

FLORIAN KRANHOLD

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Mathematical Institute
University of Bonn
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POSITIONS

PRESENT **Karlsruhe Institute of Technology (KIT)**
| Postdoctoral researcher
OCT 2022 In the working group of Manuel Krannich

SEP 2022 **University of Bonn**
| Postdoctoral researcher
APR 2022 In the working group of Carl-Friedrich Bödiger

EDUCATION

2018 – 2022 **PhD (Dr. rer. nat.) in Mathematics**
University of Bonn, Max Planck Institute for Mathematics
Member of the International Max Planck Research School (IMPRS)
Thesis: *Coloured topological operads and moduli spaces
of surfaces with multiple boundary curves*
Advisor: Carl-Friedrich Bödiger
Mark: 1.0 ('magna cum laude')

2015 – 2018 **Master of Science (MSc) in Mathematics**
Universities of Tübingen and Bonn
Thesis: *Moduli spaces of Riemann surfaces and symmetric products*
Advisor: Carl-Friedrich Bödiger
Mark: 1.0 ('excellent')

2012 – 2015 **Bachelor of Science (BSc) in Mathematics**
University of Tübingen
Thesis: *Projektive Kurven, Riemannsche Flächen und Funktionenkörper*
Advisor: Jürgen Hausen
Mark: 1.0 ('very good')

PUBLICATIONS

SEP 2022 **Computations in the unstable homology of moduli spaces of Riemann surfaces**
with Carl-Friedrich Bödiger and Felix Boes, [arXiv:2209.08148](https://arxiv.org/abs/2209.08148)

MAY 2021 **Parametrised moduli spaces of surfaces as infinite loop spaces**
with Andrea Bianchi and Jens Reinhold, [arXiv:2105.05772](https://arxiv.org/abs/2105.05772)
Forum of Mathematics, Sigma 10 (2022), DOI

APR 2021 **Configuration spaces of clusters as E_d -algebras**
[arXiv:2104.02729](https://arxiv.org/abs/2104.02729)

MAR 2021 **Vertical configuration spaces and their homology**
with Andrea Bianchi, [arXiv:2103.12137](https://arxiv.org/abs/2103.12137)
Quarterly Journal of Mathematics (2022), DOI

SCHOLARSHIPS

- 2019–2021 **Studienstiftung des deutschen Volkes**
PhD stipend („Promotionsstipendium“)
- 2018–2022 **International Max Planck Research School**
PhD stipend (until 02/2020), Grant agreement (since 03/2020)
- 2012–2018 **Studienstiftung des deutschen Volkes**
Scholarship

INVITED TALKS

- FEB 2022 **Parametrised moduli spaces of surfaces as infinite loop spaces**
Working group of Oscar Randal-Williams, University of Cambridge
- DEC 2021 **Parametrised moduli spaces of surfaces as infinite loop spaces**
Oberseminar: *Global Analysis and Geometry*, Regensburg (online)
- NOV 2021 **Configuration spaces of clusters as E_d -algebras**
Workshop: *Homology and homotopy of configuration spaces*, Copenhagen
- NOV 2021 **Vertical configuration spaces and their homological stability**
Seminar: *Moduli and Friends*, Bucharest (online)
- SEP 2021 **Parametrised moduli spaces of surfaces as infinite loop spaces**
Topology seminar, Purdue University, Indiana (online)
- MAY 2020 **Clustered configurations and asphericity**
Seminar: *Arrangements and symmetries*, Bochum (online)
- JAN 2020 **Operadic actions on moduli spaces of Riemann surfaces**
Topology Oberseminar, Bochum
- SEP 2019 **Operadic actions on moduli spaces of Riemann surfaces**
Working group of Linus Kramer, Münster

CONFERENCES AND WORKSHOPS

- JUL 2022 Workshop: *Topologie*, Oberwolfach
- JUL 2022 Young Topologists Meeting, Copenhagen
- NOV 2021 Workshop: *Homology and homotopy of configuration spaces*, Copenhagen
- JUL 2021 ☞ Young Topologists Meeting, Stockholm (online)
- JUN 2021 Masterclass: *High-dimensional cohomology of moduli spaces*, Copenhagen
- JUN 2021 ☞ TopFlavours seminar, Warwick (online)
- MAY 2021 Seminar: *Cellular E_k -algebras*, Oberwolfach (online)
- AUG 2020 24H Operad Pop-Up (online)
- SEP 2019 Workshop: *Automorphisms of manifolds*, Bonn
- JUL 2019 Young Topologists Meeting, Lausanne
- SINCE 2018 Several NRW Topology Meetings, Münster/Bochum/Düsseldorf

☞ contributed a research talk

TEACHING EXPERIENCE

- 2022 **Teaching assistant at the University of Bonn** (1 term)
Topology II, Daniel Kasprowski
Einführung in die Geometrie und Topologie, Koen van den Dungen
- 2020 **Organisation of graduate seminars** (1 term)
Operads in Algebra and Topology, together with Andrea Bianchi
- 2017–2021 **Tutor at the University of Bonn** (9 terms)
Algebraic Topology I + II, Carl-Friedrich Bödigheimer
Algebraic Topology II, Christoph Winges
Three topology courses, Wolfgang Lück
Topology II, Daniel Kasprowski
Analysis I, Herbert Koch
Analysis II, Barbara Niethammer
- 2014–2017 **Tutor at the University of Tübingen** (5 terms)
Analysis I, Stefan Teufel
Analysis I–IV, Frank Loose