

## Ali Ahmad Khostovan

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RESEARCH INTERESTS	I'm interested in studying galaxy evolution with a background in $z \sim 0.4$ to $\sim 9$ emission line galaxies traced via narrowband surveys, spectroscopic follow-ups, and broadband nebular color excess surveys. Recently, I've been very much interested in extreme emission line galaxies at various cosmic epochs to understand what physical processes/mechanisms are driving high EWs and what it means in terms of star-formation activity, ionizing photon budget, and implications for Reionization. This also convolves with my interest in studying key statistical and physical properties of star-forming galaxies (LFs, SMFs, EWs), environmental dependencies on star-formation and galaxy, investigations of changing ISM conditions via spectroscopy, and investigating star-formation histories using latest SED fitting suites and spectra. I also am interested in creating large spectroscopic surveys using archived data and developing tools to visualize them.	
PUBLICATION RECORD (OCTOBER 2023)	Number of Publications (first author): <b>29 (7)</b> . Total citations (first author): <b>2666 (217)</b> . $h$ -index: <b>18</b> . $i10$ -index: <b>21</b> . $g$ -index: <b>30</b> . $m$ -index: <b>1.3</b>	
CURRENT POSITION	<b>Postdoctoral Research Associate</b> <a href="#">Rochester Institute of Technology</a> Supervisor: Dr. Jeyhan Kartaltepe Focus: A Public COSMOS Spectroscopic Archive	Sept 2021 – present
	<b>Visiting Researcher</b> <a href="#">NASA Goddard Space Flight Center</a>	Oct 2021 – present
PAST POSITIONS	<b>NASA Postdoctoral Program Fellow</b> <a href="#">Goddard Space Flight Center</a> Supervisors: Dr. Sangeeta Malhotra & Dr. James Rhoads	Sept 2018 – Sept 2021
EDUCATION	<b>University of California, Riverside</b> PhD, Physics Adviser: Prof. Bahram Mobasher & Dr. David Sobral Dissertation: The Evolution of Star-Forming Galaxies using the Largest Narrowband Surveys	2013 – 2018
	<b>University of California, Riverside</b> MS, Physics Adviser: Prof. Bahram Mobasher	2012 – 2013
	<b>University of California, Irvine</b> BS, Physics (Specialization in Astrophysics) <i>Honors - Cum Laude</i> Adviser: Prof. Asantha R. Cooray	2008 – 2012
RESEARCH FELLOWSHIPS	<b>NASA Postdoctoral Program Fellow</b> <a href="#">Astrophysics Science Division</a>	Sept 2018 – Sept 2021

	Goddard Space Flight Center	
	<b>NASA Earth &amp; Space Sciences PhD Fellow</b> Department of Physics & Astronomy, University of California, Riverside	2016 – 2018
	<b>Chancellor’s Distinction Fellow</b> Department of Physics & Astronomy, University of California, Riverside	2012 – 2013
	<b>National Science Foundation REU Intern</b> Center for Astrophysics, Harvard University	June – Aug. 2011
	<b>Undergraduate Research Opportunities Program Fellow</b> Department of Physics & Astronomy, University of California, Irvine	Jan. – June 2011
	<b>Summer Undergraduate Research Program Fellow</b> Department of Physics & Astronomy, University of California, Irvine	June – Sept. 2010
AWARDS	<b>Anne Kernan Award for Outstanding Senior Graduate Student Researcher</b> <i>Prestigious award given to senior PhD students for their research and achievements throughout their graduate school years</i>	June 2018
	<b>Outstanding Teaching Assistant Award</b> <i>Awarded to students for demonstrating effective teaching skills</i>	June 2018
	<b>GSA Conference Travel Grant</b> <i>Funding from Graduate Student Association to attend a conference</i>	June – July 2016
	<b>National Science Foundation Graduate Research Fellowship</b> <i>Honorable Mention (3 times)</i>	2012, 2013, 2014
	<b>Chambliss Astronomy Achievement Student Award</b> <i>Honorable Mention – 219th AAS Meeting</i>	Jan. 2012
GRADUATE CO-SUPERVISION	<b>Santosh Harish, 5th year PhD Student</b> <i>Project:</i> Statistical Properties of H $\alpha$ - and [OIII]-selected emission line galaxies at $z \sim 0.6$ <i>Institution:</i> Arizona State University, Tempe & NASA GSFC <i>Paper:</i> Harish et al., 2020, ApJ, 892, 30	Sept. 2018 – March 2020
UNDERGRADUATE SUPERVISION	<b>Mehruha Zaman, 2nd year Biology student</b> <i>Project:</i> Effects of Nebular Emission Lines in SED fittings using narrowband-selected samples <i>Title:</i> NASA FIELDs Undergraduate Intern	Jan. - June 2017
COMMUNITY OUTREACH	<b>RIT Galaxy Evolution Journal Club</b> <i>Purpose:</i> Lead organizer of RIT journal club	Sept 2022 – present

	<b>Gemini Fast Turnaround TAC</b> <i>Purpose:</i> Reviewed and Graded Short Fast Turnaround Proposals	January 2023
	<b>Emission Lines in Galaxies: Discovery and Diagnostics</b> Main Co-Organizer of Meeting-in-a-Meeting Session 238th AAS meeting – <i>Received Approval 15 Jan 2021</i>	June 2021
	<b>NASA Program Reviewer</b> <i>Purpose:</i> Expert reviewer in a NASA peer review	2021, 2023
	<b>NASA Review Panel</b> <i>Purpose:</i> Review Proposals for Research Funding Purposes	Fall 2020
AWARDED PROPOSALS	<b>Gemini Fast Turnaround GS-2023A-FT-201</b> <i>Title:</i> Strong Outflows from a $z \sim 2.5$ CIV Emitter: Star-forming or AGN driven? <i>Role:</i> PI <i>Nights:</i> 2 hours Flamingos-2 Observations	
	<b>Keck PI Award (PID 88/2022B_N190)</b> <i>Title:</i> Confirmation of the Highest Redshift [OII] Emitters at $z \sim 5$ <i>Role:</i> PI <i>Nights:</i> 2 half nights <i>Funding:</i> \$13,975	
	<b>JWST Cycle 1 #2321</b> <i>Title:</i> The first blind H $\alpha$ narrow-band survey of star-formation at $z > 6$ <i>Role:</i> CoI	
	<b>JWST Cycle 1 #1635</b> <i>Title:</i> Galaxy Protoclusters as Drivers of Cosmic Reionization <i>Role:</i> CoI	
OBSERVING EXPERIENCE	<b>Blanco 4m Telescope</b> – CTIO, Chile DECam (photometry): 1.5 nights  <b>W. H. Keck Observatory</b> – Mauna Kea, Hawaii DEIMOS (spectra): 8 nights MOSFIRE (spectra): 8.5 nights  <b>Subaru Telescope</b> – Mauna Kea, Hawaii FMOS (spectra): 1 night  <b>William Herschel Telescope</b> – La Palma, Canary Islands, Spain ISIS (spectra): 2 nights	
TECHNICAL SKILLS	<i>Programming Skills:</i> Python (main), IDL, Shell Script, C, SQL <i>Computer Skills:</i> Mac OSX, Windows, Ubuntu, LaTeX, PowerPoint <i>Astronomical Tools:</i> DS9, TopCat, SExtractor, IRAF/PyRAF <i>Photo-z Tools:</i> EaZY, LePhare <i>SED &amp; Line Fitting:</i> CIGALE, PROSPECTOR, MAGPHYS, PyQSOFit <i>Data Reduction Experience:</i> Pyepit (extensive), FIBER-pac, MOSFIRE DRP	

*Data Experience:* Extensive experience analyzing observer-frame optical and near-IR spectroscopic data. Many year experience creating clean, reliable samples of narrowband-selecting galaxies.

*Machine Learning:* KDTree, Clustering, Nearest Neighbors

*Statistical Analyses:* MCMC, Metropolis-Hastings, Bootstrapping, Bayesian Statistics, MLE

PUBLIC  
OUTREACH

**AST Graduate Skills Seminar** 1 Oct 2021  
Career Panelist  
Discussion of how to succeed in the Postdoc Job Market  
School of Physics & Astronomy, Rochester Institute of Technology

**Virtual Science Night and Career Panel** 10 Febr 2021  
Providing mini science lectures and career advice for local students  
Ramona High School in Riverside, CA

**What is an Astronomer? – Early Childhood Learning Center** 3 June 2019  
Public talk to Preschoolers at the Irvine Unified School District in California

**Public Telescope Observation – UC Riverside** 20 Febr 2018  
Public event on UCR campus. Prepared/Operated Telescopes

**Press Release: “Distant galaxies glow bright in oxygen”** Oct 2016  
Public outreach of results in Khostovan et al. (2016)  
Distributed to UCRToday, Lancaster, Astronomy Now, My Science, and other science media sources

**Long Night of Arts and Innovation – Downtown Riverside** Oct 2015 & 2017  
Large event hosted by City & County of Riverside  
Interact with Community and answer astronomy-related questions  
Setup/Operate Telescopes

**Cosmic Thursday – UC Riverside** 2014 – 2016 (monthly)  
Setup and Operate Telescopes and answer questions from the community

TEACHING  
EXPERIENCE

**astroTopics** 2017 – 2018; Sept 2022 – present  
A get together I first started during my PhD years and restarted at RIT for Jeyhan Kartaltepe’s group. The idea is to select a topic of interest (e.g., Overview of rest-frame optical nebular diagnostics) and we all do our own background search (e.g., papers, books, lectures, youtube videos). After a week, we all get together and share what we have learned about that specific topic. It creates an environment of equals that allows undergrads, PhD students, and postdocs to collectively learn from each other. My role would also include running the weekly get togethers, start/lead the discussion, and ensure a safe environment for everyone to learn (especially students to feel safe and ask questions from senior students, postdocs, and faculty).

**TA: The Violent Universe (non-science majors)** Winter 2014 & 2015  
An introduction to violent phenomena that power the universe, specifically phenomena that illustrate basic astrophysical principles. Topics include impacts in our planetary system: explosions of stars, bursts of star formation, galaxy collisions, black holes, quasars, cosmic jets, and the “Big Bang”

**TA: Origins (non-science majors)** Fall 2013, 2014, 2015

Explores the most fundamental questions in cosmology, physics, and chemical sciences through their origins. Topics include the origin of the Universe, origin of matter, first generation of stars and galaxies, origin of chemical elements, chemistry of life, and astrobiology.

**TA: General Physics Lab (Engineering Students)** Spring 2014

Covers topics in mechanics, thermodynamics, and electromagnetism. Includes fluid mechanics, temperature, and heat, the laws of thermodynamics, kinetic theory of gases, electric fields and potentials, current and DC circuits, capacitance and inductance, magnetism, and Faraday's law.

**TA: General Physics (Biology Students)** Winter 2013

Covers topics in mechanics, thermodynamics, and electromagnetism. Includes fluid mechanics, temperature, and heat, the laws of thermodynamics, kinetic theory of gases, electric fields and potentials, current and DC circuits, capacitance and inductance, magnetism, and Faraday's law.

**TA: General Physics Lab (Biology Students)** Winter 2013, Spring 2013, Summer 2015

Laboratory course that covers harmonic oscillations, mechanical and electromagnetic waves, geometrical optics, reflection, refraction, interference, diffraction, and polarization, and quantum, atomic, and nuclear physics. Course also covers classical mechanics including Newton's laws of motion, work, energy, and conservation of energy, momentum and collisions, rotational motions, and orbital motion.

TALKS

**Roman Science Inspired by Emerging JWST Results** 20 – 23 June 2023  
**Space Telescope Science Institute**

*Title:* Let's Go Extreme with Roman: Observing  
 $z \sim 0.5 - 2$  low and high EW ELGs

**COSMOS Team Meeting** 23 – 26 May 2023

**Rochester Institute of Technology**

*Title:* Past Spectra for Future Science:  
A Public COSMOS Spectroscopic Archive

**COSMOS Team Meeting** 11 – 13 July 2022

**IAP, Paris, France**

*Title:* Past Spectra for Future Science:  
A Public COSMOS Spectroscopic Archive  
*Virtual Talk due to COVID-19*

**Astrophysical Sciences & Technology Colloquium** 7 Dec 2021

**Rochester Institute of Technology**

*Title:* A 13 Billion Year Old Story told by Narrowband Surveys  
*Invited Colloquium Talk*

**Roman Science Team Community Briefing** 18 Nov 2021

**NASA Goddard Space Flight Center**

*Title:* Measurements of  $H\alpha$  Equivalent Width Distributions:  
The Second Tool in *Roman* Grism Survey Planning  
*Virtual Talk*

**Emission Lines in Galaxies: Discovery and Diagnostics** June 2021

**238th American Astronomical Society Conference**

*Title:* Intrinsic Properties of  $H\alpha$  Equivalent Width Distributions  
from  $z \sim 0.4 - 2$ : Implications on Episodic Star Formation Histories  
*Invited Talk for Meeting-in-a-Meeting Session*

**NASA Early Career Scientist Forum** 10 – 13 Nov 2020

**Goddard Space Flight Center**

<i>Title:</i> Mapping the Redshift Evolution of $H\alpha$ Equivalent Width Distributions: Implications for NGRST Grism Surveys <i>Virtual Talk</i>	
<b>Galaxy Formation and Evolution in the Era of NGRST</b> <b>Space Telescope Science Insititute, Baltimore, Maryland</b> <i>Title:</i> Intrinsic Properties of $H\alpha$ Equivalent Width Distributions <i>Virtual Recorded Talk</i>	5 – 9 Oct 2020
<b>USRA Site Visit</b> <b>Goddard Space Flight Center</b> <i>Title:</i> Evolution of Star-Forming Galaxies using the Largest Narrowband Surveys <i>Virtual Talk</i>	20 Aug 2020
<b>LAGER Team Workshop</b> <b>Virtual Meeting</b> <i>Title:</i> Physical Correlations of $H\alpha$ Equivalent Width Distributions: Real or Selection Driven?	13 – 16 July 2020
<b>WFIRST Science Jamboree</b> <b>Flatiron Institute, New York City, New York</b> <i>Title:</i> Statistical Properties of $z > 0.4$ $H\alpha$ , [OIII] and [OII] Emitters: Implications for WFIRST	2 March 2020
<b>235th American Astronomical Society Conference</b> <b>Honolulu, Hawaii</b> A large, deep 3 deg <sup>2</sup> survey of $H\alpha$ , [OIII], and [OII] emitters from LAGER: constraining luminosity functions	4 - 8 January 2020
<b>COSMOS 2019</b> <b>Flatiron Institute, New York City, New York</b> <i>Title:</i> The $Ly\alpha$ and UV luminosity-dependent clustering of typical $Ly\alpha$ emitters up to $z \sim 6$	14 - 17 March 2019
<b>SED Director's Seminar</b> <b>Goddard Space Flight Center</b> <i>Title:</i> Properties of Star-Forming Galaxies with the Largest Narrowband Surveys	9 Nov 2018
<b>NASA Early Career Scientist Forum</b> <b>Goddard Space Flight Center</b> <i>Title:</i> Clustering Properties of Typical $Ly\alpha$ Emission Line Galaxies	1 Nov 2018
<b>231st American Astronomical Society Conference</b> <b>Washington, DC</b> <i>Title:</i> Clustering Properties of Emission Line Selected Galaxies over the past 12.5 Gyrs	8 - 12 January 2018
<b>Astrophysics Seminar – Lancaster University</b> <i>Title:</i> Clustering Properties of [OIII] and [OII] emitters over the past 12.5 Gyrs	22 June 2017
<b>Galaxy Evolution Across Time Conference</b> <b>Paris, France</b> <i>Title:</i> Clustering Properties of [OIII] and [OII] emitters over the past 12.5 Gyrs	12 - 16 June 2017
<b>Astrophysics Seminar – Lancaster University</b> <i>Title:</i> Exploring the Young Universe with the Largest Emission Line Surveys	4 July 2016
<b>National Astronomical Meeting</b> <b>Univ. of Nottingham</b> <i>Title:</i> The Nature of $H\beta$ + [OIII] and [OII] emitters to $z \sim 5$ with HiZELS: stellar mass functions and the evolution of EWs	27 June - 1 July 2016

	<b>228th American Astronomical Society Conference</b>	12 - 16 June 2016
	<b>San Diego, California</b>	
	<i>Title:</i> The Nature of $H\beta$ + $[OIII]$ and $[OII]$ emitters to $z \sim 5$ with HiZELS: stellar mass functions and the evolution of EWs	
	<b>Astronomy Seminar – Univ. of Lisboa</b>	13 Mar. 2015
	<i>Title:</i> Probing the Evolution of $H\beta$ + $[OIII]$ and $[OII]$ emitters up to $z \sim 5$ with HiZELS	
	<b>Master’s Class – Univ. of Lisboa</b>	12 Mar. 2015
	<i>Title:</i> Probing the Evolution of $H\beta$ + $[OIII]$ and $[OII]$ emitters up to $z \sim 5$ with HiZELS	
	<b>Special Astronomy Seminar - UC Irvine</b>	24 Febr. 2015
	<i>Title:</i> Probing the Evolution of $H\beta$ + $[OIII]$ and $[OII]$ emitters with HiZELS	
	<b>Smithsonian Astrophysical Observatory Research Symposium</b>	10 Aug 2011
	<b>Center for Astrophysics, Harvard University</b>	
	<i>Title:</i> Molecular Demographics of the Pipe Nebula: The Chemical Evolution	
	<b>Star Formation Lunch Seminar</b>	8 Aug 2011
	<b>Center for Astrophysics, Harvard University</b>	
	<i>Title:</i> Molecular Demographics of the Pipe Nebula: The Chemical Evolution	
POSTERS	<b>Large-Volume Spectroscopic Analyses of AGN and Star-Forming Galaxies in the Era of JWST</b>	29 Mar – Apr 1 2022
	<b>Space Telescope Science Institute (STScI)</b>	
	<i>Title:</i> Building A Public Spectroscopic Archive of the COSMOS Legacy Field	
	<b>NASA Sciences &amp; Exploration Directorate Poster Party</b>	23 Jan 2020
	<b>Goddard Space Flight Center</b>	
	<i>Title:</i> The $Ly\alpha$ and UV luminosity-dependent clustering of typical $Ly\alpha$ emitters up to $z \sim 6$	
	<b>233rd American Astronomical Society Conference</b>	6 - 10 Jan 2019
	<b>Seattle, Washington</b>	
	<i>Title:</i> The $Ly\alpha$ and UV luminosity-dependent clustering of typical $Ly\alpha$ emitters up to $z \sim 6$	
	<b>Back at the Edge of the Universe Conference</b>	15 - 19 Mar 2015
	<b>Sintra, Portugal</b>	
	<i>Title:</i> Evolution of the $H\beta$ + $[OIII]$ and $[OII]$ Luminosity Functions and the $[OII]$ Star-Formation History of the Universe up to $z \sim 5$	
	<b>219th American Astronomical Society Conference</b>	8 - 12 Jan 2012
	<b>Austin, Texas</b>	
	<i>Title:</i> Herschel HerMES: Identifying Counterparts in CANDELS HST & SpUDS IRAC data	
	<b>Inaugural Center for Galaxy Evolution Workshop</b>	1 - 2 Mar 2011
	<b>Univ. of California, Irvine</b>	
	<i>Title:</i> Spitzer Imaging of Herschel-ATLAS Gravitationally Lensed Submillimeter Sources	
	<b>217th American Astronomical Society Conference</b>	9 - 13 Jan 2010
	<b>Seattle, Washington</b>	
	<i>Title:</i> Spitzer Imaging of Herschel-ATLAS Gravitationally Lensed Submillimeter Sources	

REFERENCES

**Prof. Jeyhan Kartaltepe**

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FIRST-AUTHOR  
REFERRED  
PUBLICATIONS

- A. A. Khostovan**, S. Malhotra, J. Rhoads, et al. (2024)  
Redshift, Stellar Mass-dependent Evolution of H $\alpha$  Equivalent Widths from  $z \sim 0.4 - 2.2$ : implications for star formation, *NGRST*, and *Euclid*  
*MNRAS*, *submitted*
- A. A. Khostovan**, S. Malhotra, J. Rhoads, et al. (2021)  
Correlations between H $\alpha$  Equivalent Width and Galaxy Properties at  $z = 0.47$ : Physical or Selection-Driven?  
*MNRAS*, *503*, 5115
- A. A. Khostovan**, S. Malhotra, J. Rhoads, et al. (2020)  
A large, deep 3 deg<sup>2</sup> survey of H $\alpha$ , [OIII], and [OII] emitters from LAGER: constraining luminosity functions  
*MNRAS*, *493*, 3966
- A. A. Khostovan**, D. Sobral, B. Mobasher, et al. (2019)  
The clustering of typical Ly $\alpha$  emitters from  $z \sim 2.5 - 6$ : host halo masses depend on Ly $\alpha$  and UV luminosities  
*MNRAS*, *489*, 555
- A. A. Khostovan**, D. Sobral, B. Mobasher, et al. (2018)  
The clustering of H $\beta$ + [OIII] and [OII] emitters since  $z \sim 5$ : dependencies with line luminosity and stellar mass  
*MNRAS*, *478*, 2999
- A. A. Khostovan**, D. Sobral, B. Mobasher, et al. (2016)  
The nature of H $\beta$ + [OIII] and [OII] emitters to  $z \sim 5$  with HiZELS: stellar mass functions and the evolution of EWs  
*MNRAS*, *463*, 2363  
[Press Release Hyperlink](#)
- A. A. Khostovan**, D. Sobral, B. Mobasher, et al. (2015)  
Evolution of the H $\beta$ + [OIII] and [OII] Luminosity Functions and the [OII] Star-Formation History of the Universe up to  $z \sim 5$   
*MNRAS*, *452*, 3948
- OTHER REFERRED PUBLICATIONS F. Sinigaglia, G. Rodighiero, ..., **A. A. Khostovan** et al. (submitted)  
MIGHTEE-HI: HI galaxy properties in the large-scale structure environment at  $z \sim 0.37$  from a stacking experiment  
*MNRAS*, *submitted*
- S. Rezaee, N. Reddy, ..., **A. A. Khostovan** et al. (2023)  
Exploring the correlation between H $\alpha$ -to-UV ratio and burstiness for typical star-forming galaxies at  $z \sim 2$   
*MNRAS*, *526*, 1512
- C. Casey, J. Kartaltepe, ..., **A. A. Khostovan** et al. (2023)  
COSMOS-Web: An Overview of the JWST Cosmic Origins Survey  
*ApJ*, *954*, 31
- S. Harish, I. Wold, S. Malhotra, ..., **A. A. Khostovan** et al. (2022)  
New spectroscopic confirmations of Ly $\alpha$  emitters at  $z \sim 7$  from the LAGER survey  
*ApJ*, *934*, 167
- I. Wold, S. Malhotra, J. Rhoads, ..., **A. A. Khostovan** et al. (2022)  
LAGER Ly $\alpha$  Luminosity Function at  $z \sim 7$ : Implications for Reionization  
*ApJ*, *927*, 36

- S. Rezaee, N. Reddy, ..., **A. A. Khostovan** et al. (2021)  
Variation of the nebular dust attenuation curve with the properties of local star-forming galaxies  
*MNRAS*, 506, 3588
- S. Santos, D. Sobral, ..., **A. A. Khostovan** et al. (2021)  
The Evolution of the UV luminosity and Stellar Mass Functions of Ly $\alpha$  emitters from  $z \sim 2$  to  $z \sim 6$   
*MNRAS*, 505, 1117
- W. Hu, J. Wang, L. Infante, ..., **A. A. Khostovan** et al. (2021)  
A Lyman- $\alpha$  protocluster at redshift 6.9  
*Nature*, 5, 485
- S. Harish, A. Coughlin, J. Rhoads, ..., **A. A. Khostovan** et al. (2020)  
A Comprehensive Study of H $\alpha$  Emitters at  $z \sim 0.62$  in the DAWN Survey: the Need for Deep and Wide Regions  
*ApJ*, 892, 30
- W. Hu, J. Wang, Z. Zheng, ..., **A. A. Khostovan** et al. (2019)  
The Ly $\alpha$  Luminosity Function and Cosmic Reionization at  $z \sim 7.0$ : a Tale of Two LAGER Fields  
*ApJ*, 886, 90
- M. Jafariyazani, B. Mobasher, ..., **A. A. Khostovan** et al. (2019)  
Spatially Resolved Properties of Galaxies from CANDELS+MUSE: Radial Extinction Profile and Insights on Quenching  
*ApJ*, 887, 204
- Z. Zheng, J. Rhoads, J. Wang, ..., **A. A. Khostovan** et al. (2019)  
Design for the First Narrowband Filter for the Dark Energy Camera: Optimizing the LAGER Survey for  $z \sim 7$  Galaxies  
*PASP*, 131, 4502
- D. Sobral, S. Santos, J. Matthee, ..., **A. A. Khostovan** et al. (2018)  
Slicing COSMOS with SC4K: the evolution of typical Ly $\alpha$  emitters and the Ly $\alpha$  escape fraction from  $z \sim 2$  to  $z \sim 6$   
*MNRAS*, 476, 4725
- T. Suzuki, T. Kodama, M. Onodera, ..., **A. A. Khostovan** et al. (2017)  
The interstellar medium in [OIII]-selected star-forming galaxies at  $z \sim 3.2$   
*ApJ*, 849, 39
- J. Matthee, D. Sobral, P. N. Best, **A. A. Khostovan** et al. (2017)  
The production and escape of Lyman-Continuum radiation from star-forming galaxies at  $z \sim 2$  and their redshift evolution  
*MNRAS*, 465, 3637
- H. Nayyeri, S. Hemmati, B. Mobasher, ..., **A. A. Khostovan** et al. (2017)  
CANDELS Multi-wavelength Catalogs: Source Identification and Photometry in the CANDELS COSMOS Survey Field  
*ApJS*, 228, 7
- T. Suzuki, T. Kodama, D. Sobral, **A. A. Khostovan** et al. (2016)  
[O III] emission line as a tracer of star-forming galaxies at high redshifts: comparison between H $\alpha$  and [OIII] emitters at  $z = 2.23$  in HiZELS  
*MNRAS*, 462, 181

- D. Sobral, J. Matthee, P. N. Best, I. Smail, **A. A. Khostovan** et al. (2015)  
CF-HiZELS, a 10 deg<sup>2</sup> emission-line survey with spectroscopic  
follow-up: H $\alpha$ , [OIII], and [OII] luminosity functions and  
sample variance at  $z = 0.8, 1.4$ , and  $2.2$   
*MNRAS*, *451*, 2303
- S. Kim, J. Wardlow, A. Cooray, S. Fleuren, W. Sutherland, **A. A. Khostovan**, et al.  
(2012)  
Spitzer IRAC Identification of Herschel-ATLAS SPIRE Sources  
*Astrophysical Journal*, *756*, 28
- R. Hopwood, J. Wardlow, A. Cooray, **A. A. Khostovan**, et al. (2011)  
Spitzer Imaging of Herschel-ATLAS Gravitationally Lensed  
Submillimeter Sources  
*Astrophysical Journal Letter*, *728*, L4+
- A. M. Koekemoer, S. M. Faber, ... **A. A. Khostovan**, et al. (2011)  
CANDELS: The Cosmic Assembly Near-infrared Deep Extragalactic  
Legacy Survey - The Hubble Space Telescope Observations, Imaging  
Data Products and Mosaics  
*Astrophysical Journal Supplement*, *197*, 36K
- A. Amblard, A. Cooray, ... **A. A. Khostovan**, et al. (2011)  
Sub-millimetre galaxies reside in dark matter halos with masses  
greater than  $3 \times 10^{11}$  solar masses  
*Nature*, *470*, 510
- A. Cooray, ... **A. A. Khostovan**, et al. (2010)  
The Herschel-SPIRE Legacy Survey (HLS): the scientific goals of a shallow and  
wide submillimeter imaging survey with SPIRE  
*White Paper*
- A. Cooray, ... **A. A. Khostovan**, et al. (2010)  
HerMES: Halo Occupation Number and Bias Properties of  
Dusty Galaxies from Angular Clustering Measurements  
*Astronomy & Astrophysics*, *518*, L22+
- IN PREP  
PUBLICATIONS
- A. A. Khostovan**, J. Kartaltepe, M. Salvato, O. Ilbert, C. Casey, et al.  
COSMOS Redshift Compilation (working title)
- A. A. Khostovan**, J. Kartaltepe, et al.  
COSMOS Spectroscopic Archive I. Subaru/FMOS (working title)
- A. A. Khostovan**, J. Kartaltepe, et al.  
COSMOS Spectroscopic Archive II. Gemini/GMOS (working title)
- A. A. Khostovan**, J. Kartaltepe, et al.  
COSMOS Spectroscopic Archive III. Intense Extreme Emission Line Galaxy at  
 $z \sim 0.8$ : Analog of high- $z$  star-forming galaxies (working title)