

CURRICULUM VITAE

David J. E. Marsh

Date of Birth: 19 April 1987

Nationality: British

Email: d.marsh1@physics.ox.ac.uk

EDUCATION:

2009-2012

UNIVERSITY OF OXFORD (University College)

DPhil candidate in Theoretical Physics

2005-2009

THE UNIVERSITY OF EDINBURGH

Master of Physics (with Honours) Mathematical Physics
First Class Degree; graduated top of class

ACHIEVEMENTS & AWARDS:

- Tait Medal and Robert Schlapp Prize, University of Edinburgh, Sep 2009, highest marks in MPhys year.
- Nichol Foundation Scholarship, University of Edinburgh, Oct 2008, highest marks in Senior Honours year.
- EPSRC summer bursary, 2008. Anomalous Top Quark Decays, with Dr Einan Gardi, University of Edinburgh.
- Class Medal, Mathematical Physics Senior Honours, University of Edinburgh, 2007-2008, highest marks in year.
- Brodie Memorial Prize, University of Edinburgh, Jun 2006, highest marks in year.
- Margaret Campbell Scott Entrance Scholarship, University of Edinburgh, Oct 2005, highest entrance grades.
- At High School I came in the top ten in the UK in the Chemistry Olympiad, and won my school Physics Prize.

TEACHING & OUTREACH:

- Various tutoring at New College and Oriel College, Oxford, 2011
- Talk at the Oxford Centre for Buddhist Studies on the interaction of science and religion, invited by Prof. Richard Gombrich, Jun 2011.
- “Hitchiker’s Guide to Graduate School”, Oxford Astrophysics, an Introduction to the Standard Model of Particle Physics for Astronomers, Apr 2011.

- Public and Schools talk at Oxford Astrophysics, with Renée Hlozek, on “The Cosmic Shopping List”, Feb 2011.
- Podcast for 365 Days of Astronomy, with Renée Hlozek, on symmetries in the universe, Nov 2010.
- Martlett Society, University College, Oxford. Invited talk introducing symmetries in Physics, to a mixed graduate audience, Apr 2010.

CONFERENCES & SUMMER SCHOOLS:

- PiTP, IAS, Princeton, Jul 2011, with research talk.
- Euclid Meeting, Munich, Feb 2011, joined theory working group.
- UniverseNet, Lecce, Sep 2010, with research talk.
- BUSSTEPP, Swansea University, Aug 2010, with research talk.
- Parma International School of Theoretical Physics, Sep 2008.

INVITED TALKS:

- University of Oxford, Particle Phenomenology Journal Club, May 2011 & May 2010.
- University of Nottingham, Particle Theory and Cosmology Seminar, Feb 2011.
- University of Edinburgh, Particle Theory Group Seminar, Jan 2011.
- University of Stockholm, Astrophysics, Nov 2010.
- University of Oxford, “Hitchhiker’s Guide to Graduate School”, Apr 2010.

SKILLS TRAINING & OTHER INTERESTS:

- Poster and Presentation Skills course, Oxford University Computing Services, Jun 2011.
- President, Oxford University Buddhist Society, 2010-2011.
- Entertainments Officer, Weir Common Room, University College, Oxford, 2010-2011.
- Social Secretary, Edinburgh University Physics Society, 2007-2008.
- Portobello Buddhist Priory Sangha, Edinburgh, 2005-2009.
- Chief Scouts Award, 2003.

ACADEMIC PUBLICATIONS & PREPRINTS:

1. Marsh, D. J. E., *Axiverse Extended: Vacuum destabilization, early dark energy and cosmological collapse*, Phys. Rev. D. **83** 123526 (2011).
2. Marsh, D. J. E., Ferreira, P. G., *Ultralight scalar fields and the growth of structure in the Universe*, Phys. Rev. D **82** 103528 (2010).
3. Marsh D. J. E. *et al*, *Ultralight Axions: Degeneracies with Massive Neutrinos and Forecasts for Future Cosmological Observations*, (2011, in prep).
4. Euclid Review Document.

ABOUT ME:

Outside of academic and university life I have been a keen skateboarder for the last ten years. This involves a strong sense of community, particularly in Oxford, where I am involved in fund raising for a skatepark, and in Liverpool, where I have helped build a skatepark. It also involves me with my second greatest passion, which is travelling. I have visited many countries all over the world to pursue skateboarding, and always enjoy the camaraderie with strangers on such trips. I am also an avid reader of classical and contemporary literature, philosophy, religion, poetry, and popular science. I have read poetry at evenings in Oxford, and studied philosophy of science at Edinburgh. I am a practising Zen Buddhist, read widely in this area, and am always keen to find a Buddhist Sangha wherever I live. I was once a chef as a part time job (Neighbourhood, Liverpool, 2003-2008), and learned a passion for food, which I maintain in my healthy cooking at home.
