Christopher C. Lovell

Curriculum Vitae

University of Sussex
Brighton, UK
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Education

2015–2019   **Ph.D. Astronomy, Modelling Galaxy Formation and Evolution during the Epoch of Reionisation and Beyond**.
Astronomy Centre, School of Mathematical and Physical Sciences, University of Sussex
Advisors: Prof. Peter Thomas & Dr. Stephen Wilkins
The focus of my research is on using both semi-analytic and hydrodynamic simulations of galaxy evolution to model galaxies during the first few billion years of cosmic history.

2013   **Cardiff Undergraduate Research Opportunities Programme (CUROP)**, *School of Physics and Astronomy*, Cardiff University.
Advisor: Dr. Ian Harrison
Summer research placement within the Cosmology group on quantifying extreme cosmological voids and their potential to provide cosmological constraints.

2009–2013   **MPhys Astrophysics**, *School of Physics and Astronomy*, Cardiff University.
Advisor: Prof. Peter Coles
First-class honours. Masters project on using extreme value statistics to investigate massive clusters in cosmological simulations

First-Author Publications

2017   **Characterising and Identifying Galaxy Protoclusters**.
Christopher C. Lovell, Peter A. Thomas, Stephen M. Wilkins
arxiv:1710.02148
Accepted, Monthly Notices of the Royal Astronomical Society

Co-Authored Publications

2017   **Dust Obscured Star Forming Galaxies in the Early Universe**.
Stephen M. Wilkins, Yu Feng, Tiziana Di Matteo, Rupert Croft, Christopher C. Lovell, Peter Thomas
arxiv:1710.01976
Accepted, Monthly Notices of the Royal Astronomical Society

2017   **The properties of the first galaxies in the BLUETIDES simulation**.
Stephen M. Wilkins, Yu Feng, Tiziana Di-Matteo, Rupert Croft, Christopher C. Lovell, Dacen Waters
arxiv:1704.00954
Accepted, Monthly Notices of the Royal Astronomical Society

2016   **The Photometric Properties of Galaxies in the Early Universe**.
Stephen M. Wilkins, Yu Feng, Tiziana Di-Matteo, Rupert Croft, Elizabeth R. Stanway, Andrew Bunker, Dacen Waters, Christopher C. Lovell
arxiv:1605.05044
Accepted, Monthly Notices of the Royal Astronomical Society

Non-refereed Publications

2018   **Learning the Relationship between Galaxy Spectra and their Star Formation Histories**.
Christopher C. Lovell, Viviana Acquaviva, Stephen M. Wilkins, Peter A. Thomas, In prep.

Invited Talks

March 2018   **University of California, Santa Cruz**.
Characterising and Identifying Galaxy Protoclusters

Work Experience

2013–2015   **Data Scientist**, *Bank of England*, London.
Graduate analyst in the IT department, before moving to the Data Lab as a Data Scientist. I worked on text analytics projects using techniques such a latent dirichlet allocation to perform topic modelling on large text corpora.

2015–Present   **Popular Science Writer**, *Astrobites*.
Astrobites provides accessible summaries of the latest research papers in Astronomy and Astrophysics. Since September 2015 I have produced 14 articles that have been viewed over twelve thousand times, and edited and mentored other authors.

2016   **Associate Tutor**, *University of Sussex*.
Performed marking and workshop supervision for a first year introductory Python course. Duties included marking and feedback on submitted scripts, and supervision in exercise classes.

2017–Present   **Brilliant Club Tutor**, *Scholars Programme*.
I taught an intensive 6 week course on processes in galaxy evolution. The scheme required the design from scratch of a course intended for secondary school age students, the delivery of that course, communication with students and teachers, and marking and assessment of submissions.