

# Curriculum Vitae of Robin Stoll

December 20, 2022

## Personal Data

Date of Birth 03.10.1996  
Nationality German  
E-Mail Address robin.stoll@math.su.se

## Education

Since 2019 Pursuing a PhD in Mathematics (Stockholm University)  
Supervisors: Alexander Berglund and Gregory Arone  
Oct 2019 M.Sc. in Mathematics (University of Bonn).  
Master thesis: “A version of Goodwillie calculus for non-cubes” supervised by  
Emanuele Dotto  
Jul 2017 B.Sc. in Mathematics (University of Bonn).  
Bachelor thesis: “An introduction to topological K-Theory and Snaith’s Theorem”  
supervised by Urs Schreiber  
Jun 2014 Abitur (Graf-Münster-Gymnasium Bayreuth)

## Publications and Preprints

- [1] Robin Stoll. *Functor calculus via non-cubes*. Preprint. 2022. arXiv: [2205.15880](#).
- [2] Robin Stoll. “Modular operads as modules over the Brauer properad”. In: *Theory and Applications of Categories* 38.40 (2022), pp. 1538–1607. arXiv: [2202.02201](#).
- [3] Robin Stoll. *The stable cohomology of self-equivalences of connected sums of products of spheres*. Preprint. 2022. arXiv: [2203.15650](#).
- [4] Marvin Randig, Dierk Schleicher, and Robin Stoll. *Newton’s method in practice II: The iterated refinement Newton method and near-optimal complexity for finding all roots of some polynomials of very large degrees*. Preprint. 2017. arXiv: [1703.05847](#).
- [5] Dierk Schleicher and Robin Stoll. “Newton’s method in practice: finding all roots of polynomials of degree one million efficiently”. In: *Theoretical Computer Science* 681 (2017), pp. 146–166. DOI: [10.1016/j.tcs.2017.03.025](#). arXiv: [1508.02935](#).

## Research talks

### Invited

Dec 2022 Research Seminar Algebraic and Geometric Topology – Karlsruhe Institute of Technology  
Nov 2022 Research Seminar Topology – University of Münster  
Apr 2022 Research Seminar Algebra – Bowling Green State University and University of Toledo (online)

## Contributed

- Sep 2022 Gong show talk at the “European Autumn School in Topology” – Utrecht  
Jul 2022 Contributed talk at the “Young Topologists Meeting” – Copenhagen  
Jul 2022 Short communication at the ICM sectional workshop “Geometry and Topology” – Copenhagen  
Apr 2022 Junior participant talk at the research program “Higher algebraic structures in algebra, topology and geometry” – IML Stockholm  
Sep 2019 Gong show talk at the “European Autumn School in Topology” – Utrecht

## Conferences, Workshops, and Summer Schools

### Participation

- Oct 2022 Ib Fest – Copenhagen  
Sep 2022 European Autumn School in Topology – Utrecht  
Jul 2022 Young Topologists Meeting – Copenhagen  
Jul 2022 ICM sectional workshop “Geometry and Topology” – Copenhagen  
Jun 2022 Twinned Conference on Homotopy Theory with Applications to Arithmetic and Geometry – MPIM Bonn  
Jan – Apr 2022 Research program “Higher algebraic structures in algebra, topology and geometry” – IML Stockholm  
Jun 2021 Masterclass on high dimensional cohomology of moduli spaces – Copenhagen  
Jun 2021 Workshop on Higher Structures and Operadic Calculus – CRM Barcelona (online)  
Dec 2019 Opening workshop of the “Operads, Calculus, and Homotopy theory methods in Topology” research project – Lausanne  
Sep 2019 European Autumn School in Topology – Utrecht  
Jul 2019 Young Topologists Meeting – Lausanne  
Mar 2019 Bayerische Kleine AG about “The Landweber Exact Functor Theorem” – Bayreuth  
Sep 2018 European Autumn School in Topology – Utrecht  
Jul 2018 Young Topologists Meeting – Copenhagen  
Jul 2017 Young Topologists Meeting – Stockholm  
Sep 2016 Heidelberg Laureate Forum – Heidelberg  
Jul 2015 Modern Mathematics International Summer School for Students – Bremen  
Jul 2013 Modern Mathematics International Summer School for Students – Bremen

### Organization

- Jul 2021 Young Topologists Meeting – Stockholm (online)

## Teaching

### Teaching assistant

#### At Stockholm University

- Fall 2022 *Topology* held by Alexander Berglund  
Spring 2022 *Mathematics I* held by Håkan Granath and *Mathematics for Scientists II* held by Jonathan Rohleder  
Summer 2021 *Foundations of Analysis* held by Alan Sola and *Abstract algebra* held by Gregory Arone

#### At the University of Bonn

- Summer 2019 *Topology II* held by Daniel Kasprowski  
Winter 2018/19 *Topology I* held by Wolfgang Lück  
Summer 2018 *Introduction to Geometry and Topology* held by Wolfgang Lück  
Winter 2017/18 *Topology I* held by Stefan Schwede  
Summer 2017 *Introduction to Geometry and Topology* held by Urs Schreiber  
Winter 2016/17 *Analysis I* held by Barbara Niethammer

## Other teaching

I taught the following week-long courses aimed at high school and younger university students at summer schools of the Quod Erat Demonstrandum e.V. (also see below under "Other activities"):

Aug 2021	<i>Geometric group theory</i> , with Aras Ergus
Aug 2020	<i>Knot theory and practice</i> , with Aras Ergus
Aug 2017	<i>Introduction to Topology</i> , with Leon Hendrian

## Other activities

### Committees

Spring 2022	PhD hiring committee – Stockholm University
Since 2022	Natural Sciences Faculty Student Council – Stockholm University

### Outreach

Since 2011	Member of the Quod Erat Demonstrandum e.V., a Bavarian math club for high school and university students
2015 – 2018	Supervisor and tutor at three summer schools for mathematically interested pupils from Bremen
2014 – 2015	Deputy chairman of the Quod Erat Demonstrandum e.V.
Sep 2014	Organizer of the yearly summer school of the Quod Erat Demonstrandum e.V. in Sonthofen
Dec 2013	Organizer of a seminar of the Quod Erat Demonstrandum e.V. in Kronach

### Competitions

Since 2015	Participation in the ICFP Programming Contest as part of team udfew in every year except for 2016
Jul 2014	Participation in the International Tournament of Young Mathematicians as part of the team from Bremen, achieving third place
2006 – 2014	Various participations in German math, robotics, and computer science competitions for high school students, with success at the federal state level