Lea Boßmann

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Academic positions

2/2024–now	**Johannes Gutenberg-Universität Mainz**
	Junior professor for Analysis (W1 with tenure track to W2)
	Parental leave: 3/2024–10/2024
10/2022–1/2024	**Ludwig-Maximilians-Universität München**
	Postdoctoral fellow with Prof. Dr. Phan Thành Nam
11/2019–9/2022	**Institute of Science and Technology Austria**
	Postdoctoral fellow with Prof. Dr. Robert Seiringer
	Parental leave: 3/2021–10/2021

Education

10/2016–10/2019	**PhD (Mathematics),** Eberhard Karls Universität Tübingen
	Advisor: Prof. Dr. Stefan Teufel
	Dissertation: *Effective dynamics of interacting bosons: Quasi-low-dimensional gases and higher order corrections to the mean-field description*
	Grade: summa cum laude
04/2014–08/2016	**Master of Science (Theoretical and Mathematical Physics),**
	Ludwig-Maximilians-Universität München and Technische Universität München
	Thesis: *On the Dipole Approximation* (Advisor: Prof. Dr. Detlef Dürr)
	Grade: 1.0
09/2013–03/2014	**Study abroad**, The Queen's University of Belfast
10/2010–07/2013	**Bachelor of Science (Physics)**, Ludwig-Maximilians-Universität München
	Thesis: *Study on the distinction of down and strange quark jets originating from the top quark decay* (Advisor: Prof. Dr. Otmar Biebel)
	Grade: 1.0
09/2001–06/2010	**Abitur**, Gymnasium Starnberg
	Grade: 1.0

Honors

- **Invited speaker at the International Congress on Mathematical Physics 2021**
  Thematic session *Many-body Quantum Systems and Condensed Matter Physics*

- **Dissertation Prize 2020**
  Awarded by the Faculty of Science of the University of Tübingen

Grants and Fellowships

10/2022–9/2023   **MCQST Distinguished Postdoc**
German Research Foundation (DFG) within the cluster of excellence *Munich Center of Quantum Science and Technology* under Germany's Excellence Strategy (EXC2111).

11/2019–6/2022   **ISTplus postdoctoral fellowship**
IST Austria and the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No. 754411

6/2022   **Research in Pairs, Mathematisches Forschungsinstitut Oberwolfach**
Research fellowship with Dr. Nikolai Leopold (Universität Basel), Prof. Dr. Sören Petrat (Jacobs University Bremen), and Dr. Simone Rademacher (IST Austria)

10/2010–4/2016   **Max Weber Program of the State of Bavaria**
Scholarship within the Elite Network of Bavaria

Selected talks

Invited conference talks (Selection)

- *Spectral Analysis of Schrödinger Operators*, ICERM, Brown University, Providence, 8/2024

- *Workshop for young researchers in Analysis and Mathematical Physics*, LMU, Munich, 10/2023

- *DMV Annual Meeting*, Ilmenau, 9/2023

- *Beyond IID in Information Theory*, Tübingen, 8/2023

- *Workshop of Young Researchers in Mathematical Physics*, Westerham, 7/2023

- *Correlations in Mathematical Quantum Mechanics*, University of Copenhagen, 6/2023

- *Many-body quantum problems and dispersive PDEs*, University of Warwick, 6/2023

- *Solid Math – Mathematical and numerical results for Solid State Physics*, SISSA, Trieste, 9/2022

- *Laws of Nature conference remembering Detlef Dürr*, LMU, Munich, 8/2022

- *AMS-SMF-EMS joint international meeting*, Université de Grenoble-Alpes, Grenoble, 7/2022

- *International Congress on Mathematical Physics (ICMP)*, Geneva, 8/2021

- *Minisymposium Nonlinear Dynamics in Quantum Mechanics*, online, 10/2020

- *AMS Fall Southeastern Sectional Meeting*, University of Florida, Gainesville, 11/2019

- Oberwolfach meeting *Many-Body Quantum Systems*, MFO, Oberwolfach, 9/2019

- *Workshop on Analysis, PDE and Mathematical Physics*, CCNU, Wuhan, 7/2019

- *On mathematical aspects of interacting systems in low dimension*, FernUniversität in Hagen, 6/2019

Invited seminar talks (Selection)

- *Mathematical Challenges in Quantum Mechanics, PhD lecture*, online, 3/2024

- Oberseminar *Mathematical Physics*, Universität Tübingen, 12/2022

- *One World IAMP Mathematical Physics Seminar*, online, 11/2021

- *Séminaire Maths-Physique*, Institut de Mathématiques de Toulouse, 2/2021

- *Seminar Analysis and Mathematical Physics*, Universität Basel, 12/2020

- *Analysis seminar*, University of Texas at Austin, 11/2019
- *Mathematical Physics seminar*, Rutgers University, New Jersey, 10/2019
- *Mathematical and Theoretical Physics seminar*, Jacobs University, Bremen, 9/2019
- *Zürich–Tübingen meeting in mathematical physics*, Universität Zürich, 11/2018
- *Mathematical Research Seminar*, Duke Kunshan University, 10/2018
- Oberseminar *Calculus of Variations and Applications*, LMU, München, 6/2018

Selected research visits

- **Jacobs University**, Bremen, Germany (15.–20.9.2019 and 15.–19.9.2020)
  Invited by Prof. Dr. Sören Petrat
- **Central China Normal University**, Wuhan, China (24.7.–2.8.2019)
  Invited by Prof. Dr. Avy Soffer and Prof. Dr. Xiaohua Yao
- **Duke Kunshan University**, Kunshan, China (26.8.–20.10.2018)
  Invited by Prof. Dr. Peter Pickl
- **Gran Sasso Science Institute**, L'Aquila, Italy (16.–21.4.2018)
  Invited by Dr. Serena Cenatiempo

Teaching experience

Lecturer

WiSe 34/25	*Mathematical Quantum Mechanics*, JGU Mainz
WiSe 23/24	*Mathematics I for Natural Scientists*, LMU Munich

Teaching assistant

WiSe 20/21	*Mathematics of quantum many-body systems II*, IST Austria
SoSe 20	*Mathematics of quantum many-body systems I*, IST Austria
WiSe 18/19	*Mathematical foundations I*, Duke Kunshan University
SoSe 18	Seminar *Funktionentheorie*, Universität Tübingen
WiSe 15/16	*Quantenmechanik*, LMU
WiSe 14/15	*Quantenmechanik*, LMU
SoSe 14	*Theoretische Mechanik*, LMU
SoSe 13	*Mathematik für Physiker II*, LMU
WiSe 12/13	*Mathematik für Physiker I*, LMU

Further education

2023	*Diversity in Leadership*	
	One-semester program on diversity and inclusion in the academic context, MCQST	
2017	*Teaching Mathematics*	
	Two-day seminar on university didactics in Mathematics, Universität Tübingen	
2013	*Mit Stimme und Körpersprache zum Erfolg*	
	Multi-day seminar on voice and body language for teaching, Elite Network of Bavaria	

Academic services

- Committee member *Association of Women in Mathematical physics* (3/2023–present) and *Austrian Association of Women in Mathematics* (11/2021–10/2022)

- Co-organizer *LMU–TUM Junior Researcher Seminar*, 2022–23

- Referee for *Communications in Partial Differential Equations*; *Mathematical Physics, Analysis and Geometry*; *Discrete and Continuous Dynamical Systems*; *Annales Henri Poincaré*; *Journal of Statistical Physics*; *Letters in Mathematical Physics.*

- Contribution to the IAMP News Bulletin: *Voices of women in mathematical physics: A series of five interviews* (IAMP News Bulletin, April 2022, pp. 53–66)

April 9, 2024