

Curriculum Vitae

Personal Data

Name	Dr. Maria Hempel
Address	Hallesches Ufer 42, 10963 Berlin, Germany
E-mail	mariahempel85@gmail.com
Birthday	24.07.1985
Place of birth	Grimma
Nationality	German
Marital status	single

Ph.D.

08.2011 – 07.2015	Mathematics, „An Attack on Flexibility and Stoker’s Problem,“ arXiv:1512.05230v3 [math.MG], ETHZ, Zürich, Switzerland
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Professional background

01.2025 – present	Freelancing DaF-lecturer for BWS Germanlingua, Berlin, Germany
11.2024 – present	Freelancing scientific writing mentor for „Die Schreibmentoren GmbH“, Germany
11.2024 – present	Freelancing math tutor for „Nachhilfe im Kiez“, Berlin, Germany
09.2018 – 09.2019	Research Fellow, Postdoc, York University, Toronto, Kanada, und Visiting Scholar, Fields Institute, Toronto, Canada
07.2017 – 09.2018	Postdoctoral Scholar and non- academic associate, Hebrew University of Jerusalem, Jerusalem, Israel
03.2017 – 06.2017	Teaching Assistant, ETHZ, Zürich, Switzerland

08.2015 – 02.2017	Teaching Assistant Professor, Worcester Polytechnic Institute, Worcester, Massachusetts, U.S.A.
08.2011 – 07.2015	Repeated leading of Micro-teaching- courses in teaching assistant education
08.2011 – 07.2015	Ph.D., Assistant, ETHZ, Zürich, Switzerland
04.2010 – 07.2011	Ph.D., Assistant, Universität Zürich, Zürich, Switzerland
09.2007 – 05.2009	Teaching assistant, ETHZ, Zürich, Switzerland

Academic Service

Co-organizer	Zürich Graduate Colloquium
Organizer	“Geometry Café” Basel, informal talks and conversations,
Co-organizer	“Workshop on Knot Theory and related Topics, presented by women in mathematics II,” 2016, RIMS, Kyoto University, Kyoto, Japan
Reviewer	Computer-Aided Design, Elsevier, 2024

Academic Degrees

09.2007 – 03.2010	Master of Science, Mathematics, ETHZ, Zürich, Switzerland
09.2004 – 05.2009	Bachelor of Science, Mathematics, ETHZ, Zürich, Switzerland

High-School Degrees

09.2002 – 06.2004	Lycée Jean-Mermoz, Saint-Louis, Frankreich, Baccaléaurat générale scientifique avec spécialité mathématique, with mention „Très bien“
09.2001 – 05.2002	Prestatyn High School, U.K., AS- levels, AAAB

Other Education

05.2024 – 07.2024

Classy Lady Business Ideas Finder Program

Languages

German

Mother tongue

English

Negotiation-proficient, technical language mathematics

French

Fluent, technical language mathematics

Russian

Basic language skills

Programming languages

C++

Fundamental knowledge of data structures, control structures and OOP

Python

Basic knowledge of data structures, control structures and OOP

Sage

Currently developing basic skills

Professional break

10.2019 – 03.2024

Blogging and drawing cartoonlike pictures, planning of two books, while on the street in Zürich, Switzerland and Paris, France

Volunteering

09.2014 – 03.2015

Fan-shop, FCZ Frauen, Building and disassembling shop tent and sales during the game, Zürich, Switzerland

09.2001 – 05.2002

Editorial assistant Prestatyn, North-Wales Press Agency, North-Wales, U.K.

Publications

1. „*An Attack on Flexibility and Stoker's Problem*“, arXiv:1512.05230v3, 2015

2. „A Note on New Moduli-Spaces and Elimination Patterns of Simply Connected Polyhedra, Flat-Cone Surfaces and Polyhedral Conegraphs“, in preparation

Talks

„Elimination Patterns and Geometric Realization Problems,”
Combinatorics Seminar, Einstein Institute of Mathematics, HUJI,
Jerusalem, 2017, Israel

„A New Moduli-Space for the Shapes of Polyhedra,” Geometry Seminar,
Tufts University, Boston, Massachusetts, U.S.A.

„Fitting Polyhedra into Three-Space, a New Moduli-Space for Polyhedra,”
Geometry and Topology Seminar, Brown University, Providence, R.I.,
2015, U.S.A.

„Another Attack on Flexibility,” BIRS, Banff, 2015, Canada

Conferences

“Einstein Workshop Discrete Geometry and Topology,” Freie Universität,
2018, Berlin, Germany

“Workshop on Knot Theory and related Topics, presented by women in
mathematics II” RIMS, Kyoto University, Kyoto, 2016, Japan

“Geometry, Topology and Complexity of Manifolds, and Applications to
Biology,” Berkeley University, San Francisco, 2016, U.S.A.

“Cornell Topology Festival,” Cornell University, Ithaca, N.Y., 2016, U.S.A.

“Advances in Combinatorial and Geometric Rigidity,” BIRS, Banff, 2015,
Canada

“Rigidity of Discrete Structures,” AIMS, Stanford, 2014, U.S.A.

“Geometric and Analytic Group Theory,” Ventotene, 2013, Italy

“Advances in Teichmüller Theory,” Erwin Schrödinger Institute, Vienna,
Austria

“Rigidity Theory: Progress, Applications and Key Open Problems,” BIRS,
Banff, 2012, Canada

“Workshop on Rigidity”, Fields Institute, University of Toronto, Toronto,
2011, Canada

“Knot Theory and Algebra,” Swisssknots, Gwatt, 2011, Switzerland

“Knots in Poland III,” Stefan Banach Center, Warsaw and Bedlewo, 2010, Poland

“Categorification,” Oporto Meeting on Geometry, Topology and Physics, Faro, 2010, Portugal

“Homologie des noeds et des entrelacs”, Paris V, Jussieu 2009, Paris, France

“Low-dimensional Topology and Knot Theory”, Swisssknots, Freiburg 2009, Switzerland