

# Samuel Hinton

PhD Candidate, samuelreay@gmail.com, CosmicCoding.com.au

## Publications

### Core Author

BARRY and the BAO model comparison

**Hinton, Samuel R.**, Cullan Howlett, and Tamara M. Davis MNRAS 493.3 (Apr. 2020) pp. 4078–4093

Pippin: A pipeline for supernova cosmology

**Hinton, Samuel** and Dillon Brout Journal of Open Source Software 5.47 (2020) p. 2122. *The Open Journal*

Can redshift errors bias measurements of the Hubble Constant?

Davis, Tamara M. et al. MNRAS (Sept. 2019) p. 2279

Steve: A Hierarchical Bayesian Model for Supernova Cosmology

**Hinton, S. R.** et al. The Astrophysical Journal 876.1 (Apr. 2019) p. 15. *American Astronomical Society*

Measuring the 2D baryon acoustic oscillation signal of galaxies in WiggleZ: cosmological constraints

**Hinton, S. R.** et al. MNRAS 464 (Feb. 2017) pp. 4807–4822

ChainConsumer

**Hinton, S. R.** JOSS 1.4 (Aug. 2016). *The Open Journal*

Marz: Manual and automatic redshifting software

**Hinton, S.R.** et al. Astronomy and Computing 15 (2016) pp. 61–71

### Science Contributions

OzDES multi-object fibre spectroscopy for the Dark Energy Survey: Results and second data release

Lidman, C. et al. MNRAS (May 2020)

First cosmology results using type Ia supernovae from the Dark Energy Survey: the effect of host galaxy properties on supernova luminosity

Smith, M. et al. MNRAS 494.3 (Apr. 2020) pp. 4426–4447

First Cosmology Results using Type Ia Supernovae from the Dark Energy Survey: Constraints on Cosmological Parameters

Abbott, T. M. C. et al. ApJ 872.2, L30 (Feb. 2019) p. L30

First Cosmology Results Using SNe Ia from the Dark Energy Survey: Analysis, Systematic Uncertainties, and Validation

Brout, D. et al. ApJ 874.2, 150 (Apr. 2019) p. 150

First Cosmology Results Using Type Ia Supernovae from the Dark Energy Survey: Photometric Pipeline and Light-curve Data Release

Brout, D. et al. ApJ 874.1, 106 (Mar. 2019) p. 106

First cosmology results using Type Ia supernova from the Dark Energy Survey: simulations to correct supernova distance biases

Kessler, R. et al. MNRAS 485.1 (May 2019) pp. 1171–1187

First cosmology results using Type Ia supernovae from the dark energy survey: effects of chromatic corrections to supernova photometry on measurements of cosmological parameters

Lasker, J. et al. MNRAS 485.4 (June 2019) pp. 5329–5344

First cosmological results using Type Ia supernovae from the Dark Energy Survey: measurement of the Hubble constant

Macaulay, E. et al. MNRAS 486.2 (June 2019) pp. 2184–2196

- OzDES multifibre spectroscopy for the Dark Energy Survey: 3-yr results and first data release  
Childress, M. J. et al. *Monthly Notices of the Royal Astronomical Society* 472 (Nov. 2017) pp. 273–288
- OzDES multifibre spectroscopy for the Dark Energy Survey: first-year operation and results  
Yuan, F. et al. *Monthly Notices of the Royal Astronomical Society* 452 (Sept. 2015) pp. 3047–3063

## Infrastructure / Data Contributions

- Studying Type II supernovae as cosmological standard candles using the Dark Energy Survey  
de Jaeger, T. et al. *MNRAS* (May 2020)
- DES16C3cje: A low-luminosity, long-lived supernova  
Gutiérrez, C. P. et al. *MNRAS* (May 2020)
- The mystery of photometric twins DES17X1boj and DES16E2bjy  
Pursiainen, M. et al. *MNRAS* 494.4 (Apr. 2020) pp. 5576–5589
- Supernova Host Galaxies in the Dark Energy Survey: I. Deep Coadds, Photometry, and Stellar Masses  
Wiseman, P. et al. *MNRAS* (May 2020)
- Quasar Accretion Disk Sizes from Continuum Reverberation Mapping in the DES Standard-star Fields  
Yu, Zhefu et al. *ApJS* 246.1, 16 (Jan. 2020) p. 16
- A joint SZ-Xray-optical analysis of the dynamical state of 288 massive galaxy clusters  
Zenteno, A. et al. *MNRAS* (May 2020)
- Cosmological Constraints from Multiple Probes in the Dark Energy Survey  
Abbott, T. M. C. et al. *Phys. Rev. Lett.* 122 (17 May 2019) p. 171301. *American Physical Society*
- C IV black hole mass measurements with the Australian Dark Energy Survey (OzDES)  
Hoormann, J. K. et al. *MNRAS* 487.3 (Aug. 2019) pp. 3650–3663
- Dark Energy Survey year 1 results: Cosmological constraints from galaxy clustering and weak lensing  
Abbott, T. M. C. et al. *Phys. Rev. D* 98 (4 Aug. 2018) p. 043526. *American Physical Society*
- The Dark Energy Survey: Data Release 1  
Abbott, T. M. C. et al. *ApJS* 239, 18 (Dec. 2018) p. 18
- The WiggleZ Dark Energy Survey: final data release and the metallicity of UV-luminous galaxies  
Drinkwater, M. J. et al. *Monthly Notices of the Royal Astronomical Society* 474 (Mar. 2018) pp. 4151–4168
- Dark Energy Survey year 1 results: Galaxy clustering for combined probes  
Elvin-Poole, J. et al. *Phys. Rev. D* 98 (4 Aug. 2018) p. 042006. *American Physical Society*
- Dark Energy Survey Year 1 Results: Cross-Correlation Redshifts - Methods and Systematics Characterization  
Gatti, M. et al. *Monthly Notices of the Royal Astronomical Society* (Feb. 2018)
- DES science portal: Computing photometric redshifts  
Gschwend, J. et al. *Astronomy and Computing* 25 (Oct. 2018) pp. 58–80
- Dark Energy Survey Year 1 Results: redshift distributions of the weak-lensing source galaxies  
Hoyle, B et al. *Monthly Notices of the Royal Astronomical Society* 478.1 (2018) pp. 592–610
- Quasar Accretion Disk Sizes from Continuum Reverberation Mapping from the Dark Energy Survey  
Mudd, D. et al. *ApJ* 862, 123 (Aug. 2018) p. 123
- Rapidly evolving transients in the Dark Energy Survey  
Pursiainen, M et al. *Monthly Notices of the Royal Astronomical Society* 481.1 (2018) pp. 894–917
- The Taipan Galaxy Survey: Scientific Goals and Observing Strategy  
da Cunha, E. et al. *PASA* 34, e047 (Oct. 2017) e047
- Discovery of a  $z = 0.65$  post-starburst BAL quasar in the DES supernova fields  
Mudd, D. et al. *Monthly Notices of the Royal Astronomical Society* 468 (July 2017) pp. 3682–3688
- A Study of Quasar Selection in the Supernova Fields of the Dark Energy Survey  
Tie, S. S. et al. *AJ* 153, 107 (Mar. 2017) p. 107

The 2-degree Field Lensing Survey: design and clustering measurements

Blake, C. et al. *Monthly Notices of the Royal Astronomical Society* 462 (Nov. 2016) pp. 4240–4265

## In Journal Review

Increasing the census of L and T dwarfs in wide binary and multiple systems using Dark Energy Survey DR1 and Gaia DR2 data

dal Ponte, M. et al. *arXiv e-prints*, *arXiv:2001.11015* (Jan. 2020) *arXiv:2001.11015*

Chemical Analysis of the Ultra-Faint Dwarf Galaxy Grus II. Signature of high-mass stellar nucleosynthesis

Hansen, T. T. et al. *arXiv e-prints*, *arXiv:2005.10767* (May 2020) *arXiv:2005.10767*

Is diffuse intracluster light a good tracer of the galaxy cluster matter distribution?

Sampaio-Santos, H. et al. *arXiv e-prints*, *arXiv:2005.12275* (May 2020) *arXiv:2005.12275*

Supernova Siblings: Assessing the Consistency of Properties of Type Ia Supernovae that Share the Same Parent Galaxies

Scolnic, D. et al. *arXiv e-prints*, *arXiv:2002.00974* (Feb. 2020) *arXiv:2002.00974*

Milky Way Satellite Census – II. Galaxy-Halo Connection Constraints Including the Impact of the Large Magellanic Cloud

Nadler, E. O. et al. *arXiv e-prints*, *arXiv:1912.03303* (Dec. 2019) *arXiv:1912.03303*

First Cosmology Results Using Type Ia Supernovae From the Dark Energy Survey: Survey Overview and Supernova Spectroscopy

D'Andrea, C. B. et al. *arXiv e-prints* (Nov. 2018)

Quasar Accretion Disk Sizes from Continuum Reverberation Mapping in the DES Standard Star Fields

Yu, Z. et al. *arXiv e-prints* (Nov. 2018)