

Abhijeet Anand, PhD

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Research Summary

I study galaxy formation and evolution through the circumgalactic and intergalactic medium, with particular emphasis on quasar absorption-line systems and the cosmic baryon (and metal) cycle. My research combines large spectroscopic surveys such as DESI, SDSS, 4MOST and WEAVE with scalable computational methods to investigate galactic gas flows, cosmic baryon cycle, and the evolution of metals across cosmic time. I also use cosmological simulations, including Illustris, TNG-100, TNG-50 and others, to connect observations with the underlying physical processes that regulate galaxy growth. In parallel, I develop community software for robust analysis of current and future spectroscopic survey data.

Professional Experience

Dec 2025 - present: Independent Postdoctoral Fellow, IUCAA, Pune, India; *Affiliate Scientist*, Lawrence Berkeley National Lab, Berkeley, CA, USA (from Feb 2026)

- Leading an independent research program on the statistical properties of metals in the Universe and the physical state of gas in and around galaxies, using observations from SDSS, DESI, MUSE and HST.
- Developing community software for scalable analysis of large spectroscopic survey data, including [qsoabsfind](#) for metal absorber detection and [nmfqsofit](#) for fast, robust quasar continuum fitting.
- [DESI Builder](#) and core contributor to the DESI redshift-fitting pipeline [redrock](#).

Sep 2022 - Oct 2025: Postdoctoral Fellow, Lawrence Berkeley National Lab, Berkeley, CA, USA

- Led independent projects on metal absorbers in and around galaxies using DESI, constructing one of the largest absorber catalogs from quasar spectra and deriving some of the tightest constraints to date on the cosmic mass density of C IV absorbers and its evolution with redshift.
- Developer and support scientist for the DESI spectral reduction pipeline ([desispec](#)); developed a hybrid archetype+PCA method in [redrock](#) for fitting galaxy spectra with synthetic templates, improving redshift measurements and reducing catastrophic failures by $\sim 30\%$.
- Contributed to DESI collaboration papers and initiated and reviewed independent science projects within and beyond the collaboration.

Sep 2018 - Jul 2022: [IMPRS¹ PhD Fellow](#), Max Planck Institute for Astrophysics, Garching, Germany

- Studied the origin and distribution of cool metal-enriched gas in low-redshift galaxy clusters, and compared its properties with gas around field galaxies using SDSS spectroscopy and Dark Energy Survey Legacy Imaging data.
- Characterized the abundance, distribution, and nature of circumgalactic gas around star-forming and passive galaxies using SDSS quasar absorption-line systems and galaxy samples.
- Developed the first version of [qsoabsfind](#), a tool for detecting and analyzing metal absorbers in low-resolution quasar spectra.

¹International Max Planck Research School on Astrophysics

Sep 2017 - Jul 2018: UGC - JRF², National Institute of Advanced Studies, Bangalore, India

Education

Sep 2018 - Jul 2022: PhD in Astrophysics, Ludwig Maximilian University – Max Planck Institute for Astrophysics (MPA), Germany (*magna cum laude*)

- Thesis: [Probing cool and warm circumgalactic gas in galaxies and clusters with large spectroscopic and imaging surveys](#)
- Advisors: [Prof. Dr. Guinevere Kauffmann](#) & [Dr. Dylan Nelson](#)

Jul 2016 - Jul 2017: MS, Physics, Indian Institute of Science (IISc), Bangalore, India (*Grade: 7.0/8*).

- Thesis: [A sensitive search for HI 21 cm emission from super disks in radio galaxies](#)
- Advisor: [Prof. Nirupam Roy](#)

Aug 2012 - June 2016: BSc (Research), Physics, Indian Institute of Science, Bangalore, India (*Grade: 6.6/8*).

- Thesis: [Sources of Continuum Opacity in Hydrogen deficient stars](#)
- Advisors: [Prof. Gajendra Pandey](#), Indian Institute of Astrophysics (IIA)

Selected Invited Talks and Research Visits

May 2026: *Department of Physics Seminar*, Presidency University, Kolkata, India — invited seminar

Apr 2026: *Galaxy Formation and Evolution Group*, Indian Institute of Astrophysics, Bangalore, India — invited research visit

June 2025: *Astro Webinar*, Raman Research Institute, Bangalore, India — invited virtual seminar

May 2025: *Astro Lunch Seminar*, University of Washington, Seattle, USA — invited seminar

Dec 2024: *Joint Astronomy Program Seminar*, IISc, Bangalore, India — invited seminar

Feb 2024: *Extragalactic Seminar*, Max Planck Institute for Astrophysics, Garching, Germany — invited seminar

Feb 2024: *Cosmology Seminar*, Max Planck Institute for Astrophysics, Garching, Germany — invited seminar

Mar 2022: *Computational Galaxy Formation and Evolution Group*, ZAH/ITA, University of Heidelberg, Heidelberg, Germany — research visit

Feb 2022: *High Energy Group Seminar*, Max Planck Institute for Extraterrestrial Physics, Garching, Germany — invited virtual seminar

Feb 2022: *DESI Group Seminar*, Lawrence Berkeley National Laboratory, Berkeley, USA — invited virtual seminar

Dec 2021: *Galaxies & Cosmology Seminar*, CfA Harvard, Cambridge, USA — invited virtual seminar

Sep 2021: *STARs Lab*, Arizona State University, USA — invited virtual seminar

Selected Contributed Talks and Conferences

May 2026: *ASI Annual Meeting*, IIT Guwahati, India — contributed talk

Dec 2024: *Baryons Beyond Galactic Boundaries*, IUCAA, Pune, India — contributed talk

Nov 2024: *ISSAC Conference*, St. Stephen's College, New Delhi, India — contributed talk

Honors and Awards

Max Planck-India Mobility Grant, Max Planck Society (2026–2029; EUR 5000 p.a.): awarded to support annual research visits to German research institutes.

IUCAA Independent Postdoctoral Fellowship (2025–2027).

²University Grants Commission, Govt. of India - Junior Research Fellowship

[DESI Builder Award](#) (2025) for outstanding contributions to DESI data systems and survey operations.

Member of the DESI Data Systems Team, recognized as part of the DESI Collaboration with the 2026 [Berkeley Prize](#) of the American Astronomical Society.

DESI Early Career Travel Grant (2024–2025).

[IMPRS PhD Fellowship](#) (2018–2022).

University Grants Commission Junior Research Fellowship, Government of India (2017–2018).

Department of Science & Technology Higher Studies Scholarship, Government of India (2012–2017).

Mentoring and Supervision

Suman Sourav Biswal (MS, IISER Berhampur): Co-mentoring a project on characterizing neutral gas in the ISM of nearby galaxies (2026–present, IUCAA VSP Program Student).

Roshna V (MSc, Central University of Andhra Pradesh): Co-mentoring a project on the data-driven approach to model quasar continuum (2026–present, IUCAA VSP Program Student).

Paryag Sharma (PhD, Central University of Himachal Pradesh): Co-mentoring a project on the circumgalactic medium of quasars using SDSS and DESI data; manuscript in preparation (2026–present).

Sumukha Bharadwaj (PhD, Indian Institute of Space Science and Technology): Co-mentoring a project on the circumgalactic medium of low-redshift galaxies using SDSS, DESI, and HST data; manuscript in preparation (2026–present).

Joanne Tan (PhD, Max Planck Institute for Astrophysics): Co-mentoring a project on metal absorbers in TNG100 simulations; manuscript in preparation (2025–present).

Corey Dodeson (Undergraduate, UC Berkeley): Supervised a short-term reading project on the circumgalactic medium (2023).

Software, Computation, and Survey Infrastructure

Scientific Software Leadership —

- [qsoabsfind](#): metal absorber detection framework for low-resolution quasar spectra (*sole developer*)
- [nmfqsofit](#): fast, robust quasar continuum-fitting framework for large spectroscopic surveys (*sole developer*)

Survey Pipeline Contributions —

- [redrock](#): major contributor to the DESI redshift-fitting pipeline
- [desispec](#): contributor to the DESI spectroscopic reduction pipeline

Computational Tools and Workflows —

- Python (numpy, scipy, astropy, scikit-learn, matplotlib), bash; scalable analysis of large spectroscopic datasets and high-performance computing workflows
- Git, Jupyter, Slurm ([NERSC](#)), LaTeX, Unix/Linux, CI/CD workflows

Professional Service and Academic Activities

Refereeing —

- Nature Astronomy (2026–present)
- Astronomy & Astrophysics (2023–present)
- Astrophysical Journal (2023–present)
- Internal reviewer for DESI collaboration papers (2023–present)

Leadership and Committee Service —

- Core committee member, IUCAA Computing Facilities (2026–2027)
- Core committee member, [DESI Professional Development Committee](#) (2024–2025); contributed to early-career support and mentoring initiatives

- Organizer, [INPA Weekly Seminar](#), Physics Division, Lawrence Berkeley National Laboratory (2023–2024)

Collaboration and Community Activities —

- Continuing participant, DESI Collaboration (2026–present, membership category recognizing substantial prior contributions)
- Co-Investigator, NANCY³ Survey on the Roman Space Telescope (2024–present)

Teaching Experience

Online physics tutor, E-acharya⁴; taught more than 20 students from June 2017 to Aug 2018.

Outreach and Public Engagement

Press and Research Highlights —

- Research featured in monthly highlights of the Max Planck Institute for Astrophysics ([I](#), [II](#)) and on [Astrobites](#)

Interviews and Public Communication —

- Interviewed on the [Vidpeds podcast](#) about my journey in astronomy and pathways for students from small towns in India
- Featured in an [interview](#) with [The Interview Portal](#) on careers in science and astronomy

Public Presentations —

- Presented pedagogical and scientific posters for the general public on National Science Day 2026, IUCAA, Pune, India

Publications

Total publications: 49 / refereed: 34 / first-author: 5 / selected significant contributions: 7 / collaboration papers: 37 / total citations: 6,553 / h-index: 19 (Last updated: 2026-08-04)

First-author publications (citations: 149)

- ⁵ **Anand, Abhijeet**; Aguilar, J.; Ahlen, S.; Bianchi, D.; Brodzeller, A.; *et al.*, 2025, *The Cosmic Evolution of C IV Absorbers at $1.4 < z < 4.5$: Insights from 100,000 Systems in DESI Quasars*, The Astrophysical Journal, **990**, 151 (arXiv:2504.20299) [6 citations] [Impact Factor: 5.7; Scopus Quartile: Q1]

My role: Constructed the largest catalogue of triply ionized carbon absorbers to date and measured the evolution of their incidence and cosmic mass density over $1.4 < z < 4.5$. Interpreted these trends in the context of the cosmic star-formation history and the evolution of the ultraviolet background.

- ⁴ **Anand, Abhijeet**; Guy, Julien; Bailey, Stephen; Moustakas, John; Aguilar, J.; *et al.*, 2024, *Archetype-based Redshift Estimation for the Dark Energy Spectroscopic Instrument Survey*, The Astronomical Journal, **168**, 124 (arXiv:2405.19288) [44 citations] [Impact Factor: 5.8; Scopus Quartile: Q1]

My role: Developed and implemented a new galaxy redshift-fitting method for DESI that reduced catastrophic failures and improved redshift reliability. The method provides a flexible alternative for estimating redshifts in current and future large spectroscopic surveys.

- ³ **Anand, Abhijeet**; Kauffmann, Guinevere; & Nelson, Dylan, 2022, *Cool circumgalactic gas in galaxy clusters: connecting the DESI legacy imaging survey and SDSS DR16 Mg II absorbers*, Monthly Notices of the Royal Astronomical Society, **513**, 3210 (arXiv:2201.07811) [31 citations] [Impact Factor: 5.2; Scopus Quartile: Q1]

³Next-generation All-sky Near-infrared Community survey

⁴An initiative to help students in suburban and rural areas of Bihar, India.

My role: Mapped cool metal-enriched gas around galaxy clusters and compared its distribution with that around field galaxies. This was among the first studies to show that galaxy clusters host a substantial reservoir of cool metal-enriched gas in the intracluster medium.

- 2 **Anand, Abhijeet**; Nelson, Dylan; & Kauffmann, Guinevere, 2021, *Characterizing the abundance, properties, and kinematics of the cool circumgalactic medium of galaxies in absorption with SDSS DR16*, Monthly Notices of the Royal Astronomical Society, **504**, 65 (arXiv:2103.15842) [65 citations] [Impact Factor: 5.2; Scopus Quartile: Q1]

My role: onstructed a large SDSS DR16 Mg II absorber sample to characterize the abundance, spatial distribution, and kinematics of cool circumgalactic gas around star-forming and passive galaxies. Identified the characteristic scales at which differences driven by stellar processes and halo-scale processes begin to emerge.

- 1 **Anand, Abhijeet**; Roy, Nirupam; & Gopal-Krishna, 2019, *Search for H I emission from superdisk candidates associated with radio galaxies*, Research in Astronomy and Astrophysics, **19**, 083 (arXiv:1812.06875) [3 citations] [Impact Factor: 2.6; Scopus Quartile: Q2]

My role: Analysed VLA observations and performed the spectral analysis to search for H I 21 cm emission from superdisk radio galaxies. Led the interpretation and writing of the paper as part of my MS thesis at IISc Bangalore.

Selected significant contributions (citations: 95)

- 7 Napolitano, Lucas; Myers, Adam D.; Tedeschi, Adam; **Anand, Abhijeet**; Herrera-Alcantar, Hiram K.; et al., 2025, *The Composite Spectrum of QSO Absorption Line Systems in DESI DR2*, ArXiv, arXiv:2512.02992 (arXiv:2512.02992) [1 citations] [Impact Factor: N/A; Scopus Quartile: N/A]

My role: Contributed to absorber selection for the stacking analysis and served as an internal reviewer during the collaboration-wide review.

- 6 Lan, Ting-Wen; Prochaska, J. Xavier; Aguilar, J.; Ahlen, S.; **Anand, Abhijeet**; et al., 2025, *The Multi-Phase Circumgalactic Medium of DESI Emission-Line Galaxies at $z = 1.5$* , ArXiv, arXiv:2511.03195 (arXiv:2511.03195) [4 citations] [Impact Factor: N/A; Scopus Quartile: N/A]

My role: Contributed to the column density measurements of C IV absorbers identified in DESI quasar spectra and to the interpretation of the results in the context of previous work.

- 5 Wu, Xuanyi; Cai, Z.; Lan, T.-W.; Zou, S.; **Anand, Abhijeet**; et al., 2025, *Tracing the Evolution of the Cool Gas in CGM and IGM Environments through Mg II Absorption from Redshift $z = 0.75$ to $z = 1.65$ Using DESI-Y1 Data*, The Astrophysical Journal, **983**, 186 (arXiv:2407.17809) [15 citations] [Impact Factor: 5.7; Scopus Quartile: Q1]

My role: Contributed to the discussion section and to the interpretation of the results in the context of the circumgalactic medium of emission-line galaxies.

- 4 Chang, Yu-Ling; Lan, Ting-Wen; Prochaska, J. Xavier; Napolitano, Lucas; **Anand, Abhijeet**; et al., 2024, *Probing the Impact of Radio-mode Feedback on the Properties of the Cool Circumgalactic Medium*, The Astrophysical Journal, **974**, 191 (arXiv:2405.08314) [9 citations] [Impact Factor: 5.7; Scopus Quartile: Q1]

My role: Contributed to writing and to placing the results in the context of previous studies of gas profiles around luminous red galaxies.

- 3 Galiullin, Ilkham; Rodriguez, Antonio C.; El-Badry, Kareem; Szkody, Paula; **Anand, Abhijeet**; et al., 2024, *Searching for new cataclysmic variables in the Chandra Source Catalog*, Astronomy and Astrophysics, **690**, A374 (arXiv:2408.00078) [7 citations] [Impact Factor: N/A; Scopus Quartile: N/A]

N/A]

My role: Contributed to cross-matching the Chandra Source Catalog with SDSS and DESI EDR data, leading to the identification of new cataclysmic variables with follow-up from eROSITA and Keck.

- 2 Napolitano, Lucas; Pandey, Agnesh; Myers, Adam D.; Lan, Ting-Wen; **Anand, Abhijeet**; *et al.*, 2023, *Detecting and Characterizing Mg II Absorption in DESI Survey Validation Quasar Spectra*, The Astronomical Journal, **166**, 99 (arXiv:2305.20016) [30 citations] [Impact Factor: 5.8; Scopus Quartile: Q1]

My role: Contributed to algorithm development and to the physical interpretation of Mg II absorbers detected in DESI early quasar data.

- 1 Ayromlou, Mohammadreza; Kauffmann, Guinevere; **Anand, Abhijeet**; & White, Simon D. M., 2023, *The physical origin of galactic conformity: from theory to observation*, Monthly Notices of the Royal Astronomical Society, **519**, 1913 (arXiv:2207.02218) [29 citations] [Impact Factor: 5.2; Scopus Quartile: Q1]

My role: Contributed to the comparison of conformity signals in blue and red galaxies between L-Galaxies simulations and observations from the Legacy Imaging Surveys and SDSS.

Collaboration papers (citations: 6309)

- 37 McArthur, E.; Millon, M.; Powell, M.; Wechsler, R. H.; Pan, Z.; *et al.* (incl. **A. Anand**), 2026, *Quasars Acting as Strong Lenses Found in DESI DR1*, The Astrophysical Journal, **1006**, 147 (arXiv:2511.02009) [1 citations] [Impact Factor: 5.7; Scopus Quartile: Q1]
- 36 Dey, Biprateep; Newman, Jeffrey A.; Zhang, Tianqing; Aguilar, J.; Ahlen, S.; *et al.* (incl. **A. Anand**), 2026, *Deep Spectroscopy with DESI for Photometric Redshift Training and Calibration*, The Astronomical Journal, **172**, 65 (arXiv:2604.06143) [Impact Factor: 5.8; Scopus Quartile: Q1]
- 35 DESI Collaboration; Adame, A. G.; Aguilar, J.; Ahlen, S.; Alves, O.; *et al.* (incl. **A. Anand**), 2026, *DESI DR2 Results IV: Alcock-Paczyński Measurements from the Lyman Alpha Forest and Cosmological Constraints*, ArXiv, arXiv:2607.27410 (arXiv:2607.27410) [Impact Factor: N/A; Scopus Quartile: N/A]
- 34 Moore, Samuel G.; Cole, Shaun; Wilson, Michael; Norberg, Peder; Moustakas, John; *et al.* (incl. **A. Anand**), 2026, *DESI DR2 Galaxy luminosity functions*, Monthly Notices of the Royal Astronomical Society, **549**, stag866 (arXiv:2511.01803) [6 citations] [Impact Factor: 5.2; Scopus Quartile: Q1]
- 33 Negi, Vibhore; Joshi, Ravi; Vishnupriya, B.; Wu, Xue-Bing; Yesuf, Hassen M.; *et al.* (incl. **A. Anand**), 2026, *DESI as sparse Integral Field Spectrograph I: Spatially resolved chemical enrichment in star-forming galaxies at $z \leq 0.1$* , ArXiv, arXiv:2606.12541 (arXiv:2606.12541) [Impact Factor: N/A; Scopus Quartile: N/A]
- 32 DESI Collaboration; Abdul Karim, M.; Adame, A. G.; Aguado, D.; Aguilar, J.; *et al.* (incl. **A. Anand**), 2026, *Data Release 1 of the Dark Energy Spectroscopic Instrument*, The Astronomical Journal, **171**, 285 (arXiv:2503.14745) [512 citations] [Impact Factor: 5.8; Scopus Quartile: Q1]
- 31 Turner, Wynne; Cuceu, Andrei; Martini, Paul; Aguilar, J.; Ahlen, S.; *et al.* (incl. **A. Anand**), 2026, *Probing the limits of cosmological information from the Lyman- α forest 2-point correlation functions*, Journal of Cosmology and Astroparticle Physics, **2026**, 010 (arXiv:2509.14322) [3 citations] [Impact Factor: 6.4; Scopus Quartile: Q1]
- 30 Zaborowski, E. A.; Taylor, P.; Honscheid, K.; Cuceu, A.; de Mattia, A.; *et al.* (incl. **A. Anand**), 2026, *$H <_{\text{SUB}} 0 <_{\text{SUB}} >$ without the sound horizon (or supernovae): A 2% measurement in DESI DR1*, Journal of Cosmology and Astroparticle Physics, **2026**, 004 (arXiv:2510.19149) [5 citations] [Impact Factor: 6.4; Scopus Quartile: Q1]
- 29 Karaçaylı, Naim Göksel; Ravoux, Corentin; Martini, Paul; Goff, Jean-Marc Le; Armengaud, Eric; *et al.* (incl. **A. Anand**), 2026, *DESI DR1 Ly α 1D power spectrum: Validation of estimators*, Journal of

- Cosmology and Astroparticle Physics, **2026**, 048 (arXiv:2509.13593) [5 citations] [Impact Factor: 6.4; Scopus Quartile: Q1]
- 28 Ebina, H.; White, M.; Raichoor, A.; Dey, Arjun; Schlegel, D.; *et al.* (incl. **A. Anand**), 2026, *Clustering analysis of medium-band selected high-redshift galaxies*, Journal of Cosmology and Astroparticle Physics, **2026**, 019 (arXiv:2509.26467) [3 citations] [Impact Factor: 6.4; Scopus Quartile: Q1]
 - 27 Hsu, Yuan-Ming; Huang, Xiaosheng; Storfer, Christopher J.; Inchausti, Jose Carlos; Schlegel, David; *et al.* (incl. **A. Anand**), 2026, *A New Way to Discover Strong Gravitational Lenses: Pairwise Spectroscopic Search from DESI DR1*, The Astrophysical Journal Supplement Series, **282**, 41 (arXiv:2509.16033) [2 citations] [Impact Factor: 7.7; Scopus Quartile: Q1]
 - 26 Han, Jiwon Jesse; Chiti, Anirudh; Chen, Kai-Feng; Bechtol, Keith; Bellini, Andrea; *et al.* (incl. **A. Anand**), 2026, *A Path to an All-Sky Survey with Roman*, ArXiv, arXiv:2602.21280 (arXiv:2602.21280) [1 citations] [Impact Factor: N/A; Scopus Quartile: N/A]
 - 25 Kamalinejad, Farshad; Slepian, Zachary; Krolewski, Alex; Greco, Alessandro; Ortolá Leonard, William; *et al.* (incl. **A. Anand**), 2026, *First Detection of the Baryon Acoustic Oscillation (BAO) Feature in the 3-Point Correlation Function of DESI DR1 Luminous Red Galaxies*, ArXiv, arXiv:2602.16134 (arXiv:2602.16134) [1 citations] [Impact Factor: N/A; Scopus Quartile: N/A]
 - 24 Chang, Yu-Ling; Lan, Ting-Wen; Prochaska, J. Xavier; Siudek, Malgorzata; Aguilar, J.; *et al.* (incl. **A. Anand**), 2025, *Tracing the Cosmic Evolution of the Cool Circumgalactic Medium of Luminous Red Galaxies with DESI Year 1 Data*, ArXiv, arXiv:2512.03845 (arXiv:2512.03845) [3 citations] [Impact Factor: N/A; Scopus Quartile: N/A]
 - 23 Lange, Johannes U.; Wells, Alexandra; Hearin, Andrew; Beltz-Mohrmann, Gillian; Leauthaud, Alexie; *et al.* (incl. **A. Anand**), 2025, *Cosmological Constraints from Full-Scale Clustering and Galaxy-Galaxy Lensing with DESI DR1*, ArXiv, arXiv:2512.15962 (arXiv:2512.15962) [7 citations] [Impact Factor: N/A; Scopus Quartile: N/A]
 - 22 Herrera-Alcantar, Hiram K.; Armengaud, Eric; Yèche, Christophe; Gordon, Calum; Casas, Laura; *et al.* (incl. **A. Anand**), 2025, *The Lyman- α forest from LBGs: First 3D correlation measurement with DESI and prospects for cosmology*, Journal of Cosmology and Astroparticle Physics, **2025**, 053 (arXiv:2507.21852) [4 citations] [Impact Factor: 6.4; Scopus Quartile: Q1]
 - 21 Blanco, Diana; Leauthaud, Alexie; Ulf Lange, Johannes; Wright, Angus H.; Hildebrandt, Hendrik; *et al.* (incl. **A. Anand**), 2025, *The Power of DESI for Photometric Redshift Calibration: A Case Study with KiDS-1000*, ArXiv, arXiv:2512.15964 (arXiv:2512.15964) [3 citations] [Impact Factor: N/A; Scopus Quartile: N/A]
 - 20 Uzsoy, Ana Sofia M.; Dey, Arjun; Raichoor, Anand; Finkbeiner, Douglas P.; Ramakrishnan, Vandana; *et al.* (incl. **A. Anand**), 2025, *Effect of local environment on Ly α line profile in DESI/ODIN LAEs*, ArXiv, arXiv:2511.17498 (arXiv:2511.17498) [3 citations] [Impact Factor: N/A; Scopus Quartile: N/A]
 - 19 Crespi, Andrea; Percival, Will J.; Krolewski, Alex; Bonici, Marco; Zhang, Hanyu; *et al.* (incl. **A. Anand**), 2025, *Baryon fraction from the BAO amplitude: a consistent approach to parameterizing perturbation growth*, ArXiv, arXiv:2511.23459 (arXiv:2511.23459) [1 citations] [Impact Factor: N/A; Scopus Quartile: N/A]
 - 18 Abdul Karim, M.; Aguilar, J.; Ahlen, S.; Alam, S.; Allen, L.; *et al.* (incl. **A. Anand**), 2025, *DESI DR2 results. II. Measurements of baryon acoustic oscillations and cosmological constraints*, Physical Review D, **112**, 083515 (arXiv:2503.14738) [1296 citations] [Impact Factor: 5.3; Scopus Quartile: Q1]
 - 17 Abdul Karim, M.; Aguilar, J.; Ahlen, S.; Allende Prieto, C.; Alves, O.; *et al.* (incl. **A. Anand**), 2025, *DESI DR2 results. I. Baryon acoustic oscillations from the Lyman alpha forest*, Physical Review D, **112**, 083514 (arXiv:2503.14739) [241 citations] [Impact Factor: 5.3; Scopus Quartile: Q1]
 - 16 Brodzeller, A.; Wolfson, M.; Santos, D. M.; Ho, M.; Tan, T.; *et al.* (incl. **A. Anand**), 2025, *Construction of the damped Ly α absorber catalog for DESI DR2 Ly α BAO*, Physical Review D, **112**, 083510

- (arXiv:2503.14740) [24 citations] [Impact Factor: 5.3; Scopus Quartile: Q1]
- 15 Rashkovetskyi, Michael; Eisenstein, Daniel J.; Aguilar, Jessica Nicole; Ahlen, Steven; **Anand, Abhijeet**; *et al.*, 2025, *Clustering of DESI galaxies split by thermal Sunyaev-Zeldovich effect*, The Open Journal of Astrophysics, **8**, 46033 (arXiv:2508.20904) [Impact Factor: 2.4; Scopus Quartile: Q1]
 - 14 Adame, A. G.; Aguilar, J.; Ahlen, S.; Alam, S.; Alexander, D. M.; *et al.* (incl. **A. Anand**), 2025, *DESI 2024 V: Full-Shape galaxy clustering from galaxies and quasars*, Journal of Cosmology and Astroparticle Physics, **2025**, 008 (arXiv:2411.12021) [171 citations] [Impact Factor: 6.4; Scopus Quartile: Q1]
 - 13 Treiber, Helena; Amon, Alexandra; Wechsler, Risa H.; Manwadkar, Viraj; Myles, Justin; *et al.* (incl. **A. Anand**), 2025, *Dwarf galaxy halo masses from spectroscopic and photometric lensing in DESI and DES*, ArXiv, arXiv:2509.20434 (arXiv:2509.20434) [2 citations] [Impact Factor: N/A; Scopus Quartile: N/A]
 - 12 Cuceu, Andrei; Herrera-Alcantar, Hiram K.; Gordon, Calum; Ramírez-Pérez, César; Armengaud, E.; *et al.* (incl. **A. Anand**), 2025, *DESI DR1 Ly α forest: 3D full-shape analysis and cosmological constraints*, ArXiv, arXiv:2509.15308 (arXiv:2509.15308) [18 citations] [Impact Factor: N/A; Scopus Quartile: N/A]
 - 11 Medina, Gustavo E.; Li, Ting S.; Eadie, Gwendolyn M.; Riley, Alexander H.; Valluri, Monica; *et al.* (incl. **A. Anand**), 2025, *The mass of the Milky Way from outer halo stars measured by DESI DR1*, ArXiv, arXiv:2508.19351 (arXiv:2508.19351) [4 citations] [Impact Factor: N/A; Scopus Quartile: N/A]
 - 10 Adame, A. G.; Aguilar, J.; Ahlen, S.; Alam, S.; Alexander, D. M.; *et al.* (incl. **A. Anand**), 2025, *DESI 2024 VII: cosmological constraints from the full-shape modeling of clustering measurements*, Journal of Cosmology and Astroparticle Physics, **2025**, 028 (arXiv:2411.12022) [320 citations] [Impact Factor: 6.4; Scopus Quartile: Q1]
 - 9 Adame, A. G.; Aguilar, J.; Ahlen, S.; Alam, S.; Alexander, D. M.; *et al.* (incl. **A. Anand**), 2025, *DESI 2024 II: sample definitions, characteristics, and two-point clustering statistics*, Journal of Cosmology and Astroparticle Physics, **2025**, 017 (arXiv:2411.12020) [125 citations] [Impact Factor: 6.4; Scopus Quartile: Q1]
 - 8 Adame, A. G.; Aguilar, J.; Ahlen, S.; Alam, S.; Alexander, D. M.; *et al.* (incl. **A. Anand**), 2025, *DESI 2024 III: baryon acoustic oscillations from galaxies and quasars*, Journal of Cosmology and Astroparticle Physics, **2025**, 012 (arXiv:2404.03000) [524 citations] [Impact Factor: 6.4; Scopus Quartile: Q1]
 - 7 Adame, A. G.; Aguilar, J.; Ahlen, S.; Alam, S.; Alexander, D. M.; *et al.* (incl. **A. Anand**), 2025, *DESI 2024 VI: cosmological constraints from the measurements of baryon acoustic oscillations*, Journal of Cosmology and Astroparticle Physics, **2025**, 021 (arXiv:2404.03002) [1715 citations] [Impact Factor: 6.4; Scopus Quartile: Q1]
 - 6 Adame, A. G.; Aguilar, J.; Ahlen, S.; Alam, S.; Alexander, D. M.; *et al.* (incl. **A. Anand**), 2025, *DESI 2024 IV: Baryon Acoustic Oscillations from the Lyman alpha forest*, Journal of Cosmology and Astroparticle Physics, **2025**, 124 (arXiv:2404.03001) [371 citations] [Impact Factor: 6.4; Scopus Quartile: Q1]
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