

Oliver Newton

Curriculum Vitæ

Institute for Computational Cosmology
Ogden Centre West, Durham University
Durham, DH1 3LE
✉ oliver.j.newton@durham.ac.uk
🐦 [MusicalNeutron](#)
🌐 [musicalneutron](#)
🆔 0000-0002-2769-9507

Education

- 2015– **PhD**, *Institute for Computational Cosmology*, Durham, UK.
Supervisors: Prof. Adrian Jenkins and Prof. Carlos Frenk
- 2010–2014 **BSc MPhys**, *University of Warwick*, Coventry, UK, *1st Class (Honours)*.
Masters project: Determining the fundamental properties of Higgs candidates at the LHC

Employment & voluntary work

Vocational

- 2014–2015 **Graduate Trading Platform Engineer**, *Fidessa*, Woking.

Charity Board of Trustees

- 2014– **Founding trustee & Treasurer**, *UniBrass Foundation* (reg. no. 1,159,359).
Manage an annual budget of $\sim\pounds 30$ k in support of the annual University Brass Band Championships of Great Britain and Northern Ireland. Ensure charity is compliant with all legal obligations.

Conference contributions

Contributed talks

- Jan 2019 **DEX XV**, Edinburgh, UK.
Constraints on the mass of the thermal relic warm dark matter particle
- Dec 2018 **VIRGO Consortium meeting**, Leiden University, Netherlands.
Constraints on the mass of the thermal relic warm dark matter particle
- Aug 2018 **XXX IAU General Assembly**, Vienna, Austria.
Constraining the mass of the WDM particle using estimates of the total satellite population of the Milky Way
- Jan 2018 **DEX XIV**, Durham, UK.
The total satellite population of the Milky Way
- Dec 2017 **VIRGO Consortium meeting**, MPA Garching, Munich, Germany.
The total satellite population of the Milky Way
- July 2017 **National Astronomy Meeting**, Hull, UK.
The total satellite population of the Milky Way
- Dec 2016 **VIRGO Consortium meeting**, Durham, UK.
MW satellite galaxies: how many could there be?

Posters

- Aug 2018 **XXX IAU General Assembly**, Vienna, Austria.
Constraining the mass of the WDM particle using estimates of the total satellite population of the Milky Way

Teaching/supervising experience

- 2018– Co-supervising a 4th year student's master's thesis
- 2017–2018 Co-supervisor of a 4th year student's master's thesis titled 'Studying the dark matter distribution of the Local Group using dwarf galaxies.'

Committees

2018– **Small Galaxies, Cosmic Questions LOC**, *Member*, Durham, UK.

Member of the Local Organising Committee for the “Small Galaxies, Cosmic Questions” conference to be held in August 2019

2016–2017 **Postgraduate Journal Club**, *Co-convenor*, Durham, UK.

Coordinated a weekly meeting of postgraduate students to discuss recent papers and share knowledge.

Professional memberships

May 2017– Fellow of the Royal Astronomical Society

Outreach

Events

Oct 2018 **Celebrate Science**, Durham, UK.

Galaxy Makers

Apr 2018 **Schools Science Festival**, Durham, UK.

Galaxy Makers

Oct 2017 **Celebrate Science**, Durham, UK.

Galaxy Makers

Apr 2017 **Schools Science Festival**, Durham, UK.

Galaxy Makers

Jul 2016 **Royal Society Summer Science Exhibition**, London, UK.

Galaxy Makers

Activity development

2015–2016 **Galaxy Makers**, Durham, UK.

Developed design ideas and ran the constituent *EAGLE* volumes that were visualised in the final exhibit.

Computer skills

Python, L^AT_EX, TCL, SQL, Microsoft Office suite

Publications

2018 Oliver Newton, Marius Cautun, Adrian Jenkins, et al. The total satellite population of the Milky Way. *MNRAS*, 479(3):2853–2870, September 2018.

Oliver Newton, Marius Cautun, Adrian Jenkins, et al. The Milky Way's total satellite population and constraining the mass of the warm dark matter particle. *arXiv e-prints*, arXiv:1809.09625, September 2018.

Oliver Newton and Marius Cautun. MW Satellite LF: V1.0.0 release. Zenodo, March 2018.