David A. Coulter

Publications **First Author: 2 (759 citations), total papers: 46 (6329 citations), h-index: 28 [ADS]**

First Author Publications

46. **Coulter D. A.,** et al., (2017), Swope Supernova Survey 2017a (SSS17a), the optical counterpart to a gravitational wave source, Sci, 358, 1556
45. **Coulter D. A.,** et al., (2017), Testing the Universality of the Stellar IMF with Chandra and HST, ApJ, 835, 183

Second Author/Major Contribution Publications

44. Kilpatrick C. D., **Coulter D. A.**, et al., (2021), The Gravity Collective: A Search for the Electromagnetic Counterpart to the Neutron Star-Black Hole Merger GW190814, ApJ, 923, 258
43. Foley R. J., **Coulter D. A.**, et al., (2020), Updated parameter estimates for GW190425 using astrophysical arguments and implications for the electromagnetic counterpart, MNRAS, 494, 190
42. Law-Smith J. A. P., **Coulter D. A.**, et al., (2020), Stellar Tidal Disruption Events with Abundances and Realistic Structures (STARS): Library of Fallback Rates, ApJ, 905, 141
41. Jones D. O., et al., **including Coulter D. A.**, (2021), The Young Supernova Experiment: Survey Goals, Overview, and Operations, ApJ, 908, 143
40. Coughlin M. W., et al., **including Coulter D. A.**, (2019), Optimizing multitelescope observations of gravitational-wave counterparts, MNRAS, 489, 5775

Collaboration Publications

39. Jacobson-Galán W. V., et al., **including Coulter D. A.**, (2022), The Circumstellar Environments of Double-peaked, Calcium-strong Transients 2021gno and 2021inl, ApJ, 932, 58
38. Tinyanont S., et al., **including Coulter D. A.**, (2022), Progenitor and close-in circumstellar medium of type II supernova 2020fqv from high-cadence photometry and ultra-rapid UV spectroscopy, MNRAS, 512, 2777
37. Dimitriadis G., et al., **including Coulter D. A.**, (2022), A Carbon/Oxygen-dominated Atmosphere Days after Explosion for the "Super-Chandrasekhar" Type Ia SN 2020esm, ApJ, 927, 78
36. Gagliano A., et al., **including Coulter D. A.**, (2022), An Early-time Optical and Ultraviolet Excess in the Type-Ic SN 2020oi, ApJ, 924, 55
35. Jacobson-Galán W. V., et al., **including Coulter D. A.**, (2022), Final Moments. I. Precursor Emission, Envelope Inflation, and Enhanced Mass Loss Preceding the Luminous Type II Supernova 2020tlf, ApJ, 924, 15
34. Wang Q., et al., **including Coulter D. A.**, (2021), SN 2018agk: A Prototypical Type Ia Supernova with a Smooth Power-law Rise in Kepler (K2), ApJ, 923, 167
33. Armstrong P., et al., **including Coulter D. A.**, (2021), SN2017jgh: a high-cadence complete shock cooling light curve of a SN IIb with the Kepler telescope, MNRAS, 507, 3125
32. Hinkle J. T., et al., **including Coulter D. A.**, (2021), Discovery and follow-up of ASASSN-19dj: an X-ray and UV luminous TDE in an extreme post-starburst galaxy, MNRAS, 500, 1673
31. Dimitriadis G., et al., **including Coulter D. A.**, (2019), K2 Observations of SN 2018oh Reveal a Two-component Rising Light Curve for a Type Ia Supernova, ApJL, 870, L1
30. Li W., et al., **including Coulter D. A.**, (2019), Photometric and Spectroscopic Properties of Type Ia Supernova 2018oh with Early Excess Emission from the Kepler 2 Observations, ApJ, 870, 12
29. Brout D., et al., **including Coulter D. A.**, (2022), The Pantheon+ Analysis: Cosmological Constraints, arXiv, arXiv:2202.04077

28. Kilpatrick C. D., **Coulter D. A.,** et al., (2021), Updated Photometry of the Yellow Supergiant Progenitor and Late-time Observations of the Type IIb Supernova 2016gkg, arXiv:2112.03308
27. Scolnic D., et al., **including Coulter D. A.**, (2021), The Pantheon+ Analysis: The Full Dataset and Light-Curve Release, arXiv:2112.03863
26. Dettman K. G., et al., **including Coulter D. A.**, (2021), The Foundation Supernova Survey: Photospheric Velocity Correlations in Type Ia Supernovae, ApJ, 923, 267
25. Jencson J. E., et al., **including Coulter D. A.**, (2021), AT 2019qyl in NGC 300: Internal Collisions in the Early Outflow from a Very Fast Nova in a Symbiotic Binary, ApJ, 920, 127
24. Heinzel J., et al., **including Coulter D. A.**, (2021), Comparing inclination-dependent analyses of kilonova transients, MNRAS, 502, 3057
23. Barna B., et al., **including Coulter D. A.**, (2021), SN 2019muj - a well-observed Type Iax supernova that bridges the luminosity gap of the class, MNRAS, 501, 1078
22. Hung T., et al., **including Coulter D. A.**, (2020), Double-peaked Balmer Emission Indicating Prompt Accretion Disk Formation in an X-Ray Faint Tidal Disruption Event, ApJ, 903, 31
21. Jacobson-Galán W. V., et al., **including Coulter D. A.**, (2020), SN 2019ehk: A Double-peaked Ca-rich Transient with Luminous X-Ray Emission and Shock-ionized Spectral Features, ApJ, 898, 166
20. Coughlin M. W., et al., **including Coulter D. A.**, (2020), Measuring the Hubble constant with a sample of kilonovae, NatCo, 11, 4129
19. Holoien T. W.-S., et al., **including Coulter D. A.**, (2020), The Rise and Fall of ASASSN-18pg: Following a TDE from Early to Late Times, ApJ, 898, 161
18. Jacobson-Galán W. V., et al., **including Coulter D. A.**, (2020), Ca hnk: The Calcium-rich Transient Supernova 2016hnk from a Helium Shell Detonation of a Sub-Chandrasekhar White Dwarf, ApJ, 896, 165
17. Neustadt J. M. M., et al., **including Coulter D. A.**, (2020), To TDE or not to TDE: the luminous transient ASASSN-18jd with TDE-like and AGN-like qualities, MNRAS, 494, 2538
16. Coughlin M. W., et al., **including Coulter D. A.**, (2020), Standardizing kilonovae and their use as standard candles to measure the Hubble constant, PhRvR, 2, 022006
15. Jones D. O., et al., **including Coulter D. A.**, (2019), The Foundation Supernova Survey: Measuring Cosmological Parameters with Supernovae from a Single Telescope, ApJ, 881, 19
14. Kilpatrick C. D., **Coulter D. A.,** et al., (2018), X-ray limits on the progenitor system of the Type Ia supernova 2017ejb, MNRAS, 481, 4123
13. Jones D. O., et al., **including Coulter D. A.**, (2018), Should Type Ia Supernova Distances Be Corrected for Their Local Environments?, ApJ, 867, 108
12. Foley R. J., et al., **including Coulter D. A.**, (2018), The Foundation Supernova Survey: motivation, design, implementation, and first data release, MNRAS, 475, 193
11. Kilpatrick C. D., et al., **including Coulter D. A.**, (2018), Connecting the progenitors, pre-explosion variability and giant outbursts of luminous blue variables with Gaia16cfr, MNRAS, 473, 4805
10. Tartaglia L., et al., **including Coulter D. A.**, (2018), The Early Detection and Follow-up of the Highly Obscured Type II Supernova 2016ija/DLT16am, ApJ, 853, 62
9. Kilpatrick C. D., et al., **including Coulter D. A.**, (2017), Electromagnetic evidence that SSS17a is the result of a binary neutron star merger, Sci, 358, 1583
8. Drout M. R., et al., **including Coulter D. A.**, (2017), Light curves of the neutron star merger GW170817/SSS17a: Implications for r-process nucleosynthesis, Sci, 358, 1570
7. Shappee B. J., et al., **including Coulter D. A.**, (2017), Early spectra of the gravitational wave source GW170817: Evolution of a neutron star merger, Sci, 358, 1574
6. Abbott B. P., et al., **including Coulter D. A.**, (2017), A gravitational-wave standard siren measurement of the Hubble constant, Natur, 551, 85

5. Abbott B. P., et al., **including Coulter D. A.**, (2017), Multi-messenger Observations of a Binary Neutron Star Merger, ApJL, 848, L12
4. Pan Y.-C., et al., **including Coulter D. A.**, (2017), The Old Host-galaxy Environment of SSS17a, the First Electromagnetic Counterpart to a Gravitational-wave Source, ApJL, 848, L30
3. Siebert M. R., et al., **including Coulter D. A.**, (2017), The Unprecedented Properties of the First Electromagnetic Counterpart to a Gravitational-wave Source, ApJL, 848, L26
2. Murguia-Berthier A., et al., **including Coulter D. A.**, (2017), A Neutron Star Binary Merger Model for GW170817/GRB 170817A/SSS17a, ApJL, 848, L34
1. Peacock M. B., et al., **including Coulter D. A.**, (2017), Further Constraints on Variations in the Initial Mass Function from Low-mass X-ray Binary Populations, ApJ, 841, 28

Software Publications

2. Coulter, D. A, et al., (2022), YSE-PZ: An Open-source Target and Observation Management System (v0.3.0), Zenodo, 10.5281/zenodo.7278430
1. Coulter, D. A, (2021), Teglon: A Pixel-level Gravitational Wave Search Optimization and Analysis Code (v0.0.0), Zenodo, 10.5281/zenodo.5683508

Transient Alerts

443 TNS Discovery Reports, 25 Astronomer's Telegrams, 18 Gamma-ray Coordinates Network Reports