

Curriculum vitae

Personal data Prof. Dr. rer. nat. Matthias Bolten
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Accademic career

since 04/17	W3-Professor for Scientific Computing and High Performance Computing at Bergische Universität Wuppertal, Fakultät für Mathematik und Naturwissenschaften
10/15 – 03/17	W2-Professor for Numerics and Mathematical Modelling at Universität Kassel, Fachbereich 10 - Mathematik und Naturwissenschaften
04/15 – 09/15	Interim professorship for Scientific Computing/Software Engineering at Bergische Universität Wuppertal, Fachbereich C – Mathematik und Naturwissenschaften
10/13 – 03/14	Interim professorship for Numerical Mathematics at Technische Universität Braunschweig, Carl-Friedrich-Gauß-Fakultät
01/12	Successful evaluation of the Junior professorship at Bergische Universität Wuppertal
02/09 – 09/15	Juniorprofessur for Applied Mathematics at Bergische Universität Wuppertal, Fachbereich C – Mathematik und Naturwissenschaften
01/09 – 02/09	Postdoctoral research fellow at Bergische Universität Wuppertal, Fachbereich C – Mathematik und Naturwissenschaften
04/08 - 12/08	Postdoctoral research fellow at Forschungszentrum Jülich, Jülich Supercomputing Centre
07/05 – 04/08	PhD student at Forschungszentrum Jülich, Jülich Supercomputing Centre (formerly: Zentralinstitut für Angewandte Mathematik)

Doctorate

07/08	Doctorate in Natural Sciences (Doktor der Naturwissenschaften) at Bergische Universität Wuppertal, title of the dissertation: "Multigrid methods for structured matrices and their application in particle simulation", supervisor: Prof. Dr. rer. nat. Andreas Frommer, overall grade: summa cum laude
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Academic studies

05/05	Diploma Computer Science (Diplom Informatik) at Universität zu Lübeck, overall grade: with honors (mit Auszeichnung)
10/99 – 05/05	Study of Computer Science (Informatik) at Universität zu Lübeck, minor: medical informatics (Medizinische Informatik)

Stays abroad

05/23, 01/25	Hong Kong Baptist University, Hongkong, China SAR, Department of Mathematics
12/19, 11/12, 11/10	Università dell'Insubria in Como, Italy, Dipartimento di fisica e matematica
11/19, 09/17, 09/16	The University of Tokyo, Tokyo, Japan, Information Technology Center
05/19	Memorial University of Newfoundland, St. John's, NL, Canada, Department of Mathematics and Statistics
01/19	Chinese University of Hong Kong, Hongkong, SAR, China, Department of Mathematics
08/15	Carnegie Mellon University, Pittsburgh, PA, USA, Department of Electrical and Computer Engineering
03/15, 10/06–12/06	Lawrence Livermore National Laboratory, Livermore, CA, USA, Center for Applied Scientific Computing
01/15	National University of Singapore, Singapore, Institute for Mathematical Science
09/12	Tufts University, Medford, MA, USA, Department of Mathematics
03/12	Università della Svizzera italiana, Lugano, Switzerland, Institute of Computational Science
06/10	Technion – Israel Institut of Technology, Haifa, Israel, Computer Science Department
03/10, 03/09	Pennsylvania State University, State College, PA, USA, Department of Mathematics
04/05	Stanford University, Stanford, CA, USA, Stanford Vision Science and Neuroimaging Group

Organization of workshops

11/24	The International Workshop on Structured Matrix and Image Processing, Nanjing, China
01/21	GAMM Workshop “Computational Science and Engineering” as online workshop of the GAMM Fachausschusses CSE
06/19	Hamilton Mathematics Institute workshop “Beyond the discrete: Iterative methods from the continuum perspective” at Trinity College Dublin, Irland
10/17	“6th Workshop on Parallel-in-Time Integration: Parallel Multi-level Methods in Space and Time” in Ascona, Switzerland

09/16	GAMM Workshop “Computational Science and Engineering” at Universität Kassel
04/15	Seminar “Advanced Stencil-Code Engineering” in Schloss Dagstuhl, Wadern
05/14	“3rd Workshop on Parallel-in-Time Integration: Parallel Multi-level Methods in Space and Time” at Jülich Supercomputing Centre
03/14 – 04/14	Workshop “ExaStencils 2014” in Dresden
09/13	GAMM Workshop “Applied and Numerical Linear Algebra” at Bergische Universität Wuppertal

Membership in editorial boards

01/19 – 12/24	SIAM Journal on Scientific Computing
since 2019	Mathematical and Computational Applications

Third-party funded projects

04/25 – 12/28	Subproject “B04: Linear solvers exploiting saddle point structure for pHS” within DFG CRC 1701 “Port-Hamiltonian Systems”
04/25 – 12/28	Subproject “C01: PH methods in multi-objective shape optimization” within DFG CRC 1701 “Port-Hamiltonian Systems”
01/24 – 12/25	DAAD project “Efficient multigrid methods for PDE-constrained optimal control problems” with Hong Kong Baptist University within program Project-related Personal Exchange Hong Kong
04/21 – 03/24	EuroHPC project “TIME-X”
01/21 – 12/23	Project “Raum-Zeit-parallele Simulation multimodaler Energiesystemen” within DFG Priority Programme 1984 “Hybride und multimodale Energiesysteme: Systemtheoretische Methoden für die Transformation und den Betrieb komplexer Netze”
04/20 – 03/23	Subproject “Spiking network level description” within EU Flagship Project “Human Brain Project”
04/18 – 03/20	Subproject “Exascale solvers for phenomenological models” within EU Flagship Project “Human Brain Project”
01/18 – 12/20	Subproject in joint project “GIVEN” within BMBF program “Mathematik für Innovationen in Industrie und Dienstleistungen”
01/16 – 12/18	Project “ExaStencils” within DFG Priority Programme 1648 “Software for Exascale Computing”
04/16 – 03/18	Subproject “Simulation technology methods” within EU Flagship Project “Human Brain Project”
10/13 – 03/16	Subproject “Numerical algorithms for neuroscientific high performance computing” within EU Flagship Project “Human Brain Project”

01/13 – 12/15	Project “ExaStencils” within DFG priority programme 1648 “Software for Exascale Computing”
01/09 – 12/09	BMBF project ScaFaCos, subcontractor of Universität Bonn
01/09 – 12/09	Project “Development of Multigrid preconditioners for the large-scale Dyson equation” within the Umbrella Cooperation Programme of Forschungszentrum Jülich GmbH, RWTH Aachen and Technion Haifa
Various times	Continually successful proposal of smaller amounts for cooperations, travel and workshops, e.g., for running the parallel-in-time workshops in Jülich and Ascona or to fund research stay of employees abroad

Experience in the academic self-administration

seit 04/24	Vice dean at the School of Mathematics and Natural Sciences of the University of Wuppertal
09/22–03/24	Dean of studies at the School of Mathematics and Natural Sciences of the University of Wuppertal
04/18–03/20	Member of the faculty council (Fakultätsrat) of the School of Mathematics and Natural Sciences of the University of Wuppertal
	Member of various hiring committees, including chairmanship

Membership in academic societies

Member of the Deutsche Mathematiker Vereinigung (DMV)

Member of the Gesellschaft für Angewandte Mathematik und Mechanik (GAMM), university representative of the GAMM at the Bergische Universität Wuppertal, spokesperson of Fachausschusses Computational Science and Engineering

Member of Society for Industrial and Applied Mathematics (SIAM), vice chair of Activity Group on Supercomputing (2020–2021), secretary of Activity Group on Supercomputing (2018–2019)