficient systems*
arXiv:1712.06310 (31 pp.)
(22) *Homological stability for subgroups of surface braid groups* (with T. Tran)
arXiv:1410.0923 (10 pp.)

Chapters of books

(A) Appendix to "*Lectures on Invertible Field Theories*" by S. Galatius (with A. Debray and S. Galatius)
IAS/Park City Mathematics Series 28 (2021), 380–400

Invited research visits

- June 2025: Institut de Mathématiques de Bourgogne (Dijon)
- February 2025: Isaac Newton Institute (Cambridge)
- June 2024: Shanghai Center for Mathematical Sciences (Fudan University)
- March 2023: Universidad Autónoma de Madrid
- June 2022: University of Glasgow
- March 2022: American University of Sharjah
- October 2021: University of Copenhagen
- June–July 2021: Merton College, University of Oxford
- March 2020: Université Sorbonne Paris Nord
- November 2019: University of Cambridge
- September–October and December 2018: Isaac Newton Institute (*Homotopy harnessing higher structures*)

- November 2017: IRMA, Université de Strasbourg
- March 2017: University of Barcelona
- July–August 2015: Hausdorff Trimester Program *Homotopy theory, manifolds, and field theories*

Invited conference talks

- May 2025: *Journée de topologie quantique*, Dijon
- August 2024: Conference "*Topology of moduli spaces*", Copenhagen
- May 2024: Workshop for Young Researchers in Mathematics (13th edition), Iași
- June/July 2023: Tenth Congress of Romanian Mathematicians, Pitești
- June 2023: Workshop "*Homotopy: fruit of the fertile furrow*", Isaac Newton Institute, Cambridge
- June 2023: Workshop "*Homology of groups and functors*", Lille
- May 2023: Workshop for Young Researchers in Mathematics (12th edition), Iași
- May 2022: Workshop for Young Researchers in Mathematics (11th edition), Bucharest
- May 2021: Workshop for Young Researchers in Mathematics (10th edition), Bucharest
- July 2019: Workshop "*Loops in Leeds: Motion groups and related topics*", Leeds
- June 2019: Ninth Congress of Romanian Mathematicians, Galați
- June 2019: Workshop for Young Researchers in Mathematics (9th edition), Bucharest
- September 2018: Opening workshop of the CNRS-JSPS project "*Cohomological study of mapping class groups and related topics*", Strasbourg
- May 2018: Workshop for Young Researchers in Mathematics (8th edition), Bucharest
- March 2013: Topology workshop of the British Mathematical Colloquium, Sheffield

Other conference talks

- July 2025: *Bucharest topology days*, IMAR, Bucharest
- December 2024: Conference "*Biracks and Biquandles: Theory, applications, and new perspectives*", Leeds
- August 2024: Conference "*Low-dimensional topology days*", Nantes
- October 2022: Workshop "*Cobordisms, Strings, and Thom Spectra*", Oaxaca / online
- June 2022: Conference "*Homotopy Theory with Applications to Arithmetic and Geometry*", Bonn / Toronto
- October 2021: Réunion annuelle du GDR de topologie algébrique, Strasbourg
- July 2019: PCMI research program on "*Quantum field theory and manifold invariants*", Park City, Utah
- December 2018: Workshop "*Homotopy harnessing higher structures*", Isaac Newton Institute, Cambridge
- July 2018: Satellite meeting of the ICM on "*Braid groups, configuration spaces and homotopy theory*", Salvador, Brazil
- June 2018: Conference on "*Manifolds, Groups and Homotopy*", Isle of Skye, Scotland
- April 2018: Workshop, Matemale (Pyrénées-Orientales)
- July 2016: Young Topologists' Meeting, Copenhagen
- June/July 2016: Conference on "*Topology of manifolds*", Lisbon
- March 2016: Winter school, La Llagonne (Pyrénées-Orientales)
- October 2015: Colloque du GDR de topologie algébrique et applications, Toulouse
- July 2013: Young Topologists' Meeting, Lausanne
- July 2012: Young Topologists' Meeting, Copenhagen
- April 2011: Transpennine Topology Triangle, Leicester

Invited seminar talks

- April 2025: Séminaire GAAO (Géométrie, Algèbre, Algèbres d'opérateurs), Clermont-Ferrand
- February 2025: Geometric Group Theory seminar, Cambridge
- February 2025: Geometry and Analysis seminar, Leeds
- December 2024: Topology seminar, Sheffield
- November 2024: Topology seminar, Aberdeen
- May 2024: Algebra seminar, Leeds
- March 2024: Séminaire d'algèbre et de géométrie, Caen
- February 2024: Séminaire GT3, Strasbourg
- January 2024: International mathematics seminar, Namal University, Mianwali
- November 2023: Séminaire de topologie, Grenoble
- March 2023: Group Theory Seminar, ICMAT, Madrid
- March 2023: Séminaire de Topologie et Géométrie, Geneva
- June 2022: Geometry and Topology seminar, Glasgow
- May 2022: EPFL Topology Seminar, Lausanne

- March 2022: Topology seminar, New York University, Abu Dhabi
- March 2022: Fudan Topology Seminar, Shanghai
- October 2021: Algebra/Topology seminar, Copenhagen
- December 2020: Moscow-Beijing topology seminar
- October 2020: Purdue topology seminar
- September 2020: Knots and representation theory seminar, Moscow
- April 2020: Topology seminar, Oxford
- March 2020: Séminaire de l'équipe Topologie Algébrique, Paris 13
- July 2018: Arbeitsgemeinschaft-Seminar, Regensburg
- March 2018: Topology seminar, IMAR, Bucharest
- November 2017: Séminaire Algèbre et topologie, IRMA, Strasbourg
- March 2017: Topology seminar, Barcelona
- April 2016: Topology seminar, Aberdeen
- December 2015: Séminaire de Topologie, Institut de Mathématiques de Jussieu-Paris Rive Gauche
- October 2015: Séminaire de topologie, Lille
- June 2015: Séminaire de topologie algébrique, Louvain-la-Neuve
- April 2015: Topology seminar, Oxford
- March 2015: Séminaire de l'équipe topologie algébrique, Paris 13
- March 2015: Séminaire de topologie, géométrie et algèbre, Nantes
- February 2013: Topology seminar, Aberdeen
- February 2013: Topology seminar, Manchester
- January 2012: Topology seminar, Copenhagen
- December 2011: Algebra and topology seminar, Swansea

Organisation of scientific meetings

- I currently organise the seminar series *Moduli and Friends*, which began as part of the grant project PN-III-P4-ID-PCE-2020-2798 and now continues as part of the grant project PN-IV-P1-PCE-2023-2001.
- I co-organised the mini-conference *Bucharest Topology Days* in July 2025, funded by the grant project PN-IV-P1-PCE-2023-2001.
- I co-organised the conference *Moduli and Friends*, funded by the grant project PN-III-P4-ID-PCE-2020-2798, which took place in Bucharest in September 2023.
- I was the teaching assistant for a lecture course at the 2019 PCMI Graduate Summer School.
- I was a "demonstrator" for the Clay Mathematics Institute research school on *Algebraic topology of manifolds* at Oxford in September 2017.
- I organised several *groupes de travail* at Paris 13 in 2015–2016, on the *blob complex*, *Goodwillie calculus* and the work of Sam and Snowden on *representations of Gröbner categories*.
- I was a co-organiser of the Münster functor calculus workshop, which took place in June 2015.

Teaching

- At Clermont-Ferrand (2025–2026):

  · Tutor (*chargé de TD*) for the 1st-year bachelor's-level course *Mathématiques S1*

- At Leeds (2024–2025):

  · Lecturer for a bachelor's-level course on *Geometry of Curves and Surfaces* (link)

- At Bonn (2016–2019):

  · Lecturer for a master's-level course on *Algebraic Topology I* (link)
  · Lecturer for a master's-level course on *Exotic spheres* (link)
  · Running a bachelor's- and master's-level seminar on *Braid groups and configuration spaces* (link)
  · Running a bachelor's- and master's-level seminar on *Morse theory* (link)
  · Running an undergraduate seminar on *Riemann surfaces* jointly with Prof. Carl-Friedrich Bödigheimer
  · Assistent for the course *Einführung in die Algebra* by Prof. Catharina Stroppel
  · Assistent and Übungsgruppenleiter for the course *Topologie 1* by Prof. Carl-Friedrich Bödigheimer
  · Supervisor for 5 thesis projects — see details below; examiner for many other thesis projects.

- At Münster (2013–2015):

  · Übungsgruppenleiter for the course *Topologie 3* by Prof. Michael Weiss.
  · Substitute lecturer for a course on *Selected topics in topology* by Prof. Michael Joachim.
  · Übungsgruppenleiter for a course on *Knot theory* by Prof. Michael Weiss.

- At Oxford (2009–2012):

  · Teaching assistant for 3rd/4th year courses *Lie groups* (by Prof. Ulrike Tillman), *Topology and groups* (by Prof. Marc Lackenby) and *Algebraic topology* (by Prof. Ulrike Tillmann).
  · Class tutor, including running all revision classes before exams, for the *Algebraic topology* course.
  · Tutor for several 1st and 2nd year algebra courses at St John's College and at Merton College.
  · Assistant interviewer in 2011 for undergraduate admissions at Merton College.

- Other teaching:

  · 5-lecture mini-course *Introduction to exotic spheres* (based on my lecture course at Bonn; see above) at the Institute of Mathematics of the Romanian Academy, in August/September 2017

Undergraduate and graduate supervision

Master's level (at Universität Bonn):

- Genta Latifi — *Vertical configuration spaces and homological stability* (December 2017)
- Christopher Fillmore — *Homological stability of mapping class groups* (December 2018)

Bachelor's level (at Universität Bonn):

- Lara Glessen — *Linearity of the braid groups* (June 2017)
- David Göckede — *The Alexander and HOMFLY polynomials via Markov functions* (January 2018)
- Philipp Wegner — *Loop braid groups* (June 2019)

Memberships of scientific societies and other professional activities

- Member of the London Mathematical Society (LMS) since June 2013.
- Reviewer for Zentralblatt and MathSciNet.
- Referee for Q. J. Math., Trans. AMS, Proc. AMS, Math Z., Homology Homotopy Appl., Comm. Algebra, Internat. J. Math., Topology Appl., Algebr. Geom. Topol., J. Topol. Anal., Publ. Mat., J. Topol., Compos. Math., Duke Math. J.

Languages

- English (native)
- French
- German
- Romanian