

ANTONIA FREIBERT

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PROFESSIONAL EXPERIENCES

Research Associate, **MPI for the Structure and Dynamics of Matter**, *Germany* Oct. 2020 - Present
Visiting Scientist, **Stanford University**, *USA* Aug. 2022 - Oct. 2022
Research Associate, **Kiel University**, *Germany* March 2020 - Sept. 2020
Visiting Scientist, **University College London**, *UK* Jan. 2020 - April 2020

EDUCATION

PhD Theoretical Chemistry, **Hamburg University**, **Heidelberg University** 2020 - Present
Non-Adiabatic Dynamics in Excited Molecular Systems and their Manifestation in Spectroscopic Observables
Supervisors: Prof. Dr. Nils Huse, Hamburg University
Co-Supervisor: Prof. Dr. Oriol Vendrell, Heidelberg University

MSc Chemical Research, **University College London**, Final Grade: Distinction 2018 - 2019
Simulating Non-Adiabatic Photochemistry using Direct Quantum Dynamics: The Diabatization Scheme in the DD-vMCG Method
Supervisors: Prof. Dr. Graham Worth, University College London

BSc Chemistry, **Kiel University**, Final Grade: 1.9 2015 - 2018
Globale Optimierung von TATA-Plattformen auf Oberflächen
Supervisors: Prof. Dr. Bernd Hartke, Kiel University

MSc Mathematics, **Kiel University**, Final Grade: 1.8 2015 - 2018
Donaldsons Beweis vom Theorem von Narasimhan und Seshadri
Supervisors: Prof. Dr. Hartmut Weiß, Kiel University

BSc Mathematics, **Hamburg University**, Final Grade: 2.1 2009 - 2014
Die projektive Ebene der Oktonionen
Supervisors: Prof. Dr. Oliver Goertsches, Hamburg University

Abitur (High School Diploma), **Gymnasium Steglitz Berlin**, Final Grade: 1.8 2009

TEACHING EXPERIENCE

Teaching Assistant for Mathematics for Chemists II, *Department of Chemistry*, **Kiel University** 2020
Teaching Assistant for Mathematics for Chemists II, *Department of Chemistry*, **Kiel University** 2017
Teaching Assistant for Mathematics for Chemists I, *Department of Chemistry*, **Kiel University** 2016
Teaching Assistant for Mathematics for Chemists II, *Department of Chemistry*, **Kiel University** 2016
Student Assistant (Introduction Weeks), *Department of Mathematics*, **Hamburg University** 2010 - 2011
Teaching Assistant for Analysis II, *Department of Mathematics*, **Hamburg University** 2010 - 2012
Teaching Assistant for Analysis I, *Department of Mathematics*, **Hamburg University** 2011
Teaching Assistant for Linear Algebra I, *Department of Mathematics*, **Hamburg University** 2010 - 2011
Student Assistant (graduation celebration), *Department of Mathematics*, **Hamburg University** 2010

EXTRA CURRICULARS

Mentor, **ILS - Institut für Lernsysteme GmbH**. July 2021 - Present
Volunteer Work, **Foodsharing Schleswig-Holstein e. V.** 2016 - 2018
Student representative, *Department of Mathematics*, **Hamburg University** 2009 - 2011

AWARDS AND GRANTS

Best poster award at HDQD 2022, Groningen	2022
Travel grant from the German Academic Exchange Service (DAAD)	2022

CONFERENCE CONTRIBUTIONS AND TALKS

7th HDQD Workshop, <i>Groningen</i> , Poster	July 2022
12th WATOC Congress, <i>Vancouver</i> , Poster	July 2022
Spectroscopy and Dynamics Group Meeting 2022, <i>online</i> , Poster	April 2022
CONEXS Conference 2022, <i>Newcastle</i> , Talk	March 2022
DPG Spring Meeting, <i>online</i> , Talk	March 2022
Virtual Winter School on Computational Chemistry, <i>online</i> , Poster	Feb. 2022
Nanoscience Colloquium, <i>Hamburg University/online</i> , Talk	Jan. 2022
57th Symposium on Theoretical Chemistry, <i>online</i> , Poster	Sept. 2021

JOURNAL PUBLICATIONS

1. **A. Freibert**, D. Mendive-Tapia, N. Huse and O. Vendrell, *Femtosecond X-ray Absorption Spectroscopy of Pyrazine at the Nitrogen K-edge: On the Validity of the Lorentzian Limit*, J. Phys. B: At. Mol. Opt. Phys. **54** (2021), 244003
2. G. Christopoulou, **A. Freibert** and G. A. Worth, *Improved algorithm for the direct dynamics variational multi-configurational Gaussian method*, J. Chem. Phys. **154** (2021), 124127
3. **A. Freibert**, J. M. Dieterich and B. Hartke, *Exploring self-organization of molecular tether molecules on a gold surface by global structure optimization*, J. Comput. Chem. **40** (2019), 1978 – 1989