Marie-Charlotte Brandenburg

Curriculum Vitæ
Current as of December 7, 2020

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04103 Leipzig
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Education and Professional Experience

2020 – to date	**Max Planck Institute for Mathematics in the Sciences** Leipzig, Germany Ph.D. Student Research Group: Non-Linear Algebra Advisor: Rainer Sinn

2019 – 2020	**Berlin Mathematical School | Freie Universität Berlin**
	Ph.D. Student
	Research Groups:
	    Discrete Geometry
	    Discrete Methods in Algebraic Geometry
	Advisor: Rainer Sinn

2019	**Freie Universität Berlin** M.Sc. Mathematics Master Thesis: *Competitive Equilibrium and Lattice Polytopes* Advisor: Christian Haase
2016 – 2017	**Minodes GmbH** Data Analyst Business Intelligence
2017	**Freie Universität Berlin** B.Sc. Mathematics Bachelor Thesis: *A 4-Simple 4-Simplicial 8-Polytope* Advisor: Günter M. Ziegler

Preprint

2020	**Multivariate Volume, Ehrhart and h^*-Polynomials of Polytropes (`arXiv:2006.01920`)** joint work with Sophia Elia and Leon Zhang

Invited Talks

2020	Reseach Seminar Diescrete Geometry, Freie Universität Berlin, Germany *Multivariate Volume, Ehrhart and h^*-Polynomials of Polytropes*
2019	Reseach Seminar Algebra and Geometry, Otto-von-Guericke-Universität Magdeburg, Germany *Competitive Equilibrium and Lattice Polytopes*
2018	Colloquium Graduiertenkolleg Facets of Complexity, Berlin, Germany *Product-Mix Auctions, Competitive Equilibrium and Lattice Polytopes*

Posters

2019	Women in Algebra and Symbolic Computing, Bad Dürkheim, Germany *Multivariate Volume and Ehrhart Polynomials of Polytropes*

Teaching

2020	**Linear Algebra II**	
	Teaching Assistant	
	Bachelor course, Freie Universität Berlin	

2019	**Panorama der Mathematik**	
	Teaching Assistant	
	Bachelor course, Freie Universität Berlin	

2018	**Geometry**	
	Teaching Assistant	
	Bachelor/Master course, Freie Universität Berlin	

Service

2019   Co-organizer for the Workshop *AG+ Research Retreat*

Extended Stays

06/2019 –   **Max Planck Institute for Mathematics in the Sciences**
09/2019   Leipzig, Germany
            Research Group: Non-Linear Algebra

01/2019 –   **Simons Institute for the Theory of Computing**
02/2019   Berkeley, CA, USA
            Program: Geometry of Polynomials

Conferences and Workshops

06/2020   **Algebraic and Tropical Online Meetings,** online summer school
04/2020   **Algebraic Combinatorics Online Workshop,** online
01/2020   **11th Polymake Conference and Developer Meeting,** Leipzig, Germany
12/2019   **AG+ Research Retreat,** Döllnsee, Germany
12/2019   **Women in Algebra and Symbolic Computation,** Bad Dürkheim, Germany
12/2019   **Workshop on Polytopes and Discrete Geometry,** Berlin, Germany
10/2019   **Opening Conference of the Thematic Einstein Semester on Algebraic Geometry,** Berlin, Germany
10/2019   **Fall School of the Thematic Einstein Semester on Algebraic Geometry,** Berlin, Germany
09/2019   **Workshop On Discrete Geometry With A View Towards Symplectic And Tropical Geometry,** Cologne, Germany
09/2019   **Real Applied Algebraic Geometry,** Berlin, Germany
09/2019   **Convexity Day,** Leipzig, Germany
07/2019   **Non-Archimedean and Tropical Geometry,** Regensburg, Germany
06/2019   **Workshop on Non-Linear Algebra,** Leipzig, Germany
06/2019   **Network Games, Tropical Geometry and Quantum Communication,** Berlin, Germany
04/2019   **Sage Days 98 : Women in sage,** Archanes, Crete, Greece
02/2019   **Beyond Randomized Rounding and the Probabilistic Method,** Berkeley, CA, USA
01/2019   **Geometry of Polynomials Bootcamp,** Berkeley, CA, USA
11/2018   **Workshop on Algebraic Combinatorics,** Berlin, Germany
10/2018   **Workshop on Geometric and Topological Combinatorics,** Berlin, Germany

10/2018	**International Undergraduate Workshop,** Jerusalem, Israel
05/2018	**Combinatorics Day,** Leipzig, Germany
03/2018	**Workshop on Discrete Geometry and Topology,** Berlin, Germany