

List of Publications – Mathew Madhavacheril

h-index: 51

12300+ citations

Last updated: July 12, 2025

Legend:

🎓 indicates that I supervised or co-supervised the corresponding student-led publication.

✅ indicates that it has been accepted in a journal after peer-review.

❌ indicates that it is intended for peer-review but has not been accepted yet.

Out of 129 articles, 109 are intended for peer-review and 100 of those have been accepted.













Papers with major contributions

- ❌ Unified and consistent structure growth measurements from joint ACT, SPT and *Planck* CMB lensing
F. J. Qu, F. Ge, W. L. K. Wu, I. Abril-Cabezas, **MS Madhavacheril**, M. Millea et al ACT and SPT, 04/2025, [arxiv:2504.20038](#), *submitted to PRL*
- ❌ The Atacama Cosmology Telescope: DR6 Constraints on Extended Cosmological Models
E. Calabrese, J. C. Hill, H. T. Jense, A. La Posta et al ACT (incl. **MS Madhavacheril**), 03/2025, [arxiv:2503.14454](#), *submitted to JCAP*
- ❌ The Simons Observatory: Science Goals and Forecasts for the Enhanced Large Aperture Telescope
M. Abitbol et al Simons Observatory collaboration (incl. **MS Madhavacheril**), 03/2025, [arxiv:2503.00636](#), *submitted to JCAP*
- ❌ The Atacama Cosmology Telescope: DR6 Power Spectra, Likelihoods and LCDM Parameters
T. Louis, A. La Posta, Z. Atkins, H. T. Jense et al ACT (incl. **MS Madhavacheril**), 03/2025, [arxiv:2503.14452](#), *submitted to JCAP*
- ✅ Neutrino Mass Constraints from kSZ Tomography
A. Tishue, S. Hotinli, P. Adshead, E. Kovetz, **MS Madhavacheril**, 02/2025, [arxiv:2502.05260](#), *Phys. Rev. D 111, 123556*
- 🎓✅ Reconstructing the shape of the non-linear matter power spectrum using CMB lensing and cosmic shear
K. Perez Sarmiento, A. Lague, **MS Madhavacheril**, B. Jain, B. Sherwin, 02/2025, [arxiv:2502.06687](#), *to appear in PRD*
- ✅ Assessing the growth of structure over cosmic time with CMB lensing
MS Madhavacheril, 11/2024, [arxiv:2411.08152](#), *Phil. Trans. Roy. Soc. A, Volume 383, Issue 2290, 2025*

8.  Constraints on local primordial non-Gaussianity with 3d Velocity Reconstruction from the Kinetic Sunyaev-Zeldovich Effect
A. Laguë, **MS Madhavacheril** et al, 11/2024, [arxiv:2411.08240](#), *Phys. Rev. Lett.* **134**, 151003
9.  Cosmological limits on the neutrino mass sum for beyond- Λ CDM models
H. Shao, J. Givans, J. Dunkley, **MS Madhavacheril** et al, 09/2024, [arxiv:2409.02295](#), *Phys. Rev. D* **111**, 083535
10.   The Atacama Cosmology Telescope DR6 and DESI: Structure formation over cosmic time with a measurement of the cross-correlation of CMB Lensing and Luminous Red Galaxies
J. Kim, N. Sailer, **MS Madhavacheril** et al ACT and DESI collaborations, 07/2024, [arxiv:2407.04606](#), *JCAP* **12(2024)022**
11.  Cosmological constraints from the cross-correlation of DESI Luminous Red Galaxies with CMB lensing from Planck PR4 and ACT DR6
N. Sailer, J. Kim, S. Ferraro, **MS Madhavacheril** et al ACT and DESI collaborations, 07/2024, [arxiv:2407.04607](#), *JCAP* **06 (2025) 008**
12.  Constraints on Dark Matter-Dark Energy Scattering from ACT DR6 CMB Lensing
A. Laguë, F. McCarthy, **MS Madhavacheril**, J. C. Hill, F. J. Qu, 02/2024, [arxiv:2402.08149](#), *Phys. Rev. D* **110**, 023536
13.  Cosmological constraints from the tomography of DES-Y3 galaxies with CMB lensing from ACT DR4
G. Marques, **MS Madhavacheril** et al ACT, 07/2023, [arxiv:2306.17268](#), *JCAP* **01(2024)033**
14.  The Atacama Cosmology Telescope: High-resolution component-separated maps across one-third of the sky
W. R. Coulton, **MS Madhavacheril**, A. J. Duivenvoorden, J. Colin Hill et al ACT, 07/2023, [arxiv:2307.01258](#), *Phys. Rev. D* **109**, 063530
15.  The Atacama Cosmology Telescope: Mitigating the impact of extragalactic foregrounds for the DR6 CMB lensing analysis
N. MacCrann, B. D. Sherwin, F. J. Qu, T. Namikawa, **MS Madhavacheril** et al ACT collaboration, 04/2023, [arxiv:2304.05196](#), *ApJ* **966** 138
16.  The Atacama Cosmology Telescope: DR6 Gravitational Lensing Map and Cosmological Parameters
MS Madhavacheril, F. J. Qu, B. D. Sherwin, N. MacCrann, Y. Li et al ACT, 04/2023, [arxiv:2304.05203](#), *ApJ* **962** 113
17.   The Atacama Cosmology Telescope: A Measurement of the DR6 CMB Lensing Power Spectrum and its Implications for Structure Growth
F. J. Qu, B. D. Sherwin, **MS Madhavacheril**, D. Han, K. T. Crowley et al ACT collaboration, 04/2023, [arxiv:2304.05202](#), *ApJ* **962** 112
18.  High-accuracy emulators for observables in Λ CDM and extended cosmologies
B. Bolliet, A. Spurio Mancini, J. Hill, **MS Madhavacheril** et al, 03/2023, [arxiv:2303.01591](#), *MNRAS*, *Volume 531, Issue 1*

19.  Constraints on primordial non-Gaussianity from halo bias measured through CMB lensing cross-correlations
F. McCarthy, **MS Madhavacheril**, A. Maniyar, 10/2022, [arxiv:2210.01049](#), *Phys. Rev. D* 108, 083522
20.  De-kSZing the cosmic microwave background with surveys of large-scale structure
S. Foreman, S. Hotinli, **MS Madhavacheril**, A. van Engelen, C. Kreisch, 09/2022, [arxiv:2209.03973](#), *Phys. Rev. D* 107, 083502
21.  Probing early structure and model-independent neutrino mass with high-redshift CMB lensing mass maps
F. J. Qu, B. D. Sherwin, O. Darwish, T. Namikawa, **MS Madhavacheril**, 08/2022, [arxiv:2208.04253](#), *Phys. Rev. D* 107, 123540
22.   The Bias to Cosmic Microwave Background Lensing Reconstruction from the Kinematic Sunyaev-Zel'dovich Effect at Reionization
H. Cai, **MS Madhavacheril**, J. C. Hill, A. Kosowsky, 11/2021, [arxiv:2111.01944](#), *Phys. Rev. D* 105, 043516
23.   Simulated catalogs and maps of radio galaxies at millimeter wavelengths in Websky
Z. Li, G. Puglisi, **MS Madhavacheril**, M. Alvarez, 10/2021, [arxiv:2110.15357](#), *JCAP* 08 (2022) 029
24.  Cosmology with the moving lens effect
S. C. Hotinli, K. M. Smith, **MS Madhavacheril**, M. Kamionkowski, 08/2021, [arxiv:2108.02207](#), *Phys. Rev. D* 104, 083529
25.   Superclustering with the Atacama Cosmology Telescope and Dark Energy Survey: I. Evidence for thermal energy anisotropy using oriented stacking
M. Lokken, R. Hlozek, A. van Engelen, **MS Madhavacheril** et al. ACT and DES collaborations, 07/2021, [arxiv:2107.05523](#), *ApJ* 933 134
26.  A high-resolution view of the filament of gas between Abell 399 and Abell 401 from the Atacama Cosmology Telescope and MUSTANG-2
A. Hincks, F. Radiconi, C. Romero, **MS Madhavacheril** et al. ACT and MUSTANG-2 collaborations, 07/2021, [arxiv:2107.04611](#), *MNRAS, Volume 510, Issue 3*
27.   Baryonic feedback biases on fundamental physics from lensed CMB power spectra
F. McCarthy, J. C. Hill, **MS Madhavacheril**, 03/2021, [arxiv:2103.05582](#), *Phys. Rev. D* 105, 023517
28.  Quadratic estimators for CMB weak lensing
A. Maniyar, Y. Ali-Haïmoud, J. Carron, A. Lewis, **MS Madhavacheril**, 01/2021, [arxiv:2101.12193](#), *Phys. Rev. D* 103, 083524 (2021)
29.   Improving models of the cosmic infrared background using CMB lensing mass maps
F. McCarthy, **MS Madhavacheril**, 11/2020, [arxiv:2010.16405](#), *Phys. Rev. D* 103, 103515 (2021)
30.  CMB lensing power spectrum estimation without instrument noise bias
MS Madhavacheril, K. Smith, B. Sherwin, S. Naess, 11/2020, [arxiv:2011.02475](#), *JCAP, Volume 2021, 028*






31.  The Atacama Cosmology Telescope: Weighing distant clusters with the most ancient light
MS Madhavacheril, C. Sifon, N. Battaglia et al. ACT collaboration, 09/2020, [arxiv:2009.07772](#), *ApJ Letters*, 903, 1
32.  The Atacama Cosmology Telescope: A Catalog of more than 4000 Sunyaev-Zel'dovich Galaxy Clusters
M. Hilton, C. Sifón, S. Naess, **MS Madhavacheril** et al. ACT, DES, HSC, KiDS collaborations, 09/2020, [arxiv:2009.11043](#), *ApJS* 253 3
33.  The Atacama Cosmology Telescope: Delensed Power Spectra and Parameters
D. Han, N. Sehgal, A. MacInnis, A. van Engelen, B. D. Sherwin, **MS Madhavacheril** et al. ACT collaboration, 07/2020, [arxiv:2007.14405](#), *JCAP*, Issue 01, article id. 031 (2021)
34.   The Atacama Cosmology Telescope: A CMB lensing mass map over 2100 square degrees of sky and its cross-correlation with BOSS-CMASS galaxies
O. Darwish, **MS Madhavacheril**, B. Sherwin et al. ACT collaboration, 04/2020, [arxiv:2004.01139](#), *MNRAS*, Volume 500, Issue 2
35.  The Atacama Cosmology Telescope: Component-separated maps of CMB temperature and the thermal Sunyaev-Zel'dovich effect
MS Madhavacheril, J. C. Hill, S. Naess et al. ACT Collaboration, 11/2019, [arxiv:1911.05717](#), *Physical Review D* 102 (2), 023534
36.   Improving Small-Scale CMB Lensing Reconstruction
B Hadzhiyska, BD Sherwin, **MS Madhavacheril**, S Ferraro, 05/2019, [arxiv:1905.04217](#), *Physical Review D* 100 (2), 023547
37.   Constraining neutrino mass with the tomographic weak lensing bispectrum
WR Coulton, J Liu, **MS Madhavacheril**, V Böhm, DN Spergel, 05/2019, [arxiv:1810.02374](#), *Journal of Cosmology and Astroparticle Physics* 2019 (05), 043
38.  Constraining neutrino mass with the tomographic weak lensing one-point probability distribution function and power spectrum
J Liu, **MS Madhavacheril**, 04/2019, [arxiv:1809.10747](#), *Physical Review D* 99 (8), 083508
39.   Improving Constraints on Fundamental Physics Parameters with the Clustering of Sunyaev-Zeldovich Selected Galaxy Clusters
D Cromer, N Battaglia, **MS Madhavacheril**, 03/2019, [arxiv:1903.00976](#), *Physical Review D* 100 (6), 063529
40.  The Simons Observatory: science goals and forecasts
Ade et al. Simons Observatory Collaboration (incl. **MS Madhavacheril**), 02/2019, [arxiv:1808.07445](#), *Journal of Cosmology and Astroparticle Physics* 2019 (02), 056
41.   Measuring the small-scale matter power spectrum with high-resolution CMB lensing
HN Nguyen, N Sehgal, **MS Madhavacheril**, 01/2019, [arxiv:1710.03747](#), *Physical Review D* 99 (2), 023502
42.  Cosmology with kSZ: breaking the optical depth degeneracy with Fast Radio Bursts
MS Madhavacheril, N Battaglia, KM Smith, JL Sievers, 01/2019, [arxiv:1901.02418](#), *Physical Review D* 100 (10), 103532





43.   Disentangling dark physics with cosmic microwave background experiments
Z Li, V Gluscevic, KK Boddy, **MS Madhavacheril**, 12/2018, [arxiv:1806.10165](#), *Physical Review D* (12), 123524
44.  KSZ tomography and the bispectrum
KM Smith, **MS Madhavacheril**, M Münchmeyer, S Ferraro, U Giri, MC Johnson, 10/2018, [arxiv:1810.13423](#), *in review by Physical Review D*
45.  Constraining local non-Gaussianities with kSZ tomography
M Münchmeyer, **MS Madhavacheril**, S Ferraro, MC Johnson, KM Smith, 10/2018, [arxiv:1810.13424](#), *Physical Review D* 100, 083508
46.  Mitigating foreground biases in CMB lensing reconstruction using cleaned gradients
MS Madhavacheril, JC Hill, 07/2018, [arxiv:1802.08230](#), *Physical Review D* 98 (2), 023534
47. The weight of cosmic lenses (invited News and Views article; not peer-reviewed)
MS Madhavacheril, 11/2017, *Nature Astronomy* 1 (11), 751-752
48.  Fundamental physics from future weak-lensing calibrated Sunyaev-Zel'dovich galaxy cluster counts
MS Madhavacheril, N Battaglia, H Miyatake, 11/2017, [arxiv:1708.07502](#), *Physical Review D* 96 (10), 103525
49.  Two-season Atacama Cosmology Telescope polarimeter lensing power spectrum
BD Sherwin, A Van Engelen, N Sehgal, **MS Madhavacheril** et al. ACTPol Collaboration, 06/2017, [arxiv:1611.09753](#), *Physical Review D* 95 (12), 123529
50.  Internal delensing of cosmic microwave background acoustic peaks
N Sehgal, **MS Madhavacheril**, B Sherwin, A van Engelen, 05/2017, [arxiv:1612.03898](#), *Physical Review D* (10), 103512
51.  Measurement of a cosmographic distance ratio with galaxy and cosmic microwave background lensing
H Miyatake, **MS Madhavacheril**, N Sehgal, A Slosar, DN Spergel, B Sherwin, A van Engelen, 04/2017, [arxiv:1605.05337](#), *Physical Review Letters* 118 (16), 161301
52. CMB-S4 science book
Abazajian et al. CMB-S4 collaboration (incl. **MS Madhavacheril**), 10/2016, [arxiv:1610.02743](#), *unsubmitted (for arXiv only)*
53.  The Atacama Cosmology Telescope: Evidence of lensing of the cosmic microwave background by dark matter halos
MS Madhavacheril, N Sehgal et al. ACTPol Collaboration, 04/2015, [arxiv:1411.7999](#), *Physical Review Letters* 114 (15), 151302
54.  Building unbiased estimators from non-Gaussian likelihoods with application to shear estimation
MS Madhavacheril, P McDonald, N Sehgal, A Slosar, 01/2015, [arxiv:1407.1906](#), *Journal of Cosmology and Astroparticle Physics* 2015 (01), 022
55.  Current dark matter annihilation constraints from CMB and low-redshift data
MS Madhavacheril, N Sehgal, TR Slatyer, 05/2014, [arxiv:1310.3815](#), *Physical Review D* 89 (10), 103508





Papers with some contribution

56.  Impact of Galactic non-Gaussian foregrounds on CMB lensing measurements
I. Abril-Cabezas, F. J. Qu, B. D. Sherwin, A. van Engelen, N. MacCrann, C. Hervías-Caimapo, O. Darwish, J. Colin Hill, **MS Madhavacheril**, N. Sehgal, 05/2025, [arxiv:2505.03737](#), *to appear in PRD*
57.  The Atacama Cosmology Telescope: DR6 Maps
S. Naess, Y. Guan, A. J. Duivenvoorden, M. Hasselfield, Y. Wang et al ACT (incl. **MS Madhavacheril**), 03/2025, [arxiv:2503.14451](#), *submitted to JCAP*
58.  Evolution of structure growth during dark energy domination: Insights from the cross-correlation of DESI galaxies with CMB lensing and galaxy magnification
N. Sailer, J. DeRose, S. Ferraro, S. Chen, R. Zhou, M. White, J. Kim, **MS Madhavacheril**, 03/2025, [arxiv:2503.24385](#), *Phys. Rev. D 111, 103540*
59.  Modeling beam chromaticity for high-resolution CMB analyses
S. Giardiello, A. J. Duivenvoorden, E. Calabrese, G. Galloni, M. Hasselfield, J. C. Hill, A. La Posta, T. Louis, **MS Madhavacheril**, L. Pagano, 11/2024, [arxiv:2411.10124](#), *Phys. Rev. D 111, 043502*
60.  The Atacama Cosmology Telescope: A measurement of galaxy cluster temperatures through relativistic corrections to the thermal Sunyaev-Zeldovich effect
W. Coulton et al ACT (incl. **MS Madhavacheril**), 10/2024, [arxiv:2410.19046](#), *submitted to PRD*
61.  The Atacama Cosmology Telescope: Large-scale velocity reconstruction with the kinematic Sunyaev-Zel'dovich effect and DESI LRGs
F. McCarthy et al ACT (incl. **MS Madhavacheril**), 10/2024, [arxiv:2410.06229](#), *to appear in JCAP*
62.  Superclustering with the Atacama Cosmology Telescope and Dark Energy Survey: II. Anisotropic large-scale coherence in hot gas, galaxies, and dark matter
M. Lokken et al ACT (incl. **MS Madhavacheril**), 09/2024, [arxiv:2409.04535](#), *ApJ 982 186*
63.  The Atacama Cosmology Telescope: Multi-probe cosmology with unWISE galaxies and ACT DR6 CMB lensing
G S. Farren et al ACT (incl. **MS Madhavacheril**), 09/2024, [arxiv:2409.02109](#), *Phys. Rev. D 111, 083516*
64.  Evidence for large baryonic feedback at low and intermediate redshifts from kinematic Sunyaev-Zel'dovich observations with ACT and DESI photometric galaxies
B. Hadzhiyska et al ACT and DESI collaborations (including **MS Madhavacheril**), 07/2024, [arxiv:2407.07152](#), *submitted to PRL*
65.  The Atacama Cosmology Telescope: Reionization kSZ trispectrum methodology and limits
N. MacCrann et al ACT collaboration (including **MS Madhavacheril**), 05/2024, [arxiv:2405.01188](#), *MNRAS, Volume 532, Issue 4*
66.  The Atacama Cosmology Telescope: DR6 Gravitational Lensing and SDSS BOSS cross-correlation measurement and constraints on gravity with the EG statistic
Lukas Wenzl et al ACT collaboration (including **MS Madhavacheril**), 05/2024, [arxiv:2405.12795](#), *Phys. Rev. D 111, 043535*



67.  Sensitive 3mm Imaging of Discrete Sources in the Fields of tSZ-Selected Galaxy Clusters
S. Dicker et al (incl. **MS Madhavacheril**), 03/2024, [arxiv:2403.09855](#), *ApJ* 970 84
68.  Constraining gravity with a new precision EG estimator using Planck + SDSS BOSS
L. Wenzl, R. Bean, S. Chen, G. Farren, **MS Madhavacheril** et al, 01/2024, [arxiv:2401.12971](#),
Phys. Rev. D 109, 083540
69.  The Atacama Cosmology Telescope: Detection of Patchy Screening of the Cosmic Microwave Background
W. Coulton et al ACT collaboration (incl. **MS Madhavacheril**), 01/2024, [arxiv:2401.13033](#)
70. class_sz I: Overview
B. Bolliet et al (incl. **MS Madhavacheril**), 10/2023, [arxiv:2310.18482](#), *Proc. of the mm Universe 2023 conference, European Physical Journal Web of Conferences*
71.  Cosmology from Cross-Correlation of ACT-DR4 CMB Lensing and DES-Y3 Cosmic Shear
S. Shaikh et al. ACT and DES collaborations (incl. **MS Madhavacheril**), 09/2023, [arxiv:2309.04412](#),
MNRAS, Volume 528, Issue 2
72.  The Atacama Cosmology Telescope: Cosmology from cross-correlations of unWISE galaxies and ACT DR6 CMB lensing
G S. Farren et al ACT (incl. **MS Madhavacheril**), 09/2023, [arxiv:2309.05659](#), *ApJ* 966 157
73.  The Atacama Cosmology Telescope: Map-Based Noise Simulations for DR6
Z. Atkins et al ACT (incl. **MS Madhavacheril**), 03/2023, [arxiv:2303.04180](#), *JCAP11(2023)073*
74.  The Atacama Cosmology Telescope: Flux Upper Limits from a Targeted Search for Extragalactic Transients
Hervias-Caimapo et al ACT (incl. **MS Madhavacheril**), 01/2023, [arxiv:2301.07651](#), *MNRAS, Volume 529, Issue 3, April 2024, Pages 3020–3034*
75.  The Atacama Cosmology Telescope: limits on dark matter-baryon interactions from DR4 power spectra
Z. Li et al ACT collaboration (incl. **MS Madhavacheril**), 08/2022, [arxiv:2208.08985](#),
JCAP02(2023)046
76.  The Atacama Cosmology Telescope: The Persistence of Neutrino Self-Interaction in Cosmological Measurements
C. D. Kreisch et al ACT collaboration (incl. **MS Madhavacheril**), 07/2022, [arxiv:2207.03164](#),
Phys. Rev. D 109, 043501
77. Snowmass 2021 CMB-S4 White Paper
Abazajian et al. CMB-S4 collaboration (incl. **MS Madhavacheril**), 03/2022, [arxiv:2203.08024](#),
Contribution to Snowmass 2021
78. Snowmass 2021 CMB-HD White Paper
Aiola et al. CMB-HD collaboration (incl. **MS Madhavacheril**), 03/2022, [arxiv:2203.05728](#),
Contribution to Snowmass 2021
79.  The Atacama Cosmology Telescope: Measurement and Analysis of 1D Beams for DR4
M. Lungu et al ACT collaboration (incl. **MS Madhavacheril**), 12/2021, [arxiv:2112.12226](#),
JCAP 05 (2022) 044

80.  The Simons Observatory: a new open-source power spectrum pipeline applied to the Planck legacy data
Z. Li et al Simons Observatory collaboration (incl. **MS Madhavacheril**), 12/2021, [arxiv:2112.13839](#), *JCAP 09 (2023) 048*
81.  The Simons Observatory: Constraining inflationary gravitational waves with multi-tracer B-mode delensing
T. Namikawa et al SO collaboration (incl. **MS Madhavacheril**), 10/2021, [arxiv:2110.09730](#), *Phys. Rev. D 105, 023511*
82.  The Atacama Cosmology Telescope: Constraints on Pre-Recombination Early Dark Energy
J. C. Hill, E. Calabrese et al ACT collaboration (incl. **MS Madhavacheril**), 09/2021, [arxiv:2109.04451](#), *Phys. Rev. D 105, 123536*
83.  Cross-correlation of DES Y3 lensing and ACT/Planck thermal Sunyaev Zel'dovich Effect II: Modeling and constraints on halo pressure profiles
S. Pandey et al ACT and DES collaborations (including **MS Madhavacheril**), 08/2021, [arxiv:2108.01601](#), *Phys. Rev. D 105, 123526*
84.  Cross-correlation of DES Y3 lensing and ACT/Planck thermal Sunyaev Zel'dovich Effect I: Measurements, systematics tests, and feedback model constraints
M. Gatti et al ACT and DES collaborations (including **MS Madhavacheril**), 08/2021, [arxiv:2108.01600](#), *Phys. Rev. D 105, 123525*
85.  The Atacama Cosmology Telescope: Microwave Intensity and Polarization Maps of the Galactic Center
Y. Guan et al. ACT collaboration (including **MS Madhavacheril**), 05/2021, [arxiv:2105.05267](#), *ApJ 920 6*
86.  The mass and galaxy distribution around SZ-selected clusters
T. Shin et al. ACT collaboration (incl. **MS Madhavacheril**), 05/2021, [arxiv:2105.05914](#), *MNRAS, Volume 507, Issue 4*
87.  The Atacama Cosmology Telescope: A search for Planet 9
S. Naess et al. ACT collaboration (incl. **MS Madhavacheril**), 04/2021, [arxiv:2104.10264](#), *ApJ 923 224*
88. Combining information from multiple cosmological surveys: inference and modeling challenges
D. Alonso et al (incl. **MS Madhavacheril**), 03/2021, [arxiv:2103.05320](#), *response to DOE/NASA RFI*
89.  The Atacama Cosmology Telescope: Summary of DR4 and DR5 Data Products and Data Access
Mallaby-Kay et al (incl. **MS Madhavacheril**), 03/2021, [arxiv:2103.03154](#), *ApJS 255 11*
90.  The Atacama Cosmology Telescope: Detection of the Pairwise Kinematic Sunyaev-Zel'dovich Effect with SDSS DR15 Galaxies
V. Calafut et al. ACT collaboration (incl. **MS Madhavacheril**), 01/2021, [arxiv:2101.08374](#), *Phys. Rev. D 104, 043502 (2021)*
91.  The Atacama Cosmology Telescope: Probing the Baryon Content of SDSS DR15 Galaxies with the Thermal and Kinematic Sunyaev-Zel'dovich Effects

- E. Vavagiakis et al. ACT collaboration (incl. **MS Madhavacheril**), 01/2021, [arxiv:2101.08373](#), *Phys. Rev. D* 104, 043503 (2021)
92. NDRIO White Paper: Envisioning Digital Research Infrastructure for the Simons Observatory
A. Hincks et al. (incl. **MS Madhavacheril**), 12/2020, [arxiv:2012.12205](#), *NDRIO white paper*
 93.  The Atacama Cosmology Telescope: Detection of mm-wave transient sources
S. Naess et al. ACT collaboration (incl. **MS Madhavacheril**), 12/2020, [arxiv:2012.14347](#), *ApJ* 915 14
 94.  The Simons Observatory: Bandpass and polarization-angle calibration requirements for B-mode searches
M. Abitbol et al Simons Observatory collaboration (incl. **MS Madhavacheril**), 11/2020, [arxiv:2011.02449](#), *JCAP*05(2021)032
 95.  Strong detection of the CMB lensing x galaxy weak lensing cross-correlation from ACT-DR4, Planck Legacy and KiDS-1000
N. Robertson et al. ACT collaboration (incl. **MS Madhavacheril**), 11/2020, [arxiv:2011.11613](#), *A&A* 649, A146 (2021)
 96.  The Atacama Cosmology Telescope: Combined kinematic and thermal Sunyaev-Zel'dovich measurements from BOSS CMASS and LOWZ halos
E. Schaen et al. ACT collaboration (incl. **MS Madhavacheril**), 09/2020, [arxiv:2009.05557](#), *Phys. Rev. D* 103, 063513 (2021)
 97.  The Atacama Cosmology Telescope: Modelling the Gas Thermodynamics in BOSS CMASS galaxies from Kinematic and Thermal Sunyaev-Zel'dovich Measurements
S. Amodeo et al. ACT collaboration (incl. **MS Madhavacheril**), 09/2020, [arxiv:2009.05558](#), *Phys. Rev. D* 103, 063514 (2021)
 98.  CMB-S4: Forecasting Constraints on Primordial Gravitational Waves
CMB-S4 collaboration (incl. **MS Madhavacheril**), 08/2020, [arxiv:2008.12619](#), *ApJ* 926 54
 99.  Probing galaxy evolution in massive clusters using ACT and DES: splashback as a cosmic clock
S. Adhikari et al. ACT, DES collaborations (incl. **MS Madhavacheril**), 08/2020, [arxiv:2008.11663](#), *ApJ* 923 37
 100.  The Atacama Cosmology Telescope: A Measurement of the Cosmic Microwave Background Power Spectra at 98 and 150 GHz
S. Choi et al. ACT collaboration (incl. **MS Madhavacheril**), 07/2020, [arxiv:2007.07289](#), *JCAP*12(2020)045
 101.  The Atacama Cosmology Telescope: DR4 Maps and Cosmological Parameters
S. Aiola et al. ACT collaboration (incl. **MS Madhavacheril**), 07/2020, [arxiv:2007.07288](#), *JCAP*12(2020)047
 102.  The Atacama Cosmology Telescope: Arcminute-resolution maps of 18,000 square degrees of the microwave sky from ACT 2008-2018 data combined with Planck
S. Naess et al. ACT collaboration (incl. **MS Madhavacheril**), 07/2020, [arxiv:2007.07290](#), *JCAP*12(2020)046

103.  The cross correlation of the ABS and ACT maps
Z. Li et al. ACT collaboration (incl. **MS Madhavacheril**), 02/2020, [arxiv:2002.05717](#), *Journal of Cosmology and Astroparticle Physics* 09(2020)010
104. CMB-HD: Astro2020 RFI Response
N Sehgal et al. (incl. **MS Madhavacheril**), 02/2020, [arxiv:2002.12714](#), *response to Astro2020 Decadal RFI*
105.  Constraints on Cosmic Birefringence
T. Namikawa et al. ACT collaboration (incl. **MS Madhavacheril**), 01/2020, [arxiv:2001.10465](#), *Physical Review D* 101 (8), 083527
106. Microwave Spectro-Polarimetry of Matter and Radiation across Space and Time
Delabrouille et al. (incl. **MS Madhavacheril**), 09/2019, [arxiv:1909.01591](#), *Science White Paper submitted in response to the ESA Voyage 2050 call*
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