



ADDRESS

Freie Universität Berlin
Institut für Mathematik
Arnimallee 2
D-14195 Berlin, Germany

Tel. +49 30 838 75 668
E-Mail ziegler@math.fu-berlin.de
WWW <http://page.mi.fu-berlin.de/gmziegler/>

CURRICULUM VITAE

1963 Born in München (Munich), Germany (Citizenship: German)
1981–1984 Studies in Mathematics and Physics, Ludwig-Maximilians-University, Munich
1984–1987 Graduate studies in Mathematics, Massachusetts Institute of Technology, Cambridge, MA
1987 PhD at M.I.T. Advisor: Prof. Anders Björner
Thesis: “Algebraic Combinatorics of Hyperplane Arrangements”
1987–1991 Postdoc at Augsburg University, with Prof. Martin Grötschel
1991–1992 Special year on “Combinatorics”, Institut Mittag-Leffler, Djursholm, Sweden
1992–1994 Research scientist at Konrad-Zuse-Zentrum für Informationstechnik Berlin (ZIB)
Deputy of Martin Grötschel for the “Combinatorial Optimization” department
1992 Habilitation, TU Berlin
Thesis: “Combinatorics and Topology of Subspace Arrangements”
1992–1994 Privatdozent, TU Berlin
1993–2000 Faculty member, DFG Research Training Group “Algorithmic Discrete Mathematics”
1995–1998 Professor of Discrete Mathematics (C3/equivalent to associate professor), TU Berlin
1998–2011 Professor of Mathematics (C4/full professor), TU Berlin (since 2006: W3)
2001 Visiting Miller Research Professor, UC Berkeley
2000–2005 Faculty member, DFG International Research Training Group “Combinatorics, Geometry, and Computation” (Berlin–ETH Zurich)
2002– Member, DFG Research Center MATHEON
2006–2017 Faculty member, DFG Research Training Group “Methods for Discrete Structures”
2006– Member of the Faculty, *Berlin Mathematical School*
2011– **MATHEON-Professor of Mathematics, Freie Universität Berlin**
2017– Honorary Professor, Technische Universität Berlin

FIELDS OF RESEARCH

Discrete Geometry, in particular convex polytopes, complexes, arrangements
Combinatorics, topological methods, configuration spaces, equivariant problems
Discrete Differential Geometry, polyhedral surfaces, mesh generation
Linear and Integer Optimization, applications
Science Communication; Teaching and Popularization of Mathematics

MENTORING

39 bachelor theses supervised, 5 current
66 diploma/master theses supervised, 3 current
30 dissertations supervised, 5 current
7 habilitations mentored, 1 current

PUBLICATIONS

More than 150 scientific papers and six books, among these:

Lectures on Polytopes (Springer, New York 1995, 7. revised printing 2007), *Proofs from THE BOOK* (Springer, Heidelberg 1998, 5. edition 2014, with Martin Aigner), in German *Das BUCH der Beweise* (Springer, 4. edition 2014), published in 12 further languages.

Numerous popular contributions, newspaper columns, etc., in particular the books

II & Co. – Kaleidoskop der Mathematik, edited with E. Behrends and P. Gritzmann (Springer, Heidelberg 2008, 2. edition 2016), *Darf ich Zahlen? Geschichten aus der Mathematik* (Piper, München 2010/2013, in English *Do I Count? Stories from Mathematics*, CRC Press, Boca Raton FL 2013, published in three further languages), and *Mathematik – Das ist doch keine Kunst!* (Knaus, München 2013)

LECTURES (SELECTION)

Far more than 200 invited seminar and colloquium lectures, as well as main and plenary invited lectures at conferences worldwide, among them:

- 2001 Main Plenary Lecture, 15. ÖMG-Congress of the Austrian Mathematical Society and Annual Meeting of the German Mathematical Society DMV, Vienna, Austria
- 2002 **Invited Lecture, International Congress of Mathematicians ICM2002**, Beijing, China
- 2008 Main Lecture, Leibniz Day of the Berlin-Brandenburg Academy of Sciences and Humanities, Berlin
- 2009 Capstone plenary lecture, Symposium on Geometry Processing, Berlin
- 2010 **Panel Speaker and Chair, International Congress of Mathematicians ICM2010**, Hyderabad, India
- 2011 Erdős Lectures in Discrete Mathematics and Theoretical Computer Science, Hebrew University, Jerusalem
- 2012 Erdős Memorial Lecture, 24th Canadian Conference on Computational Geometry, Charlottetown, Prince Edward Island, Canada
- 2012–2014 Leibniz Lectures of the German Science Foundation DFG in New York, Moscow, Petersburg, and São Paulo
- 2013 Emil Grosswald Lectures, Temple University, Philadelphia, USA
- 2014 **Invited Lecture, International Congress of Mathematicians ICM2014**, Seoul, Korea
- 2014 Main Lecture, Conference “500 Years of Melancholia in Mathematics”, New York
- 2014 Plenarvortrag, Barcelona Mathematical Days BMD2014, Barcelona, Spain
- 2015 Invited Plenary Presentation, World Science Forum, Budapest, Hungary
- 2016 Main Lecture, Cornell Topology Festival, Cornell University, Ithaca NY
- 2016 Plenary Lecture, Hector Symposium, Berlin
- 2016 John von Neumann Lecture, Münster University
- 2016 **Plenary Lecture, Internat. Conference on Mathematics Education ICME**, Hamburg
- 2016 Friedrich Hirzebruch Lecture, Bonn University
- 2018 Plenary lecture, Annual Meeting of the Australian Mathematical Society, Adelaide, Australia

FUNCTIONS AND RESPONSIBILITIES (SELECTION)

- 1997–2000 Member of the Directorate (Vorstand), German Mathematical Society (Deutsche Mathematiker-Vereinigung DMV),
Editor of the “Notices” (*Mitteilungen der DMV*)
- 2000–2004 Treasurer, Berlin Mathematical Society (Berliner Mathematische Gesellschaft BMG)
- 2001–2016 Member, **Scientific Board, Mathematisches Forschungsinstitut Oberwolfach**,
since 2006 Cochair, 2012–2016 Chair
- 2006–2008 **President, German Mathematical Society** (Deutsche Mathematiker-Vereinigung DMV),
- 2006–2011 Speaker, DFG Research Training Group “Methods for Discrete Structures”, 2011–2017 Deputy speaker

- 2006 Member, Program Committee “Combinatorics”, International Congress of Mathematicians ICM2006, Madrid
- 2006– Member of the Executive Board, **Berlin Mathematical School, 2006–2007 and 2016–2018 Chair**, 2008–2011 Cochair
- 2007–2008 **Initiator and Co-Organizer, German National “Year of Mathematics 2008”**, a joint project of the German Federal Ministry of Science BMBF, Deutsche Telekom Stiftung, DMV, and “Science in Dialogue” “Wissenschaft im Dialog”
- 2009–2013 Member of the board of trustees (Kuratorium), Stiftung Rechnen, Hamburg
- 2009– **Member of the directorate (Vorstand), Berlin-Brandenburg Academy of Sciences and Humanities**, since 2013 Deputy Secretary of the Class of Mathematics and Natural Sciences, since 2015 Secretary of the Class of Mathematics and Natural Sciences
- 2009–2015 Member and Cochair, Scientific Board of FIZ Karlsruhe
- 2010–2013 Member of the Scientific Advisory Board, Stiftung Jugend forscht e.V., Hamburg
- 2009–2015 Member of the Scientific Committee, **Einstein Foundation Berlin**, since then Berlin Expert, advising the Executive Board
- 2011–2015 Organizer and Chair of the Jury, Euler-Lecture in Sanssouci, Potsdam
- 2011–2016 Co-Editor-in-Chief, *Discrete & Computational Geometry*, Springer New York
- 2011– Member of the Executive Committee (Präsidium) of DMV, since 2009 Director of the DMV “Mathematics Media Office”, since 2010 Director of the DMV “Network Office Schools–Universities”
- 2012–2016 Board Member, DFG Collaborative Research Center “Discretization in Geometry and Dynamics”
- 2013– Member, Executive Board, Einstein Center for Mathematics *ECMath*, Berlin
- 2014– **Member of the Senate, Deutsche Forschungsgemeinschaft DFG**
- 2016–2017 Member of the Scientific Council, Alfred Krupp-Förderpreis für junge Hochschullehrer, Alfred Krupp von Bohlen und Halbach-Stiftung, Essen
- 2016– Member of the Scientific Council, Fondation Mathématique Jacques Hadamard, Paris
- 2016– Member of the Negotiation Group, Project DEAL for national licencing agreements for offers of large scientific publishers
- 2017– Member of the board of trustees (Kuratorium), Klaus Tschira Foundation, Heidelberg
- 2017– Member of the European Mathematical Society EMS Publications and Electronic Dissemination Committee
- 2017– Member of the Selection Committee for the Allocation of the Alexander von Humboldt Professorship – International Award for Research in Germany, Alexander von Humboldt Foundation, Bonn

CONFERENCE AND WORKSHOP ORGANIZATION (SELECTION)

- 1991 Co-organizer, Conference “Combinatoire et géométrie: matroides orientés”, Centre International de Rencontres Mathématiques (C.I.R.M.), Marseille-Luminy, France
- 1994 Co-organizer, First Euroconference in Mathematics on Crete, “Combinatorial Geometry”
- 1995–2011 Co-organizer, five Oberwolfach Workshops on Geometric, Topological, and Algebraic Combinatorics, Mathematisches Forschungsinstitut Oberwolfach
- 1997 Co-organizer and lecturer, Oberwolfach Seminar “Polytopes and Optimization” (with Gil Kalai and Peter Kleinschmidt)
- 1998 Member of the Organizing Committee, and of the Local Scientific Committee, International Congress of Mathematicians, Berlin 1998
- 2000 Co-organizer, Euroconference in Mathematics on Crete, “Discrete and Algorithmic Geometry”
- 2001 Co-organizer, 100-Jahrfeier der Berliner Mathematischen Gesellschaft, TU Berlin
- 2003 Co-organizer, Workshop on “Polyhedral Surfaces”, Euler Institute, St. Petersburg
- 2003–2017 Co-organizer, Three Fall Programs, Mathematical Sciences Research Institute MSRI, Berkeley CA, USA
- 2004 Co-organizer and lecturer, Oberwolfach Seminar “Discrete Differential Geometry”
- 2006–2012 Co-organizer, three Oberwolfach Workshops “Discrete Differential Geometry”
- 2006 Organizer, “Symposium Diskrete Mathematik”, TU Berlin, for DMV Fachgruppe “Diskrete Mathematik”
- 2006 Co-organizer, “Topological Methods in Combinatorics”, KTH Stockholm and Mittag-Leffler Institute, Stockholm/Djursholm, Sweden
- 2011–2015 Co-organizer of three ERC *SDModels* workshops, FU Berlin

- 2015 Co-organizer and lecturer, Oberwolfach Seminar “Topological Combinatorics of Configuration Spaces”
- 2015 Co-organizer, Workshop in Discrete Geometry, Moscow Institute of Physics and Technology
- 2016 Co-organizer, 7th European Congress of Mathematics 7ecm, Berlin

PRIZES AND AWARDS (SELECTION)

- 1980, 1981 Federal winner, Federal Mathematics Competition “Bundeswettbewerb Mathematik”
- 1981 **Gold Medal, International Mathematical Olympiad**, Washington DC
- 1981–1986 Fellow, Studienstiftung des Deutschen Volkes (German National Scholarship Foundation)
- 1982 Federal winner Mathematics/Computer Science, National Science Fair “Jugend forscht”
- 1985–1986 Norman P. Levinson Graduate Fellowship am MIT
- 1986–1987 Alfred P. Sloan Dissertation Fellowship
- 1991–1992 Postdoctoral fellowship of Swedish Science Foundation NFR
- 1994 Gerhard Hess Prize, Deutsche Forschungsgemeinschaft DFG (1 Mio. DM)
- 1995–1998 “Konrad-Zuse-Fellow” at ZIB Berlin
- 2001 **Gottfried Wilhelm Leibniz Prize**, DFG (1,5 Mio. DM)
- 2002 Election to the **Berlin-Brandenburg Academy of Sciences and Humanities**
- 2006 Chauvenet Prize, Mathematical Association of America (MAA), with F. Pfender
- 2008 “Archimedes Prize for Mathematics”, German Science Teachers’ Society MNU
- 2008 **Communicator Prize** of DFG and of Stifterverband für die Deutsche Wissenschaft
- 2009 Election to the **German National Academy of Science, Leopoldina**
- 2010–2015 **ERC Advanced Grant** (1,85 Mio. Euro) “SDModels: Structured Discrete Models as a basis for studies in Geometry, Numerical Analysis, Topology, and Visualization”
- 2012– Fellow, American Mathematical Society
- 2013 Hector Science Prize, with appointment as “Hector Fellow”
- 2013 Election to the **German National Academy of Science and Engineering acatech**
- 2016 Ambassador for the Berlin “Brain City” Campaign
- 2017 Berlin Science Prize (Science Prize of the Governing Mayor of Berlin)
- 2018 Leroy P. Steele Prize for Mathematical Exposition (AMS), with M. Aigner

November 15, 2017