Katherine A. (Wren) Suess

Department of Astrophysical and Planetary Sciences suess@colorado.edu University of Colorado Boulder wrensuess.github.io Research Interests Observational galaxy formation and evolution; galaxy quenching; structural evolution of galaxies; spatiallyresolved stellar population modeling; galaxy star formation histories Research Positions Assistant Professor, University of Colorado Boulder Aug 2024 -Hubble Fellow, Stanford University 2023 - 2024 Stanford - Santa Cruz Cosmology Fellow, UC Santa Cruz & Stanford University 2021 - 2023 UC Santa Cruz Chancellor's Fellow, UC Santa Cruz 2021 - 2023 NSF Graduate Research Fellow; Berkeley Chancellor's Fellow, UC Berkeley 2015 - 2021 Education Ph.D. Astrophysics, University of California, Berkeley Aug 2021 Advisor: Mariska Kriek Thesis: The Growth & Transformation of Galaxies Across Cosmic Time M.A. Astrophysics, University of California, Berkeley May 2017 B.A. Physics, summa cum laude, University of Colorado, Boulder May 2015 Advisor: Jeremy Darling Honors thesis: Identifying OH Imposters in the ALFALFA Neutral Hydrogen Survey Selected Awards & Honors Hubble Fellowship 2023 Mary Elizabeth Uhl Prize for outstanding scholarly achievement by a graduate student 2021 finishing their dissertation in Astronomy or Physics UC Berkeley Grad Slam Semifinalist (final competition canceled due to COVID-19) 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 Grants Funded Research Grants (\sim \$1.54 million) JWST GO Cycle 3 (Co-PI with R. Wechsler: \$243k total) 2024-2027 Characterizing the z > 1 satellite population with public deep-field JWST surveys NSF AAG (Co-PI with J. Spilker: \$525k total, \$262k at CU) 2024-2027 Collaborative Research: A Matter of Timing Star Formation Suppression Over the Last Half of Cosmic History JWST GO Cycle 2 (PI: \$715k total, \$497k at CU Boulder) 2023-2026 Medium Bands, Mega Science: spatially-resolved R~15 spectrophotometry of Abell 2744 NRAO ALMA Student Observing Support (PI: \$10k) 2020-2021 Mapping the molecular gas reservoirs of recently-quenched galaxies HST Cycle 25 (**PI**: \$22k) 2017-2019 Understanding the origin of large gas reservoirs in recently-quenched galaxies NRAO VLA Student Observing Support (PI: \$32k) 2017-2018 Understanding the origin of large gas reservoirs in recently-quenched galaxies Fellowships & travel grants NASA Hubble Fellowship 2023-2026

ALMA Ambassador Research Award

Simons Foundation Grant (to attend Aspen Center for Physics workshop)

UC Berkeley Graduate Division Travel Grant

IAU Travel Grant

AAS International Travel Grant

NSF Graduate Research Fellowship (3 years stipend & tuition)

UC Berkeley Chancellor's Fellowship (2 years stipend & tuition)

2022

Feb 2020, Aug 2023

Summer 2019, Fall 2019

2019-1, 2019-2, 2020-1

2016

UC Berkeley Chancellor's Fellowship (2 years stipend & tuition)

2016

PI Telescope Programs

Atacama Large Millimeter/submillimeter Array

- 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∼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 $z\sim0.6$ 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

- 2. **K. Suess** & R. Wechsler et al., Cycle 3: AR 5907, Characterizing the z > 1 satellite population with public deep-field JWST surveys (archival)
- 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 NIRCam; 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 NIRSpec). Cycle 2: PID 3516 (PI Matthee, 47.2hr NIRCam grism), 3659 (PI D'Eugenio, 24hr NIRSpec), 4106 (PI Nelson, 14hr NIRSpec), 4196 (PI Gibson, 3hr NIRSpec), 4233 (PI A. de Graaff & Brammer, 58hr NIRSpec). Cycle 3: PID 6405 (PIs S. Cutler & K. Whitaker, 20hr NIRSpec), 5629 (PIs M. Kriek, A. Beverage, & C. Cheng, 42hr NIRSpec), 5355 (PI M. Bustamante Rosell, archival), 5224 (PIs P. Oesch & R. Naidu, 34hr NIRSpec).

Very Large Array: VLA/19A-390 (PI R. Bezanson, 8hr), VLA/20A-188 (PI J. Spilker, 8.3hr), VLA/20B-281 (PI J. Spilker, 6.5hr), VLA/22A-362 (PI J. Spilker, 45hr), VLA/24B-451 (PI V. Donofrio, 21hr).

Additional Observing Experience:

Keck Observatory: OSIRIS (2 nights), MOSFIRE (1 night), LRIS (0.5 night) Rudolph Minkowski Observational Astronomy Workshop, Lick Observatory, 2015

Teaching

ASTR-3800, Introduction to Scientific Data Analysis and Computing	Fall 2024	
Undergraduate majors course, ~ 35 students		
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	

Service & Leadership

Respect Is Part of Research:	peer-led sexual assault & harassment prevention workshops
	for incoming physics & astronomy graduate students,
	respectispartofresearch.com

Co-coordinator, Respect is Part of Research (with Micah Brush)	2018 -	2021
(responsibilities: develop workshop content; coordinate with university survivor support of	fice &	

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

Caltech Astronomy Department

Aug 2020

"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

(2-day workshop attended by \sim 25 grad students from 10 institutions to teach the Respect is Part of Research model: 4 new RPR chapters started for Fall 2020)

Presentation and Climate Q&A, Physics Department Faculty Retreat

"Respect is Part of Research: Peer-Led Training to Improve Departmental Climate"

Oct 2019

IJC Pooled on Astronomy Level, Teller

UC Berkeley Astronomy Lunch Talks

Facilitator training lead for UC Berkeley (7 academic departments, 55 peer facilitators)

Facilitator, UC Berkeley College of Chemistry Diversity & Inclusion Focus Group

Respect is Part of Research Facilitator

Aug 2019

Feb 2019

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 (lead two day-long workshops to teach community members radio interferometry, 2022 from radio basics to data reduction to writing ALMA proposals)

ALMA Distributed Time Allocation Committee member	Cycle 8, 9
Hubble Space Telescope Time Allocation Committee Panel Member (Galaxies)	Cycle 27, 27.5, 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

Latin American Webinars on Physics (~300 views; https://www.youtube.com/watch?v=mta	_XWK4nwU) Oct
Early Results from JWST, CU STARS, Boulder, CO	Nov 2022
JWST: a new era of distant galaxies, KIPAC public lecture (~500 attendees), Stanford University, CA Oct 2022	
Astro Circle speaker, BASIS Independent Silicon Valley High School, San Jose, CA	March 2022
Tons of Fuel But No Fire, UC Berkeley Grad Slam, Berkeley CA	Feb 2020
Lunch speaker, Berkeley High School STEMinist Club, Berkeley CA	Feb 2020
Galaxies Across Cosmic Time, Astro Night Public Lecture (~ 250 attendees), Berkeley CA	2019
What's it like being an astronomer?, MetWest High School, Oakland CA	2019
Galaxies Across Time, 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	016, 2018, 2019
Mentoring group, Society of Women in the Physical Sciences, UC Berkeley	2015 - 2020

Presentations

Seminars (* invited)	
*ITC Seminar, Center for Astrophysics, Harvard	March 2024
*Colloquium, Colorado State University Physics Department	Nov 2023
*Astronomy Seminar, Texas A&M Astronomy	Oct 2023
*Colloquium, CU Boulder Astrophysical & Planetary Sciences Department	Feb 2023
*Cosmology & Galaxy Seminar, UC Santa Cruz	Dec 2022
*Colloquium, CU Boulder Astrophysical & Planetary Sciences Department	Nov 2022
*Colloquium, 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
*Colloquium, Saint Mary's University in Halifax	Sept 2021
*University of Hertfordshire Astronomy Seminar	June 2021
*CANDELS SED fitting working group meeting	Apr 2021
*Colloquium, University of Sussex	Apr 2021
*Caltech Tea Talk	$\mathrm{Dec}\ 2020$
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

$\underline{\textbf{Conference Presentations}} \ (^* \ invited)$

Extreme Galaxies in their Extreme Environments at Extremely Early Epochs, Reykjavik,	Iceland May 2024
The Physics and Impact of Astrophysical Dust, Aspen CO	March 2024
*Hubble Symposium, Boston MA	Sep 2023
Revealing the Detailed Astrophysics of Early Galaxies with JWST, Aspen CO	Aug-Sep 2023

- *Plenary on early JWST discoveries, Phenomenology Symposium, Pittsburgh PA
- *The Growth of Galaxies in the Early Universe VII, Sesto IT

May 2023 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

*Review, 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 (canceled due to COVID-19)	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

Press

- \bullet 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
- \bullet Nature, Four Revelations from the Webb Telescope about Distant Galaxies, 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/
- \bullet AAS Nova, Sizing Up Galaxies at Cosmic Noon, https://aasnova.org/2022/12/02/sizing-up-galaxies-at-cosmic-noon/

Publications (65 total, 12 as first author; ADS)

As of June 2024, these works have 3075 citations with an h-index of 28. In the list below, my name is **bolded** and authors under my direct supervision are † in *italics*.

First author:

- 12. Suess, K. A., Weaver, J. R., Price, S. H., et al., "Medium Bands, Mega Science: a JWST/NIRCam Medium-Band Imaging Survey of Abell 2744," 2024, arXiv:2404.13132
- 11. Suess, K. A., Williams, C. C., Robertson, B., et al., "Minor Merger Growth in Action: JWST Detects Faint Blue Companions around Massive Quiescent Galaxies at $0.5 \le z \le 3.0$," 2023, ApJL 956 L42
- 10. <u>Suess, K. A.</u>, Bezanson, R., Nelson, E. J., et al., "Rest-frame Near-infrared Sizes of Galaxies at Cosmic Noon: Objects in JWST's Mirror Are Smaller than They Appeared," 2022, ApJL 937 L33
- 9. <u>Suess, K. A.</u>, Leja, J., Johnson, B. D., et al., "Recovering the Star Formation Histories of Recently Quenched Galaxies: The Impact of Model and Prior Choices," 2022, ApJ 935 146
- 8. <u>Suess, K. A.</u>, Kriek, M., Bezanson, R., et al., "SQuIGGLE: Studying Quenching in Intermediate-z Galaxies-Gas, AnguLar Momentum, and Evolution," 2022, ApJ 926-89
- Suess, K. A., Kriek, M., Price, S. H., & Barro, G., "Dissecting the Size-Mass and Σ-1-Mass Relations at 1.0 < z < 2.5: Galaxy Mass Profiles and Color Gradients as a Function of Spectral Shape," 2021, ApJ 915 87
- 6. <u>Suess, K. A.</u>, Kriek, M., Price, S. H., & Barro, G., "Color Gradients along the Quiescent Galaxy Sequence: Clues to Quenching and Structural Growth," 2020, ApJL 899 L26
- Suess, K. A., Kriek, M., Price, S. H., & Barro, G., "Half-mass Radii of Quiescent and Star-forming Galaxies Evolve Slowly from 0 lesssim z ≤ 2.5: Implications for Galaxy Assembly Histories," 2019, ApJL 885 L22
- Suess, K. A., Kriek, M., Price, S. H., & Barro, G., "Half-mass Radii for ~ 7000 Galaxies at 1.0 ≤ z ≤ 2.5: Most of the Evolution in the Mass-Size Relation Is Due to Color Gradients," 2019, ApJ 877 103
- 3. <u>Suess, K. A.</u>, Bezanson, R., Spilker, J. S., et al., "Massive Quenched Galaxies at $z \sim 0.7$ Retain Large Molecular Gas Reservoirs," 2017, ApJL 846 L14

- 2. <u>Suess, K. A.</u>, Darling, J., Haynes, M. P., & Giovanelli, R., "Identifying OH Imposters in the ALFALFA Neutral Hydrogen Survey," 2016, MNRAS 459 220-231
- 1. <u>Suess, K.</u>, Snow, M., Viereck, R., & Machol, J., "Solar Spectral Proxy Irradiance from GOES (SSPRING): a model for solar EUV irradiance," 2016, Journal of Space Weather and Space Climate 6 A10

Second or third author:

- Beverage, A. G., Kriek, M., <u>Suess, K. A.</u>, et al., "The Heavy Metal Survey: The Evolution of Stellar Metallicities, Abundance Ratios, and Ages of Massive Quiescent Galaxies since z ~ 2," 2024, ApJ 966 234
- 7. Ji, Z., Williams, C. C., <u>Suess, K. A.</u>, et al., "JADES: Rest-frame UV-to-NIR Size Evolution of Massive Quiescent Galaxies from Redshift z=5 to z=0.5," 2024, arXiv:2401.00934
- Price, S. H., <u>Suess, K. A.</u>, Williams, C. C., et al., "UNCOVER: The rest ultraviolet to near infrared multiwavelength structures and dust distributions of sub-millimeter-detected galaxies in Abell 2744," 2023, arXiv:2310.02500
- † Hartley, A. I., Nelson, E. J., <u>Suess, K. A.</u>, et al., "The first quiescent galaxies in TNG300," 2023, MNRAS 522 3138-3144
- 4. Nelson, E. J., <u>Suess, K. A.</u>, Bezanson, R., et al., "JWST Reveals a Population of Ultrared, Flattened Galaxies at 2 lesssim z lesssim 6 Previously Missed by HST," 2023, ApJL 948 L18
- 3. Spilker, J. S., <u>Suess, K. A.</u>, Setton, D. J., et al., "Star Formation Suppression by Tidal Removal of Cold Molecular Gas from an Intermediate-redshift Massive Post-starburst Galaxy," 2022, <u>ApJL 936 L11</u>
- Bezanson, R., Spilker, J. S., <u>Suess, K. A.</u>, 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 0.6," 2022, ApJ 925 153
- 1. Setton, D. J., Bezanson, R., <u>Suess, K. A.</u>, et al., "SQuIGGLE Survey: Massive $z \sim 0.6$ Post-starburst Galaxies Exhibit Flat Age Gradients," 2020, ApJ 905 79

Contributing author:

- 45. Williams, C. C., Alberts, S., Ji, Z., Hainline, K. N., Lyu, J., Rieke, G., Endsley, R., <u>Suess, K. A.</u>, et al., "The Galaxies Missed by Hubble and ALMA: The Contribution of Extremely Red Galaxies to the Cosmic Census at 3 < z < 8," 2024, ApJ 968 34
- 44. Cutler, S. E., Whitaker, K. E., Weaver, J. R., Wang, B., Pan, R., Bezanson, R., Furtak, L. J., Labbe, I., et al., including <u>KAS</u>, "Two Distinct Classes of Quiescent Galaxies at Cosmic Noon Revealed by JWST PRIMER and UNCOVER," 2024, ApJL 967 L23
- 43. Kriek, M., Beverage, A. G., Price, S. H., <u>Suess, K. A.</u>, Barro, G., Bezanson, R. S., Conroy, C., Cutler, S. E., et al., "The Heavy Metal Survey: Star Formation Constraints and Dynamical Masses of 21 Massive Quiescent Galaxies at z = 1.3-2.3," 2024, ApJ 966 36
- 42. Wang, B., Leja, J., de Graaff, A., Brammer, G. B., Weibel, A., van Dokkum, P., Baggen, J. F. W., Suess, K. A., et al., "RUBIES: Evolved Stellar Populations with Extended Formation Histories at z ∼ 7 − 8 in Candidate Massive Galaxies Identified with JWST/NIRSpec," 2024, arXiv:2405.01473
- 41. Looser, T. J., D'Eugenio, F., Maiolino, R., Witstok, J., Sandles, L., Curtis-Lake, E., Chevallard, J., Tacchella, S., et al., including <u>KAS</u>, "A recently quenched galaxy 700 million years after the Big Bang," 2024, Nature 629 53-57
- 40. Clausen, M., Whitaker, K. E., Momcheva, I., Cutler, S. E., <u>Suess, K. A.</u>, Weaver, J. R., Miller, T., van der Wel, A., et al., "3D-DASH: The Evolution of Size, Shape, and Intrinsic Scatter in Populations of Young and Old Quiescent Galaxies at 0.5 < z < 3," 2024, arXiv:2405.09354
- 39. de Graaff, A., Rix, H.-W., Carniani, S., <u>Suess, K. A.</u>, Charlot, S., Curtis-Lake, E., Arribas, S., Baker, W. M., et al., "Ionised gas kinematics and dynamical masses of z \gtrsim 6 galaxies from JADES/NIRSpec high-resolution spectroscopy," 2024, A&Ap 684 A87
- 38. de Graaff, A., Setton, D. J., Brammer, G., Cutler, S., <u>Suess, K. A.</u>, Labbe, I., Leja, J., Weibel, A., et al., "Efficient formation of a massive quiescent galaxy at redshift 4.9," 2024, arXiv:2404.05683
- 37. Slob, M., Kriek, M., Beverage, A. G., <u>Suess, K. A.</u>, Barro, G., Bezanson, R., Cheng, C. M., Conroy, C., et al., "The JWST-SUSPENSE Ultradeep Spectroscopic Program: Survey Overview and Star-Formation Histories of Quiescent Galaxies at 1 < z < 3," 2024, arXiv:2404.12432

- 36. Hainline, K. N., Johnson, B. D., Robertson, B., Tacchella, S., Helton, J. M., Sun, F., Eisenstein, D. J., Simmonds, C., et al., including <u>KAS</u>, "The Cosmos in Its Infancy: JADES Galaxy Candidates at z & in GOODS-S and GOODS-N," 2024, ApJ 964 71
- 35. Kado-Fong, E., Robinson, A., Nyland, K., Greene, J. E., <u>Suess, K. A.</u>, Stierwalt, S., & Beaton, R., "Dwarf–Dwarf Interactions Can Both Trigger and Quench Star Formation," 2024, ApJ 963–37
- 34. Wang, B., Leja, J., Atek, H., Labbé, I., Li, Y., Bezanson, R., Brammer, G., Cutler, S. E., et al., including <u>KAS</u>, "Quantifying the Effects of Known Unknowns on Inferred High-redshift Galaxy Properties: Burstiness, IMF, and Nebular Physics," 2024, ApJ 963 74
- 33. Wright, L., Whitaker, K. E., Weaver, J. R., Cutler, S. E., Wang, B., Carnall, A., <u>Suess, K. A.</u>, Bezanson, R., et al., "Remarkably Compact Quiescent Candidates at 3 < z < 5 in JWST-CEERS," 2024, ApJL 964 L10
- 32. Wang, B., de Graaff, A., Davies, R. L., Greene, J. E., Leja, J., Goulding, A. D., Williams, C. C., Brammer, G. B., et al., including <u>KAS</u>, "RUBIES: JWST/NIRSpec Confirmation of an Infrared-luminous, Broad-line Little Red Dot with an Ionized Outflow," 2024, arXiv:2403.02304
- 31. Setton, D. J., Khullar, G., Miller, T. B., Bezanson, R., Greene, J. E., <u>Suess, K. A.</u>, Whitaker, K. E., Antwi-Danso, J., et al., "UNCOVER NIRSpec/PRISM Spectroscopy Unveils Evidence of Early Core Formation in a Massive, Centrally Dusty Quiescent Galaxy at z_spec = 3.97," 2024, arXiv:2402.05664
- 30. Atek, H., Labbé, I., Furtak, L. J., Chemerynska, I., Fujimoto, S., Setton, D. J., Miller, T. B., Oesch, P., et al., including <u>KAS</u>, "Most of the photons that reionized the Universe came from dwarf galaxies," 2024, Nature 626 975-978
- 29. Wang, B., Leja, J., Labbé, I., Bezanson, R., Whitaker, K. E., Brammer, G., Furtak, L. J., Weaver, J. R., et al., including <u>KAS</u>, "The UNCOVER Survey: A First-look HST+JWST Catalog of Galaxy Redshifts and Stellar Population Properties Spanning 0.2<z<15," 2024, ApJS 270 12
- 28. Alberts, S., Williams, C. C., Helton, J. M., <u>Suess, K. A.</u>, Ji, Z., Shivaei, I., Lyu, J., Rieke, G., et al., "To high redshift and low mass: exploring the emergence of quenched galaxies and their environments at 3jzj6 in the ultra-deep JADES MIRI F770W parallel," 2023, arXiv:2312.12207
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Skills

Computing Python, LATEX, Mathematica, bash, git

Other Software Prospector, FSPS, GALFIT, SExtractor, FAST, MESA