

# Robert Harris

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- Research Interests** Quantum Error Correcting Codes, Randomised Benchmarking, Holographic Codes
- Education**
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| <i>PhD</i> , Physics<br>University of Queensland, Australia.<br>Thesis: Fault Tolerance and Error Benchmarking for Quantum Technologies<br>Supervisor: Prof Tom Stace | Jan 2017 - Present    |
| <i>MPhys</i> , Physics, First Class with Honours<br>University of Strathclyde, UK.  | Sept 2011 - July 2015 |
- Teaching Experience**
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| <i>COSC2500 Numerical Methods in Computational Science</i> , Tutor<br>University of Queensland | Semester 2 2017 |
| <i>PH151 Mechanics, Optics and Waves</i> , Tutorial Demonstrator<br>University of Strathclyde  | Semester 1 2014 |
- Pre-Prints**
- Harris RJ, McMahon NA, Brennen GK, Stace TM. Calderbank-Steane-Shor Holographic Quantum Error Correcting Codes. arXiv:1806.06472
  - Edmunds CL, Hempel C, Harris R, Ball H, Frey V, Stace TM, Biercuk MJ. Measuring and Suppressing Error Correlations in Quantum Circuits. arXiv:1712.04954. 2017 Dec 13.
- Talks**
- Holographic Quantum Error Correcting Codes with Cluster States  
Seminar, University College London, 22nd March 2018  
Seminar, University of Leeds, 28th February 2018  
Contributed Talk, Quantum Simulation and Computation, University of the Basque Country, 12th February 2018
- Posters**
- Hamiltonian Noise in Randomised Benchmarking  
EQuS Workshop, 25th September 2017
  - Distribution of Entangled Orbital Angular Momentum States in Optical Parametric Oscillators  
British Conference of Undergraduate Research, University of Nottingham, 14-15 April 2014
- Conferences and Schools Attended**
- Coogee 2018, Sydney, 30 Jan - 2 Feb 2018.
  - EQuS Workshop 2017, Hunter Valley, 25-27 September 2017
  - EQuS Winter School 2017, Sunshine Coast, 19-21 June 2017
  - 12th Canadian Student Conference Quantum Information, Jouvence, Canada, 7 - 9 June 2017

- 16th Canadian Summer School on Quantum Information, Jouvence, Canada, 28 May - 7 June 2017

### Visits

- Dan Browne, University College London, 19-23 March 2018
- Jiannis Pachos, University of Leeds, 26 Feb - 2 March 2018
- Tobias Osborne, Leibnitz University, 19-23 Feb 2018
- Gavin Brennen, Maquarie University, 11-15 December 2017

### References

Prof Tom Stace  
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