

Thomas de Jaeger— Bibliography

Summary: 66 total refereed publications, 12 first author, 9 with significant contribution, 6 papers led by supervised grad students denoted by, and 1 by undergrad student denoted by***.**

Total citations: >2150, h-index=26.

Last update: 12/14/23

REFEREED JOURNAL PUBLICATIONS

First author

- [1] Optical/ γ -ray blazar flare correlations: understanding the high-energy emission process using ASAS-SN and Fermi light curves
de Jaeger, T., Shappee, B. J., Kochanek, C. S. et al. 2023
MNRAS, 519, 6349, [2210.16329](#)
- [2] A 5% measurement of the Hubble-Lemaître constant from Type II supernovae
de Jaeger, T., Galbany, L., Riess, A. G. et al. 2022
MNRAS, 514, 4620, [2203.08974](#)
- [3] ASAS-SN search for optical counterparts of gravitational-wave events from the third observing run of Advanced LIGO/Virgo
de Jaeger, T., Shappee, B. J., Kochanek, C. S. et al. 2021
MNRAS, 509, 3427, [2108.04839](#)
- [4] A measurement of the Hubble constant from Type II supernovae
de Jaeger, T., Stahl, B. E., Zheng, W. et al. 2020
MNRAS, 498, 4900, [2006.03412](#)
- [5] Studying Type II supernovae as cosmological standard candles using the Dark Energy Survey
de Jaeger, T., Galbany, L., Gonzalez Gaitan, S., et al. 2020
MNRAS, 495, 4860, [2005.09757](#)
- [6] The Berkeley sample of Type II supernovae: BVRI light curves and spectroscopy of 55 SNe II
de Jaeger, T., Zheng, W., Stahl, B. E., et al. 2019
MNRAS, 490, 2799, [1909.13813](#)
- [7] SN 2016esw: a luminous Type II supernova observed within the first day after the explosion
de Jaeger, T., Galbany, L., Gutierrez, C. P., et al. 2018
MNRAS, 478, 3776, [1805.03205](#)
- [8] Observed Type II supernova colours from the CSP-I
de Jaeger, T., Anderson, J. P., Galbany, L., et al. 2018
MNRAS, 476, 4592, [1802.07254](#)
- [9] SN 2016jhh at redshift 0.34: extending the Type II supernova Hubble diagram using the standard candle method
de Jaeger, T., Galbany, L., Filippenko, A. V., et al. 2017
MNRAS, 472, 4322, [1709.01513](#)
- [10] A Type II Supernova Hubble diagram from the CSP-I, SDSS-II, and SNLS surveys
de Jaeger, T., Gonzalez Gaitan, S., Hamuy, M., et al. 2017
ApJ, 835, 166, [1612.05636](#)

- [11] A Hubble diagram from Type II Supernovae based solely on photometry: the Photometric-Colour Method
de Jaeger, T., Gonzalez Gaitan, S., Anderson, J. P., et al. 2015
ApJ, 815, 121, [1511.05145](#)
- [12] SN 2011A: A Low-luminosity Interacting Transient with a Double Plateau and Strong Sodium Absorption
de Jaeger, T., Anderson, J. P., Pignata, G., et al. 2015
ApJ, 807 63, [1505.01852](#)

Co-author

- [1] An updated measurement of the Hubble constant from near-infrared observations of Type Ia supernovae
Galbany, L., **de Jaeger, T.**, Riess, A. G., 2022
A&A, Accepted, [2209.02546](#)
- [2] Fast and not-so-furious: Case study of the fast and faint type IIb SN 2021bxu
Desai, D. D., Ashall, C., Shappee, B. J., (incl. **de Jaeger, T.**), 2023
MNRAS, temp, 1182 [2303.13581](#)
- [3] The DEHVILS survey overview and initial data release: high-quality near-infrared Type Ia supernova light curves at low redshift
Peterson, E. R., Jones, D. O, Scolnic, D., (incl. **de Jaeger, T.**), 2023
MNRAS, 522, 2478 [2301.11868](#)
- [4] SN 2016ije: An SN 2002es-like Type Ia Supernova Exploded in a Metal-poor and Low-surface Brightness Galaxy
Li, Z., Zhang, T., Wang, X., (incl. **de Jaeger, T.**), 2023
ApJ, 950, 17 [2305.09417](#)
- [5] Multiple flares in the changing-look AGN NGC 5273
Neustadt, J. M. M., Hinkle, J. T, Kochanek, C. S., (incl. **de Jaeger, T.**), 2023
MNRAS, 521, 3810 [2211.03801](#)
- [6] JWST Low-resolution MIRI Spectral Observations of SN 2021aefx: High-density Burning in a Type Ia Supernova
DerKacy, J. M. ; Ashall, C. ; Hoefflich, P., et al. (incl. **de Jaeger, T.**), 2023
ApJ, 945, 2 [2301.03647](#)
- [7] SCAT Uncovers ATLAS's First Tidal Disruption Event ATLAS18mlw: A Faint and Fast TDE in a Quiescent Balmer Strong Galaxy
Hinkle, J. T., Tucker, M. A., Shappee, B. J., et al. (incl. **de Jaeger, T.**), 2023
MNRAS, 519, 2035 [2210.09322](#)
- [8] The disappearances of six supernova progenitors
Van Dyk, S. D. ; de Graw, A. ; Baer-Way, R., et al. (incl. **de Jaeger, T.**), 2023
MNRAS, 519, 471 [2212.00179](#)
- [9] A JWST Near- and Mid-infrared Nebular Spectrum of the Type Ia Supernova 2021aefx
Kwok, L. A., Jha, S. W., Temin, T., (incl. **de Jaeger, T.**), 2023
ApJ 944 3 [2211.00038](#)

- [10] Cosmicflows-4
Tully B. R., Kourkchi, E., Courtois H. M., et al. (incl. **de Jaeger, T.**), 2023
ApJ, 944, 94 [2209.11238](#)
- [11] The Spectroscopic Classification of Astronomical Transients (SCAT) Survey: Overview, Pipeline Description, Initial Results, and Future Plans
Tucker, M. A., Shappee, B. J., Huber, M.E., (incl. **de Jaeger, T.**), 2022
PASP, 134, 4502 [2210.09322](#)
- [12] SALT3-NIR: Taking the Open-source Type Ia Supernova Model to Longer Wavelengths for Next-generation Cosmological Measurements
Pierel, J. D. R., Jones, D. O, Kenworthy, W. D., (incl. **de Jaeger, T.**), 2022
ApJ, 939, 11 [2209.05594](#)
- [13] **ASAS-SN follow-up of IceCube high-energy neutrino alerts
Necker, J., **de Jaeger, T.**, Stein, R., 2022
MNRAS, 516, 2455 [2204.00500](#)
- [14] Testing the homogeneity of type Ia Supernovae in near-infrared for accurate distance estimations
Muller-Bravo, T. E., Galbany L., Karamahmetoglu, E., (incl. **de Jaeger, T.**), 2022
MNRAS, 516, 2455 [2204.00500](#)
- [15] Investigating the Nature of the Luminous Ambiguous Nuclear Transient ASASSN-17jz
Holoien, T. W. -S. , Neustadt, J. M. M., Vallely, P. J., et al. (incl. **de Jaeger, T.**), 2021
ApJ, 933, 196 [2109.07480](#)
- [16] The Lick Observatory Supernova Search follow-up program: photometry data release of 70 SESNe
Zheng, W., Stahl, B. E., **de Jaeger, T.**, et al. 2022
MNRAS, 512, 3195, [2203.05596](#)
- [17] The Curious Case of ASASSN-20hx: A Slowly Evolving, UV- and X-Ray-Luminous, Ambiguous Nuclear Transient Hinkle, J. T., Holoien, T. W. -S., Shappee, B. J., et al. (incl. **de Jaeger, T.**), 2022 ApJ, 930, 12, [2108.03245](#)
- [18] Early-Time Ultraviolet Spectroscopy and Optical Follow-up Observations of the Type IIP Supernova 2021yja
Vasylyev, S. S., Filippenko, A. V., Vogl, C., et al. (incl. **de Jaeger, T.**), 2022
ApJ, 934, 134, [2203.08001](#)
- [19] Type II supernovae from the Carnegie Supernova Project-I. III. Understanding SN II diversity through correlations between physical and observed properties
Martinez, L. , Anderson, J. P., Bersten, M. C., et al. (incl. **de Jaeger, T.**), 2022
A&A, 660, 42, [2202.11220](#)
- [20] Type II supernovae from the Carnegie Supernova Project-I. II. Physical parameter distributions from hydrodynamical modelling
Martinez, L. , Bersten, M. C. , Anderson, J. P., et al. (incl. **de Jaeger, T.**), 2022
A&A, 660, 41, [2111.06529](#)
- [21] Type II supernovae from the Carnegie Supernova Project-I. I. Bolometric light curves of 74 SNe II using uBgVriYJH photometry
Martinez, L. , Bersten, M. C. , Anderson, J. P., et al. (incl. **de Jaeger, T.**), 2022
A&A, 660, 40, [2111.06519](#)
- [22] The effects of varying colour-luminosity relations on supernova science
Gonzalez-Gaitan, S., **de Jaeger, T.**, Galbany, L. et al., 2021
MNRAS, 508, 4656, [2009.13230](#)

- [23] ** Peculiar Velocity Cosmology with Types Ia & II Supernovae
Stahl, B. E., **de Jaeger, T.**, Boruah, Supranta S., et al. 2021
MNRAS, 505, 2349, [2105.05185](#)
- [24] ** The snapshot distance method: estimating the distance to a Type Ia supernova from minimal observations
Stahl, B. E., **de Jaeger, T.**, Zheng, W., et al. 2021
MNRAS, 505, 2300, [2105.04446](#)
- [25] The Gravity Collective: A Search for the Electromagnetic Counterpart to the Neutron Star-Black Hole Merger GW190814
Kilpatrick, C. D., Coulter, D. A., Arcavi, I., et al. (incl. **de Jaeger, T.**) 2021
ApJ, Accepted, [2106.06897](#)
- [26] Asteroids' Size Distribution and Colors from HITS
Pena, J., Fuentes, C., Forster F., et al. (incl. **de Jaeger, T.**) 2020
AJ, 159, 148, [2003.05499](#)
- [27] ** Berkeley Supernova Ia Program: Data Release of 637 Spectra from 247 Type Ia Supernovae
Stahl, B. E., Zheng, W., **de Jaeger, T.**, et al. 2020
MNRAS, 492, 4325, [2001.03235](#)
- [28] ** deepSIP: Linking Type Ia Supernova Spectra to Photometric Quantities with Deep Learning
Stahl, B. E., Martinez-Palomera, J., Zheng, W., et al. (incl. **de Jaeger, T.**) 2020
MNRAS, 496, 3553, [2006.06745](#)
- [29] *** Distribution of Si II $\lambda 6355$ velocities of Type Ia supernovae and implications for asymmetric explosions
Zhang, Keto D., Zheng, W., **de Jaeger, T.**, et al. 2020
MNRAS, 496, 3553, [2006.06745](#)
- [30] SN 2017cfd: A Normal Type Ia Supernova Discovered Very Young
Han, X., Zheng, W., Stahl, B. E. et al. (incl. **de Jaeger, T.**), et al. 2020
ApJ, 892 142, [1911.07734](#)
- [31] Evidence for a Chandrasekhar-mass explosion in the Ca-strong 1991bg-like type Ia supernova 2016hmk
Galbany, L., Ashall, C., Hoflich, P. et al. (incl. **de Jaeger, T.**) 2019
A&A, 630, 76A, [1904.10034](#)
- [32] On the Origin of SN 2016hil—A Type II Supernova in the Remote Outskirts of an Elliptical Host
Irani, I., Schulze, S., Gal-Yam, et al. (incl. **de Jaeger, T.**), 2019
ApJ, 887, 127, [1904.01425](#)
- [33] ** Lick Observatory Supernova Search Follow-Up Program: Photometry Data Release of 93 Type Ia Supernovae
Stahl, B. E., Zheng, W., **de Jaeger, T.**, et al. 2019
MNRAS, 490, 3882, [1909.11140](#)
- [34] Late-time observations of the extraordinary Type II supernova iPTF14hls
Sollerman, J., Taddia, F., Arcavi, I. et al. (incl. **de Jaeger, T.**) 2019
A&A, 621A, 30S, [1806.10001](#)
- [35] The Type II-plateau Supernova 2017eaw in NGC 6946 and Its Red Supergiant Progenitor
Van Dyk, S. D., Zheng, W., Maund, J. R. et al. (incl. **de Jaeger, T.**) 2019
A&A, 875, 136V, [1903.03872](#)

- [36] The High Cadence Transit Survey (HiTS): Compilation and Characterization of Light-curve Catalogs
Martínez-Palomera, J., Förster, F., Protopapas, P., et al. (incl. **de Jaeger, T.**) 2018
AJ, 156, 186, [1809.00763](#)
- [37] The delay of shock breakout due to circumstellar material evident in most type II supernovae
Förster, F., Moriya, T. J., Maureira, J. C., et al. (incl. **de Jaeger, T.**) 2018
Nature Astronomy, 2, 808, [1809.06379](#)
- [38] Discovery of Distant RR Lyrae Stars in the Milky Way Using DECam
Medina, G. E., Munoz R. R., Vivas K. A., et al. (incl. **de Jaeger, T.**) 2018
ApJ, 855, 43, [1802.01581](#)
- [39] Asteroids in the High Cadence Transient Survey
Pena, J., Forster F., Maureira J. C., et al. (incl. **de Jaeger, T.**) 2018
AJ, 155, 135, [1806.03352](#)
- [40] A surge of light at the birth of a supernova
Bersten, M. C., Folatelli, G., Garcia, F., et al. (incl. **de Jaeger, T.**) 2018
Nature, 554, 487, [1801.00732](#)
- [41] The First Post-Kepler Brightness Dips of KIC 8462852
Boyajian, T. S., Alonso, R., Ammerman, A., et al. (incl. **de Jaeger, T.**) 2018
ApJ, 835, 8, [1802.09360](#)
- [42] Gaia17biu/SN 2017egm in NGC 3191: the closest hydrogen-poor superluminous supernova to date is in a "normal", massive, metal-rich spiral galaxy
Bose, S., Dong, S., Pastorello, A., et al. (incl. **de Jaeger, T.**) 2018
ApJ, 853, 57, [1708.00864](#)
- [43] Serendipitous discovery of RR Lyrae stars in the Leo V ultra-faint galaxy
Medina, G. E., Munoz R. R., Vivas K. A., et al. (incl. **de Jaeger, T.**) 2017
ApJ, 845, 10, [1708.00009](#)
- [44] The High Cadence Transient Survey (HITS). I. Survey Design and Supernova Shock Breakout Constraints
Forster, F., Maureira, J. C., San Martin, J., et al. (incl. **de Jaeger, T.**) 2016
ApJ, 832, 166, [1609.03567](#)
- [45] Type II supernovae as probes of environment metallicity: observations of host H II regions
Anderson, J. P., Gutierrez, C. P., Dessart, L., et al. (incl. **de Jaeger, T.**) 2016
A&A, 589, 110, [1602.00011](#)
- [46] UBVRIz Light Curves of 51 Type II Supernovae
Galbany, L., Hamuy, M., Phillips, M. M., et al. (incl. **de Jaeger, T.**) 2016
AJ, 151, 33, [1511.08402](#)
- [47] The rise-time of Type II supernovae
González-Gaitán, S., Tominaga, N., Molina, J., et al. (incl. **de Jaeger, T.**) 2015
MNRAS, 451 2212, [1505.02988](#)
- [48] Nebular phase observations of the Type-Ib supernova iPTF13bvn favour a binary progenitor
Kuncarayakti, H., Maeda, K., Bersten, M. C., et al. (incl. **de Jaeger, T.**) 2015
A&A, 579 95, [1504.01473](#)

- [49] PESSTO: survey description and products from the first data release by the Public ESO Spectroscopic Survey of Transient Objects
Smartt, S. J., Valenti, S., Fraser, M., et al. (incl. **de Jaeger, T.**) 2015
A&A, 579 40, [1411.0299](#)
 - [50] Defining Photometric Peculiar Type Ia Supernovae
González-Gaitán, S., Hsiao, E. Y., Pignata, G., et al. (incl. **de Jaeger, T.**) 2014
ApJ, 795 142, [1409.4811](#)
 - [51] Characterizing the V-band Light-curves of Hydrogen-rich Type II Supernovae
Anderson, J. P., González-Gaitán, S., Hamuy, M., et al. (incl. **de Jaeger, T.**) 2014
ApJ, 786 67, [1403.7091](#)
 - [52] SN 2011hs: a fast and faint Type IIb supernova from a supergiant progenitor
Bufano, F., Pignata, G., Bersten, M., et al. (incl. **de Jaeger, T.**) 2014
MNRAS, 439 1807, [1401.2368](#)
 - [53] An Independent Measurement of the Incidence of Mg II Absorbers along Gamma-Ray Burst Sight Lines: The End of the Mystery?
Cucchiara, A., Prochaska, J. X., Zhu, G., et al. (incl. **de Jaeger, T.**) 2013
ApJ, 773 82, [1211.6528](#)
 - [54] Spectroscopic Observations of SN 2012fr: A Luminous, Normal Type Ia Supernova with Early High-velocity Features and a Late Velocity Plateau
Childress, M. J., Scalzo, R. A., Sim, S. A., et al. (incl. **de Jaeger, T.**) 2013
ApJ, 786 67, [1302.2926](#)
-

**NON-
REFEREED
PUBLICATIONS**

- [1] JWST MIRI/MRS Observations and Spectral Models of the Under-luminous Type Ia Supernova 2022xkq
DerKacy, J. M.; Ashall, C.; Hoefflich, P. et al. (incl. **de Jaeger, T.**) 2023 ApJ, Submitted, [2310.09153](#)
- [2] Strong Carbon Features and a Red Early Color in the Underluminous Type Ia SN 2022xkq
Pearson, J., Sand, D. J., Lundqvist, P., et al. (incl. **de Jaeger, T.**) 2023 ApJ, Submitted, [2309.10054](#)
- [3] SN 2022crv: IIb, Or Not IIb: That is the Question
Dong, Y., Valenti, S., Ashall, C., et al. (incl. **de Jaeger, T.**) 2023 ApJ, Submitted, [2309.09433](#)
- [4] Ground-based and JWST Observations of SN 2022pul: II. Evidence from Nebular Spectroscopy for a Violent Merger in a Peculiar Type-Ia Supernova
Kwok, L. A., Siebert, M. R., Johansson, J., et al. (incl. **de Jaeger, T.**) 2023 ApJ, Submitted, [2308.12450](#)
- [5] Ground-based and JWST Observations of SN 2022pul: I. Unusual Signatures of Carbon, Oxygen, and Circumstellar Interaction in a Peculiar Type Ia Supernova
Siebert, M. R., Kwok, L. A., Johansson, J., et al. (incl. **de Jaeger, T.**) 2023 ApJ, Submitted, [2308.12449](#)
- [6] Early-Time Ultraviolet and Optical Hubble Space Telescope Spectroscopy of the Type II Supernova 2022wsp

BOOKS

- [1] The pursuit of the Hubble Constant using Type II Supernovae
de Jaeger, T., Galbany, L. 2024
Invited chapter for the edited book "Hubble Constant Tension" (Eds. E. Di Valentino and D. Brout, Springer Singapore) [2305.17243](#)
-

CONFERENCES

PROCEEDINGS

- [1] A double plateau and unprecedented circumstellar variable sodium in the transient SN 2011A
de Jaeger, T., Anderson, J., Pignata, G., Hamuy, M. 2014
[IAUS, 296, 346](#)
-

OTHERS

- [1] 50 TNS reports, 11 CBETS, 56 ATELS, 2 GCNs