

CURRICULUM VITAE

Andreas Faisst | Caltech - Infrared Processing and Analysis Center | afaisst@caltech.edu

Personal Information

Name Andreas Faisst
Citizenship Switzerland (U.S. Perm. Resident)
Contact Infrared Processing and Analysis Center
 California Institute of Technology
 314-6 Keith Spalding
 1200 E. California Blvd.
 Pasadena, CA 91125, USA
E-mail afaisst@caltech.edu
Social Media @astrofaisst (Twitter)
Webpage <http://www.astro.caltech.edu/~afaisst>

Research Interests

- Physics during the Epoch of Reionization
- Early phases of galaxy formation and evolution
- Physical and structural properties of high-redshift galaxies
- Quenching of star formation in massive galaxies

Main Leads and Involvements

U.S. lead principal investigator (PI) of **ALPINE** (a 70-hour ALMA program), PI of its 57-hour **JWST/IFU extension**, and PI of **CHAMPS** (a 145-hour ALMA program) ★ Member of the **science steering committee of the COSMOS survey** ★ Co-investigator of **COSMOS-Web** (a 255h JWST cycle 1 program) ★ Co-lead of the **IPAC Joint Pixel Survey Processing (JSP)** and science co-lead of **IPAC Science Platform initiative** ★ Science and pipeline team co-lead of **SPHERE^x** (0.2m infrared telescope to be launched in 2025) ★ Science co-investigator of **ATLAS** (concept for a 1.5m infrared telescope for near-infrared spectroscopy) and Science Operation Center lead and science team member of **SIRMOS** (concept infrared telescope) ★ Science team member and co-lead of AGN working group for **CASTOR** (a Canada-led UV space telescope) ★ Member of the **PRIMA** (proposed far-IR space telescope) science team ★ Member of the **Euclid consortium**.

References

References are available upon request.

Career and Education

Jan 2019 to present Assistant Research Scientist (Assistant Research Faculty) at Caltech/IPAC
Oct 2016 to Dec 2018 Postdoctoral Researcher at Caltech/IPAC
May 2015 to Oct 2016 SNSF Postdoctoral Fellow at Caltech (Visitor in Astronomy)
April 2015 Dr. Sc. ETH Zurich in Physics
 Thesis: *"The Evolution of Star-forming and Quiescent Massive Galaxies through Cosmic Time"*
March 2011 M.Sc. in Physics at ETH Zurich
 Thesis: *"Star-forming Galaxies at Redshifts $z \sim 2$ and $z \sim 4$ "*
September 2009 B.Sc. in Physics at ETH Zurich

Grants, Honors, and Awards

August 2022 Performance bonus for contributions as co-lead of JSP Project
April 2014 SNSF Early Postdoc Mobility Fellowship
March 2012 ETH Medal for outstanding Master thesis
March 2011 M.Sc. in Physics Cum Laude at ETH Zurich

Observing Experience and Selected Proposals

I have contributed to or lead several observations in the past:

- Keck I, Hawaii, 2012 – 2022: 23.5 nights on MOSFIRE (NIR spectrograph)
- Keck II, Hawaii, 2011 – 2016: 8 nights on DEIMOS (optical spectrograph)

I led the following *accepted* proposals as **Principal-Investigator (PI) or Co-PI (>420h in total)**:

- 2024, JWST, Cycle 3** *A Deep Look into PAHs: Resolved PAH and Fine-Structure Emission in z=1 Main-Sequence Galaxies*
(**47.7 hours**, Proposal ID #4761, **PI: Faisst**)
- 2023, ALMA, Cycle 10** *Quiescent or Not? Deep ALMA Observations of a Quiescent Galaxy at z=7.3*
(**15.6 hours**, Proposal ID #2023.1.00521.S, **PI: Faisst**)
- 2023, ALMA, Cycle 10** *The COSMOS High-z ALMA-MIRI Population Survey (CHAMPS): A Wide-Area Comprehensive Survey of the Dusty Universe*
(**143.5 hours**, Proposal ID # 2023.1.00180.L, **PI: Faisst**)
- 2023, JWST, Cycle 2** *Witnessing the Maturing of Teenage Galaxies at z = 4 – 6 with a Comprehensive UV - Optical - Sub-mm Benchmark Sample for the Community (**ALPINE follow-up**)*
(**57 hours**, Proposal ID #3045, **PI: Faisst**)
- 2022, HST, Cycle 30** *Compact oddballs in COSMOS: The Faint End of the z>6 Quasar Luminosity Function and the Growth of Ionized Bubbles*
(**14 orbits**, ACS/WFC grism spectroscopy, Proposal ID #17091, **PI: Faisst**)
- 2021, JWST, Cycle 1** *Beasts in the Bubbles: Characterizing ultra-luminous galaxies at Cosmic Dawn*
(**13.8 hours**, Proposal ID #2659, **North America co-PI: Faisst**)
- 2019, ALMA, Cycle 7** *Unraveling the complex ISM of z=4.5 galaxies: With the largest sample of [NII]205+[CII]158 detected galaxies*
(**28.4 hours**, Proposal ID #2019.1.00535.S, **PI: Faisst**)
- 2019, HST, Cycle 26M** *HST imaging for an immediate study of the ISM in z=4.5 galaxies*
(**6 orbits**, WFC3/IR, Proposal ID #15692, **PI: Faisst**)
- 2018, ALMA, Cycle 6** *Are high-redshift Galaxies hot? Constraining the temperatures of z~5.5 galaxies*
(resubmission, 11.1 hours, Proposal ID #2018.1.00348.S, **PI: Faisst**)
- 2018, Keck 2018B** *[OIII] Emitters in the Epoch of Reionization: Clues to Early Galaxy Formation*
(**1.5 nights**, MOSFIRE, Proposal ID #20/2018B_N144, **PI: Faisst**)
- 2017, ALMA, Cycle 5** *ALPINE: The ALMA Large Program to INvestigate C+ at Early times*
(**69.3 hours**, Proposal ID #2017.1.00428.L, **North America Lead PI: Faisst**)
- 2017, ALMA, Cycle 5** *Are high-redshift Galaxies hot? Constraining the temperatures of z~5.5 galaxies*
(**11.1 hours**, Proposal ID #2017.1.00479.S, **PI: Faisst**)

I **contributed significantly** to the following selection of *accepted* proposals as Co-Investigator (Co-I):

- 2024, JWST, Cycle 3** *The most distant Cosmos-Web strong gravitational lens: mass content in the foreground lens and dissecting the background source*
(**10.7 hours**, Proposal ID #5883, **PI: Gavazzi**)
- 2024, JWST, Cycle 3** *The First Measurement of AGN Feedback in Action in the First Billion Years*
(**8 hours**, Proposal ID #6074, **PI: Lambrides**)
- 2023, Palomar, 2024A** *Probing the Galactic Halo: Double Spectrograph Characterization of Joint Survey Processing Sangarius Stream Candidates*
(**1 night**, PI: Fajardo-Acosta)
- 2023, ALMA, Cycle 10** *Caught in the Web: ALMA Data for Every Sub-Millimeter Galaxy Over the COSMOS-Web Survey Field*
(**6.7 hours**, Proposal ID #2023.1.00170.S, **PI: McKinney**)

- 2023, ALMA, Cycle 10** *Chasing Giants: Discovering a Large Population of $z > 3$ Massive Quiescent Galaxies with ALMA*
(**29.2 hours**, Proposal ID #2023.1.00885.S, PI: Long)
- 2023, ALMA, Cycle 10** *Dissecting the ISM of a normal star-forming disk at $z=4.5$ down to the 500 pc scale*
(**ALPINE follow-up**)
(**16.1 hours**, Proposal ID #2023.1.00562.S, PI: Béthermin)
- 2023, JWST, Cycle 2** *Unlocking the Early Universe for Weak Lensing with JWST: High-Precision Analysis of $z=2$ Galaxy Cluster XLSSC122*
(**4.99 hours**, Proposal ID #3950, PI: Finner)
- 2023, JWST, Cycle 2** *A deep dive into the physics of the first massive quiescent galaxies in the Universe*
(**47.06 hours**, Proposal ID #3567, PI: Valentino)
- 2022, ALMA, Cycle 9** *Dust in Galaxies at $z = 8 - 11$*
(**19.8 hours**, Proposal ID #2022.1.01562.S, PI: Y. Fudamoto)
- 2022, ALMA, Cycle 9** *A zoom-in view on the archetypal disk at $z > 4$. Is it really a disk? (ALPINE follow-up)*
(**23.1 hours**, Proposal ID #2022.1.00788.S, PI: F. Rizzo)
- 2022, ALMA, Cycle 9** *Dissecting the ISM of a normal star-forming disk at $z=4.5$ down to the 500 pc scale*
(**ALPINE follow-up**)
(**19.8 hours**, Proposal ID #2022.1.01118.S, PI: Béthermin)
- 2022, KMOS, P110** *Probing the dust and metal content of primordial star-forming galaxies through rest-frame UV-to-FIR spectroscopy*
(**22 hours**, Proposal ID 110.2417, PI: M. Romano)
- 2022, NOEMA, W22** *First multi-tracer exploration of molecular gas and cold dust in main-sequence galaxies at $z \sim 4.5$ (ALPINE follow-up)*
(**49 hours**, Proposal ID #W22DW, PIs: M. Dessauges-Zavadsky, M. Béthermin)
- 2022, NOEMA, W22** *The obscured Universe at $z \sim 6$ on the way to JWST (ALPINE follow-up)*
(**26.5 hours**, Proposal ID #W22DX, PIs: M. Talia, M. Béthermin)
- 2021, JWST, Cycle 1** *COSMOS-Web: The Webb Cosmic Origins Survey*
(**255 hours** treasury, Proposal ID #1727, PI: Kartaltepe & Casey)
- 2021, JWST, Cycle 1** *Physical Characterization of a Massive Galaxy Protocluster ~ 1 Billion Years after the Big Bang*
(**11 hours**, Proposal ID #2417, PI: Riechers)
- 2021, JWST, Cycle 1** *Galaxy Protoclusters as Drivers of Cosmic Reionization*
(**35.2 hours**, Proposal ID #1635, PI: Martin)
- 2020, Keck, 2022A** *The Webb Epoch of Reionization Lyman-alpha Survey (WERLS)*
(**29 nights** over 4 semesters, DEIMOS, MOSFIRE, Strategic Mission Support, PI: C. Casey)
- 2019, Keck, 2020A** *Direct spectroscopic confirmation of $z > \sim 4$ quiescent galaxies*
(**1 night**, MOSFIRE, Proposal ID # S20A0037N, PI: Tanaka)
- 2019, Keck, 2020A** *Understanding Reionizing Source with Newly-Identified IRAC Excess Galaxy*
(**1 night**, MOSFIRE, Proposal ID # S20A0085N, PI: Harikane)
- 2019, Keck, 2020A** *MOSFIRE Observations of ALMA Dust Continuum Sources (Caltech) and Black Hole Growth (Yale)*
(**4 nights**, MOSFIRE, PI: Scoville)
- 2019, ALMA, Cycle 7** *A kpc-scale view to the dust and gas content of typical star forming ALPINE galaxies at $z \sim 4.6$ (ALPINE follow-up)*
(**30 hours**, Proposal ID #2019.1.00226.S, PI: Ibar)
- 2019, ALMA, Cycle 7** *Into the Heart of Darkness: Imaging a "Maximum Starburst" Nucleus at 75pc Resolution in the First Billion Years*
(**5 hours**, Proposal ID #2019.1.00212.S, PI: Riechers)
- 2019, ALMA, Cycle 7** *Evolution of ISM Masses in the First 2 Gyr at $z = 3 - 6$*
(**5.6 hours**, Proposal ID # 2019.1.00459.S, PI: Scoville)
- 2019, HST Cycle 27** *He II Emission from Wolf-Rayet Stars: a New Dust Attenuation*

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| | <i>Measure in Star-forming Galaxies</i> (14 orbits, STIS, Proposal ID #15846, PI: Leitherer) |
| 2019, HST Cycle 27 | <i>Understanding an Extreme QSO: The Curious Case of SDSS 0956+5128</i> (3 orbits, ACS/WFC, Proposal ID # 15872, PI: Steinhardt) |
| 2019, Keck, 2019B | <i>Understanding Reionizing Source with Newly-Identified IRAC Excess Galaxy III</i> (2 nights, MOSFIRE, Proposal ID # S19B0003N, PI: Harikane) |
| 2018, Keck, 2019A | <i>Understanding Reionizing Source with Newly-Identified IRAC Excess Galaxy II</i> (2 nights, MOSFIRE, Proposal ID #S19A0037N, PI: Harikane) |
| 2018, ALMA, Cycle 6 | <i>Into the Heart of Darkness: Imaging a "Maximum Starburst" Nucleus at ~95pc Resolution in the First Billion Years</i> (4 hours, Proposal ID# 2018.1.00222.S, PI: Riechers) |
| 2018, Magellan | <i>Follow up of [OII] emission in ALPINE galaxies</i> (2 nights, Magellan/FIRE, PI: Mendez) |
| 2017, Subaru 2018A | <i>Hawaii Two-0: Subaru Hyper Suprime-Cam (HSC) imaging and Keck LRIS+MOSFIRE spectroscopy on 20deg2</i> (30 hours, Hyper Suprime-Cam, 5 nights LRIS, 5 nights MOSFIRE, PI: Sanders) |
| 2018, Keck 2018B | <i>MOSFIRE Observations of ALMA Dust Continuum Source and Black Hole Growth</i> (3 nights, MOSFIRE, Proposal ID #2018B_C236, PI: Scoville) |
| 2017, HST Cycle 25 | <i>Beyond Ultra-deep Frontier Fields and Legacy Observations (BUFFALO)</i> (101 orbits, Proposal ID #15117, PI: Steinhardt) |
| 2017, Keck 2017B | <i>Direct Spectroscopic Confirmation of $z > 4$ Quiescent Galaxies</i> (1 night, MOSFIRE, Proposal ID #S17B-106, PI: Tanaka) |
| 2016, SST Cycle 13 | <i>The Euclid/WFIRST Spitzer Legacy Survey</i> (5286 hours, Spitzer/IRAC, Proposal ID #13058, PI: Capak) |
| 2016, HST Cycle 24 | <i>The Fundamental Plane of Ultra-Massive Galaxies at $z \sim 2$</i> (11 orbits, Proposal ID #14721, PI: Conselice) |
| 2015, Keck 2016A | <i>DEIMOS Spectroscopy of Ultra-Diffuse Galaxies in the Coma Cluster</i> (4 nights, DEIMOS, Proposal ID #2016A_C270D, PI: Koda) |
| 2013, SST Cycle 10 | <i>SPLASH: Spitzer Large Area Survey with Hyper Suprime-Cam</i> (1650 hours, Spitzer/IRAC Proposal ID #10042, PI: Capak) |
| 2011, HST Cycle 19 | <i>Constraints on the Mass Assembly and Early Evolution of $z \sim 2$ Galaxies: Witnessing the Growth of Bulges and Disks</i> (55 orbits, Proposal ID #12578, PI: Förster-Schreiber) |

Teaching Experience and Student/Postdoc Supervision

Amongst co-mentoring many other students:

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| Starting 2024 | TBD Postdoc (will be working on cycle 2 JWST program and ALPINE) |
| August 2023 – present | Current Postdoc Yu-Heng Lin (Caltech) |
| July 2021 – present | Current Postdoc Marziye Jafariyazani (Caltech) |
| 2022 – 2023 | Master thesis co-advisor: Patrizia Bussatori (Univ. Padova, IT; Univ. Geneva, CH) Topic: “Unveiling the nature of [CII] rich galaxies in the Early Universe with JWST observations” (Bussatori et al. in prep) |
| Summer 2023 | Summer undergraduate student: Edward Zhang (SURF; Caltech) Topic: “Dusty Galaxies as Seen By SPHEREx” (Zhang et al. in prep) |
| Summer 2021 | Summer undergraduate student: Teresa Huang (SURF; Caltech) Topic: “Using Computer Vision To Identify Stars and Galaxies” |
| Spring/Summer 2020 | Summer graduate student: Brittany Vanderhoof (Rochester Int. of Technology) Topic: “The first optical [OII] and far-IR C^+ analysis of the ISM conditions of a galaxy at $z \sim 4.58$ ” (Vanderhoof et al. 2021, MNRAS, 511, 1303) |

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| Fall 2019 | Summer graduate student: Thomas Venville (Swinburne University) Topic: <i>"Identifying transient and variable sources with machine learning"</i> (Venville et al. in prep) |
| Summer 2019 | Undergraduate student: Ishita Korde (FIELDS; University California Riverside) Topic: <i>"Spectroscopic measurements for COSMOS galaxies"</i> |
| Spring 2018 | Summer graduate student: Rebecca Larson (U. Texas) Topic: <i>"Redshifts Derivation from Galaxy Clustering"</i> (Larson et al. in prep) |
| Spring 2016 | Summer undergraduate student: Catalina Miritescu (SURF; Caltech) Topic: <i>"The Escape Fraction of UV Photons in Strong Line Galaxies"</i> |
| 2015 – 2017 | Summer undergraduate student: Ivana Barisic (SURF; Caltech) Topic: <i>"Dust Properties of $z \sim 6$ Galaxies with ALMA and HST"</i> (Barisic et al. 2017, ApJ, 845, 41) |
| 2016 – present | Co-organizer of weekly Extragalactic Astro-ph journal club at Caltech |
| Spring 2015 | Astrophysics II (Prof. M. Carollo), ETH Zurich |
| Fall 2014 | Physics I (Prof. S. Lilly), ETH Zurich |
| Spring 2014 | Astrophysics II (Prof. M. Carollo), ETH Zurich |
| Spring 2013 | Astrophysics II (Prof. M. Carollo), ETH Zurich |
| Fall 2012 | Physics I (Prof. M. Carollo), ETH Zurich |
| Fall 2012 & 2013 | Astronomy Week (advanced bachelor lab), ETH Zurich |
| Spring 2011 | Semester project: S. Tacchella (ETH Zurich) Topic: <i>"SED fitting constraints from IRAC near-IR observations"</i> |

[\(Invited\) Seminars and Colloquia](#)

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| Fall 2024 | Invited Talk: TBD; University of Hawaii (Honolulu, USA) |
| July 2024 | Invited Talk: TBD; University Hiroshima (Hiroshima, Japan) |
| December 2023 | Invited Talk: "From Dusty and Gaseous to Massive and Quiescent – Following the Evolution of Galaxies with ALMA and JWST"; University Geneva (Geneva, Switzerland) |
| December 2023 | Invited Talk: "From Dusty and Gaseous to Massive and Quiescent – Following the Evolution of Galaxies with ALMA and JWST"; UC Santa Barbara Lunch Seminar (Santa Barbara, CA, USA) |
| September 2023 | Invited Talk: "From Dusty and Gaseous to Massive and Quiescent – Following the Evolution of Galaxies with ALMA and JWST"; UC Davis Colloquium (Davis, CA, USA) |
| November 2022 | Invited Talk: "Teenage Galaxies and More - A Multi-Wavelength View of Galaxy Evolution"; KASI Astronomy Colloquium, (South Korea) |
| February 2020 | Invited Talk: "Star formation and Dust in the Early Universe"; Caltech Tea Talk (Pasadena, CA, USA) |
| February 2019 | Invited Talk: "Galaxies in the Early Universe: In the view of newest observations with Spitzer, ALMA, and HST"; Tea talk at the DAWN center (Copenhagen, Denmark) |
| February 2019 | Invited Talk: "Galaxies in the Early Universe: The view from the newest observations with Spitzer, ALMA, and HST"; Rochester Institute of Technology (Rochester NY, USA) |
| December 2018 | Invited Talk: "Galaxies in the Early Universe: The view from the newest observations with Spitzer, ALMA, and HST"; Harvard-Smithsonian Center for Astrophysics (Cambridge, MA, USA) |
| September 2018 | Invited Talk: "Galaxies in the Early Universe: The view from the newest observations with Spitzer, ALMA, and HST"; Saint Mary's University: astronomy colloquium (Halifax, NS, Canada) |

- November 2017** “Galaxies in the Early Universe: The view from the newest observations with Spitzer, ALMA, and HST”; **University of British Columbia: astronomy colloquium (Vancouver, BC, Canada)**
- November 2017** “Galaxies in the Early Universe: The view from the newest observations with Spitzer, ALMA, and HST”; **UC Berkeley: Astro lunch talk (Berkeley, CA, USA)**
- October 2017** “Galaxies in the Early Universe: The view from the newest observations with Spitzer, ALMA, and HST”; **Institute for Astronomy Hawaii: astronomy colloquium (Honolulu, HI, USA)**
- October 2017** “Galaxies in the early Universe: In the view of the newest observations with Spitzer, ALMA, and HST”; **UC Santa Barbara: astronomy lunch talk (Santa Barbara, CA, USA)**
- October 2017** “Galaxies in the early Universe: In the view of the newest observations with Spitzer, ALMA, and HST”; **Cornell University: Galaxy lunch seminar (Ithaca, NY, USA)**
- October 2017** “Galaxies in the early Universe: In the view of the newest observations with Spitzer, ALMA, and HST”; **UC Riverside: Lunch seminar (Riverside, CA, USA)**
- September 2017** “Galaxies in the early Universe: In the view of the newest observations with Spitzer, ALMA, and HST”; **UCLA: Lunch journal club (Los Angeles, CA, USA)**
- September 2017** “Galaxies in the early Universe: In the view of the newest observations with Spitzer, ALMA, and HST”; **Carnegie Observatories: Lunch talk (Pasadena, CA, USA)**
- February 2017** “Insights into the high-redshift Universe using Spitzer and Local Galaxies”; **Caltech/IPAC lunch talk (Pasadena, CA, USA)**
- August 2016** **Invited Talk:** “Insights into the High-Redshift Universe using Spitzer and Local Galaxies”; **ETH Zurich: Lunch seminar talk (Zurich, Switzerland)**
- June 2016** “Insights into the High-Redshift Universe using Spitzer and Local Galaxies”; **Telescope Science Institute and Johns Hopkins University: lunch seminar (Baltimore, MD, USA)**
- May 2016** **Invited Talk:** “Insights into the High-Redshift Universe from Spitzer and Local Galaxies”; **UC Davis: Cosmology seminar (Davis, CA, USA)**
- October 2016** **Invited Talk:** “Insights into the High-Redshift Universe using Spitzer and Local Galaxies”; **University of Minnesota: Astrophysics colloquium (Minneapolis, MN, USA)**
- September 2016** **Invited Talk:** “Insights into the High-Redshift Universe using Spitzer and Local Galaxies”; **Laboratoire d’Astrophysique de Marseille, Astronomy seminar (Marseille, France)**
- September 2016** “Insights into the High-Redshift Universe using Spitzer and Local Galaxies”; **Geneva Observatory, Astronomy seminar (Geneva, Switzerland)**

Conference Talks

- September 2024** **Invited Talk:** *TBD*; **Views on the multi-phase interstellar medium in galaxies (Bologna, Italy)**
- April 2024** **Invited Talk:** “CHAMPS: Exploring the Dusty Universe”; **Bridging the Models & Observations of Galaxies’ Dust in the JWST Era (Trieste, Italy)**
- May 2023** **Invited Talk:** “First characterization of globular clusters (or stripped dwarfs?) around the host galaxies of SMACS0723 at $z=0.4$ ”; **A multi-wavelength view on globular clusters near and far: from JWST to the ELT (Sexten, Italy)**
- August 2022** “COSMOS-Web: Going Deeper and Redder in COSMOS with the largest JWST program”; **The 2022 Greater IPAC Science Symposium (Pasadena, CA, USA)**
- July 2022** **Invited Talk:** “ALPINE: A Large Survey to Understand Teenage Galaxies”; **From galaxies to cosmology with deep spectroscopic surveys (Marseille, France)**
- August 2021** **Invited Talk:** “ALPINE – the Largest Survey to Understand Teenage Galaxies”
Contributed Talk: “Oddballs in COSMOS – High-Redshift Quasars or Junk?”; **The 2021 Greater IPAC Science Symposium (Pasadena, CA, USA)**
- October 2020** “The far-IR dust SEDs of $z > 5$ galaxies: Hot or Cold?”; **The Rise of Metals and Dust in Galaxies through Cosmic Time (Marseille, France)**

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| August 2020 | <i>"The far-IR SEDs of $z=5$ Galaxies: Hot or Not?"</i> ; The 2020 Greater IPAC Science Symposium (Pasadena, CA, USA) |
| February 2020 | Invited Talk: "Studying the first Galaxies with Spitzer" ; Spitzer Legacy Conference at Caltech (Pasadena, USA) |
| November 2019 | <i>"10,000 Keck spectra to study galaxy evolution across 7 billion years of cosmic time"</i> ; Keck Science Meeting 2019 at UCLA (Los Angeles, USA) |
| August 2019 | <i>"Insights into the ISM conditions of infant galaxies"</i> ; From AGN to Starburst: A Multi-wavelength Synergy (Guiyang, China) |
| July 2019 | <i>"Insights into the ISM of infant galaxies with Spitzer and ALMA"</i> ; The 2019 Greater IPAC Science Symposium (Pasadena, CA, USA) |
| November 2018 | <i>"ALPINE: The large ALMA Program to Study the Interstellar Medium of High Redshift Galaxies"</i> ; IAU Symposium 341: PanModel2018 – Challenges in Panchromatic Galaxy Modeling with Next Generation Facilities (Osaka, Japan) |
| June 2018 | <i>"Go ALPINE! Interstellar medium properties of high redshift galaxies"</i> ; The 2018 Greater IPAC Science Symposium (Pasadena, CA, USA) |
| April 2018 | <i>"Empirical Modeling of the Redshift Evolution of the [NII]/Hα ratio for Galaxy Redshift Surveys and Simulations"</i> ; Simulated Skies for new-generation Spectroscopic Surveys (Madrid, Spain) |
| May 2017 | <i>"Galaxies at $z = 6$: Hot and Turbulent"</i> ; The 2017 Greater IPAC Science Symposium (Pasadena, CA, USA) |
| September 2016 | <i>"How to quench massive galaxies"</i> ; Mapping the Pathways of Galaxy Transformation Across Time and Space (Avalon, Catalina Island, CA, USA) |
| March 2016 | <i>"Emission Lines in High Redshift Galaxies as Probed by Spitzer"</i> ; The 2016 Greater IPAC Science Symposium (Pasadena, CA, USA) |
| March 2016 | <i>"Emission Lines from Broad Bands: $sSFR$ and [OIII]/Hβ ratio at $3 < z < 6$"</i> ; Aspen Winter Conference – The Reionization Epoch: New Insights and Future Prospects (Aspen, CO, USA) |
| January 2016 | <i>"Rest-UV absorption lines as Metallicity Estimator: The Metal Content of Star-forming Galaxies at $z \sim 5$"</i> ; 227th Meeting of the American Astronomical Society (Kissimmee, FL, USA) |
| August 2014 | <i>"Constraints on re-ionization at $z \sim 8$ using Lyα emitters"</i> ; Lyman Continuum Leakage and Cosmic Reionization (Stockholm, Sweden); |

Collaborative Meetings and Workshops

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| December 2024 | <i>"Views on the early Universe with ALMA and JWST"</i> ; Lorentz Workshop (Leiden, NL) |
| July 2024 | <i>"TBD"</i> ; COSMOS Team Meeting (Tokyo, Japan) |
| May 2023 | <i>"Star Formation Properties and Morphologies in COSMOS-Web"</i> ; COSMOS Team Meeting (Rochester, NY, USA) |
| July 2022 | <i>"Update on ALPINE" & "Oddballs in COSMOS – Low Luminosity Quasars at $z > 6$?"</i> ; COSMOS Team Meeting (Paris, France) |
| October 2019 | Invited Talk: "ALPINE – The first multi-wavelength survey to study galaxies at $4 < z < 6$ (from UV to FIR wavelengths)" ; Lorentz Workshop: Revolutionary Spectroscopy of Today as a Springboard to the James Webb Space Telescope (Leiden, Netherlands) |
| September 2019 | Invited Talk: "Containerize, don't improvise! Importance of containers from a scientist's view" ; IPAC Containerization Workshop (Pasadena, USA) |
| May 2019 | Lead ancillary data group; ALPINE Team Meeting (Bologna, Italy, co-organizer) |
| May 2019 | <i>"Update on ALPINE" & "Insights into the ISM of Early Galaxies"</i> ; COSMOS Team Meeting (New York, USA) |
| October 2018 | <i>"Study Galaxy Growth in the Early Universe with Spitzer and ALMA"</i> ; BUFFALO Team Meeting (Marseille, France) |
| October 2018 | Various talks and workshop organization; ALPINE Team Meeting (Marseille, France) |
| June 2018 | <i>"Go ALPINE! Interstellar Medium Properties of High Redshift Galaxies"</i> ; COSMOS Team Meeting (Copenhagen, Denmark) |

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| July 2017 | <i>"Galaxies at $z = 6$: Hot and turbulent?"</i> ; COSMOS Team Meeting (Kyoto, Japan) |
| May 2017 | <i>"Studying optical Emission Lines in $z > 4$ Galaxies with SPLASH"</i> ; Hyper Suprime-Cam Collaboration Meeting (Sendai, Japan) |
| June 2016 | <i>"Studying the First Galaxies with Spitzer and the Help of Locals"</i> ; COSMOS Team Meeting (Baltimore, MD, USA) |
| June 2015 | <i>"Quenching of Massive Galaxies"</i> ; COSMOS Team Meeting (Helsinki, Finland) |
| May 2015 | <i>"Structure of high mass galaxies at $z \sim 2$ in UltraVISTA"</i> ; COSMOS Team Meeting (Zagreb, Croatia) |
| May 2013 | <i>"Spectroscopic follow-up of $z \sim 7.7$ Lyα emitters in COSMOS"</i> ; COSMOS Team Meeting (Kyoto, Japan) |
| June 2011 | <i>"The galaxy population in $z \sim 2$ proto-groups"</i> ; COSMOS Team Meeting (Zurich, Switzerland) |
| May 2011 | <i>"Update on zCOSMOS-deep sample"</i> ; zCOSMOS Team Meeting (Zurich, Switzerland) |

Professional Activities and Services

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| 2024 – present | Reviewer for NSF AAG grants |
| 2022 – present | Reviewer for Swiss National Science Foundation Advanced Grants (several \$1M grants awarded to support a research group at Swiss institutions). |
| 2020 – present | Reviewer for the Hubble Space Telescope time allocation committee |
| 2019 – present | Committee member of the IPAC Visiting Graduate Student Fellowship |
| 2017 – present | Science advisor and consultant for <i>The Science and Entertainment Exchange</i> (program of the National Academy of Science connecting entertainment industry professionals with top scientists and engineers to create a synergy between accurate science and engaging storylines in both film and TV programming) |
| 2017 – present | Reviewer for the NASA Earth and Space Science Fellowship (NESSF) and the Future Investigators in NASA Earth and Space Science and Technology (FINESST) programs (\$45k awards to supplement graduate student's stipend for up to three years) |
| 2017 – present | Co-founder and organizer of the IPAC Visualization group (IViz), a think-tank for advanced data visualization in science, for public and scientific outreach. |
| 2016 – present | Co-organizer of weekly Astro-ph journal club at Caltech |
| 2015 – present | Reviewer for Canadian Time Allocation Committee (CanTAC) |
| 2015 – present | Reviewer for high-impact journals (MNRAS, ApJ, A&A, Nature Astronomy) |
| 2023 – 2024 | Organizer of the IPAC Community and Communication (IPAC Com ²) seminar series, which provides monthly interfaces for exchanging tips & tricks and ideas on topics related to science, software development, and administration. |
| August 2022 | Member of search committee for deputy Head of Science Staff at Caltech/IPAC |
| January 2021 | Organizer AAS #237 2-day Machine Learning Workshop (virtual, 120 attendees) |
| October 2020 | SOC member of the 2020 Accelerated Artificial Intelligence for Big-Data Experiments Conference (Illinois, USA) |
| February 2020 | LOC member of the "Celebrating the Legacy of the Spitzer Space Telescope" conference at IPAC (Pasadena, USA) |
| January 2020 | Organizer AAS #235 Machine Learning Workshop (Honolulu, Hawaii, 80 attendees) |
| 2018/19/20/21 | Committee member of the Caltech Astronomy Colloquium |
| December 2017 | LOC member of the JWST Proposal Planning Workshop Pasadena, CA, USA |
| 2016 – 2018 | Organizer of Pasadena Astro Postdoc Mixer at Caltech/IPAC (Pasadena, CA, USA) Acquisition of funding and organization. Science meeting for all postdoctoral researchers in astronomy related fields in Pasadena (including Caltech, Carnegie, JPL). |

Outreach and Science Communication Activities

My main outreach events that I have participated in or led, amongst other smaller ones not listed here.

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|------------------------|--|
| 2022 to present | Regular science talks as part of NASA's Community College Network (NCCN) where I am a "subject matter expert" and consultant for college teachers for physics and astronomy |
| 2021 to present | Regular science talks as "subject matter expert" for NASA's James Webb Space Telescope (explaining to public the science done with JWST) |
| 2016 to present | Contributions (talks and organization) to and co-organization of <i>Astronomy on Tap</i> Los Angeles (Pasadena, CA, USA) |
| 2016 to present | Contributions (talks and organization) to Public Lecture Series & Stargazing at Caltech (Pasadena, CA, USA) |
| 2016 to present | Member of the Los Angeles Astronomical Society (LAAS) and Friends of the Griffith Observatories (FOTO) with occasional invitations for public talks |
| November 2023 | Lecture on machine learning at the <i>International Workshop on Machine Learning in Astronomy</i> of Pakistan (Islamabad, Pakistan) |
| November 2023 | Public talk at the California Dark Sky Festival (Panamint valley, CA, USA) |
| September 2023 | Public talk at the Sequoia Dark Sky Festival (Sequoia National Park, CA, USA) |
| February 2021 | EESA STEM career conference (panel member) of the John Muir High School |
| September 2020 | Public talk at the Idaho Star Party (virtual) (Idaho, USA) |
| May 2020 | Live YouTube Interview for Daily Space about ALPINE press release |
| September 2019 | Organizer of Caltech/Astro outreach event for SSGA/Merill at Caltech (Pasadena, CA, USA). |
| May 2019 | Speaker at Astronomy on Tap New York City (Manhattan, NY, USA) |
| October 2018 | Hosting of the movie "Into the Unknown" about the James Webb Space Telescope and invited talk (City of Commerce, CA, USA) |
| June 2018 | Organization of first <i>Astronomy On Tap</i> in Copenhagen, Denmark |
| June 2018 | Public talk at the Griffith Observatory for the Friends of the Observatory (FOTO) (Los Angeles, CA, USA) |
| January 2018 | Science Night at the Arroyo Vista Elementary School: Infrared camera demonstration (South Pasadena, CA, USA) |
| November 2017 | "Exploring your Universe" event at UCLA (Los Angeles, CA, USA) Lead of Caltech/IPAC booth (infrared camera and TRAPPIST-1 VR headset) |
| October 2016 | Pasadena Astronomy Week: Stargazing, Booth of the Infrared Processing and Analysis Center (Pasadena, CA, USA) |
| July 2016 | Public talk at the Griffith Observatory for the Los Angeles Astronomical Society (Los Angeles, CA, USA) |
| June 2016 | Speaker at Astronomy on Tap Baltimore (Baltimore, MD, USA) |
| March 2016 | Greenway Talk Series at the Palomar Observatory (Palomar Mountain, CA, USA) |
| 2013 – 2015 | Board member of AMP (Association of non-faculty scientific staff of the physics department) at ETH Zurich (Zurich, Switzerland) |
| 2009 – 2015 | Guide at the Urania Observatory (Zurich, Switzerland) |
| 2009 – 2015 | Board member of the Zurich Astronomy Association (AGUZ) and member of the Swiss Astronomical Association (SAG). Specialized in outreach and event management and organization. |
| 2005 – 2015 | Guide at the Uitikon/Waldegg Observatory (Zurich, Switzerland) |

In the Press

Some of the most important appearances of my work in the press

- March 2023** AAS Nova news article on JWST observations of globular clusters in the SMACS0723 galaxy cluster:
<https://aasnova.org/2023/03/15/update-on-jwst-observations-of-galaxy-cluster-smacs-0723/>
- October 2020** ALMA/NRAO press release featuring ALPINE:
<https://public.nrao.edu/news/galaxies-in-the-infant-universe-were-surprisingly-mature/>
- April 2020** Caltech news story on ALPINE:
<http://pma.caltech.edu/news/rotating-galaxies-galore>