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Date of Birth: 8 May, 1983
Citizenship: Australia

Education

B. Sc. (hons), Australian National University, 2004.

Major: Theoretical Physics

Honours, first class: Quantum state tomography of BECs and atom lasers.

Research

Current research interests

Creating, measuring, and using entanglement between atoms in Bose-Einstein condensates

Correlations and dynamics of one-dimensional Bose gases

Atom-light entanglement

Accurate quantum simulations of dilute atomic gases

Working Papers

Atomic entanglement generation and detection using degenerate four-wave-mixing, with M. J. Davis, M. K. Olsen (2008).

Papers Under Review

Detection of continuous variable entanglement without coherent local oscillators, A. J. Ferris, M. K. Olsen, E. G. Cavalcanti, M. J. Davis, eprint arXiv:0806.3120 (2008).

Publications in Refereed Journals

Dynamical instabilities of Bose-Einstein condensates at the band edge in one-dimensional optical lattices, A. J. Ferris, M. J. Davis, R. W. Guersen, P. B. Blakie, A. C. Wilson, Phys. Rev. A **77** 012712 (2008).

Control of an atom laser using feedback, S. A. Haine, A. J. Ferris, J. D. Close and J. J. Hope, Phys. Rev. A **69**, 013605 (2004).

Honours & Awards

Scholarships

Australian Postgraduate Award, The University of Queensland, 2006-2008.

Distinguished Scholars Award, The University of Queensland, 2005.

National Undergraduate Scholarship, Australian National University, 2001-2004.

Awards

University Medal, Australian National University, 2004.

Bronze Medal, International Physics Olympiad, Leicester UK, 2000.

References

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<http://www.physics.uq.edu.au/people/ferris/cv.pdf>