

# GAGANDEEP S. ANAND

Senior Staff Scientist ◊ ganand@stsci.edu ◊ [gsanand.github.io](https://github.com/gsanand)

## RECENT EMPLOYMENT

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<b>Senior Staff Scientist</b>	Apr. 2024 – Present
<b>Staff Scientist II</b>	Aug. 2021 – Apr. 2024

Employed at the Space Telescope Science Institute (Baltimore, MD) as a Senior Staff Scientist working as a member of the Advanced Camera for Surveys team on the Hubble Space Telescope.

## EDUCATION

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<b>Institute for Astronomy, University of Hawaii</b>	<i>December 2018/August 2021</i>
M.S./PhD in Astronomy	
Thesis: Tip of the Red Giant Branch Distances to Nearby Galaxies	
Advisor: R. Brent Tully	
<b>Boston University</b>	<i>May 2017</i>
M.A. in Astronomy	
<b>Vassar College</b>	<i>May 2015</i>
A.B. in Astronomy & Physics, Minor in Mathematics	

## PREVIOUS RESEARCH POSITIONS

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Graduate Research Assistant, University of Hawaii	Aug. 2017 – Aug. 2021
Visiting Graduate Research Fellow, IPAC/Caltech	Feb. 2020 – July 2020
Visiting Scholar, W.M. Keck Observatory	July 2017 – Aug. 2017
Graduate Researcher, Boston University	July 2015 – May 2017
Summer Researcher, Colby College	May 2014 – Aug. 2014
Observatory Assistant, Vassar College	Sept. 2011 – May 2015

## COMPUTATIONAL SKILLS

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Operating Systems	MacOS/OS X, UNIX/Linux, Windows
Computer Languages	Python, L <sup>A</sup> T <sub>E</sub> X, IDL
Astronomical Software	DOLPHOT, DrizzlePac, DS9, CIAO, GALFIT, IRAF, XSPEC
Amazon Web Services	API Gateway, Amplify, EC2, IAM, Lambda, S3
Miscellaneous Software/Tools	Git, Lightroom

## PUBLICATION SUMMARY

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[NASA/ADS Link to All Publications](#)

65 Refereed Publications (11 as first author, 1 as primary mentor)

3 Papers Under Review (as co-author)

4 Instrument Science Reports (3 as first author)

5800+ Citations (580+ as first author), h-index = 29

## HONORS/AWARDS

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Outstanding Achievement in Astronomical Research	STScI, 2025
George and Mona Elmore Award for Research in Astronomy	ARCS Foundation, 2020
IPAC/Caltech Visiting Graduate Fellowship	IPAC/Caltech, 2020
W. M. Keck Observatory Visiting Scholarship	Keck Observatory, 2017
Departmental Honors in Astronomy	Vassar College, 2015

## GRANT FUNDING

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JWST Cycle 4, GO-7034 – \$237,461 to G. S. Anand (as Grant PI)	JWST, 2025
HST Cycle 32, GO-17809 – \$59,832 to G. S. Anand (as Grant PI)	HST, 2025
HST Cycle 32, GO-17712 – \$41,000 for G. S. Anand’s Salary	HST, 2025
JWST Cycle 2, GO-3055 – \$243,826 to G. S. Anand (as Grant PI)	JWST, 2023
JWST Cycle 2, GO-2875 – \$50,000 for G. S. Anand’s Salary	JWST, 2023
JWST Cycle 1, GO-1685 – \$75,000 for G. S. Anand’s Salary	JWST, 2022

## OBSERVING TIME

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HST Cycle 33, GO-18103 (Co-I), <i>145 orbits</i> , PI <i>D. Thilker</i>	HST, 2025
HST Cycle 33, GO-18079 (Co-I), <i>120 Snapshot Targets</i> , PI <i>S. Sarbadhicary</i>	HST, 2025
HST Cycle 33, GO-18070 (Co-I), <i>162 Snapshot Targets</i> , PI <i>R. Tully</i>	HST, 2025
HST Cycle 33, GO-18027 (Co-I), <i>6 orbits</i> , PI <i>J. Jensen</i>	HST, 2025
JWST Cycle 4, GO-7113 (Co-I), <i>300 Survey Targets</i> , PI <i>R. Tully</i>	JWST, 2025
JWST Cycle 4, GO-7034 ( <b>Co-PI</b> ), <i>43.0 hours</i> , PIs <i>R. Tully and G. S. Anand</i>	JWST, 2025
HST Cycle 32, GO-17911 (Co-I), <i>8 orbits</i> , PI <i>S. Li</i>	HST, 2024
HST Cycle 32, GO-17809 (Co-I), <i>48 orbits</i> , PI <i>D. Thilker</i>	HST, 2024
HST Cycle 32, GO-17743 (Co-I), <i>28 orbits</i> , PI <i>A. Riess</i>	HST, 2024
HST Cycle 32, GO-17712 (Co-I), <i>8 orbits</i> , PI <i>A. Benitez-Llambay</i>	HST, 2024
JWST Cycle 3, GO-5989 (Co-I), <i>29.7 hours</i> , PI <i>J. Jensen</i>	JWST, 2024
HST Cycle 31, GO-17502 (Co-I), <i>169 orbits</i> , PI <i>D. Thilker</i>	HST, 2023
HST Cycle 31, GO-17520 (Co-I), <i>33 orbits</i> , PI <i>L. Breuval</i>	HST, 2023
JWST Cycle 2, GO-3707 (Co-I), <i>148.8 hours</i> , PI <i>A. Leroy</i>	JWST, 2023
JWST Cycle 2, GO-3055 (Co-I), <i>46.8 hours</i> , PI <i>R. Tully</i>	JWST, 2023

## SELECT MEDIA COVERAGE

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A Failed Galaxy Could Solve the Dark Matter Mystery	NPR, 2026
This 'Galaxy That Wasn't' Never Bore Any Stars	New York Times, 2026
Hubble Examines Cloud-9, First of New Object Class	NASA/Hubble, 2026
Astronomers Capture an Incredible View of M87's Black Hole Jet	New Scientist, 2025
The Hubble Tension Is Becoming a Hubble Crisis	Scientific American, 2025
JWST Further Deepens the Biggest Controversy in Cosmology	Quanta Magazine, 2024
JWST Reveals Networks of Gas and Dust in Nearby Galaxies	NASA/JWST, 2023
Peekaboo! Tiny, Hidden Galaxy Provides a Peek Into the Past	NASA/Hubble, 2022
Capturing All That Glitters in Galaxies With NASA's Webb	NASA/JWST, 2022
Scientists Finally Confirm Elusive Third Type of Supernova	Smithsonian, 2021

## OUTREACH ACTIVITIES

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ESA/Hubble Picture of the Week Series	2019–Present
Institute for Astronomy, Misc. Outreach Activities	2017–2021
Boston University Astronomy Open Nights	2015–2017
Vassar College Astronomy Open Nights	2011–2015

## PROFESSIONAL MEMBERSHIPS

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American Astronomical Society, Full Member	2021–Present
American Astronomical Society, Junior Member	September 2016–2021

## PROFESSIONAL SERVICE

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Referee	Astrophysical Journal (5+ papers), July 2018–Present
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## TEACHING EXPERIENCE

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<b>Department of Astronomy</b> <i>Teaching Fellow</i>	Sept. 2015 –May 2017 <i>Boston University</i>
· Astronomy 203- Principles of Astronomy II (Spring 2017) · Astronomy 109- Cosmology (Fall 2015/Fall 2016) · Astronomy 105- Alien Worlds (Spring 2016)	

<b>Department of Physics &amp; Astronomy</b> <i>Astronomy Academic Intern</i>	Sept. 2014 –May 2015 <i>Vassar College</i>
· Astronomy 105- Stars, Galaxies, & Cosmology (Spring 2015) · Astronomy 101- Solar System Astronomy (Fall 2014)	

## FIRST AUTHOR PUBLICATIONS

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**Envisioning the Distance Ladder in the Era of the Habitable Worlds Observatory**  
Anand, G. S., Durbin, M., Beaton, R., Jensen, J. & Riess, A., *In Press at PASP*

**The First RELHIC? Cloud-9 is a Starless Gas Cloud**  
Anand, G. S., Benítez-Llambay, A., Beaton, R., Fox, A. J., Navarro, J. F., & D’Onghia, E., 2025,  
*ApJL*

**The TRGB–SBF Project. II. Resolving the Virgo Cluster with JWST**  
*Anand, G. S., Tully, R. B., Cohen, Y., et al., 2025, [ApJ](#)*

**The TRGB–SBF Project. I. A Tip of the Red Giant Branch Distance to the Fornax Cluster with JWST**  
*Anand, G. S., Tully, R. B., Cohen, Y., et al., 2024, [ApJ](#)*

**Tip of the Red Giant Branch Distances with JWST: An Absolute Calibration in NGC 4258 and First Applications to Type Ia Supernova Hosts**  
*Anand, G. S., Riess, A. G., Yuan, W., et al., 2024, [ApJ](#)*

**Comparing Tip of the Red Giant Branch Distance Scales: An Independent Reduction of the Carnegie-Chicago Hubble Program and the Value of the Hubble Constant**  
*Anand, G. S., Tully, R. B., Rizzi, L., Riess, A. G., & Yuan, W., 2022, [ApJ](#)*

**The Extragalactic Distance Database: The Color-Magnitude Diagrams and Tip of the Red Giant Branch Distances Catalog**  
*Anand, G. S., Rizzi, L., Tully, R. B., et al., 2021, [AJ](#)*

**Distances to PHANGS Galaxies: New Tip of the Red Giant Branch Measurements and Adopted Distances**  
*Anand, G. S., Lee, J., Van Dyk, S., et al., 2021, [MNRAS](#)*

**Peculiar Velocities of Galaxies Just Beyond the Local Group**  
*Anand, G. S., Tully, R. B., Rizzi, L., Shaya, E., & Karachentsev, I. D., 2019, [ApJ](#)*

**The Distance and Motion of the Maffei Group**  
*Anand, G. S., Tully, R. B., Rizzi, L., & Karachentsev, I. D., 2019, [ApJL](#)*

**A Robust Tip of the Red Giant Branch Distance to the Fireworks Galaxy (NGC 6946)**  
*Anand, G. S., Rizzi, L., & Tully, R. B., 2018, [AJ](#)*

**The Distance to the Galaxy Coma P**  
*Anand, G. S., Tully, R. B., Karachentsev, I. D., Makarov, D. I., Makarova, L.; Rizzi, L.; Shaya, E. J., 2018, [ApJL](#)*

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## PUBLICATIONS AS PRIMARY MENTOR

**Tip of the Red Giant Branch Distances with JWST. II. I–band Measurements in a Sample of Hosts of 10 SN Ia Match HST Cepheids**  
*Li, S., Anand, G. S., Riess, A. G., [7 authors], 2024, [ApJ](#)*

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## CO-AUTHOR PUBLICATIONS (AS SECOND/THIRD AUTHOR)

**The Progenitor of the Type II-Plateau SN 2025pht in NGC 1637: The Dustiest, Most Luminous Red Supergiant So Far?**  
*Van Dyk, S. D., Szalai, T., Anand, G. S., [7 authors], [Submitted to ApJ](#)*

**The Complete Sample of Available SNe Ia Luminosity Calibrations from the TRGB Observed with either HST or JWST**  
*Li, S., Riess, A. G., Anand, G. S., Scolnic, D., Murakami, Y. S., Brout, D., Peterson, E. R., 2026, [ApJ](#)*

**The Perfect Host: JWST Cepheid Observations in a Background-Free SN Ia Host Confirm No Bias in Hubble-Constant Measurements**  
*Riess, A. G., Li, S., Anand, G. S., Yuan, W., Breuval, L., [6 authors], 2025, [ApJL](#)*

**JWST Observations Reject Unrecognized Crowding of Cepheid Photometry as an Explanation for the Hubble Tension at  $8\sigma$  Confidence**  
Riess, A. G., Anand, G. S., Yuan, W., Casertano, S., Dolphin, A., Macri, L., Breuval, L., Scolnic, D., Perrin, M., & Anderson, R., 2024, [ApJL](#)

**Crowded No More: The Accuracy of the Hubble Constant Tested with High Resolution Observations of Cepheids by JWST**

Riess, A. G., Anand, G. S., Yuan, W., Casertano, S., Dolphin, A., Macri, L., Breuval, L., Scolnic, D., Perrin, M., & Anderson, R., 2023, [ApJL](#)

**A Nearby Isolated Dwarf: Star Formation and Structure of ESO 006-001**

Makarova, L. N., Tully, R. B., Anand, G. S., Lambert, T. S., Sharina, M. E., Koribalski, B. S., & Kraan-Korteweg, R. C., 2023, [ApJ](#)

**Around the Spindle Galaxy: The Dark Halo Mass of NGC 3115**

Karachentsev, I. D., Makarova, L. N., Anand, G. S., & Tully, R. B., 2022, [AJ](#)

**The Distance and Mass of the NGC 253 Galaxy Group**

Karachentsev, I. D., Tully, R. B., Anand, G. S., Rizzi, L., Shaya, E. J., 2021, [AJ](#)

## CO-AUTHOR PUBLICATIONS

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**Evolved Supergiants in PHANGS I: Red Supergiants in 19 Galaxies between 5-20 Mpc with HST and JWST**

Sarbadhicary, S. K., Thilker, D., Leroy, A. K., Lee, J. C., Amiri, A., Anand, G. S., [13 authors], Submitted to ApJ

**The Hidden Life of Stars: Embedded Beginnings to AGB Endings in the PHANGS–JWST Sample. I. Catalog of Mid-IR Sources**

Hassani, H., Rosolowsky, E., Leroy, A. K., [4 authors], Anand, G. S., [23 authors], Submitted to ApJS

**The Local Distance Network: A Community Consensus Report on the Measurement of the Hubble Constant at 1% Precision**

Casertano, S., Anand, G. S., Anderson, R. I., [34 authors], In Press at A&A

**Converging on the Cepheid Metallicity Dependence: Implications of Non-Standard Gaia Parallax Recalibration on Distance Measures**

Breuval, L., Anand, G. S., Anderson, R. I., Beaton, R. L., [16 authors], 2025, [ApJ](#)

**The Infrared Jet of M87 Observed with JWST**

Roder, J., Wielgus, M., Jensen, J. B., Anand, G. S., Tully, R. B., 2025, [A&A](#)

**The MUSE View of the Sculptor Galaxy: Survey Overview and the Planetary Nebulae Luminosity Function**

Congiu, E., Scheuermann, F. ; Kreckel, K., [4 authors], Anand, G. S., [16 authors], 2025, [A&A](#)

**The CosmoVerse White Paper: Addressing Observational Tensions in Cosmology with Systematics and Fundamental Physics**

Di Valentino, E., Levi Said, J., Riess, A., [537 authors including Anand, G. S.], 2025, [Physics of the Dark Universe](#)

**The TRGB–SBF Project. III. Refining the HST Surface Brightness Fluctuation Distance Scale Calibration with JWST**

Jensen, J. B., Blakeslee, J. P., Cantiello, M., Cowles, M., *Anand, G. S.*, Tully, R. B., Kourkchi, E., Raimondo, G., 2025, [ApJ](#)

**JAGB 2.0: Improved Constraints on the J-Region Asymptotic Giant Branch-based Hubble Constant from an Expanded Sample of JWST Observations**  
Li, S., Riess, A. G., Scolnic D., Casertano S., *Anand, G. S.*, 2025, [ApJ](#)

**Polycyclic Aromatic Hydrocarbon and CO(2-1) Emission at 50–150 pc Scales in 66 Nearby Galaxies**  
Chown, R., Leroy, A., Sandstrom, K., [8 authors], *Anand, G. S.*, [30 authors], 2025, [ApJ](#)

**The Hubble Tension in our own Backyard: DESI and the Nearness of the Coma Cluster**  
Scolnic, D., Riess, A. G., Murakami, Y. S., [7 authors], *Anand, G. S.*, 2025, [ApJ](#)

**The Hubble Constant Anchor Galaxy NGC 4258: Metallicity and Distance from Blue Supergiants**  
Kudritzki, R., Urbaneja, M. A., Bresolin, F., [3 authors], *Anand, G. S.*, [1 author], 2024, [ApJ](#)

**JWST Validates HST Distance Measurements: Selection of Supernova Subsample Explains Differences in JWST Estimates of Local  $H_0$**   
Riess, A. G., Scolnic, D., *Anand, G. S.*, [16 authors], 2024, [ApJ](#)

**Small Magellanic Cloud Cepheids Observed with the Hubble Space Telescope Provide a New Anchor for the SH0ES Distance Ladder**  
Breuval, L., Riess, A. G., Casertano, S., [5 authors], *Anand, G. S.*, [1 authors], 2024, [ApJ](#)

**PHANGS-JWST: Data Processing Pipeline and First Full Public Data Release**  
Williams, T. G., Lee, J. C., Larson, K. L., [10 authors], *Anand, G. S.*, [42 authors], 2024, [ApJS](#)

**Reconnaissance of the J-region Asymptotic Giant Branch in Five Nearby Galaxies using JWST**  
Li, S., Riess, A. G., Casertano, S., *Anand, G. S.*, Scolnic, D., Breuval, L., Huang, C. D., 2024, [ApJ](#)

**Standardized Luminosity of the Tip of the Red Giant Branch Utilizing Multiple Fields in NGC 4258 and the CATs Algorithm**  
Li, S., Riess, A. G., Scolnic, D., *Anand, G. S.*, Wu, J., Casertano, S., Yuan, W., Beaton, R., & Anderson, R. I., 2023, [ApJ](#)

**CATs: The Hubble Constant from Standardized TRGB and Type Ia Supernovae**  
Scolnic, D., Riess, A. G., Wu, J., Li, S., *Anand, G. S.*, Beaton, R., Casertano, S., Anderson, R., Dhawan, S., Ke, X., 2023, [ApJ](#)

**Comparative Analysis of TRGBs (CATs) from Unsupervised, Multi-Halo-Field Measurements: Contrast is Key**  
Wu, J., Scolnic, D., Riess, A. G., *Anand, G. S.*, Beaton, R., Casertano, S., Ke, X., & Li, S., 2023, [ApJ](#)

**A Possible Dwarf Galaxy Satellite-of-Satellite Problem in  $\Lambda$ CDM**  
Müller, O., Heesters, N., Jerjen, H., *Anand, G. S.*, & Revaz, Y., 2023, [A&A](#)

**Serendipitous Nebular-phase JWST Imaging of SN Ia 2021aefx: Testing the Confinement of 56-Co Decay Energy**  
Mayker Chen, N., Tucker, M., Hoyer, N., [5 authors], *Anand, G. S.*, [19 authors], 2023, [ApJL](#)

## **Peekaboo: The Extremely Metal Poor Dwarf Galaxy HIPASS J1131-31**

Karachentsev, I. D., Makarova, L. N., Koribalski, B. S., *Anand, G. S.*, Tully, R. B., & Kniazev, A. Y., 2023, [MNRAS](#)

## **The PHANGS-JWST Treasury Survey: Star Formation, Feedback, and Dust Physics at High Angular resolution in Nearby GalaxieS**

Lee, J C., Sandstrom, K. M., Leroy, A. K., Thilker, D. A., Schinnerer, E., [6 authors], *Anand, G. S.*, [65 authors], 2023, [ApJL](#)

## **PHANGS-JWST First Results: The Dust Filament Network of NGC 628 and its Relation to Star Formation Activity**

Thilker, D. A., Lee, J. C., Deger, S., [24 authors], *Anand, G. S.*, [11 authors], 2023, [ApJL](#)

## **PHANGS-JWST First Results: Stellar Feedback-Driven Excitation**

### **and Dissociation of Molecular Gas in the Starburst Ring of NGC 1365?**

Liu, D., Schinnerer, E., Cao, Y., Leroy, A., [24 authors], *Anand, G. S.*, [12 authors], 2023, [ApJL](#)

## **PHANGS-JWST First Results: A statistical view on bubble evolution in NGC628**

Watkins, E. J., Barnes, A., [11 authors], *Anand, G. S.*, [38 authors], 2022, [ApJL](#)

## **PHANGS-JWST First Results: Dust Embedded Star Clusters in NGC 7496**

### **Selected via 3.3 $\mu$ m PAH Emission**

Rodriguez, J., Lee, J., Whitmore, B., Thilker, D., [11 authors], *Anand, G. S.*, [25 authors], 2023, [ApJL](#)

## **The Whisper of a Whimper of a Bang: 2400 Days of the Type Ia SN 2011fe Reveals the Decay of 55Fe**

Tucker, M. A., Shappee, B. J. , Kochanek, C.S., Stanek, K.Z., Ashall, C., *Anand, G. S.*, & Garnavich, P., 2022, [MNRAS](#)

## **Cosmicflows-4**

Tully, R. B, Kourkchi, E. ; Courtois, H. M. ; *Anand, G. S.*, [13 authors], 2022, [ApJ](#)

## **PHANGS: Constraining Star Formation Timescales Using the Spatial Correlations of Star Clusters and Giant Molecular Clouds**

Turner, Jordan A., Dale, Daniel A., Lilly, James, [4 authors], *Anand, G. S.*, [17 authors], 2022, [MNRAS](#)

## **A Comprehensive Measurement of the Local Value of the Hubble Constant with 1 km/s/Mpc Uncertainty from the Hubble Space Telescope and the SH0ES Team**

Riess, A. G., Yuan, W., Macri, L. M., [5 authors], *Anand, G. S.*, [9 authors] 2022, [ApJL](#)

## **PNLF Distances for 19 Galaxies Observed by PHANGS-MUSE**

Scheuermann, F., Kreckel, K. *Anand, G. S.*, [3 authors], Van Dyk, S. D., [11 authors] , 2022, [A&A](#)

## **The PHANGS-MUSE survey. Probing the chemo-dynamical evolution of disc galaxies**

Emsellem, E., Schinnerer, E., Santoro, F., [18 authors], *Anand, G. S.*, [26 authors], 2022, [A&A](#)

## **KK 242, A Faint Companion to the Isolated Scd Galaxy NGC 6503**

Karachentsev, I. D., Cannon, J. M., Fuson, J., Inoue, J. L., Tully, R. B., *Anand, G. S.*, & Kaisin, S. S., 2022, [AJ](#)

## **Late-Onset Circumstellar Medium Interactions are Rare: An Unbiased GALEX View of Type Ia Supernovae**

Dubay, L., Tucker, M., Do, A., Shappee, B., *Anand, G. S.*, 2022, [ApJ](#)

**The PHANGS-HST Survey: Physics at High Angular resolution in Nearby Galaxies with the Hubble Space Telescope**

Lee, Janice C., Whitmore, Bradley C., Thilker, David A., Deger, Sinan, Larson, Kirsten L., Ubeda, Leonardo, *Anand, G. S.*, [10 authors], White, R. L., [36 authors], 2022, [ApJS](#)

**Measuring an off-Center Detonation through Infrared Line Profiles: The peculiar Type Ia Supernova SN 2020qxp/ASASSN-20jq**

Hoeflich, P., Ashall, C., Bose, S., [4 authors], *Anand, G. S.*, [12 authors], 2021, [ApJ](#)

**PHANGS-ALMA: Arcsecond CO(2–1) Imaging of Nearby Star-Forming Galaxies**

Leroy, A., Schinnerer, E., Hughes, A., [16 authors], *Anand, G. S.*, [52 authors], 2021, [ApJS](#)

**SN2019yvq Does Not Conform to SN Ia Explosion Models**

Tucker, M. A., Ashall, C., Shappee, B. J., Vallely, P. J., Kochanek, C. S., Huber, M. E., *Anand, G. S.*, Keane, J. V., Hsiao, E. Y., Holoi, T. W. S., 2021, [ApJ](#)

**PHANGS-ALMA Data Processing and Pipeline**

Leroy, A., Hughes, A., Liu, D., [16 authors], *Anand, G. S.*, [47 authors], 2021, [ApJS](#)

**The Cepheid Distance to the Narrow-Line Seyfert 1 Galaxy NGC 4051**

Yuan, W., Macri, L., Peterson, B. M., Riess, A. G., Fausnaugh, M. M., Hoffman, S. L., *Anand, G. S.*, [11 authors], 2021, [ApJ](#)

**The Electron-capture Origin of Supernova 2018zd**

Hiramatsu, D., Howell, D. A., Van Dyk, S. D., [19 authors], *Anand, G. S.*, [7 authors], 2021, [Nature Astronomy](#)

**The Properties of Dwarf Spheroidal Galaxies in the Cen A Group: Stellar Populations, Internal Dynamics, and a Heart-Shaped H $\alpha$  Ring?**

Müeller, O., Fahrion, K., Rejkuba, M., Hilker, M., Lelli, F., Lutz, K., Pawłowski, M. S., Coccato, L., *Anand, G. S.*, & Jerjen, H., 2020, [A&A](#)

**Distance and Mass of the M104 (Sombrero) Group**

Karachentsev, I. D., Makarova, L. N., Tully, R. B.; *Anand, G. S.*; Rizzi, L., Shaya, E. J., 2020, [A&A](#)

**KKH 22, The First Dwarf Spheroidal Satellite of IC 342**

Karachentsev, I. D., Makarova, L. N., Tully, R. B.; *Anand, G. S.*; Rizzi, L., Shaya, E. J., Afanasiev, V. L., 2020, [A&A](#)

**Cosmicflows-4: The Calibration of Optical and Infrared Tully-Fisher Relations**

Kourkchi, E.; Tully, R. B., *Anand, G. S.*, Courtois, H. M., Dupuy, A., Neill, J. D., Rizzi, L., Seibert, M., 2020, [ApJ](#)

**Does Gravity Fall Down? Evidence for Gravitational-wave Deflection along the Line of Sight to GW170817**

Rubin, D., Szapudi, I., Shappee, B. J., *Anand, G. S.*, 2020, [ApJL](#)

**The High-Redshift Clusters Occupied by Bent Radio AGN (COBRA) Survey**

Paterno-Mahler, R., Blanton, E. L., Ashby, M. L. N., Brodwin, M., Wing, J. D., Decker, B., Golden-Marx, E., & *Anand, G. S.*, 2017, [ApJ](#)

## INSTRUMENT SCIENCE REPORTS

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### The ACS/WFC Focus-Diverse ePSF Webtool

Anand, G. S., Grogin, N., Anderson, J., Cohen, Y., & Bellini, A., [Instrument Science Report, ACS, 2023-06](#)

### Systematic Effects in ACS/WFC Absolute Gain Measurements

Anand, G. S., Grogin, N., Anderson, J., & Ryon J., [Instrument Science Report, ACS, 2023-02](#)

### Improved Absolute Astrometry for ACS and WFC3 Data Products

Mack, J., Hack, W., Burger, M., White, R. L., Bajaj, V., Avila, R. J., Anand, G. S., de la Pena, M., [Instrument Science Report, ACS, 2022-03](#)

### Revisiting ACS/WFC Sky Backgrounds

Anand, G. S., Grogin, N., & Anderson, J., [Instrument Science Report, ACS, 2022-01](#)

## COLLABORATIVE WORKSHOPS

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### What's Under the H0od? Towards Consensus on the Local Value of the Hubble Constant

March 2025 – Participant in week-long 40 person workshop at the International Space Science Institute (Bern, Switzerland) focused on achieving consensus on the local value of the Hubble constant.

## INVITED TALKS

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### Insights on the Hubble Tension with JWST

CERN/European Consortium for Astroparticle Theory– September 2024  
LSST Dark Energy Science Collaboration– September 2024

### A JWST TRGB Calibration of Surface Brightness Fluctuations

International Space Science Institute– December 2023

### Cosmicflows-4: Tip of the Red Giant Branch Distances

American Museum of Natural History, New York– September 2021  
Herzberg Astronomy and Astrophysics Research Centre, NRC Canada– April 2021  
UMass Amherst Galaxy Lunch Talk, Amherst, MA– March 2021

### PHANGS-HST: New Tip of the Red Giant Branch Distances

IPAC Colloquium, Pasadena, CA– July 2020

## CONTRIBUTED TALKS

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### Envisioning the Distance Ladder in the Era of the Habitable Worlds Observatory

Towards the Habitable World Observatory, Johns Hopkins Bloomberg Center, DC– July 2025

### Time Dependent Sensitivity of the Advanced Camera for Surveys

Accurate Flux Calibration, Space Telescope Science Institute– October 2024

### Tip of the Red Giant Branch Distances to Nearby Galaxies

Caltech Tea Talk– June 2020  
Visiting Scholars Talk, W.M. Keck Observatory– August 2017

### Peculiar Velocities of Galaxies Just Beyond the Local Group

Constrained Local Universe Simulations 2019 Meeting, University of Lyon– September 2019

## **Exploring the Structural Evolution of Massive Quiescent Galaxies**

Keck Northeast Astronomy Consortium– November 2014

Colby Undergraduate Summer Research Retreat– July 2014

## **Observations and Analysis of Orbital Period Changes in Contact Binaries**

Keck Northeast Astronomy Consortium– October 2013

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### **CONFERENCE POSTERS**

#### **Galaxy Distances and Peculiar Velocities in the Era of Roman**

Cosmic Cartography with Roman– July 2025

#### **PHANGS-HST: New Tip of the Red Giant Branch Distances**

236th Meeting of the American Astronomical Society– June 2020

#### **The Extragalactic Distance Database: Color-Magnitude Diagrams and Tip of the Red Giant Branch Distances**

235th Meeting of the American Astronomical Society– January 2020

#### **Tip of the Red Giant Branch Distances to Nearby Galaxies**

Stars: Birth and Death, GMT Community Science Meeting– September 2018

The 21st Century HR Diagram, Space Telescope Science Institute– April 2018

#### **Chandra Observation of the WAT Radio Source/ICM Interaction in Abell 623**

229th Meeting of the American Astronomical Society– January 2017

Chandra Science for the Next Decade, Harvard-Smithsonian Center for Astrophysics– August 2016

#### **Observations and Analysis of Orbital Period Changes in Contact Binaries**

Vassar Undergraduate Research Summer Institute– July 2013