

# Samuel Hinton

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

## Publications

### Core Author

Pippin: A pipeline for supernova cosmology

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

BARRY and the BAO model comparison

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

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)

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

Scolnic, D. et al. *ApJ* 896.1, L13 (June 2020) p. L13

First Cosmology Results using Supernovae Ia from the Dark Energy Survey: Survey Overview, Performance, and Supernova Spectroscopy

Smith, M. et al. *AJ* 160.6, 267 (Dec. 2020) p. 267

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

The host galaxies of 106 rapidly evolving transients discovered by the Dark Energy Survey

Wiseman, P. et al. *MNRAS* 498.2 (Oct. 2020) pp. 2575–2593

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

- The first Hubble diagram and cosmological constraints using superluminous supernovae  
Inserra, C. et al. *MNRAS* (Apr. 2021)
- Is diffuse intracluster light a good tracer of the galaxy cluster matter distribution?  
Sampaio-Santos, H. et al. *MNRAS* 501.1 (Feb. 2021) pp. 1300–1315
- STRIDES: Spectroscopic and photometric characterization of the environment and effects of mass along the line of sight to the gravitational lenses DES J0408-5354 and WGD 2038-4008  
Buckley-Geer, E. J. et al. *MNRAS* 498.3 (Nov. 2020) pp. 3241–3274
- Increasing the census of ultracool dwarfs in wide binary and multiple systems using Dark Energy Survey DR1 and Gaia DR2 data  
dal Ponte, M. et al. *MNRAS* 499.4 (Dec. 2020) pp. 5302–5317
- Studying Type II supernovae as cosmological standard candles using the Dark Energy Survey  
de Jaeger, T. et al. *MNRAS* (May 2020)
- Validation of selection function, sample contamination and mass calibration in galaxy cluster samples  
Grandis, S. et al. *MNRAS* 498.1 (Oct. 2020) pp. 771–798
- Dark Energy Survey identification of a low-mass active galactic nucleus at redshift 0.823 from optical variability  
Guo, Hengxiao et al. *MNRAS* 496.3 (Aug. 2020) pp. 3636–3647
- DES16C3cje: A low-luminosity, long-lived supernova  
Gutiérrez, C. P. et al. *MNRAS* (May 2020)
- Chemical Analysis of the Ultrafaint Dwarf Galaxy Grus II. Signature of High-mass Stellar Nucleosynthesis  
Hansen, T. T. et al. *ApJ* 897.2, 183 (July 2020) p. 183
- The impact of spectroscopic incompleteness in direct calibration of redshift distributions for weak lensing surveys  
Hartley, W. G. et al. *MNRAS* 496.4 (Aug. 2020) pp. 4769–4786
- Design and rationale of the COVID-19 Critical Care Consortium international, multicentre, observational study  
Li Bassi, Gianluigi et al. *BMJ Open* 10.12 (2020). *British Medical Journal Publishing Group*
- Constraints on the Physical Properties of GW190814 through Simulations Based on DECam Follow-up Observations by the Dark Energy Survey  
Morgan, R. et al. *ApJ* 901.1, 83 (Sept. 2020) p. 83
- Milky Way Satellite Census. II. Galaxy-Halo Connection Constraints Including the Impact of the Large Magellanic Cloud  
Nadler, E. O. et al. *ApJ* 893.1, 48 (Apr. 2020) p. 48
- 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