

# Katherine A. (Wren) Suess

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## Research Interests

Observational galaxy formation and evolution; galaxy quenching; structural evolution of galaxies; spatially-resolved stellar population modeling; galaxy star formation histories

## Education

<b>Ph.D. Astrophysics</b> , University of California, Berkeley	Aug 2021
<i>Advisor:</i> Mariska Kriek	
<i>Thesis:</i> The Growth & Transformation of Galaxies Across Cosmic Time	
<b>M.A. Astrophysics</b> , University of California, Berkeley	May 2017
<b>B.A. Physics</b> , <i>summa cum laude</i> , University of Colorado, Boulder	May 2015
<i>Advisor:</i> Jeremy Darling	
<i>Honors thesis:</i> Identifying OH Imposters in the ALFALFA Neutral Hydrogen Survey	

## Research Positions

<b>Hubble Fellow</b> , Stanford University	2023 - present
<b>Stanford - Santa Cruz Cosmology Fellow</b> , UC Santa Cruz & Stanford University	2021 - 2023
<b>UC Santa Cruz Chancellor's Fellow</b> , UC Santa Cruz	2021 - 2023
<b>NSF Graduate Research Fellow</b> , UC Berkeley	2017 - 2021
<b>Chancellor's Fellow</b> , UC Berkeley	2015 - 2017
<b>Undergraduate Research Assistant</b> , CU APS & LASP & NOAA SWPC	2013 - 2015

## Selected Awards & Honors

Hubble Fellowship	2023
Mary Elizabeth Uhl Prize <i>for outstanding scholarly achievement by a graduate student finishing their dissertation in Astronomy or Physics</i>	2021
UC Berkeley Grad Slam Semifinalist ( <i>final competition canceled due to COVID-19</i> )	2019
Robert J. Trumpler Graduate Excellence Award	2019
Outstanding Graduate Student Instructor	2017
NSF Graduate Research Fellowship	2016
University of California, Berkeley Chancellor's Fellowship	2015
Stephen Halley White Undergraduate Research Award	2015

## PI Telescope Programs

### Atacama Large Millimeter/submillimeter Array

5. **K. Suess**, R. Bezanson, R. Feldmann, J. E. Greene, M. Kriek, D. Narayanan, D. Setton, J. Spilker, P.-F. Wu, Cycle 8: 2021.1.00761.S, Quantifying the molecular gas reservoirs of post-starburst AGN hosts (14.5 hours)
4. **K. Suess**, R. Bezanson, R. Feldmann, J. E. Greene, K. Hall-Hooper, Q. Hunt, M. Kriek, D. Narayanan, D. Setton, J. Spilker, Cycle 8: 2021.1.00749.S, Mapping the molecular gas reservoirs of recently-quenched galaxies (2.6 hours)
3. **K. Suess**, R. Bezanson, R. Feldmann, J. E. Greene, K. Hall-Hooper, Q. Hunt, M. Kriek, D. Narayanan, D. Setton, J. Spilker, Cycle 7: 2019.1.00221.S, Mapping the molecular gas reservoirs of recently-quenched galaxies (11.4 hours)
2. **K. Suess**, R. Bezanson, R. Feldmann, J. E. Greene, K. Hall-Hooper, Q. Hunt, M. Kriek, D. Narayanan, D. Setton, J. Spilker, Cycle 6: 2018.1.01240.S, Mapping the molecular gas reservoir of a recently-quenched galaxy (7.0 hours)
1. **K. Suess**, R. Bezanson, R. Feldmann, J. E. Greene, K. Hall-Hooper, Q. Hunt, M. Kriek, D. Narayanan, D. Setton, J. Spilker, Cycle 6: 2018.1.01264.S, How did molecular gas end up tens of kiloparsecs away from a massive, recently-quenched  $z \sim 0.6$  galaxy? (6.5 hours)

### Gemini Observatory

1. **K. Suess**, R. Bezanson, R. Feldmann, J. E. Greene, K. Hall-Hooper, Q. Hunt, M. Kriek, D. Narayanan, D. Setton, J. Spilker, 2019B: GS-2019B-Q-232, Characterizing the sizes and morphologies of  $z \sim 0.6$  gas-rich quenched galaxies (7.7 hours)

## ***Hubble Space Telescope***

1. **K. Suess**, J. Spilker, R. Bezanson, M. Kriek, J. Greene, Cycle 25: [GO 15436](#), Understanding the Origin of Large Gas Reservoirs in Recently-Quenched Galaxies (3 orbits)

## ***James Webb Space Telescope***

1. **K. Suess**, et al., Cycle 2: [GO 4111](#), Medium Bands, Mega Science: Spatially-resolved R~15 spectrophotometry of 50,000 sources at z=0.3-12 (48 hrs NIRCcam; 30 hrs NIRISS)

## ***Keck Observatory***

3. M. Kriek\*, **K. Suess**, R. Bezanson, J. Greene, J. Spilker, Spr 2019: U132, Testing the Quiescence of Massive, Gas-rich Post-starburst Galaxies (0.5 night, NIRES)
2. M. Kriek\*, **K. Suess**, R. Bezanson, J. Greene, J. Spilker, Fall 2018: U093, Testing the Quiescence of Massive, Gas-rich Post-starburst Galaxies (0.5 night, NIRES)
1. M. Kriek\*, **K. Suess**, R. Bezanson, J. Greene, J. Spilker, Spr 2018: U232, Testing the Quiescence of Massive, Gas-rich Post-starburst Galaxies (1 night, NIRES)

*\*acting PI; graduate students/postdocs cannot PI UC Keck proposals*

## ***Lick Observatory***

2. **K. Suess**, M. Kriek, K. Hall-Hooper, R. Bezanson, J. Greene, B. Holden, Fall 2018: S018, Spectroscopic Confirmation of Post-Starburst Galaxies (6 nights, Kast Spectrograph)
1. **K. Suess**, M. Kriek, J. Greene, R. Bezanson, Fall 2016: S018, The origin of compact quiescent galaxies as revealed by  $z \sim 0.7$  post-starburst galaxies (3 nights, ShARCS LGS)

## ***Very Large Array***

1. **K. Suess**, J. Spilker, R. Bezanson, M. Kriek, J. Greene, Spr 2018: VLA/18A-390, Understanding the Origin of Large Gas Reservoirs in Recently-Quenched Galaxies (7.5 hours; A priority)

## **Co-I Telescope Programs**

**Atacama Large Millimeter/submillimeter Array:** 2017.1.01109.S, 2016.1.01126.S, & 2019.1.01286.S, 2019.1.00702.S, 2021.1.00988.S, 2021.1.01535.S, 2022.1.00604.S, PIs R. Bezanson, M. Kriek, P.-F. Wu, & D. Setton, 156.8 hours.

**Gemini Observatory:** GN-2018B-Q-203 & GS-2018B-Q-104, GS-2018A-FT-112, GS-2017B-Q-35, GN-2017B-Q-37, GS-2017A-Q-56, PIs R. Bezanson & Q. Hunt, GMOS, 37.53 hours.

**Keck Observatory:** S21 U075, F20 U054, S20 U220, F19 U171, S19 U133, F18 U094, S18 U258, F17 U147, S17 U091, PI M. Kriek, 21 nights MOSFIRE & 4 nights LRIS.

**Hubble Space Telescope:** Cycle 28 16201, Cycle 28 16248, PI J. Spilker, WFC3 grism & imaging, 6 orbits.

**James Webb Space Telescope:** Cycle 1 PID 2110 (PI M. Kriek, 23hr NIRSspec). Cycle 2: PID 3516 (PI Matthee, 47.2hr NIRCcam grism), 3659 (PI D'Eugenio, 24hr NIRSspec), 4106 (PI Nelson, 14hr NIRSspec), 4196 (PI Gibson, 3hr NIRSspec), 4233 (PI de Graaff, 58hr NIRSspec). Member, JADES GTO collaboration & UNCOVER team.

## **Additional Observing Experience:**

Keck Observatory: OSIRIS (2 nights), MOSFIRE (1 night), LRIS (0.5 night)

Rudolph Minkowski Observational Astronomy Workshop, Lick Observatory, 2015

## **Teaching**

ALMA Ambassador & Workshop Leader, Stanford University	2022
Graduate Student Instructor, UC Berkeley AY160: Stellar Physics	Fall 2016
Graduate Student Instructor, UC Berkeley Astro C10: Introduction to General Astronomy	Fall 2015
Splash Instructor, "How do astronomers know anything?"	Fall 2015
Learning Assistant, CU Boulder Phys 1110: Introductory Physics for Majors	Fall 2012
Director of K-12 Education, AmeriCorps with CoPIRG Energy Service Corps	Oct 2011 - May 2012

## **Service & Leadership**

**Respect Is Part of Research:** peer-led sexual assault & harassment prevention workshops for incoming physics & astronomy graduate students, [respectispartofresearch.com](https://respectispartofresearch.com)

Co-coordinator, Respect is Part of Research (with Micah Brush) 2018 - 2021

*(responsibilities: develop workshop content; coordinate with university survivor support office & Title IX office; secure program funding; work with university officials, statewide Title IX office, and graduate union to expand program to all UC Berkeley graduate departments)*

Member, UC Berkeley Coordinated Community Review Team 2020-2021

for Sexual and Gender-Based Violence and Misconduct	
Facilitator training lead, Harvard University Physics Department	Aug 2020
Caltech Astronomy Department	
“Respect is Part of Research” – Presentation and Q&A, UC Berkeley Graduate Assembly	Feb 2020
Lead Organizer, “How to Start a Peer-Led SVSH Prevention Program” workshop (with Micah Brush)	Jan 2020
<i>(2-day workshop attended by ~25 grad students from 10 institutions to teach the Respect is Part of Research model; 4 new RPR chapters started for Fall 2020)</i>	
Presentation and Climate Q&A, Physics Department Faculty Retreat	Dec 2019
“Respect is Part of Research: Peer-Led Training to Improve Departmental Climate”	Oct 2019
UC Berkeley Astronomy Lunch Talks	
Facilitator training lead for UC Berkeley (7 academic departments, 55 peer facilitators)	Aug 2019
Facilitator, UC Berkeley College of Chemistry Diversity & Inclusion Focus Group	Feb 2019
Respect is Part of Research Facilitator	2017 - 2021

## Other Service & Leadership

Journal Referee: ApJ, MNRAS, A&A	
NOIRLab Time Allocation Committee Panel Member (Extragalactic)	2023A - 2025A
NRAO Student Observing Support Grant Review Panel	2022
ALMA Ambassador <i>(lead two day-long workshops to teach community members radio interferometry, from radio basics to data reduction to writing ALMA proposals)</i>	2022
ALMA Distributed Time Allocation Committee member	Cycle 8, 9
Hubble Space Telescope Time Allocation Committee Panel Member (Galaxies)	Mid-Cycle 27, Cycle 27, Cycle 28
Facilitator, UC Berkeley Astronomy Racial Justice Book Club	Summer 2020, Fall 2020
UC Berkeley Astronomy Graduate Student Representative	2019-2020
Head of prospective graduate student visit committee, UC Berkeley	2018, 2019

## Outreach

Early Results from <i>JWST</i> , CU STARS, Boulder, CO	Nov 2022
<i>JWST: a new era of distant galaxies</i> , KIPAC public lecture (~500 attendees), Stanford University, CA	Oct 2022
Astro Circle speaker, BASIS Independent Silicon Valley High School, San Jose, CA	March 2022
<i>Tons of Fuel But No Fire</i> , UC Berkeley Grad Slam, Berkeley CA	Feb 2020
Lunch speaker, Berkeley High School STEMinist Club, Berkeley CA	Feb 2020
<i>Galaxies Across Cosmic Time</i> , Astro Night Public Lecture (~ 250 attendees), Berkeley CA	2019
<i>What’s it like being an astronomer?</i> , MetWest High School, Oakland CA	2019
<i>Galaxies Across Time</i> , Public Talk at Grounds for Science (~ 50 attendees), Emeryville CA	2018
Head Expert, Branson School 9th Grade Science Symposium, Ross CA	2018
Berkeley High School STEMinist Club Shadow Day, UC Berkeley	2016
Astronomy department exposition at Cal Day, UC Berkeley	2016, 2018, 2019
Mentoring group, Society of Women in the Physical Sciences, UC Berkeley	2015 - 2020

## Presentations

### Seminars (\* invited)

* <i>Colloquium</i> , Colorado State University Physics Department	Nov 2023
* <i>Colloquium</i> , Texas A&M Astronomy	Oct 2023
* <i>Colloquium</i> , CU Boulder Astrophysical & Planetary Sciences Department	Feb 2023
*Cosmology & Galaxy Seminar, UC Santa Cruz	Dec 2022
* <i>Colloquium</i> , CU Boulder Astrophysical & Planetary Sciences Department	Nov 2022
* <i>Colloquium</i> , KIPAC, Stanford University	Oct 2022
NRAO webinar, “How to write an ALMA proposal”	Apr 2022
FLASH seminar, UC Santa Cruz Astronomy Department	Apr 2022
*SCIPP seminar, UC Santa Cruz Physics Department	Jan 2022
* <i>Colloquium</i> , Saint Mary’s University in Halifax	Sept 2021
*University of Hertfordshire Astronomy Seminar	June 2021
*CANDELS SED fitting working group meeting	Apr 2021
* <i>Colloquium</i> , University of Sussex	Apr 2021
*Caltech Tea Talk	Dec 2020

Princeton University GalRead Seminar	Nov 2020
Hernquist Group Meeting, Harvard University	Nov 2020
*UMass Amherst Galaxy Lunch Seminar	Oct 2020
University of Arizona Galaxy Group Talk	Oct 2020
*Harvard ITC Colloquium	Oct 2020
*Carnegie Observatories Lunch Talk	Oct 2020
UC Santa Cruz Cosmology-Galaxies-IGM Seminar	Sept 2020
*Galaxy Crawl, University of Arizona	July 2020
*UC Davis Cosmology Seminar	March 2020
CASA/JILA Lunch Seminar, Boulder CO	Feb 2020

### Conference Presentations (\* invited)

* <b>Plenary</b> on early JWST discoveries, Phenomenology Symposium, Pittsburgh PA	May 2023
*The Growth of Galaxies in the Early Universe VII, Sesto IT	March 2023
*First Light at Cosmic Dawn: Exploiting the James Webb Space Telescope Revolution, Bern CH	Jan 2023
*An In-Situ View of Galaxy Formation 2, Schloss Ringberg	July 2022
* <b>Review</b> , European Astronomical Society Annual Meeting: SS4, The Main Sequence of Star Formation	July 2022
Public Summit of the Action Collaborative on Preventing Sexual Harassment in Higher Education	Oct 2020
National Academies of Sciences, Engineering, and Medicine	
*Where the Star Formation Ends, Lorentz Center Workshop ( <i>canceled due to COVID-19</i> )	March 2020
Galaxy Quenching and Transformation Throughout Cosmic Time, Aspen CO	Feb 2020
*The Growth of Galaxies in the Early Universe VI, Sesto IT	Jan 2020
The Art of Measuring Galaxy Physical Properties, Milano IT	Nov 2019
IAU Symposium 352: Uncovering early galaxy evolution in the ALMA and JWST era	June 2019
UC Santa Cruz Galaxy Workshop	Aug 2018

### Grants

Simons Foundation Grant ( <i>Aspen Center for Physics</i> )	2023
NASA Hubble Fellowship (~\$500,000)	2023-2026
ALMA Ambassador Research Award (\$10,000)	2022
NRAO Student Observing Support Award (\$10,000)	2020
Travel Grant, Aspen Center for Physics	Feb 2020
UC Berkeley Graduate Division Travel Grant	Summer 2019, Fall 2019
IAU Travel Grant	2019
AAS International Travel Grant	2019-1, 2019-2, 2020-1
STScI grant to support <i>HST</i> program GO 15436 (\$22,000)	2017
NRAO Student Observing Support Award (\$32,000)	2017
NSF Graduate Research Fellowship (3 years stipend & tuition)	2016
UC Berkeley Chancellor's Fellowship (2 years stipend & tuition)	2015
Professional and Academic Conference Endowment, CU Boulder	2014
Individual Grant, Undergraduate Research Opportunities Program, CU Boulder	2014
Research Assistantship, Undergraduate Research Opportunities Program, CU Boulder	2012

### Press

- *The Atlantic*, "Astronomers were not expecting this", <https://www.theatlantic.com/science/archive/2023/03/webb-space-telescope-discovers-galaxies-astronomy/673274/>
- Canada Public Radio interview on "As It Happens", These red dots could change everything we think we know about how galaxies form, <https://www.cbc.ca/radio/asithappens/james-webb-distant-galaxies-1.6762078>
- *Nature*, Four Revelations from the Webb Telescope about Distant Galaxies, [nature.com/articles/d41586-022-02056-5](https://www.nature.com/articles/d41586-022-02056-5)
- NRAO Press Release, ALMA Witnesses Deadly Star-Slinging Tug-of-War Between Merging Galaxies, [public.nrao.edu/news/alma-merging-galaxies-tidal-tails/](https://public.nrao.edu/news/alma-merging-galaxies-tidal-tails/)
- AAS Nova, Sizing Up Galaxies at Cosmic Noon, <https://aasnova.org/2022/12/02/sizing-up-galaxies-at-cosmic-noon/>

### Publications (46 total, 11 as first author; ADS)

As of Sept 2023, these works have 1,444 citations with an h-index of 20. In the list below, my name is **bolded** and authors under my direct supervision are underlined.

First author:

11. **K. A. Suess**, C. Williams, B. Robertson et al., Minor merger growth in action: JWST detects faint blue companions around massive quiescent galaxies at  $0.5 < z < 3$ , in review at ApJL. [arXiv: 2307.14209](#).
10. **Suess, K. A.**, J. Leja, B. D. Johnson, R. Bezanson et al., Recovering the Star Formation Histories of Recently Quenched Galaxies: The Impact of Model and Prior Choices, ApJ 935, 2, 146. DOI: [10.3847/1538-4357/ac82b0](#)
9. **Suess, K. A.**, R. Bezanson, E. J. Nelson, D. J. Setton et al., Rest-frame near-infrared sizes of galaxies at cosmic noon: objects in JWST’s mirror are smaller than they appeared, ApJL 937, 2, L33. DOI: [10.3847/2041-8213/ac8e06](#)
8. **Suess, K. A.**, M. Kriek, R. Bezanson, J. E. Greene et al., SQuIGGLE: Studying Quenching in Intermediate- $z$  Galaxies – Gas, Angular Momentum, and Evolution, ApJ 926, 1, 89, 2022. DOI: [10.3847/1538-4357/ac404a](#)
7. **Suess, K. A.**, M. Kriek, G. Barro, S. H. Price, Dissecting the size-mass and  $\Sigma_1$ -mass relations at  $1.0 < z < 2.5$ : galaxy mass profiles and color gradients as a function of spectral shape, ApJ 915, 2, 87, 2021. DOI: [10.3847/1538-4357/abf1e4](#)
6. **Suess, K. A.**, M. Kriek, S. H. Price, G. Barro, Color gradients along the quiescent galaxy sequence: clues to quenching and structural growth, ApJL 899, L2, 2020. DOI: [10.3847/2041-8213/abacc9](#)
5. **Suess, K. A.**, M. Kriek, S. H. Price, G. Barro, Half-mass radii of quiescent and star-forming galaxies evolve slowly from  $0 \sim z \leq 2.5$ : implications for galaxy assembly histories, ApJL 885, L22, 2019. DOI: [10.3847/2041-8213/ab4db3](#)
4. **Suess, K. A.**, M. Kriek, S. H. Price, G. Barro, Half-mass radii for  $\sim 7,000$  galaxies at  $1.0 \leq z \leq 2.5$ : most of the evolution in the mass-size relation is due to color gradients, ApJ 877, 103, 2019. DOI: [10.3847/1538-4357/ab1bda](#)
3. **Suess, K. A.**, R. Bezanson, J. S. Spilker, M. Kriek, J. E. Greene, R. Feldmann, Q. Hunt, D. Narayanan, Massive Quenched Galaxies at  $z \sim 0.7$  Retain Large Molecular Gas Reservoirs, ApJL 846, L14, 2017. DOI: [10.3847/2041-8213/aa85dc](#)
2. **Suess, K. A.**, J. Darling, M. P. Haynes, R. Giovanelli, Identifying OH Imposters in the ALFALFA Neutral Hydrogen Survey, MNRAS 459, 220-231, 2016. DOI: [10.1093/mnras/stw666](#)
1. **Suess, K. A.**, M. Snow, R. Viereck, J. Machol, Solar Spectral Proxy Irradiance from GOES (SSPRING): A Model for Solar EUV Irradiance, J. Space Weather Space Clim., 6, A10, 11pp, 2016. DOI: [10.1051/swsc/2016003](#)

Second/third author:

5. Hartley, A. I., E. J. Nelson, **K. A. Suess**, A. M. Gargia, M. Park et al., The first quiescent galaxies in TNG300, MNRAS 522, 2, 2023. DOI: [10.1093/mnras/stad1162](#)
4. Nelson, E., **K. A. Suess**, R. Bezanson, S. H. Price, et al., JWST reveals a population of ultra-red, flattened disk galaxies at  $2 < z < 6$  previously missed by HST, ApJL 948, L18, 2023. DOI: [10.3847/2041-8213/acc1e1](#)
3. Spilker, J., **K. A. Suess**, D. J. Setton, R. Bezanson et al., Star Formation Suppression by Tidal Removal of Cold Molecular Gas from an Intermediate-redshift Massive Post-starburst Galaxy, ApJ 936, 1, L11, 2022. DOI: [10.3847/2041-8213/ac75ea](#)
2. R. Bezanson, J. Spilker, **K. A. Suess**, D. J. Setton et al., Now You See It, Now You Don’t: Star Formation Truncation Precedes the Loss of Molecular Gas by 100 Myr in Massive Poststarburst Galaxies at  $z \sim 0.6$ , ApJ 925, 2, 153, 2022. DOI: [10.3847/1538-4357/ac3dfa](#)
1. Setton, D. J., R. Bezanson, **K. A. Suess** et al., SQuIGGLE survey: massive  $z \sim 0.6$  post-starburst galaxies exhibit flat age gradients, ApJ 905, 79, 2020. DOI: [10.3847/1538-4357/abc265](#)

Contributing author:

30. Mathews, E. P., incl. **K. A. Suess**, As Simple as Possible but No Simpler: Optimizing the Performance of Neural Net Emulators for Galaxy SED Fitting, ApJ 954, 132, 2023. DOI: [10.3847/1538-4357/ace720](#)
29. Martorano, M., incl. **K. A. Suess**, Rest-Frame Near-Infrared Radial Light Profiles up to  $z=3$  from JWST/NIRCam: Wavelength Dependence of the Sersic Index, *submitted to ApJ*. [arXiv:2308.11392](#)
28. de Graaf, A., incl. **K. A. Suess**, Ionised gas kinematics and dynamical masses of  $z \geq 6$  galaxies from JADES/NIRSpec high-resolution spectroscopy, *submitted to ApJ*. [arXiv:2308.09742](#)
27. Wu, P.-F., incl. **K. A. Suess**, Stars, gas, and star formation of distant post-starburst galaxies, *accepted to ApJ*. [arXiv:2308.08681](#)
26. Atek, H., incl. **K. A. Suess**, First spectroscopic observations of the galaxies that reionized the Universe, *submitted to Nature*. [arXiv:2308.08540](#)



25. Furtak, L. J., incl. **K. A. Suess**, JWST UNCOVER: Extremely Red and Compact Object at  $z_{phot} \sim 7.6$  Triply Imaged by A2744, *ApJ* 952, 142. DOI: [10.3847/1538-4357/acdc9d](https://doi.org/10.3847/1538-4357/acdc9d)
24. Tacchella, S., incl. **K. A. Suess**, JWST NIRCам+NIRSpec: Interstellar medium and stellar populations of young galaxies with rising star formation and evolving gas reservoirs, *MNRAS* 522, 2023, 4. DOI: [10.1093/mnras/stad1408](https://doi.org/10.1093/mnras/stad1408)
23. Furtak, L. J., incl. **K. A. Suess**, A variable active galactic nucleus at  $z = 2.06$  triply-imaged by the galaxy cluster MACS J0035.4-2015, *MNRAS* 522, 4, 2023. DOI: [10.1093/mnras/stad1321](https://doi.org/10.1093/mnras/stad1321)
22. Tacchella, S., incl. **K. A. Suess**, JADES Imaging of GN-z11: Revealing the Morphology and Environment of a Luminous Galaxy 430 Myr After the Big Bang, *ApJ* 952, 74, 2023. DOI: [10.3847/1538-4357/acdbc6](https://doi.org/10.3847/1538-4357/acdbc6)
21. Labbe, I., incl. **K. A. Suess**, UNCOVER: Candidate Red Active Galactic Nuclei at  $3 < z < 7$  with JWST and ALMA, *submitted to ApJ*. [arXiv:2306.07320](https://arxiv.org/abs/2306.07320)
20. Baker, W. M., incl. **K. A. Suess**, Inside-out growth in the early Universe: a core in a vigorously star-forming disc, *submitted to Nature Astronomy*. [arXiv:2306.02472](https://arxiv.org/abs/2306.02472)
19. Hainline, K. N., incl. **K. A. Suess**, The Cosmos in its Infancy: JADES Galaxy Candidates at  $z > 8$  in GOODS-S and GOODS-N, *submitted to ApJ*. [arXiv:2306.02468](https://arxiv.org/abs/2306.02468)
18. Rieke, M. J., incl. **K. A. Suess**, JADES Initial Data Release for the Hubble Ultra Deep Field: Revealing the Faint Infrared Sky with Deep JWST NIRCам Imaging, *accepted to ApJS*. [arXiv:2306.02466](https://arxiv.org/abs/2306.02466)
17. Eisenstein, D. J., incl. **K. A. Suess**, Overview of the JWST Advanced Deep Extragalactic Survey (JADES), *submitted to ApJS*. [arXiv:2306.02465](https://arxiv.org/abs/2306.02465)
16. Ji, Z., C. C. Williams, S. Tacchella, **K. A. Suess**, et al., JADES + JEMS: A Detailed Look at the Buildup of Central Stellar Cores and Suppression of Star Formation in Galaxies at Redshifts  $3 < z < 4.5$ , *submitted to ApJ*. [arXiv:2305.18518](https://arxiv.org/abs/2305.18518)
15. Baggen, J. F. W., incl. **K. A. Suess**, Sizes and mass profiles of candidate massive galaxies discovered by JWST at  $7 < z < 9$ : evidence for very early formation of the central  $\sim 100$  pc of present-day ellipticals, *submitted to ApJL*. [arXiv:2305.17162](https://arxiv.org/abs/2305.17162)
14. Curtis-Lake, E., incl. **K. A. Suess**, Spectroscopy of four metal-poor galaxies beyond redshift ten, *Nature Astronomy*, 7, 622, 2023. DOI: [10.1038/s41550-023-01918-w](https://doi.org/10.1038/s41550-023-01918-w)
13. Robertson, B., incl. **K. A. Suess**, Identification and properties of intense star-forming galaxies at redshifts  $z > 10$ , *Nature Astronomy*, 7, 611, 2023. DOI: [10.1038/s41550-023-01921-1](https://doi.org/10.1038/s41550-023-01921-1)
12. Verrico, M., D. J. Setton, R. Bezanson, J. E. Greene, **K. A. Suess** et al., Merger Signatures are Common but not Universal in Massive, Recently-Quenched Galaxies at  $\sim 0.7$ , *ApJ* 949, 1, 5, 2023. DOI: [10.3847/1538-4357/acc38b](https://doi.org/10.3847/1538-4357/acc38b)
11. Giménez-Arteaga, C., incl. **K. A. Suess**, Spatially Resolved Properties of High Redshift Galaxies in the SMACS0723 JWST ERO Field, *ApJ* 948, 2, 126, 2023. DOI: [10.3847/1538-4357/acc5ea](https://doi.org/10.3847/1538-4357/acc5ea)
10. Labbe, I, P. van Dokkum, E. Nelson, R. Bezanson, **K. A. Suess** et al., A population of red candidate massive galaxies 600 Myr after the Big Bang, *Nature* 616, 7956, 266, 2023. DOI: [10.1038/s41586-023-05786-2](https://doi.org/10.1038/s41586-023-05786-2)
9. Looser, T. J., incl. **K. A. Suess**, Discovery of a quiescent galaxy at  $z = 7.3$ , *submitted to Nature*. [arXiv:2302.14155](https://arxiv.org/abs/2302.14155)
8. Bunker, A. J., incl. **K. A. Suess**, JADES NIRSpec Spectroscopy of GN-z11: Lyman- $\alpha$  emission and possible enhanced nitrogen abundance in a  $z = 10.60$  luminous galaxy, *submitted to ApJ*. [arXiv:2302.07256](https://arxiv.org/abs/2302.07256)
7. Williams, C. C., incl. **K. A. Suess**, JEMS: A deep medium-band imaging survey in the Hubble Ultra-Deep Field with JWST NIRCам & NIRISS, *submitted to ApJL*. [arXiv:2301.09780](https://arxiv.org/abs/2301.09780)
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## Skills

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<b>Computing</b>	Python, L <sup>A</sup> T <sub>E</sub> X, Mathematica, bash, git
<b>Other Software</b>	Prospector, FSPS, GALFIT, SExtractor, FAST, MESA