

Curriculum Vitae – Professor Matthew John Davis

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Field of research – theory of ultracold quantum gases, incorporating

- Non-equilibrium and far-from-equilibrium dynamics of quantum gases;
- Superfluidity, vortices, and quantum turbulence;
- Dynamics of phase transitions and formation of topological defects;
- Relaxation of isolated quantum systems and quantum thermodynamics;
- Computational methods for quantum systems.

Qualifications

D. Phil, University of Oxford, United Kingdom, 2001.

B. Sc. (Hons) first class, University of Otago, New Zealand, 1997.

Professional history

2013 – present Professor, School of Mathematics and Physics, University of Queensland.

2015 JILA Visiting Fellowship, University of Colorado Boulder, USA.

2010 – 14 Australian Research Council Queen Elizabeth II Fellow, University of Queensland.

2009 – 12 Associate Professor, School of Mathematics and Physics, University of Queensland.

2005 – 08 Senior Lecturer, School of Physical Sciences, University of Queensland.

2003 – 05 Lecturer, School of Physical Sciences, University of Queensland.

2002 – 03 UQ Postdoctoral Research Fellow, School of Physical Sciences, University of Queensland.

2001 – 02 EPSRC Postdoctoral Research Fellow in Theoretical Physics, University of Oxford, UK.

1997 – 2001 D. Phil. student, Atomic and Laser Physics, University of Oxford, United Kingdom.

Major service and leadership roles

2023 – present Chair of Equity, Diversity, and Inclusion committee, School of Mathematics and Physics, UQ.

2023 – present Member of Physics, Chemistry and Biochemistry Panel, Marsden Fund, Royal Society of NZ.

2020 – 2023 Deputy Head of School of Mathematics and Physics, University of Queensland.

2017 – 2023 Head of Physics, School of Mathematics and Physics, University of Queensland.

2022 – present Translation Program Director, ARC Centre of Excellence for Future Low-Energy Electronics Technologies (FLEET)

2021 – present Senior Editorial Fellow, SciPost Physics.

2018 – present Divisional Associate Editor, Physical Review Letters, for Atomic, Molecular, and Optical Physics.

2017 – present Executive committee member, ARC Centre of Excellence for Future Low-Energy Electronics Technologies (FLEET)

2014 – present Executive Committee member, School of Mathematics and Physics, UQ (excluding 2015).

2018 – 19 Portfolio leader, Education and training, ARC Centre of Excellence for Engineered Quantum System (EQUS).

2016 – 2021 Editorial Fellow, SciPost Physics.

2011 – 2016 Chair, School of Mathematics and Physics Research Committee (excluding 2015).

Awards and Honours

2023 Commendation, Equity Diversity and Inclusion, University of Queensland Awards for Excellence

2021 Senior Editorial Fellow, SciPost Physics.

2018 Divisional Associate Editor, Physical Review Letters, for Atomic, Molecular, and Optical Physics.

2016 Editorial Fellow, SciPost Physics.

2016 Fellow of the American Physical Society

2015 American Physical Society Outstanding Referee

2015 JILA Visiting Fellowship, University of Colorado Boulder.

2011 Queensland Tall Poppy Award

2011 Australian Learning and Teaching Council Citation for Outstanding Contribution to Student Learning.

2010 University of Queensland Citation for Outstanding Contribution to Student Learning.

2007 University of Queensland Foundation Research Excellence Award.

2007 Engineering, Physical Sciences and Architecture Faculty Teaching Excellence Award.

1998 North Senior Scholarship, St John's College, University of Oxford.

1997 Commonwealth Scholarship to St John's College, University of Oxford.

1997 New Zealand Vice-Chancellor's Committee William Georgetti Scholarship.

1997 TV2 New Zealand Young Achievers Award.

1996 Prince of Wales Prize, University of Otago.
"Awarded annually by the University ... to the most outstanding student completing an undergraduate degree."

1996 Otago Branch of the Royal Society of New Zealand Prize.
"Awarded annually ... to the student adjudged to have demonstrated outstanding ability in the final year of the course of Bachelor of Science with Honours."

1996 University of Otago Postgraduate Scholarship. Beverly Bursary in Physics.

1995 Beverly Bursary in Physics, Beverly Scholarship in Physics, Staff Prize in Mathematics.

1995 Australian National University Vacation Scholarship in Theoretical Physics.

1994 Beverly Bursary in Physics.

1994 Robert Jack/New Zealand Institute of Physics Prize (top of second year physics.)

1993 New Zealand Institute of Chemistry Prize (top of first year chemistry.)

1992 New Zealand Top Scholar Bursary Physics (highest mark in New Zealand in high school physics.)

Career publications – summary bibliometrics

I have a total of 5239 citations from 95 publications in refereed journals currently listed on Clarivate Analytics Web of Science (10/12/2025), with an h-index of 38 (I have 38 papers with 38 or more citations), and a **mean of more than 50 citations per paper**. I have 31 papers with more than 50 citations, 13 of which have more than 100 citations. Full details at <https://www.webofscience.com/wos/author/rid/A-1464-2008>

Google Scholar lists a total of 8719 citations and an h-index of 45.

<https://scholar.google.com.au/citations?user=V7cou5MAAAAJ>

I aim to publish innovative and high-quality papers, rather than focussing on volume of research output. As lead theory author, I have published three research articles in the premier science research journals Nature (1) and Science (2) with experimental colleagues. I have published a further 23 papers in the most cited physics letters journal, Physical Review Letters.

Most significant publications (reverse chronological order)

1. 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**, and T. W. Neely, Turbulent Relaxation to Equilibrium in a Two-Dimensional Quantum Vortex Gas, *Physical Review X* **12**, 011031 (2022). [25 citations (88th percentile), IF 14.4] – *Explored the phase diagram of chiral vortex matter, and demonstrated that nonequilibrium vortex dynamics led to the equilibrium predicted by the maximum entropy principle – a first for agreement between experiment and the point vortex model.*

2. Y. P. Sachkou, C. G. Baker, G. I. Harris, O. R. Stockdale, S. Forstner, M. T. Reeves, Xin He, D. L. McAuslan, A. S. Bradley, **M. J. Davis**, and W. P. Bowen,
Coherent vortex dynamics in a strongly-interacting superfluid on a silicon chip,
Science **366**, 1480 (2019). [41 citations (87th percentile), IF 41.1]
– *First real-time observation and measurement of vortex cluster dynamics in a superfluid helium thin film, paving the way for devices based on superfluid circuits.*
3. G. Gauthier, M. T. Reeves, X. Yu, A. S. Bradley, M. Baker, T. A. Bell, H. Rubinsztein-Dunlop, **M. J. Davis**, and T. W. Neely,
Giant vortex clusters in a two-dimensional quantum fluid
Science **364**, 1264 (2019). [173 citations (99th percentile), IF 41.1]
– *First realisation of Onsager’s famous toy model of point vortices in 2D in the laboratory, paving the way for rigorous studies of 2D turbulence in this system.*
4. T. Simula, **M. J. Davis**, and K. Helmerson,
Emergence of Order from Turbulence in an Isolated Planar Superfluid,
Physical Review Letters **113**, 165302 (2014). [104 citations (94th percentile), IF 7.9]
– *Demonstrated the first physical realisation of Onsager’s famous toy model of point vortices in 2D, and identified a previously unknown microscopic mechanism for superfluid turbulence – vortex evaporative heating.*
5. J. Sabbatini, W. H. Zurek, and **M. J. Davis**,
Phase Separation and Pattern Formation in a Binary Bose-Einstein Condensate,
Physical Review Letters **107**, 230402 (2011). [93 citations (93rd percentile), IF 7.9]
– *Proposed realisation of the famous Kibble-Zurek scenario for a quantum phase transition. Led to experiment’s by Markus Oberthaler’s group in Heidelberg, Germany, and Ian Spielman at JQI/NIST, Maryland.*
6. T. W. Neely, E. C. Samson, A. S. Bradley, **M. J. Davis**, and B. P. Anderson,
Observation of vortex dipoles in an oblate Bose-Einstein condensate,
Physical Review Letters **104**, 160401 (2010). [340 citations (99th percentile), IF 7.9]
– *First observation and experimental and theoretical study of multi-core vortex dipoles in a Bose-Einstein condensate – the fundamental localized excitation carrying momentum in a superfluid. ISI Highly Cited.*
7. P. B. Blakie, A. S. Bradley, **M. J. Davis**, R. J. Ballagh, and C. W. Gardiner,
Dynamics and statistical mechanics of ultra-cold Bose gases using c-field techniques.
Advances in Physics **57**, 363 (2008). [496 citations (99th percentile), IF 18.0]
– *Invited review describing the c-field method and its application. This is significant as it persuaded many researchers to make use of this method, and is becoming a standard reference. ISI Highly Cited.*
8. C. N. Weiler, T. W. Neely, D. R. Scherer, A. S. Bradley, **M. J. Davis**, and B. P. Anderson,
Spontaneous vortices in the formation of Bose-Einstein condensates.
Nature **455**, 948 (2008). [465 citations (99th percentile), IF 40.1]
– *The first observation and understanding via theoretical simulation of spontaneous rotation of a BEC formed from the cooling of a Bose gas. ISI Highly Cited.*
9. P. B. Blakie and **M. J. Davis**,
Projected Gross-Pitaevskii Equation for harmonically confined Bose gases at finite temperature.
Physical Review A **72**, 063608 (2005). [94 citations (94th percentile), IF 2.9]
– *Enabled the simulation of the dynamics of trapped BECs at finite temperature, by determining how to apply the new c-field techniques to Bose gases as they exist in laboratories.*
10. C. W. Gardiner and **M. J. Davis**,
The stochastic Gross-Pitaevskii equation: II,

Journal of Physics B: Atomic, Molecular, and Optical Physics **36**, 4731 (2003).

[133 citations (97th percentile), IF 1.7]

– Provided the rigorous theoretical foundation of the c-field methodology, by connecting the computational classical field approach with Gardiner’s earlier work on quantum kinetic theory using phase space methods.

11. M. J. Davis, S. A. Morgan, and K. Burnett,
Simulations of Bose Fields at Finite Temperature.

Physical Review Letters **87**, 160402 (2001). [200 citations (96th percentile), IF 8.5]

– The first paper on c-field techniques for BECs, definitively establishing that the computational method can be quantitative, and that it was valid beyond commonly used mean-field theories.

Most Significant Research Contributions

1. Development of practical computational methods for nonequilibrium superfluids

The computational modelling of the nonequilibrium dynamics of quantum many-particle systems is an extremely difficult problem requiring substantial computational resources. Only in the past two decades has significant progress been made. Davis has played a leading role in the development of practical “classical field” (or c-field) computational methods for the nonequilibrium quantum and thermal dynamics of superfluids. These methods are now being widely used in the field of ultra-cold gases, as demonstrated by the hundreds of citations that Davis’s papers have received in this area. The methodology has enabled Davis to drive important advances in nonequilibrium dynamics.

Davis’s leadership is demonstrated in this area by co-authoring an invited review article in *Advances in Physics* (IF=37), and a book chapter on the topic, and led to him co-editing a book on nonequilibrium quantum gases “Quantum Gases: Finite Temperature and Non-Equilibrium Dynamics”. From a review: “This book should be the first reference point for learning about various theoretical approaches to describing quantum gases. The completeness and depth of the presentation are impressive.” – Wolfgang Ketterle, Nobel Laureate in Physics 2001.

2. Dynamics of phase transitions in Bose-Einstein condensates (BECs)

Determining how BECs emerge from a thermal gas of cold atoms is a significant problem in nonequilibrium dynamics. Before the observation of the phenomenon of Bose-Einstein condensation in atomic gases in 1995 (awarded a Nobel Prize in 2001), estimates for the condensate formation time ranged from near zero to infinite. Davis and collaborators made the first quantitative calculations of condensate formation times using kinetic theory, broadly in agreement with later experiments. Davis has continued to lead the field on this topic, having been approached by several experimental groups to compare his theoretical calculations of condensate formation with experimental data. A notable joint theory/experimental study was conducted entirely at the University of Queensland in 2011, which quantitatively analysed the differences in condensate formation following the adiabatic and sudden addition of a “dimple” trap. Jacob Sherson at the University of Aarhus in Denmark has recently built on this work.

In 2008 Davis performed a pioneering experimental and theoretical study of spontaneous vortices in BEC formation. This was the first quantitative use of the new c-field methods for nonequilibrium dynamics and was published with experimental collaborators Brian Anderson and CI Neely in *Nature* in 2008. In 2016 Davis was the lead author of a broad review of condensate formation in Bose gases for the book “Universal Themes of Bose-Einstein Condensation.”

3. Simulating laboratory models for quantum dynamics in the early universe

Following the Big Bang, the universe has undergone a series of symmetry breaking phase transitions, which are predicted to have resulted in topological defects and the formation of structure. Motivated by this problem, in the 1980s Kibble and Zurek proposed a mechanism for symmetry breaking in dynamical phase transitions. Such emergent phenomena generally occur in a wide range of physical systems, and indeed similar physics arises in the context of quantum Bose gases. In pioneering work, Davis and collaborators have

described a novel method of realising the quantum Kibble-Zurek mechanism in two-component Bose gases. This attracted the interest of Zurek himself and has resulted in collaborating with him on two publications. There has been growing experimental interest in this exciting topic, and in the past few years there have been ground-breaking new experiments on the Kibble-Zurek mechanism in Bose gases from the groups of Gabrielle Ferrari (Trieste), Jean Dalibard (Paris) and Zoran Hadzibabic (Cambridge).

4. Vortices and turbulence in two-dimensional superfluids

Davis's interest in nonequilibrium dynamics and the formation of topological defects naturally led to the study of vortex dynamics and turbulent flows in two-dimensional superfluids. A significant advance from this research has been to establish theoretically and experimentally that quasi-two-dimensional BECs are suitable systems for the characterisation of turbulence, and the identification of a new microscopic mechanism connected to turbulence – the evaporative heating of vortices. This work has led directly to the establishment of the point vortex model as being more than a toy model for atomic gas superfluids. Most recently, in 2019 Davis has published two papers in the journal *Science* on a joint experimental and theoretical study of vortex clusters, one in an atomic gas Bose-Einstein condensate, and one in a superfluid helium film.

5. Connecting theory and experiment in quantum gases

Many physicists believe that theoretical work should be strongly driven by experiment. Davis has an outstanding track record of effective interaction and collaboration with his experimental colleagues, co-authoring nineteen joint theory/experiment papers with ten different groups in his career. This includes working with some of the leaders in the field, such as Alain Aspect, the first person to experimentally demonstrate Einstein's "spooky action at a distance," Ted Hänsch, Nobel Laureate in Physics for the invention of laser frequency combs, and Eric Cornell, Nobel Laureate in Physics for the discovery of Bose-Einstein condensates. These strong interactions have led to both theory and experiment on BECs that has been more focused and definitive.

Davis's leadership is identified in many of these collaborations by being listed as the second-to-last author – where the senior experimentalist is the last author, including one paper in *Nature* (2008) and two in *Science* (2019).

Major research funding as Chief Investigator

I have been a Chief Investigator in three significant ARC Centre of Excellence grants, two that are current. I have held three individual fellowships in my career.

2026 -29 Quantum thermodynamics with many-body systems,
ARC Discovery Project DP260103158, funding of AUD\$606k,
M. J. Davis and J. Anders

2025-29 Controlling superfluid transport with spatially engineered dissipation,
ARC Discovery Project DP250102923, funding of AUD\$650k,
M. J. Davis and A. J. Daley

2023-27 Nonequilibrium vortex matter in a strongly interacting quantum fluid,
United States Army Research Office, funding of ~AUD\$1122k.
W. P Bowen, C. G. Baker, G. I. Harris, M. J. Davis, M. T. Reeves

2022-25 Quantum-enhanced atomic gravimetry for improved sensing capabilities,
Australia-India Strategic Research Fund, funding of AUD\$1250k
S. A. Haine, J. D. Close, J. J. Hope, M. J. Davis, A. G. White.

2020-23 Spin vortex dynamics in a ferromagnetic superfluid
ARC Discovery grant, DP200102239, funding of AUD\$480k.
M. J. Davis, T. W. Neely, M. Baker, P. B. Blakie, and D. M. Stamper-Kurn.

2019-22 Inertial sensing with a quantum gas phonon interferometer,
Commonwealth Defence Science and Technology Group, funding of ~AUD\$400k.
T.W. Neely, H. Rubinsztein-Dunlop, M. J. Davis, J. F Corney.

2018-25 **ARC Centre of Excellence for Engineered Quantum Systems (EQUS)**,
A. G. White et al., \$31.9m from the ARC.

2017-24 **ARC Centre of Excellence in Future Low-Energy Electronics Technologies (FLEET)**,
 M. Fuhrer et al., \$33.9m from the ARC.

2017-19 Nonequilibrium dynamics of vortices in thin-film superfluid helium,
 US Army Research Office grant, funding of ~AUD\$600k.
 W. P. Bowen, C. G. Baker, M. J. Davis.

2016-18 Nonequilibrium states of polariton superfluids,
 ARC Discovery grant, DP 160103311, funding of AUD\$435k.
 M. J. Davis and E. A. Ostrovskaya.

2011-13 Quantum equilibration.
 ARC Discovery grant, DP110101047, funding of AUD\$405k.
 K. V. Kheruntsyan and M. J. Davis. Partners: M. Rigol, G. Shylapnikov, J. Caux, N. van Druten.

2010-14 Ebb and flow of superfluids: Bose-Einstein condensates far from equilibrium.
 ARC Discovery grant and QEII Fellowship, DP1094025, funding of AUD\$635k.
 M. J. Davis. Partners: P. B. Blakie, B. P. Anderson.

2010 New-generation parallel-computing cluster for the mathematical and physical sciences.
 UQ Major Equipment and Infrastructure grant, AUD\$192k.
 A. Roberts, M. Davis, J. Alcock, H. Baumgardt, B. Burton, V. Challis, J. Grotowski, D. Kroese.

2008-10 **ARC Centre of Excellence for Quantum-Atom Optics**, grant CE0348178 from 2008–10.
 H. A. Bachor et al. Funding from ARC AUD\$6m, University of Queensland AUD\$570k.

2007 Spontaneous vortices in the formation of Bose-Einstein condensates
 UQ Foundation Research Excellence Award, AUD\$60k. Sole investigator.

2006 Superfluidity and Quantum Fluctuations in Bose-Einstein Condensates,
 University of Queensland New Staff Grant, 2006–7, AUD\$13k. Sole investigator.

2004 Nonlinear dynamics and chaos in Bose-Einstein condensates on atom chips.
 ARC Linkage International, grant LX0454394, from 2004–6, funding of AUD\$91k.
 H. Rubinsztein-Dunlop, C. J. Vale, M. J. Davis, C. Zimmerman, J. Fortágh.

2003-7 **ARC Centre of Excellence for Quantum-Atom Optics**, grant CE0348178 from 2003–7.
 H. A. Bachor et al. ARC AUD\$10.975m, UQ AUD\$750k, Queensland State Govt AUD\$750k.

2003-7 Quantum Atom Optics and Single Atom Detection with Micro-Bose-Einstein Condensates.
 ARC Discovery grant DP0343094 from 2003–7, funding of AUD\$1.39m.
 H. Rubinsztein-Dunlop, M. J. Davis, C. A. Holmes, N. R. Heckenberg, G. J. Milburn, K. Schwab.

2003 Application of novel computational techniques to Bose-Einstein condensates in optical lattices.
 University of Queensland Early Career Researcher Grant, funding of AUD\$29 993.
 J. F. Corney and M. J. Davis.

2002 Dynamical simulations of Bose fields at finite temperature, 01/5/2002–30/04/2005.
 University of Queensland Postdoctoral Fellowship, funding of salary plus AUD\$17000.

2001 Dynamical calculations of Bose fields at finite temperature, 12/03/2001 – 30/04/2002 (resigned).
 EPSRC (UK) Postdoctoral Fellowship GR/N24490/01, funding of £99 833.

Research supervision

Graduated nine PhD students as principal advisor: Andrew Ferris (2009), Andrew Sykes (2010), Christopher Foster (2012), Michael Garrett (2012), Jacopo Sabbatini (2012), Geoffrey Lee (2013), Jan Zill (2017), James Mills (2017), Chao Feng (2020).

Graduated four M. Phil students as principal advisor: Oliver Sandberg (2020), Oliver Stockdale (2021), Tim Harris (2023), Abithaswathi Muniraj Saraswathy (2024).

Graduated two M.Sc. students with 8-unit research project: Ramtin Aminteheri, Swilanji.

Three current PhD students as principal advisor: Charlotte Thomson, Mason Clark, Daniel Foshee.

Two PhD students withdrawn: Zhi-Tao Deng (2022), Tim Edmonds (2023).

Graduated fourteen honours students: Mark Dowling (2003), Chao Feng (2008), Sebastian Kish (2014), Oliver Sandberg (2017), Josh Guanzon (2018), Oliver Stockdale (2018), Tim Edmonds (2019), Tim Harris (2020), Liam Bond (2020), Jemima Goodhew (2021), Charlotte Quirk (2022), Owen Thompson (2023), Mason Clark (2025), Nick Jordinson (2025).

Supervisor for thirteen postdoctoral research fellows from 2005 – present.

Supervised 70+ undergraduate research projects since 2003.

Undergraduate teaching

Led the reform of first year physics teaching at the University of Queensland to an active learning paradigm, beginning with PHYS1001 in 2008. Continued teaching this course while an ARC QEII fellow.

Mentored several other staff in SMP on the implementation of active learning techniques, including attending lectures and providing written feedback.

Australian Learning and Teaching Council Citation for Outstanding Contribution to Student Learning, 2011.

University of Queensland Citation for Outstanding Contribution to Student Learning, 2010.

Engineering, Physical Sciences and Architecture Faculty Teaching Excellence Award, 2007.

PHYS3020: Statistical mechanics, 2004-2007.

Coordinator, lectured 75-100% of course each year.

PHYS2100: Dynamics, chaos, and special relativity, 2005-2009.

Lectured 1/3 of course, coordinated from 2006-9.

PHYS1171: Physical Basis of Biological Systems: 2004 - 2009

Gave 3-4 lectures each iteration over 11 semesters.

PHYS4055: Laser physics: 2006, 2006, 2008

Delivered 1-2 weeks of course on atom optics.

PHYS1001: Mechanics and Thermal Physics I: 2008-2014.

Coordinated the course including lectures and laboratories from 2008-12. Lectured half of the course and supervised one lab afternoon session every year.

SCIE2011: Perspectives in Science, 2014.

Designed and delivered 9 hours of physics specific sessions: Gravity module.

PHYS1002: Electromagnetism and Modern Physics: 2016 – present.

Coordinated and lectured most sections across several semesters, coordinated laboratories.

PHYS4040: Advanced Quantum Theory: 2016-2017

Coordinated and lectured 1/3 of course.

SCIE1000: Theory and Practice of Science: 2018 – 2019

Lectured 1/3 of one stream in 2018, half of one stream in 2019.

SCIE1100: Advanced Theory and Practice of Science: 2020 - 2024

Lectured 1/2 each semester. Coordinator in 2021 – 2024.

Professional memberships

2020 – present Australian Optical Society.

2015 – present Fellow, American Physical Society.

2004 – present Australian Institute of Physics. Committee member, Queensland branch 2009 – 10.

1998 – present Institute of Physics (United Kingdom).

Committee membership

2023 – present Chair, School of Mathematics and Physics Equity, Diversity, and Inclusion committee

2014 – present School of Mathematics and Physics Executive committee member (excluding 2015)

2017 – 2024 Executive committee member, ARC Centre of Excellence for Future Low-Energy Electronics Technologies (FLEET)

2018 – 2023 Member, School of Mathematics and Physics Equity, Diversity, and Inclusion committee

2018 – 2019 Portfolio leader, Education and training, ARC Centre of Excellence for Engineered Quantum System (EQUS).

2020 – 2022 EQUS Education and training committee member

2017 – 2020 Chair, FLEET Education and Training committee

2020 – 2024 Member, FLEET Education and Training committee

2017 – 2022 FLEET Equity and Diversity committee

2017 – 2022 FLEET Outreach committee

2016 – 2022 Member, School of Mathematics and Physics Teaching and Learning committee.

2016 – 2022 Member, School of Mathematics and Physics Research committee.

2011 – 2016 Chair of School of Mathematics and Physics Research Committee (excluding 2015).

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| 2011 – 2016 | Member, Faculty of Science Research Committee (excluding 2015). |
| 2009 – 2010 | Member, School of Mathematics and Physics Research Committee |
| 2009 – 2012 | Chair, SMP Information Technology and Communications Committee. |
| 2007 – 2008 | Joint coordinator of the computational science dual major in the B.Sc. |
| 2006 – 2010 | Physics Honours and Postgraduate Coursework coordinator and Academic Advisor. |
| 2005 – 2010 | Physics Curriculum committee. |
| 2005 – 2010 | Physics Colloquium committee |
| 2004 – 2010 | Chair, Physics Postgraduate Day committee. |
| 2004 – 2008 | School of Physical Sciences Teaching and Learning committee. |
| 2004 – 2013 | Physics PhD confirmation committee. |