

# CURRICULUM VITAE

MICHAEL JOSWIG

Citizenship: Germany.

## 1. PROFESSIONAL CAREER

2013-            Professor (W3) “Discrete Mathematics/Geometry”, TU Berlin  
2004–2013      Professor (C3) “Algorithmic Discrete Mathematics”, TU Darmstadt.  
2008/2009      Visiting Professor “Discrete Geometry”, TU Berlin and Berlin Mathematical  
School.  
2000–2004      Assistant Professor (C2), TU Berlin.  
2003            Visiting Professor “Algebra”, U Magdeburg.  
1999/2000      Visiting Professor “Computer Oriented Mathematics”, U Frankfurt/Main.  
1996–1999      Postdoctoral Researcher, TU Berlin.  
1995/1996      Postdoctoral Researcher, Research Institute for Symbolic Computation,  
Linz, Austria.

## 2. DISTINCTIONS AND PERSONAL GRANTS

2015            CNRS-INSMI Research Professor, Centre de Mathématique Appliquées  
(École Polytechnique) and Institut de Mathématiques de Jussieu (Université  
Pierre et Marie Curie, Paris)  
2013            Einstein Professor, Berlin  
2006            Research Professor, Mathematical Sciences Research Institute, Berkeley, CA,  
U.S.A  
2003            General Member of the Mathematical Sciences Research Institute, Berkeley,  
CA, U.S.A.  
2002            Invited Visitor of the Center for Discrete Mathematics and Theoretical Com-  
puter Science, Rutgers, NJ, U.S.A.  
1995/1996      Lise-Meitner-Grant, Austria.  
1990–1994      Studienstiftung des deutschen Volkes.

## 3. EDUCATION

2000            Habilitation in Mathematics, TU Berlin. Title of thesis: “Contributions to  
polytope theory and incidence geometry.”  
1994            PhD (Dr. rer. nat.) in Mathematics, U Tübingen. Title of thesis: “Translation  
generalized quadrangles,” supervised by Theo Grundhöfer.  
1991            Diploma in Mathematics, U Tübingen. Title of thesis: “Projectivities of ge-  
neralized polygons and Moufang octagons,” supervised by Theo Grundhöfer.

## 4. PHD STUDENTS SUPERVISED

4.1. **Current.**

Benjamin Schröter  
Georg Loho  
André Wagner  
Robert Loewe (with Boris Springborn)

4.2. **Former.**

Nikolaus Witte *Foldable triangulations*, TU Darmstadt, 2007.  
Sven Herrmann *Splits and tight spans of convex polytopes*, TU Darmstadt, 2009.  
Katja Kulas *Combinatorics of tropical polytopes*, TU Darmstadt, 2012.  
Silke Horn, née Möser *Tropical oriented matroids and cubical complexes*, TU Darmstadt, 2012.  
Katrín Herr *Core sets and symmetric convex optimization*, TU Darmstadt, 2013.  
Benjamin Assarf *Fano polytopes*, TU Berlin, 2015.

## 5. POSTDOCTORAL SCHOLARS MENTORED

5.1. **Current.**

Simon Hampe  
Kristin Shaw

5.2. **Former.**

Andreas Paffenholz

## 6. PROJECT GRANTS

6.1. **Current.**

- 2017– Project “polymake: polyhedral data, quotients and stacks”, within SFB/TRR 195 “Symbolic Tools in Mathematics and their Application”
- 2017– Project “Moduli spaces of tropical varieties, modifications and compactifications”, within SFB/TRR 195 “Symbolic Tools in Mathematics and their Application,” with Hannah Markwig
- 2017– Project “Central software project”, within SFB/TRR 195 “Symbolic Tools in Mathematics and their Application,” with Mohamed Barakat, Wolfram Decker, Claus Fieker and Frank Lübeck
- 2016– Project “Secondary fans of Riemann surfaces”, within SFB/TRR 109 “Discretization in Geometry and Dynamics,” with Boris Springborn
- 2016– Project “Information Infrastructure”, within SFB/TRR 109 “Discretization in Geometry and Dynamics,” with Alexander I. Bobenko
- 2014–2017 Project “Multiview geometry for Ophthalmic Surgery Simulation”, within ECMath/Matheon
- 2013–2017 Project “Polyhedral Fan Structures”, within DFG Priority Program 1489 “Experimental Methods in Algebra, Geometry, and Number Theory”

6.2. **Former.**

- 2012–2013 Project “Algorithmic Methods in Combinatorial Topology” with Australia Go8, funded by DAAD
- 2010–2013 Project “Decompositions of lattice polytopes” within DFG Priority Program “Experimental Methods in Algebra, Geometry, and Number Theory”
- 2008–2011 Project “Non-positive Curvature and Cubical Surfaces” within DFG-Research group “Polyhedral Surfaces,” with Günter M. Ziegler.
- 2007–2013 Graduate School “Computational Engineering: Beyond Traditional Sciences,” Principal Investigator, TU Darmstadt.
- 2005–2008 Project “Branched coverings and combinatorial holonomy” within DFG-Research group “Polyhedral Surfaces,” with Günter M. Ziegler.
- 2002–2004 DFG-Research Center “Matheon”, Principal Investigator; Project “F4: Visualization algorithms and web based software”, with Alexander Bobenko and Konrad Polthier.
- 2001–2003 Project C4 within DFG-Sonderforschungsbereich 288 “Differential Geometry and Quantum Physics,” with Günter M. Ziegler.

## 7. ADMINISTRATION

2016– Deputy Director, Institut für Mathematik, TU Berlin

## 8. EDITORIAL WORK

2016– Associate Editor: “Linear Algebra and Applications”  
 2013– Editor-in-Chief of “Mitteilungen der Deutschen Mathematiker-Vereinigung”  
 and Member of the Executive Board of the Society of German Mathematicians (DMV)  
 2011– Associate Editor: “Advances in Geometry”  
 2011– Associate Editor: “Beiträge zur Algebra und Geometrie”  
 2001–2013 Managing Editor (with Konrad Polthier): “Electronic Geometry Models”,  
<http://www.eg-models.de>

## 9. ORGANIZATION (SELECTION)

2005– Member of the Scientific Advisory Board: “Oberwolfach References on Mathematical Software”  
 2016 Dagstuhl Seminar “Algorithms and Effectivity in Tropical Mathematics and Beyond” (12-0116), (co-organized with Stéphane Gaubert, Dima Grigoriev and Thorsten Theobald)  
 2014 Member of the Advisory Board: “4th International Congress on Mathematical Software”, Seoul, Korea  
 2013 Member of the Local Committee “MEGA 2013 (Methods for Effective Algebraic Computation)”, Frankfurt/Main  
 2012 Minisymposia on “Integer Points in Polytopes” (with Günter M. Ziegler) at “ISMP 2012 (21st International Symposium on Mathematical Programming)”, Berlin  
 2010 Programme Committee Co-chair: “3rd International Congress on Mathematical Software,” Kobe, Japan.  
 2009 Co-Organizer (with Friedrich Knop, Thorsten Theobald and Volker Strehl) of Workshop “Saturday in Discrete Mathematics,” Erlangen.  
 2008 Member of the Programme Committee: “Symposium on Computational Geometry,” College Park, MD, U.S.A.  
 2008 Co-Organizer (with Thorsten Theobald) of Workshop “Discrete Mathematics on a Saturday in Frankfurt,” Frankfurt am Main.  
 2006 Member of the Programme Committee: “2nd International Congress on Mathematical Software,” Castro Urdiales, Spain.  
 2005 Co-Organizer (with Thorsten Theobald): “Discrete Mathematics on a Saturday in Darmstadt,” Darmstadt.  
 2004 Member of the Programme Committee: “FPSAC 2004: Formal Power Series and Algebraic Combinatorics,” University of British Columbia, Vancouver, Canada.  
 2002 Member of the Programme Committee: “VisMath 2002: International Workshop on Visualization and Mathematics,” Berlin.  
 2002–2004 Member of the Board of “Berliner Mathematische Gesellschaft”  
 2001 Programme Chair (with Nobuki Takayama): “Integration of Algebra and Geometry Software Systems,” Seminar No. 01421, Schloss Dagstuhl

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