# Oliver R. Stockdale **Curriculum Vitae**

# PERSONAL INFORMATION

PLACE & DATE OF BIRTH: Durham, United Kingdom | 4 September 1997

PLACE OF RESIDENCE: Heidelberg, Germany

CITIZENSHIP: British & Australian (naturalised)
EMAIL: oliver.stockdale@kip.uni-heidelberg.de

### **EDUCATION**

EDUCATION	
Oct 2020 - Present	Doctor of Philosophy in Physics, Kirchhoff-Institut für Physik, Universität Heidelberg, Germany (Anticipated completion: Sep 2024)
Apr 2019 - Sep 2020 Conferred: Mar 2021	Master of Philosophy in Physics, ARC Centre of Excellence in Future Low-Energy Electronics Technologies, The University of Queensland, Australia  Thesis title: Dynamics of vortex cluster crystallisation and single-vortex pinning in two-dimensional superfluids
Jan 2019	Australian and New Zealand School in Ultracold Physics, <b>The University</b> of Otago, New Zealand
Mar 2015 - Nov 2018	Bachelor of Advanced Science (Hons. I) in Physics, <b>The University of Queensland</b> , Australia Thesis title: Models of vortex dynamics in thin-film superfluid helium
Jan 2018	Canberra International Physics Summer School on <i>Topological Matter</i> , <b>The Australian National University</b> , Australia
SEP - DEC 2016	Exchange Program, University College London, United Kingdom
Jan 2010 - Nov 2014	Queensland Certificate of Education, Grace Lutheran College, Australia

### TEACHING EXPERIENCE

Semester 2, 2019	Tutor for PHYS3020 (Statistical Mechanics) at The University of Queensland
Semester 2, 2018 & Semester 1, 2019 & 2020	Laboratory Demonstrator for PHYS1002 (Electromagnetism and Modern Physics) at The University of Queensland
	Laboratory Demonstrator for PHYS1001 (Mechanics and Thermal Physics) at The University of Queensland
Semester 2, 2017	Tutor for PHYS1171 (Physical Basis of Biological Systems) at The University of Queensland
· · · · · · · · · · · · · · · · · · ·	Peer Assisted Study Session leader for PHYS1002 (Electromagnetism and Modern Physics) at The University of Queensland
Jan 2015 - Aug 2016	Academic Tutor at Grace Lutheran College

# SERVICE

Feb 2021 - Present	PhD Student Contributor at Physics World
Apr 2019 - Sep 2020	ARC Centre of Excellence in Future Low-Energy Electronics Technologies Special Governance Committee - Education and Training
May 2019 - Sep 2020	Chair, UQ Bose-Einstein Condensate Journal Club
May 2019 - Sep 2020	Volunteer at the UQ Physics Museum

# Conferences

Jan 2020	10 <sup>th</sup> International Conference on Spontaneous Coherence in Excitonic Sys-
	tems
	Contributed Talk
DEC 2018   23 <sup>rd</sup> Australian Institute of Physics Congress	
	Poster Presentation

# SCHOLARSHIPS AND AWARDS

, 0110 2111001111 0 11112	221111102 ~
Jan 2021	Recommendation for Dean's Award for Outstanding Higher Degree by Research Thesis, The University of Queensland
Jun 2019	Runner-Up, School of Mathematics and Physics 3-Minute Thesis Competition
Apr 2019 - Sep 2020	Research Training Program Stipend, Australian Government
Apr 2019 - Sep 2020	Research Training Program Tuition Fee Offset, Australian Government
Apr 2019 - Sep 2020	Research Higher Degree Top Up Scholarship, Australian Government
Feb - Mar 2019	Australian Research Council Centre of Excellence for Engineered Quantum Systems Work Experience Scholarship
Dec 2018 $\mid$	Best Poster by an undergraduate student, FLEET Annual Meeting
Jun 2016	The University of Queensland Student Exchange Scholarship
May 2016 & 2017 $\mid$	Winter Research Scholarship, The University of Queensland $(\times 2)$
Nov 2015 & 2017	Summer Research Scholarship, The University of Queensland $(\times 2)$
Jul 2015, Jul 2018, Dec $\begin{vmatrix} 2018 & 1 \\ 2018 & 1 \end{vmatrix}$	Dean's Commendation for Academic Excellence, The University of Queensland $(\times 3)$
Nov 2014	Runner-Up Dux of Grace Lutheran College

# Referees

Prof. Matthew J. Davis	Prof. Warwick P. Bowen
Head of Physics,	ARC Future Fellow,
The University of Queensland	The University of Queensland
mdavis@physics.uq.edu.au	wbowen@physics.uq.edu.au
(+61)733469824	(+61)733469425

# Publications (and Preprints)

- Feb 2021 O. R. Stockdale, M. T. Reeves, M. J. Davis, Dynamical mechanisms of vortex pinning in superfluid thin films. arXiv:2102.04712 (2021).
- OCT 2020 M. T. Reeves, K. Goddard-Lee, G. Gauthier, O. R. Stockdale, H. Salman, T. Edmonds, X. Yu, A. S. Bradley, M. Baker, H. Rubinsztein-Dunlop, M. J. Davis, T. W. Neely, *Emergence of off-axis equilibria in a quantum vortex gas.* arXiv:2010.10049 (2020).
- Jul 2020 O. R. Stockdale, M. T. Reeves, X. Yu, G. Gauthier, K. Goddard-Lee, W. P. Bowen, T. W. Neely, M. J. Davis, Universal dynamics in the expansion of vortex clusters in a dissipative two-dimensional superfluid. Physical Review Research 2, 033138 (2020).
- DEC 2019 Y. P. Sachkou, C. G. Baker, G. I. Harris, O. R. Stockdale, S. Forstner, M. T. Reeves, X. He, D. L. McAuslan, A. S. Bradley, M. J. Davis, W. P. Bowen, Coherent vortex dynamics in a strongly-interacting superfluid on a silicon chip. Science, 366, 1480 (2019).