

## Personal information

<i>Name</i>	Martin Palmer-Anghel
<i>Current position</i>	Wissenschaftlicher Mitarbeiter, Universität Bonn, Germany
<i>Nationalities</i>	British and German
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## Qualifications and employment history

2016–	Postdoctoral researcher at Universität Bonn
2015–2016	Postdoctoral researcher at Université Paris 13
2013–2015	Postdoctoral researcher at the University of Münster (WWU Münster)
2009–2013	University of Oxford: DPhil — supervised by Prof. Ulrike Tillmann Thesis title: <i>Configuration spaces and homological stability</i> Submitted: December 2012; defended: February 2013
2005–2009	University of Oxford: MMath (1 <sup>st</sup> class)

## Publications

- [1] *Homological stability for oriented configuration spaces*  
[Transactions of the American Mathematical Society](#) 365 (2013), 3675–3711
- [2] *Scanning for oriented configuration spaces* (with J. Miller)  
[Homology, Homotopy and Applications](#) 17.1 (2015), 35–66
- [3] *A twisted homology fibration criterion and the twisted group-completion theorem* (with J. Miller)  
[Quarterly Journal of Mathematics](#) 66.1 (2015), 265–284
- [4] *On homological stability for configuration spaces on closed background manifolds* (with F. Cantero)  
[Documenta Mathematica](#) 20 (2015), 753–805
- [5] *Twisted homological stability for configuration spaces*  
[Homology, Homotopy and Applications](#) 20.2 (2018), 145–178
- [6] *Triple-crossing number and moves on triple-crossing link diagrams* (with C. Adams and J. Hoste)  
To appear in *Journal of Knot Theory and Its Ramifications* ([arXiv:1706.09333](#))
- [7] *Homological stability for subgroups of surface braid groups* (with T. Tran)  
To appear in *Homology, Homotopy and Applications* ([arXiv:1410.0923](#))

*Note: the first arXiv version of this paper was authored solely by T. Tran; I became co-author at a later stage.*

## Preprints

- [A] *A comparison of twisted coefficient systems*  
[arXiv:1712.06310](#)
- [B] *Homological stability for moduli spaces of disconnected submanifolds, I*  
[arXiv:1805.03917](#)
- [C] *Homological stability for moduli spaces of disconnected submanifolds, II – Symmetric diffeomorphism groups and parametrised connected sum*  
[arXiv:1807.07558](#)

## Selected talks

- On homological stability for moduli spaces of disconnected submanifolds:
  - Sept. 2018: Workshop: *Cohomological study of mapping class groups and related topics*, Strasbourg
  - July 2018: Satellite meeting of the ICM: *Braid groups, configuration spaces and homotopy theory*, Salvador, Bahia, Brazil
  - July 2018: Arbeitsgemeinschaft-Seminar, Regensburg
  - June 2018: Conference on *Manifolds, groups and homotopy*, Skye
  - March 2018: Topology seminar, IMAR, Bucharest
  - June 2016: Conference on *Topology of manifolds*, Lisbon
  - December 2015: Séminaire de Topologie, Institut de Mathématiques de Jussieu-Paris Rive Gauche
  - July 2013: Young topologists' meeting, Lausanne

- March 2013: Topology workshop of the British Mathematical Colloquium, Sheffield
- February 2013: Topology seminar, Aberdeen
- On twisted homological stability for configuration spaces:
  - November 2017: Séminaire Algèbre et topologie, IRMA, Strasbourg
  - May 2017: Oberseminar Topologie, Bonn
  - March 2017: Topology seminar, Barcelona
  - May 2013: Oberseminar Topologie, Münster
- On configuration spaces on closed background manifolds:
  - April 2016: Topology seminar, Aberdeen
  - October 2015: Annual meeting of the GDR 2875, *Topologie algébrique et applications*, Toulouse
  - 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
- On twisted group-completion and scanning for oriented configuration spaces:
  - January 2015: Leray seminar, Münster
- On homological stability for oriented configuration spaces:
  - July 2012: Young topologists' meeting, Copenhagen
  - January 2012: Topology seminar, Copenhagen
  - December 2011: Algebra and topology seminar, Swansea
  - September 2011: Workshop on *Homotopy theory*, Oberwolfach

## Teaching

### Bonn (2016–2018):

- Lecturer for a master's-level course on *Algebraic Topology I* ([link](#))
- Running a bachelor's- and master's-level seminar on *Morse theory* ([link](#))
- Assistent for the course *Einführung in die Algebra* by Prof. Catharina Stroppel
- Jointly running an undergraduate seminar on *Riemann surfaces* with Prof. Carl-Friedrich Bödigheimer
- Lecturer for a master's-level course on *Exotic spheres* ([link](#))
- Assistent and Übungsgruppenleiter for the course *Topologie I* by Prof. Carl-Friedrich Bödigheimer

### 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.

### Oxford (2009–2012):

- Teaching assistant for 3<sup>rd</sup>/4<sup>th</sup> 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 1<sup>st</sup> and 2<sup>nd</sup> year algebra courses at St John's College and at Merton College.
- Assistant interviewer in 2011 for undergraduate admissions at Merton College.

### Other:

- 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

Eduard Nickel (B; current)	<i>On homotopy-invariance of configuration spaces</i>
Philipp Wegner (B; current)	<i>Loop braid groups</i>
Christopher Fillmore (M; 12/2018)	<i>Homological stability of mapping class groups</i>
David Göckede (B; 01/2018)	<i>The Alexander and HOMFLY polynomials via Markov functions</i>
Genta Latifi (M; 12/2017)	<i>Vertical configuration spaces and homological stability</i>
Lara Glessen (B; 06/2017)	<i>Linearity of the braid groups</i>

(All students at the University of Bonn M = master's-level B = bachelor's-level)

(Date = date of submission of the thesis)

### **Selected conferences attended**

- 12.18 • Cambridge: *Manifolds* (part of the programme mentioned below at the Isaac Newton Institute)
- 09-10.18 • Cambridge: Participant of the programme *Homotopy harnessing higher structures* at the INI
- 09.18 • Strasbourg: Conference on *Cohomological study of mapping class groups and related topics*
- 07.18 • Salvador, Brazil: ICM satellite: *Braid groups, configuration spaces and homotopy theory*
- 06.18 • An t-Eilean Sgitheanach (Isle of Skye): Conference on *Manifolds, groups and homotopy*
- 05.18 • IMAR, Bucharest: Workshop for Young Researchers in Mathematics
- 04.18 • Matemale: Winter school on the coloured Jones polynomial and solvable approximations
- 02.18 • CIRM (Luminy): École thématique CNRS – *Winter Braids VIII*
- 10.17 • Paris Diderot: Colloque du GDR 2875, *Topologie algébrique et applications*
- 09.17 • Oxford: CMI-LMS research school on *Algebraic topology of manifolds*
- 06.17 • Münster: Conference on *Groups, manifolds and K-theory*
- 05.17 • Toulouse: Conference on *Quantum topology and geometry*
- 04.17 • Cambridge (Isaac Newton Institute): Workshop on *Physics and knot homologies*
- 10.16 • Bonn: *Configuration spaces and moduli spaces in homotopy theory*
- 08.16 • Berlin: Workshop on symplectic field theory
- 07.16 • Ancient Olympia: Conference “*Knots in Hellas*”
- 06-07.16 • Lisbon: Conference on *Topology of manifolds*
- 05.16 • Bonn: Workshop on *Categorification*
- 03.16 • La Lagonne: Winter school on *differentiable structures on spheres*
- 02.16 • Lille: École thématique CNRS – *Winter braids VI*
- 11.15 • Copenhagen: Workshop on *Automorphisms of free groups*
- 10.15 • Toulouse: Colloque du GDR 2875, *Topologie algébrique et applications*
- 09-10.15 • Oxford: Clay workshop on *Algebraic topology: manifolds unlocking higher structures*
- 07-08.15 • Bonn: Hausdorff trimester program *Homotopy theory, manifolds, and field theories*
- 06.15 • Münster: Workshop on *Functor calculus* (for which I was a co-organiser)
- 05.15 • Oberwolfach: seminar on *Topological combinatorics of configuration spaces*
- 03.15 • Oberwolfach: workshop on *Homotopy theory*
- 09.14 • Nantes: *Loop spaces in geometry and topology*
- 07.14 • London: Workshop on *Homological methods in algebra, geometry and physics*
- 06.14 • Dubrovnik: Conference on *Manifolds, K-theory and related topics*
- 01.14 • Berkeley: Introductory workshop of the MSRI *Algebraic topology* semester
- 08.13 • Copenhagen: Workshop and masterclass on homological stability
- 05.13 • Nantes: Conference on *Algebra and topology*
- 03.13 • Sheffield: British mathematical colloquium
- 12.12 • Oxford: *Aspects of topology*
- 09.12 • Cambridge: British topology meeting
- 07.12 • Stanford: Symposium on *Algebraic topology: applications and new directions*
- 07.12 • Stanford: West coast algebraic topology summer school on *Algebraic K-theory*
- 05-06.12 • Oberwolfach: seminar on *Surgery theory*
- 04.12 • Swansea: Workshop on  *$\infty$ -categories,  $\infty$ -operads and homotopy type theory*
- 09.11 • Oberwolfach: workshop on *Homotopy theory*
- 09.11 • Edinburgh: British topology meeting
- 07.11 • Utah (PCMI): Summer school on *Moduli spaces of Riemann surfaces*
- 10.10 • Bonn: Autumn school on *Graphs, groups and surfaces*
- 09.10 • Oxford: British topology meeting
- 08.10 • Oregon: Summer school on *Operator algebras and conformal field theory*
- 08.10 • Oregon: West coast algebraic topology summer school on *Homotopy theory of moduli spaces*

### **Organisation of scientific meetings**

- I was a co-organiser of the [Münster functor calculus workshop](#), which took place in June 2015.
- I was a “demonstrator” for the Clay Mathematics Institute research school on *Algebraic topology of manifolds* at Oxford in September 2017

***Memberships of scientific societies and other professional activities***

- Member of the London Mathematical Society (LMS).
- Reviewer for Zentralblatt ([link to list of reviews: zbmath.org/?q=rv:00015044](https://zbmath.org/?q=rv:00015044)).
- Referee for Q. J. Math., Trans. AMS, Proc. AMS, Math Z. and Homology Homotopy Appl.

***Languages***

- English (native)
- German (level: ~C1)
- French (level: ~B2)
- Romanian (level: ~B1)