

Dr. rer. nat. Christopher Wayne Wächtler

Berkeley, USA

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ACADEMIC POSITIONS

- 06/2022 – present** **University of California Berkeley, Postdoc**
Berkeley, USA *Department of Physics, Condensed Matter Theory Center*
Postdoc advisor: Prof. Dr. Joel E. Moore
- 11/2020 – 05/2022** **Max Planck Institute for the Physics of Complex Systems, Postdoc**
Dresden, GER *Finite Systems Division, Quantum Aggregates*
Postdoc advisor: Dr. Alexander Eisfeld
- 01/2017 – 11/2020** **Technical University Berlin, PhD Candidate**
Berlin, GER *Institute of Theoretical Physics, Computergestützte Materialphysik*
Supervisor: Dr. habil. Gernot Schaller (Prof. Dr. Tobias Brandes †2017)
- 10/2019 – 03/2020** **NTT Basic Research Laboratories, Intern**
Atsugi, JAP *Theoretical Quantum Physics Research Group*
Supervisors: Prof. Dr. William J. Munro and Dr. Victor M. Bastidas
- 10/2017 – 10/2017** **University of Maryland, Visiting Researcher**
10/2016 – 12/2016 *Institute for Physical Science and Technology*
College Park, USA Supervisor: Prof. Dr. Christopher Jarzynski
- 10/2014 – 09/2015** **Technical University Berlin, Student Researcher**
Berlin, GER *Institute of Theoretical Physics, Simulations and Theory of Complex Fluids*
Supervisors: Dr. Florian Kogler and Prof. Dr. Sabine H. L. Klapp

EDUCATION

- 01/2017 – 11/2020** **PhD in Theoretical Physics (Dr. rer. nat.), Technical University Berlin**
Berlin, GER *Nonequilibrium thermodynamics of critical phenomena (Summa Cum Laude)*
Supervisor: Dr. habil. Gernot Schaller (Prof. Dr. Tobias Brandes †2017)
- 10/2014 – 09/2016** **Master of Science in Physics (M. Sc.), Technical University Berlin**
Berlin, GER *Stochastic thermodynamics based on incomplete information*
Supervisors: Dr. Philipp Strasberg and Prof. Dr. Tobias Brandes
- 10/2010 – 09/2014** **Bachelor of Science in Physics (B. Sc.), Technical University Berlin**
Berlin, GER *Heteroepitaxial growth of C60 on substrates: A kinetic Monte Carlo study*
Supervisors: Dr. Nicola Kleppmann and Prof. Dr. Sabine H. L. Klapp
- 09/2012 – 12/2012** **University of California San Diego**
San Diego, USA Exchange student

TEACHING EXPERIENCE

- 07/2024** **Guest Lecturer, Physics for Scientists and Engineers, UC Berkeley**
- Independently designed and taught two lectures on magnetism for 50 students
 - Collaborated with the main lecturer on course objectives
- 04/2015 – 03/2016** **Teaching assistant, Mathematical Methods and Electrodynamics, TU Berlin**
- Led discussion sessions and provided additional instruction to 40 students
 - Graded assignments and exams, offering detailed feedback

GRANTS AND FELLOWSHIPS

(12/2024 – 11/2026)	<i>Marie-Skłodowska Curie Fellowship</i> from the European Commission	€165k
08/2024	<i>Exchange Program</i> from the Challenge Institute for Quantum Computing	€4k
07/2024 & 11/2024	<i>Leadership Academy Fellowship</i> from the German Scholars Organization	€11k
06/2022 – 05/2024	<i>Walter Benjamin Fellowship</i> from the German Research Foundation (DFG)	€90k
11/2020 – 05/2022	<i>Next Step Fellowship</i> from the Max-Planck-Gesellschaft	€100k
03/2020 – 03/2020	<i>Conference Stipend</i> from the German Academic Exchange Service (DAAD)	€2k
04/2013 – 10/2016	Studienstiftung des deutschen Volkes	€25k
09/2012 – 12/2012	<i>Student Exchange</i> from the German Academic Exchange Service (DAAD)	€20k

PUBLICATIONS (SUMMARY)

By now, I have authored 16 scientific journal articles, 11 of which I was the first and corresponding author, including three Letters. My publications span diverse journals, encompassing broad-scope ones like *Physical Review Letters*, *Physical Review Research*, and the *New Journal of Physics*, as well as specialized journals such as *Physical Review A*, *B*, and *E* and *Physical Review Applied*.

SCIENTIFIC MEETINGS (SUMMARY)

I have presented my research at major international physics conferences, such as the APS March Meeting and the DPG Frühjahrstagung, as well as specialized workshops and conferences. Additionally, I have participated in extended formats such as the KITP program. Notably, I was invited to speak at the *International Workshop for Young Researchers on the Future of Quantum Science and Technology* (FQST2020) in Tokyo and have been invited over 25 times to present my research in departmental colloquia and group seminars across Europe, the USA, and Asia. Moreover, Christoph Bruder (Basel), Andreas Nunnenkamp (Vienna), and I recently received funding to organize the first workshop on *Quantum Synchronization* at the MPI-PKS (Dresden) in 2025.

LEADERSHIP AND OUTREACH

2024	<i>Leadership Academy</i> from the German Scholars Organization	2 weeks
	Selected as participant of UC Berkeley's <i>Pathways to Scientific Teaching</i>	2 Days
	Workshop on <i>Successful Job Interviews and Networking</i> (UC Berkeley)	1 Day
2023	Selected as participant of UC Berkeley's <i>Scientific Leadership and Management Course</i>	3 Days
2021	<i>Wenn Elektronen den Bus nehmen – Effekte und Anwendungen des Elektronen-Shuttles</i>	
	Popular science talk as part of Dresden's Long Night of Science.	

MENTORING AND SUPERVISION

01/2024 – present	Meabh Allen (PhD Student), <i>Dissipation in critical spin chains</i> , UC Berkeley
02/2023 – present	Yi Zhao (PhD Student), <i>Quantum synchronization</i> , UC Berkeley
06/2024 – 07/2024	Chester Su (Summer Student), <i>Boundary-driven quantum systems</i> , UC Berkeley
06/2021 – 05/2022	Juan Nicolas Moreno (PhD Student), <i>Dissipatively induced synchronization</i> , MPI-PKS