

MARIA G. WESTDICKENBERG

Curriculum Vitae, January 2023

EDUCATION

2004 Ph.D. Applied Mathematics, Courant Institute, New York University, USA
2000 M.S. Applied Mathematics, Rensselaer Polytechnic Institute, USA

EMPLOYMENT HISTORY

2012 – present Professor of Mathematics (W2), RWTH Aachen University, Germany
08 – 12/2011 Associate professor (tenured), Georgia Institute of Technology (GT), USA
2006 – 07/2011 Assistant Professor, Georgia Institute of Technology, USA
2005 – 07/2006 NSF Postdoctoral Fellow and Instructor, Princeton University, USA
2004 – 07/2005 NSF Postdoctoral Fellow, University of Bonn, Germany

HONORS, AWARDS, AND RECOGNITIONS

2011 Presidential Early Career Award (PECASE), USA
2010 Alfred P. Sloan Research Fellowship, USA
2004 – 2007 National Science Foundation Postdoctoral Research Fellowship, USA
2005 Kurt O. Friedrichs Dissertation Prize, Courant Institute, USA
2002 Bella Manel Prize, Courant Institute, USA
2000 – 2004 Henry M. MacCracken Fellowship, Courant Institute, USA

RESEARCH GRANTS AND CONTRACTS

04/22 – RTG: Energy, Entropy, and Dissipative Dynamics (EDDy), **Speaker**
02/22 – CRC: Sparsity and Singular Structures (SFB-1481), **Co-PI**
2018 – 03/2022 RTG: Energy, Entropy, and Dissipative Dynamics (EDDy), **Co-PI**
2016 – 2020 DFG Individual Grant , WE 5760/1-1, **Principal Investigator**
2011 – 2016 NSF S-STEM Grant 1060333, **Co-PI**
2010 – 2015 NSF CAREER Grant DMS 0955051, **Principal Investigator**
(returned due to move to Germany)
2007 – 2010 NSF Grant DMS 0706026, **Principal Investigator**

SUPERVISION OF PHD STUDENTS AND POSTDOCTORAL FELLOWS

08/22 – Likhith Ganedi, **Postdoctoral researcher** in EDDy
07/22 – Hicham Kouhkouh, **Postdoctoral researcher** in EDDy
06/22 – Sasa Lukic, **Doctoral researcher** in EDDy
Co-supervision with Umberto Hryniewicz
05/22 – Daniel Meinert, **Doctoral researcher** in EDDy
Co-supervision with Christof Melcher
04/19 – 09/21 Richard Schubert, **Postdoctoral researcher**
Exit position: Postdoctoral researcher in Bonn
10/18 – 07/21 Sarah Biesenbach, **Doctoral researcher** in EDDy
Co-supervised with Heiko von der Mosel
Exit position: aixigo, Business consultant
01/17 – 08/17` Olga Chugreeva, **Postdoctoral researcher**
Exit position: ERGO Group AG: Referentin, Aktuarielles Bestandsmanagement

SUPERVISION, CONTINUED

2015 – 2017	Sebastian Scholtes, Postdoctoral researcher <i>Current position: Professor, University of Applied Sciences, Augsburg</i>
2012 – 2015	Michael Gelantalis, Postdoctoral researcher <i>Exit position: Lecturer, University of Tennessee</i>

RESEARCH CAREER BREAKS

10/2018 – 09/2019	Personal leave: 50% (RWTH)
10/2017 – 09/2018	Personal leave: 100% (RWTH)
08/2011 – 12/2011	Personal leave (with partial grant funding) due to move to Germany (GT)
09/2008 – 12/2008	“Active service/ Modified duties” due to childbirth (GT)

WORKSHOP ORGANIZATION (2017-2022)

2021 (May)	SIAM Materials Science, Minisymposium co-organizer [online]: Multiscale and stochastic effects in evolution of materials
2020 (May)	SIAM Materials Science, Bilbao, Minisymposium co-organizer [postponed due to Corona crisis]
2019 (Dec)	Tricity Seminar (Aachen, Dortmund, Eindhoven)
2019 (July)	ICIAM, Valencia, Minisymposium co-organizer: Rings, wrinkles, and vortices: Singularities in the nonlinear eq. of materials science
2017 (April)	Aachen-Augsburg-Applied-Analysis Workshop Co-organized with Sebastian Scholtes (RWTH) and Dirk Blömker (Augsburg)

SELECTED INVITED TALKS (2014 – 2022)

2022 (Sept)	Oberseminar Analysis-Probability MIS MPG, Leipzig
2022 (August)	Oberwolfach workshop talk, Calculus of Variations
2022 (August)	Summer School Lecturer, Bonn
2022 (July)	Workshop talk, Conference on Calc Var in Lille, France
2022 (April)	Geometric Analysis Seminar [online]
2021 (June)	PDE Seminar, University of Chile [online]
2021 (May)	Minisymposium talk, SIAM Materials Science [online]
2020 (Nov)	Applied PDEs Seminar, Imperial College London [online]
2020 (Sept)	Oberwolfach workshop talk, Variational Methods for Evolution [in-person]
2021 (May)	Minisymposium talk, SIAM Materials Science [postponed due to Corona crisis]
2020 (March)	Workshop talk, Ulm University [postponed due to Corona crisis]
2020 (Jan)	Workshop talk, University Paul Sabatier, Toulouse, France
2019 (June)	Fields Institute workshop talk, Toronto, Canada
2019 (Jan)	RTG Colloquium, FAU Erlangen-Nürnberg
2017 (March)	VU-UvA Dynamical Analysis Seminar
2016 (Sept)	Mittag-Leffler Institute workshop talk, Stockholm, Sweden
2016 (Sept)	Principal speaker at GAMM PDE Meeting
2016 (July)	Minisymposium talk, AIMS Dynamical Systems Conference, Orlando, USA
2016 (April)	Minisymposium talk, SIAM Uncertainty Quantification, Lausanne, Switzerland
2016 (Jan)	Colloquium, Universität Münster
2015 (Nov)	Eighth Workshop on Random Dynamical Systems, Bielefeld
2015 (July)	Minisymposium talk, Equadiff, Lyon, France
2015 (Jan)	Hausdorff Institute for Mathematics workshop talk, Bonn
2014 (July)	Colloquium, Universität Düsseldorf
2014 (June)	Lorentz Center workshop talk, Leiden, Netherlands

SELECTED TALKS, CONTINUED

2014 (May) Institute for Mathematics and its Applications workshop talk, Minneapolis, USA
2014 (Feb) Winter School Lecturer, Würzburg

TEACHING EXPERIENCE

04/2023 – 09/2022 7 hours/week, HöMa 4 ET+Phys, Practical Mathematics (Math Ed)
10/2022 – 03/2023 7 hours/week, HöMa 3 ET+Phys
04/2022 – 09/2022 9 hours/week, HöMa 2 ET+Phys, Practical Mathematics (Math Ed)
10/2021 – 03/2022 9 hours/week, HöMa 1 ET+Phys, Seminar on PDE
10/2020 – 03/2021 9 hours/week, Stochastic Analysis and Seminar on ODEs, digital teaching
04/2020 – 09/2020 9 hours/week, ODE and proseminar, RWTH, digital teaching
10/2019 – 03/2020 9 hours/week, PDE II and seminar, RWTH
10/2018 – 03/2020 4 ½ hours/week, RWTH
04/2012 – 09/2017 9 hours/week, lectures and seminars, RWTH including PDE, Calculus of Variations, Stochastic Analysis, Higher Mathematics for Physicists and Electrical Engineers
08/2006 – 07/2011 2:1 teaching at Georgia Institute of Technology including Analysis, Calculus, Industrial Mathematics, Calculus of Variations, ODEs, Numerical Methods
09/2005 – 01/2006 Developed and taught Intro to ODE and PDE, Princeton University, USA
09/2000 – 05/2004 Independent instructor and teaching assistant, NYU, USA
02/1994 – 06/1998 K-12 and special education teacher and related service (4 years), USA

SUPERVISION OF MASTER AND BACHELOR STUDENTS (2020-2022)

2022 Simon Paulus, Bachelor thesis (Hopf bifurcations and applied mathematics)
2021 Antonia Berger, Bachelor thesis (delay differential equations and math bio)
2021 Jonas Nießen, Bachelor thesis (Brownian motion and where it spends time)
2020 Philipp Kreins, Master thesis (minimizers and metastability in 1d parabolic equation)
2020 Nicolas Freches, Bachelor thesis (quantitative deformation lemma)
2020 Paul Mork, Bachelor thesis (existence for the Mullins-Sekerka evolution)
2020 Daniel Meinert, Bachelor thesis (blowup via similarity solutions)

INSTITUTIONAL SERVICE (SAMPLE)

Ongoing Undergraduate curriculum committee (Kommission für Lehre)
Ongoing Hiring committees at RWTH (member numerous committees)
Ongoing Gender & diversity representative (Gleichstellungsbeauftragte Vertreterin)
2012 Founder of the Joint Analysis Seminar
Ongoing Thesis committee reviewer (Xinye Li, 2020, Olga Chugreeva, 2016)

EXTERNAL SERVICE (SAMPLE)

[1] Founded and organized the European Women in Mathematics Working Group on the Corona Crisis, writing an open letter that gained over 1,000 signatures and 18 endorsements from organizations including GAMM, UMI, SEMA, and others. Co-developed and co-maintained associated webpages (ongoing).

Participant in related Mathematrix panel discussion (Oxford University, online, 30 Nov, 2020). Co-organized PRYME Gathering (Pandemic Response for Young Mathematicians in Europe, April, 2022).

[2] Review grant and SFB proposals: Deutsche Forschungsgemeinschaft (DFG) and National Science Foundation (NSF)

EXTERNAL SERVICE, CONTINUED

[3] Referee for multiple journals, including *Archive for Rational Mechanics and Analysis*, *Communications on Pure and Applied Mathematics*, *Indiana University Mathematics Journal*, *European Mathematical Society: Interfaces and Free Boundaries*, *Journal of Functional Analysis*, *Nonlinearity*, *Physics Letters A*, *Probability Theory and Related Fields*, *SIAM Journal of Math Analysis*

[4] Member, external job committees (TU Eindhoven (2017), Universität Leipzig (2019-2020)), external thesis committee (2020; TU Eindhoven)

[5] Mentor, Association for Women in Mathematics (since 2010), European Women in Mathematics (since 2020)

[6] Panelist at the Celebration of Women in Mathematics (2021; MSRI) [online]
