



# Vicente Estrada-Carpenter

*Beus Postdoctoral Fellow*  
*School of Earth and Space Exploration*  
*Arizona State University, Tempe, AZ*  
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## RESEARCH INTERESTS

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Astrophysics, Galaxy Evolution, Stellar Populations, Formation Histories, Quenching, Spatially Resolved Stellar Populations, Astrostatistics, Spectral Analysis, Slitless Spectroscopy

## COLLABORATIONS

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I am an active member of CANUCS (CANadian NIRISS Unbiased Cluster Survey), NGDEEP (Next Generation Deep Extragalactic Exploratory Public ), and PEARLS (Prime Extragalactic Areas for Reionization and Lensing Science)

## EDUCATION

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<b>PhD in Astronomy</b> <i>Texas A&amp;M University</i> Thesis advisor: Casey Papovich	2018-2021
<b>Masters in Astronomy</b> <i>Texas A&amp;M University</i> Thesis advisor: Casey Papovich	2015-2018
<b>Bachelors of Science in Physics</b> <i>Southwestern University</i> Magna Cum Laude	2011-2014

## PROFESSIONAL EMPLOYMENT

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<b>Beus Prize Postdoctoral Fellowship</b> <i>Arizona State Univeristy</i> Supervisor: Judd Bowman	2024-
<b>Postdoctoral Fellow</b> <i>Saint Mary's University</i> Supervisor: Marcin Sawicki	2021-2024

## PUBLISHED PAPERS

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- **Estrada-Carpenter, V.**, M. Sawicki, G. Brammer, G. Desprez, et al., When, Where, and How Star Formation Happens in a Galaxy Pair at Cosmic Noon Using CANUCS JWST/NIRISS Grism Spectroscopy, (*2 Citations*)
- **Estrada-Carpenter, V.**, C. Papovich, I. Momcheva, G. Brammer, et al., CLEAR: The Morphological Evolution of Galaxies in the Green Valley, ApJ 951, 2, 115, 2023, DOI: 10.3847/1538-4357/acd4be (*7 Citations*)
- **Estrada-Carpenter, V.**, C. Papovich, I. Momcheva, G. Brammer, et al., CLEAR. II. Evidence for Early Formation of the Most Compact Quiescent Galaxies at High Redshift, ApJ 898, 2, 171, 2020, DOI: 10.3847/1538-4357/aba004 (*51 Citations*)
- **Estrada-Carpenter, V.**, C. Papovich, I. Momcheva, G. Brammer, et al., CLEAR. I. Ages and Metallicities of Quiescent Galaxies at  $1.0 < z < 1.8$  Derived from Deep Hubble Space Telescope Grism Data, ApJ 870, 2, 133, 2019, DOI: 10.3847/1538-4357/aaf22e (*69 Citations*)

## PRESENTATIONS

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- Invited Speaker, Arizona State University - SESE Symposium, Oral presentation, Tempe AZ, 2024
- Invited Speaker, Saint Mary's University - 2024 ICA Symposium , Oral presentation, Halifax NS Canada, 2024
- Guest Speaker at the Cosmic Dawn Center, Virtual presentation, University of Copenhagen, Copenhagen, Denmark, 2022
- Invited Speaker, Saint Mary's University - Data Analytics Seminar , Oral presentation, Virtual, 2022
- Guest Speaker, CANUCS Science meeting, Oral presentation, Virtual, 2022
- Invited Speaker, Saint Mary's University - Astronomy Colloquium,, Oral presentation, Halifax NS Canada, 2021
- Invited Speaker, Multi-Object Spectroscopy Workshop, Space Telescope Science Institute, Oral presentation, Virtual, 2021
- AAS meeting #237, Oral presentation, Virtual, 2021
- Invited Speaker, CANDELS SED fitting group, Oral presentation, Virtual, 2020
- Guest Speaker, CalTech, Oral presentation, Virtual, 2020
- Guest Speaker, University of California, Riverside - Astronomy Seminar, Oral presentation, Virtual, 2020

- Guest Speaker, University of Massachusetts Amherst - Galaxy Lunch Talk, Oral presentation, Virtual, 2020
- Guest Speaker, University of California, Los Angeles, Oral presentation, Virtual, 2020
- Guest Speaker, University of California, Davis - Astronomy Seminar, Oral presentation, Virtual, 2020
- Roman2020, Poster presentation, Virtual, 2020
- Guest Speaker, University of Texas Austin - ExGal/Cosmology Seminar, Oral presentation, Virtual, 2020
- Guest Speaker, Princeton - Galread Seminar, Oral presentation, Virtual, 2020
- Invited Speaker, STSCI - Galaxies Journal Club, Oral presentation, Virtual, 2020
- Invited Speaker, CFA - HiGEM meeting, Oral presentation, Virtual, 2020
- SAZERAC, Poster presentation, Virtual, 2020
- CEERS Team Meeting, Oral presentation, Montgomery TX 2020
- AAS meeting #235, Oral presentation, Honolulu Hi, 2020
- The Art of Measuring Galaxy Physical Properties, Oral presentation, INAF, Milan, Italy, 2019
- Frank N. Bash Symposium 2019 - New Horizons in Astronomy, Poster presentation, University of Texas, Austin TX, 2019
- GMT Community Science Meeting, Poster presentation, Carlsbad Ca, 2019
- Guest Speaker at the Cosmic Dawn Center, Oral presentation, University of Copenhagen, Copenhagen, Denmark, 2019
- CLEAR Team Meeting, Oral presentation, STSCI, Baltimore MD, 2019
- Workshop on Astronomy and Statistics, Oral presentation, Texas A&M University, College Station TX, 2019
- Extremely Big Eyes on the Early Universe, Oral presentation, University of California Los Angeles, Los Angeles CA, 2019
- AAS meeting #233, Oral presentation, Seattle Wa, 2019
- CLEAR Team Meeting, Oral presentation, Montgomery TX 2018
- CANDELS Team Meeting, Oral presentation, University of Massachusetts, Amherst MA, 2018
- CEERS Team Meeting, Oral presentation, Montgomery TX 2018

- Plumbing Star Formation Rates in the Era of JWST, Oral presentation, Texas A&M University, College Station TX, 2017
- Frank N. Bash Symposium 2017 - New Horizons in Astronomy, Poster presentation, University of Texas, Austin TX, 2017
- Chemical Evolution of the Universe, Poster presentation, Tarrytown NY, 2017
- CANDELS Team Meeting, Oral presentation, UC Santa Cruz, Santa Cruz CA, 2017
- AAS meeting #299, Poster presentation, Grapevine TX, 2017
- ZFOURGE Collaboration meeting, Oral presentation, Montgomery TX 2016
- ZFOURGE Collaboration meeting, Oral presentation, Montgomery TX 2015
- AAS meeting #223, Poster presentation, Washington DC, 2014
- Texas Section APS meeting, Poster presentation, University of Texas at Brownsville, Brownsville TX, 2013
- Frank N. Bash Symposium, Poster presentation, University of Texas, Austin TX, 2013

## HONORS AND AWARDS

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- 2024 Named a Beus Prize Postdoctoral Fellow, ASU
- 2024 Canadian Space Agency Cycle 3 Grant - \$50,000 CAD, CSA
- 2024 STSCI press release for the Question Mark Galaxy, STSCI
- 2019 Named a NASA FINESST Future Investigator, NASA
- 2018 Hagler Institute for Advanced Study HEEP Graduate Fellowship, Texas A&M University
- 2015 Diversity Fellowship, Texas A&M University
- 2014 Excellence in Physics Award, Southwestern University
- 2014 Recipient of the King Creativity Grant, Southwestern University
- 2013 Feagin Scholarship, for excellence in physics, Southwestern University
- 2013 Physics Club President, Southwestern University
- 2013 Best undergraduate poster presentation, Texas Section APS meeting
- 2013 Recipient of the King Creativity Grant, Southwestern University
- 2012 Recipient of the King Creativity Grant, Southwestern University

## SKILLS

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- Programming Experience: Python, R, IDL, C++,  $\text{\LaTeX}$ , Mathematica, MatLab, HTML, bash
- 4 + years experience with high performance computing clusters, including using SLURM
- 2018 Summer School in Informatics for Astronomers I: One week course at Penn State designed as an overview of informatics.
- 2017 Summer School in Statistics for Astronomers XIII: One week course at Penn State designed as an overview of modern statistical practices and programs in reference to astronomy.

## OUTREACH

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- Undergrad mentoring, 2018–Present, Advised multiple undergrads at Texas A&M and Saint Mary’s University on several projects including trying to de-blend  $H\alpha$  and NII emission in grism data, building a website for the CLEAR collaboration, measuring color gradients in compact galaxies, searching for signatures of star-formation caused by galaxies interactions in grism  $H\alpha$  maps, comparing the stellar populations of field and cluster galaxies with deep HST grism data
- Mentoring Advising Graduates in an Inclusive Community (MAGIC): mentor, Texas A&M University, Graduate student mentoring program, 2019-2020
- Houston Astronomical Society, Galaxy Evolution in the Infrared, Public Talk, 2020
- Astronomy on Tap BCS #20, Art-stronomy, Public Talk, 2019
- Astronomy on Tap BCS #13, How to Kill a Galaxy, Public Talk, 2019
- Astronomy on Tap BCS #3, Searching for Signals of Life, Public Talk 2018