# 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)

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. Apl 874.2, 150 (Apr. 2019) p. 150

First Cosmology Results Using Type Ia Supernovae from the Dark Energy Survey: Photometric Pipeline and Lightcurve 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**

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. arXiv e-prints (Mar. 2020)

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 (Jan. 2020)

Validation of Selection Function, Sample Contamination and Mass Calibration in Galaxy Cluster Samples Grandis, S. et al. arXiv e-prints (Feb. 2020)

Dark Energy Survey Identification of A Low-Mass Active Galactic Nucleus at Redshift 0.823 from Optical Variability Guo, Hengxiao et al. arXiv e-prints (*Mar. 2020*)

Chemical Analysis of the Ultra-Faint Dwarf Galaxy Grus II. Signature of high-mass stellar nucleosynthesis Hansen, T. T. et al. arXiv e-prints (May 2020)

The impact of spectroscopic incompleteness in direct calibration of redshift distributions for weak lensing surveys

Hartley, W. G. et al. arXiv e-prints (Mar. 2020)

First Hubble diagram and cosmological constraints using superluminous supernova Inserra, C. et al. arXiv e-prints (Apr. 2020)

Constraints on the Physical Properties of S190814bv through Simulations based on DECam Follow-up Observations by the Dark Energy Survey

Morgan, R. et al. arXiv e-prints (June 2020)

Is diffuse intracluster light a good tracer of the galaxy cluster matter distribution? Sampaio-Santos, H. et al. arXiv e-prints (May 2020)

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

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

The Host Galaxies of Rapidly Evolving Transients in the Dark Energy Survey Wiseman, P. et al. arXiv e-prints (May 2020)

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 (Dec. 2019)

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)