

# Curriculum Vitae

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Simon St.John-Green

PhD Student

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EDUCATION 2011–Current **University of Southampton**, EPSRC funded PhD.  
- Supervisor: Prof. Brita Nucinkis,  
Brita.Nucinkis@rhul.ac.uk  
2007–2011 **University of Warwick**, MMATH 1<sup>st</sup> Class.  
- Masters project title: Techniques for calculating the Hausdorff dimension  
of sets generated by iterated function schemes.  
Supervisor: Prof. M. Pollicott,  
M.Pollicott@warwick.ac.uk

PUBLICATIONS - Centralisers in Houghton's Groups (2012, to appear Proc. Edinburgh  
Math. Soc.)  
arxiv.org/abs/1207.1597  
- Finiteness Conditions for Mackey and Cohomological Mackey Functors  
(2013)  
arxiv.org/abs/1310.6262  
- On the Gorenstein and  $\mathfrak{F}$ -cohomological dimensions (2013)  
arxiv.org/abs/1311.6156  
- Bredon–Poincaré duality groups (2013)  
arxiv.org/abs/1311.7629

RESEARCH INTERESTS My interests center around discrete group actions and cohomological in-  
variants, and often involve combining geometric group theory, homological  
algebra and group cohomology. I am particularly interested in:  
- Invariants associated to proper group actions, including the  $\mathfrak{F}$ -  
cohomological dimension and Gorenstein cohomological dimension.  
- Classifying spaces for families of subgroups and Bredon cohomology, es-  
pecially Bredon cohomology with coefficients either Mackey functors or  
cohomological Mackey functors.  
- Poincaré duality groups and their generalisations.  
- Houghton groups.

- TALKS
- *Proper actions and Mackey functors*, Royal Holloway University of London, March 2014.
  - *Proper actions and Mackey functors*, Pure Seminar, University of Southampton, March 2014.
  - *A long exact sequence relating the group cohomology, complete cohomology, and Gorenstein cohomology*, Geometric Group Theory Seminar, University of Southampton, February 2014.
  - *On the Gorenstein and  $\mathfrak{F}$ -cohomological dimensions of groups*, Lunchtime Seminar, University of Southampton, February 2014.
  - *Houghton's Groups*, 3 talks, Geometric Group Theory Seminar, University of Southampton, October 2013.
  - *Bredon–Poincaré Duality Groups*, Postgraduate Group Theory Conference, University of Manchester, July 2013.
  - Regular talks at University of Southampton Postgraduate Seminar, 2011–2013.
- CONFERENCES
- Groups and Geometry in the South East, University College London, October 2013.
  - Classifying spaces, loop spaces and finiteness, University of Copenhagen, October 2013.
  - Postgraduate Group Theory Conference, University of Manchester, July 2013.
  - LMS Symposium on Geometric and Cohomological Group Theory, Durham University, August 2013.
  - Cohomology in Profinite Groups, Royal Holloway University of London, June 2013.
  - Groups and Geometry in the South East, University of Southampton, December 2012.
  - Postgraduate Group Theory Conference, University of York, July 2012.
  - Topology and Groups, Summer School and Conference, Freie Universität Berlin Berlin, June 2012.
  - Groups and Geometry in the South East, University of Oxford, February 2012.
  - Group Theory Mini Meeting, University of Southampton, October 2011.
- TEACHING
- Calculus I and Calculus II, University of Southampton 2011–2013.
  - Supervisor for 8 first year students (mostly calculus and linear algebra), University of Warwick 2010–2011,
  - Analysis I Peer Tutor, University of Warwick 2008–2009.
  - Tutored various private pupils, from GCSE to undergraduate level.
- ADDITIONAL
- Awarded URSS Scholarship to investigate image sonification, Physics Department, University of Warwick, Summer 2010.
  - Keen programmer, proficient in Python, C++ and Java.
  - Organised reading groups around algebraic topology and homological algebra.
- REFERENCES
- Academic Supervisor
- Prof. Brita Nucinkis, Brita.Nucinkis@rhul.ac.uk
- Research
- Prof. Ian Leary, I.J.Leary@soton.ac.uk
- Further references available on request.