Brendan Crill

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Education

2001 **PhD Physics**, *California Institute of Technology*, Pasadena, CA, USA.
Thesis title: *A* Measurement of the Angular Power Spectrum of the Cosmic Microwave Background with a Long Duration Balloon-Borne Receiver. Adviser: Andrew Lange

1995 **Sc.B.Physics**, *Brown University*, Providence, RI, USA.

Employment

2008 – **S**taff Scientist, Jet Propulsion Laboratory

2007 – 2008 **V**isiting Professor, Astronomy Department, University of Toronto

2004 – 2007 **S**taff Scientist, IPAC, Caltech

2002 – 2004 **A**ssistant Professor of Physics, California State University, Dominguez Hills

2001 – 2002 **A**djunct Physics Professor, California State University, San Bernardino

Scientific Leadership Roles

2023 – co-I, Pipeline Manager, Roman Cosmology Project Infrastructure Team (PIT)

2016 – Deputy Program Chief Technologist, NASA Exoplanet Exploration Program Office

2015 – co-I, Science Data Pipeline Architect, SPHEREx

2023 – 2024 Acting Group Supervisor, Origin of the Universe group at JPL

2017 – 2018 co-I, PICO (inflation probe) concept study

2008 – 2017 Planck HFI instrument data analysis lead

Awards

2018 Gruber cosmology prize (with Planck team)

2014 NASA Exceptional Service Medal

2013 JPL Mariner award

2011 JPL Ranger award

2004 NASA Faculty Fellowship

1999 Everhart Lectureship, Caltech

1995 R. Bruce Lindsay Prize, Brown University

Research Interests

Cosmic Microwave Background: cosmology and constraints on fundamental physics.

Mission Development and Data Management

Infrared detectors and optics; cryogenic detector systems

Terrestrial exoplanet atmosphere characterization; Vis/NIR direct imaging space technology: Vis/NIR single-photon-counting detectors, coronagraph technology, starshade technology

Refereed Publications

1. Fazar, C. M. *et al.* Image persistence flagging for SPHEREx. *Journal of Astronomical Telescopes, Instruments, and Systems* **11,** 011208 (2025).
2. Mennesson, B. *et al.* Current laboratory performance of starlight suppression systems and potential pathways to desired Habitable Worlds Observatory exoplanet science capabilities. *Journal of Astronomical Telescopes, Instruments, and Systems* **10,** 035004. arXiv: 2404.18036 [astro-ph.IM] (July 2024).
3. Ashby, M. L. N. *et al.* The SPHEREx Target List of Ice Sources (SPLICES). *The Astrophysical Journal* **949,** 105 (June 2023).
4. Ivezić, Z. *et al.* Simulated SPHEREx spectra of asteroids and their implications for asteroid size and reflectance estimation. *Icarus* **371,** 114696. ISSN: 0019-1035 (Jan. 2022).
5. Symons, T. *et al.* Superresolution Reconstruction of Severely Undersampled Point-spread Functions Using Point-source Stacking and Deconvolution. *The Astrophysical Journal Supplement Series* **252,** 24 (Feb. 2021).
6. Planck Collaboration. *Planck* 2018 results. III. High Frequency Instrument data processing and frequency maps. *A&A* **641,** A3. arXiv: 1807.06207 [astro-ph.CO] (Sept. 2020).
7. Planck Collaboration. *Planck* 2018 results. II. Low Frequency Instrument data processing. *A&A* **641,** A2. arXiv: 1807.06206 [astro-ph.CO] (Sept. 2020).
8. Planck Collaboration. *Planck* 2018 results. I. Overview and the cosmological legacy of Planck. *A&A* **641,** A1. arXiv: 1807.06205 [astro-ph.CO] (Sept. 2020).
9. Planck Collaboration. *Planck* 2018 results. IV. Diffuse component separation. *A&A* **641,** A4. arXiv: 1807.06208 [astro-ph.CO] (Sept. 2020).
10. Planck Collaboration. *Planck* 2018 results. IX. Constraints on primordial non-Gaussianity. *A&A* **641,** A9. arXiv: 1905.05697 [astro-ph.CO] (Sept. 2020).
11. Planck Collaboration. *Planck* 2018 results. V. CMB power spectra and likelihoods. *A&A* **641,** A5. arXiv: 1907.12875 [astro-ph.CO] (Sept. 2020).
12. Planck Collaboration. *Planck* 2018 results. VI. Cosmological parameters. *A&A* **641,** A6. arXiv: 1807.06209 [astro-ph.CO] (Sept. 2020).
13. Planck Collaboration. *Planck* 2018 results. VIII. Gravitational lensing. *A&A* **641,** A8. arXiv: 1807.06210 [astro-ph.CO] (Sept. 2020).
14. Planck Collaboration. *Planck* 2018 results. VII. Isotropy and statistics of the CMB. *A&A* **641,** A7. arXiv: 1906.02552 [astro-ph.CO] (Sept. 2020).
15. Planck Collaboration. *Planck* 2018 results. X. Constraints on inflation. *A&A* **641,** A10. arXiv: 1807.06211 [astro-ph.CO] (Sept. 2020).
16. Planck Collaboration. *Planck* 2018 results. XII. Galactic astrophysics using polarized dust emission. *A&A* **641,** A12. arXiv: 1807.06212 [astro-ph.GA] (Sept. 2020).
17. Planck Collaboration. *Planck* 2018 results. XI. Polarized dust foregrounds. *A&A* **641,** A11. arXiv: 1801.04945 [astro-ph.GA] (Sept. 2020).
18. Planck Collaboration *et al.* Planck intermediate results - LVII. Joint Planck LFI and HFI data processing. *A&A* **643,** A42 (Nov. 2020).
19. Planck Collaboration *et al.* Planck intermediate results. LVI. Detection of the CMB dipole through modulation of the thermal Sunyaev-Zeldovich effect: Eppur si muove II. *A&A* **644,** A100. arXiv: 2003.12646 [astro-ph.CO] (Dec. 2020).
20. Ruane, G. J. *et al.* Wavefront sensing and control in space-based coronagraph instruments using Zernike's phase-contrast method. *Journal of Astronomical Telescopes, Instruments, and Systems* **6,** 1 –26 (Nov. 2020).

21. BICEP2/Keck Collaboration *et al.* BICEP2/Keck Array XI: Beam Characterization and Temperature-to-Polarization Leakage in the BK15 Data Set. *ApJ* **884,** 114. arXiv: 1904.01640 [astro-ph.IM] (Oct. 2019).

22. Stark, C. C. *et al.* ExoEarth yield landscape for future direct imaging space telescopes. *Journal of Astronomical Telescopes, Instruments, and Systems* **5,** 024009 (2019).

23. Tauber, J. A. *et al.* Characterization of the in-flight properties of the Planck telescope. *A&A* **622,** A55 (Feb. 2019).

24. BICEP2 Collaboration *et al.* Constraints on Primordial Gravitational Waves Using Planck, WMAP, and New BICEP2/Keck Observations through the 2015 Season. *Phys. Rev. Lett.* **121,** 221301. arXiv: 1810.05216 [astro-ph.CO] (Nov. 2018).

25. Planck Collaboration. Planck intermediate results. LIII. Detection of velocity dispersion from the kinetic Sunyaev-Zeldovich effect. *A&A* **617,** A48. eprint: 1707.00132 (astro-ph.CO) (Sept. 2018).

26. Planck Collaboration. Planck intermediate results. LIV. The Planck multi-frequency catalogue of non-thermal sources. *A&A* **619,** A94 (Nov. 2018).

27. BICEP2 Collaboration *et al.* BICEP2 / Keck Array IX: New bounds on anisotropies of CMB polarization rotation and implications for axionlike particles and primordial magnetic fields. *Phys. Rev. D* **96,** 102003. arXiv: 1705.02523 (Nov. 2017).

28. Planck Collaboration. Planck intermediate results. L. Evidence of spatial variation of the polarized thermal dust spectral energy distribution and implications for CMB B-mode analysis. *A&A* **599,** A51. arXiv: 1606.07335 (Mar. 2017).

29. Planck Collaboration. Planck intermediate results. LI. Features in the cosmic microwave background temperature power spectrum and shifts in cosmological parameters. *A&A* **607,** A95. arXiv: 1608.02487 (Nov. 2017).

30. Planck Collaboration. Planck intermediate results. LII. Planet flux densities. *A&A* **607,** A122. arXiv: 1612.07151 [astro-ph.EP] (Nov. 2017).

31. Bertincourt, B. *et al.* Comparison of absolute gain photometric calibration between Planck/HFI and Herschel/SPIRE at 545 and 857 GHz. *A&A* **588,** A107. arXiv: 1509.01784 [astro-ph.IM] (Apr. 2016).

32. BICEP2 Collaboration *et al.* BICEP2/Keck Array VIII: Measurement of Gravitational Lensing from Large-scale B-mode Polarization. *ApJ* **833,** 228. arXiv: 1606.01968 (Dec. 2016).

33. BICEP2/Keck Collaboration *et al.* BICEP2/Keck Array. VII. Matrix Based E/B Separation Applied to Bicep2 and the Keck Array. *ApJ* **825,** 66 (July 2016).

34. Planck Collaboration. Planck intermediate results. XL. The Sunyaev-Zeldovich signal from the Virgo cluster. *A&A* **596,** A101. arXiv: 1511.05156 (Dec. 2016).

35. Planck Collaboration. Planck intermediate results. XLI. A map of lensing-induced B-modes. *A&A* **596,** A102. arXiv: 1512.02882 (Dec. 2016).

36. Planck Collaboration. Planck intermediate results. XLII. Large-scale Galactic magnetic fields. *A&A* **596,** A103. arXiv: 1601.00546 (Dec. 2016).

37. Planck Collaboration. Planck intermediate results. XLIII. Spectral energy distribution of dust in clusters of galaxies. *A&A* **596,** A104. arXiv: 1603.04919 (Dec. 2016).

38. Planck Collaboration. Planck intermediate results. XLIV. Structure of the Galactic magnetic field from dust polarization maps of the southern Galactic cap. *A&A* **596,** A105. arXiv: 1604.01029 (Dec. 2016).

39. Planck Collaboration. Planck intermediate results. XLIX. Parity-violation constraints from polarization data. *A&A* **596,** A110. arXiv: 1605.08633 (Dec. 2016).

40. Planck Collaboration. Planck intermediate results. XLV. Radio spectra of northern extragalactic radio sources. *A&A* **596,** A106. arXiv: 1606.05120 (Dec. 2016).

41. Planck Collaboration. Planck intermediate results. XLVI. Reduction of large-scale systematic effects in HFI polarization maps and estimation of the reionization optical depth. *A&A* **596,** A107. arXiv: 1605.02985 (Dec. 2016).

42. Planck Collaboration. Planck intermediate results. XLVII. Planck constraints on reionization history. *A&A* **596,** A108. arXiv: 1605.03507 (Dec. 2016).

43. Planck Collaboration. Planck intermediate results. XLVIII. Disentangling Galactic dust emission and cosmic infrared background anisotropies. *A&A* **596,** A109. arXiv: 1605.09387 (Dec. 2016).

44. Planck Collaboration. Planck intermediate results. XXIX. All-sky dust modelling with Planck, IRAS, and WISE observations. *A&A* **586,** A132. arXiv: 1409.2495 (Feb. 2016).

45. Planck Collaboration. Planck intermediate results. XXX. The angular power spectrum of polarized dust emission at intermediate and high Galactic latitudes. *A&A* **586,** A133 (Feb. 2016).

46. Planck Collaboration. Planck intermediate results. XXXI. Microwave survey of Galactic supernova remnants. *A&A* **586,** A134. arXiv: 1409.5746 (Feb. 2016).

47. Planck Collaboration. Planck intermediate results. XXXII. The relative orientation between the magnetic field and structures traced by interstellar dust. *A&A* **586,** A135 (Feb. 2016).

48. Planck Collaboration. Planck intermediate results. XXXIII. Signature of the magnetic field geometry of interstellar filaments in dust polarization maps. *A&A* **586,** A136 (Feb. 2016).

49. Planck Collaboration. Planck intermediate results. XXXIV. The magnetic field structure in the Rosette Nebula. *A&A* **586,** A137. arXiv: 1501.00922 (Feb. 2016).

50. Planck Collaboration. Planck intermediate results. XXXIX. The Planck list of high-redshift source candidates. *A&A* **596,** A100. arXiv: 1508.04171 (Dec. 2016).

51. Planck Collaboration. Planck intermediate results. XXXV. Probing the role of the magnetic field in the formation of structure in molecular clouds. *A&A* **586,** A138. arXiv: 1502.04123 (Feb. 2016).

52. Planck Collaboration. Planck intermediate results. XXXVI. Optical identification and redshifts of Planck SZ sources with telescopes at the Canary Islands observatories. *A&A* **586,** A139. arXiv: 1504.04583 (Feb. 2016).

53. Planck Collaboration. Planck intermediate results. XXXVII. Evidence of unbound gas from the kinetic Sunyaev-Zeldovich effect. *A&A* **586,** A140. arXiv: 1504.03339 (Feb. 2016).

54. Planck Collaboration. Planck intermediate results. XXXVIII. E- and B-modes of dust polarization from the magnetized filamentary structure of the interstellar medium. *A&A* **586,** A141. arXiv: 1505.02779 (Feb. 2016).

55. Planck Collaboration. *Planck* 2015 results. I. Overview of products and scientific results. *A&A* **594,** A1. arXiv: 1502.01582 (Sept. 2016).

56. Planck Collaboration II. *Planck* 2015 results. II. Low Frequency Instrument data processings. *A&A* **594,** A2. arXiv: 1502.01583 [astro-ph.IM] (Sept. 2016).

57. Planck Collaboration VI. *Planck* 2015 results. VI. LFI mapmaking. *A&A* **594,** A6. arXiv: 1502.01585 (Sept. 2016).

58. Planck Collaboration VII. *Planck* 2015 results. VII. High Frequency Instrument data processing: Time-ordered information and beams. *A&A* **594,** A7 (Sept. 2016).

59. Planck Collaboration X. *Planck* 2015 results. X. Diffuse component separation: Foreground maps. *A&A* **594,** A10. arXiv: 1502.01588 (Sept. 2016).

60. Planck Collaboration XI. *Planck* 2015 results. XI. CMB power spectra, likelihoods, and robustness of parameters. *A&A* **594,** A11. arXiv: 1507.02704 (Sept. 2016).

61. Planck Collaboration XII. *Planck* 2015 results. XII. Full focal plane simulations. *A&A* **594,** A12. arXiv: 1509.06348 (Sept. 2016).

62. Planck Collaboration XIII. *Planck* 2015 results. XIII. Cosmological parameters. *A&A* **594,** A13. arXiv: 1502.01589 (Sept. 2016).

63. Planck Collaboration XIV. *Planck* 2015 results. XIV. Dark energy and modified gravity. *A&A* **594,** A14. arXiv: 1502.01590 (Sept. 2016).

64. Planck Collaboration XV. *Planck* 2015 results. XV. Gravitational lensing. *A&A* **594,** A15. arXiv: 1502.01591 (Sept. 2016).

65. Planck Collaboration XVII. *Planck* 2015 results. XVII. Constraints on primordial non-Gaussianity. *A&A* **594,** A17. arXiv: 1502.01592 (Sept. 2016).

66. Planck Collaboration XVIII. *Planck* 2015 results. XVIII. Background geometry and topology of the Universe. *A&A* **594,** A18. arXiv: 1502.01593 (Sept. 2016).

67. Planck Collaboration XX. *Planck* 2015 results. XX. Constraints on inflation. *A&A* **594,** A20. arXiv: 1502.02114 (Sept. 2016).

68. Planck Collaboration XXI. *Planck* 2015 results. XXI. The integrated Sachs-Wolfe effect. *A&A* **594,** A21. arXiv: 1502.01595 (Sept. 2016).

69. Planck Collaboration XXII. *Planck* 2015 results. XXII. A map of the thermal Sunyaev-Zeldovich effect. *A&A* **594,** A22. arXiv: 1502.01596 (Sept. 2016).

70. Planck Collaboration XXIV. Planck 2015 results. XXIV. Cosmology from Sunyaev-Zeldovich cluster counts. *A&A* **594,** A24. arXiv: 1502.01597 (Sept. 2016).

71. Planck Collaboration XXV. *Planck* 2015 results. XXV. Diffuse low-frequency Galactic foregrounds. *A&A* **594,** A25. arXiv: 1506.06660 (Sept. 2016).

72. Planck Collaboration XXVI. *Planck* 2015 results. XXVI. The Second Planck Catalogue of Compact Sources. *A&A* **594,** A26. arXiv: 1507.02058 (Sept. 2016).

73. Planck Collaboration XXVII. *Planck* 2015 results. XXVII. The second Planck catalogue of Sunyaev-Zeldovich sources. *A&A* **594,** A27. arXiv: 1502.01598 (Sept. 2016).

74. Zemcov, M., Crill, B., Ryan, M. & Staniszewski, Z. An Algorithm for Real-Time Optimal Photocurrent Estimation Including Transient Detection for Resource-Constrained Imaging Applications. *Journal of Astronomical Instrumentation* **05,** 1650007. eprint: http://www.worldscientific.com/doi/pdf/10.1142/S2251171716500070 (June 2016).

75. BICEP2/Keck and Planck Collaborations. Joint Analysis of BICEP2/*KeckArray* and *Planck* Data. *Phys. Rev. Lett.* **114,** 101301 (10 Mar. 2015).

76. BICEP2/Keck Collaboration *et al.* BICEP2 / Keck Array V: Measurements of B-mode Polarization at Degree Angular Scales and 150 GHz by the Keck Array. *ApJ* **811,** 126. arXiv: 1502.00643 (Oct. 2015).

77. Gudmundsson, J. E. *et al.* The thermal design, characterization, and performance of the SPIDER long-duration balloon cryostat. *Cryogenics* **72,** 65–76. arXiv: 1506.06953 [astro-ph.IM] (Dec. 2015).

78. Planck and Fermi Collaborations. Planck intermediate results. XXVIII. Interstellar gas and dust in the Chamaeleon clouds as seen by Fermi LAT and Planck. *A&A* **582,** A31 (Oct. 2015).

79. Planck Collaboration. Planck intermediate results. XIX. An overview of the polarized thermal emission from Galactic dust. *A&A* **576,** A104. arXiv: 1405.0871 (Apr. 2015).

80. Planck Collaboration. Planck intermediate results. XVIII The millimetre and sub-millimetre emission from planetary nebulae. *A&A* **573,** A6. arXiv: 1403.4723 [astro-ph.GA] (Jan. 2015).

81. Planck Collaboration. Planck intermediate results. XX. Comparison of polarized thermal emission from Galactic dust with simulations of MHD turbulence. *A&A* **576,** A105. arXiv: 1405.0872 (Apr. 2015).

82. Planck Collaboration. Planck intermediate results. XXI. Comparison of polarized thermal emission from Galactic dust at 353 GHz with interstellar polarization in the visible. *A&A* **576,** A106. arXiv: 1405.0873 (Apr. 2015).

83. Planck Collaboration. Planck intermediate results. XXII. Frequency dependence of thermal emission from Galactic dust in intensity and polarization. *A&A* **576,** A107. arXiv: 1405.0874 (Apr. 2015).

84. Planck Collaboration. Planck intermediate results. XXIII. Galactic plane emission components derived from Planck with ancillary data. *A&A* **580,** A13. arXiv: 1406.5093 (Aug. 2015).

85. Planck Collaboration. Planck intermediate results. XXVII. High-redshift infrared galaxy overdensity candidates and lensed sources discovered by Planck and confirmed by Herschel-SPIRE. *A&A* **582,** A30. arXiv: 1503.08773 (Oct. 2015).

86. Catalano, A., Ade, P., Atik, Y. & Benoit, A. Characterization and Physical Explanation of Energetic Particles on Planck HFI Instrument. *Journal of Low Temperature Physics* **176,** 773–786. arXiv: 1403.5639 [astro-ph.IM] (Sept. 2014).

87. Catalano, A., Ade, P., Atik, Y. & Benoit, A. Impact of particles on the Planck HFI detectors: Ground-based measurements and physical interpretation. *A&A* **569,** A88. arXiv: 1403.6592 [astro-ph.IM] (Sept. 2014).

88. Planck Collaboration. Planck intermediate results. XIII. Constraints on peculiar velocities. *A&A* **561,** A97 (Jan. 2014).

89. Planck Collaboration. Planck intermediate results. XIV. Dust emission at millimetre wavelengths in the Galactic plane. *A&A* **564,** A45. arXiv: 1307.6815 (Apr. 2014).

90. Planck Collaboration. Planck intermediate results. XV. A study of anomalous microwave emission in Galactic clouds. *A&A* **565,** A103. arXiv: 1309.1357 (May 2014).

91. Planck Collaboration. Planck intermediate results. XVII. Emission of dust in the diffuse interstellar medium from the far-infrared to microwave frequencies. *A&A* **566,** A55. arXiv: 1312.5446 (June 2014).

92. Planck Collaboration I. *Planck* 2013 results: Overview of Planck Products and Scientific Results. *A&A* **571,** A1 (Nov. 2014).

93. Planck Collaboration II. *Planck* 2013 results: The Low Frequency Instrument data processing. *A&A* **571,** A2 (Nov. 2014).

94. Planck Collaboration III. *Planck* 2013 results: LFI systematic uncertainties. *A&A* **571,** A3 (Nov. 2014).

95. Planck Collaboration IV. *Planck* 2013 results: LFI Beams. *A&A* **571,** A4 (Nov. 2014).

96. Planck Collaboration V. *Planck* 2013 results: LFI Calibration. *A&A* **571,** A5 (Nov. 2014).

97. Planck Collaboration VI. *Planck* 2013 results: High Frequency Instrument Data Processing. *A&A* **571,** A6 (Nov. 2014).

98. Planck Collaboration VII. *Planck* 2013 results: HFI time response and beams. *A&A* **571,** A7 (Nov. 2014).

99. Planck Collaboration VIII. *Planck* 2013 results: HFI calibration and Map-making. *A&A* **571,** A8 (Nov. 2014).

100. Planck Collaboration IX. *Planck* 2013 results: HFI spectral response. *A&A* **571,** A9 (Nov. 2014).

101. Planck Collaboration X. *Planck* 2013 results: HFI energetic particle effects. *A&A* **571,** A10 (Nov. 2014).

102. Planck Collaboration XI. *Planck* 2013 results: All-sky model of thermal dust emission. *A&A* **571,** A11 (Nov. 2014).

103. Planck Collaboration XII. *Planck* 2013 results: Component separation. *A&A* **571,** A12 (Nov. 2014).

104. Planck Collaboration XIII. *Planck* 2013 results: Galactic CO emission as seen by Planck. *A&A* **571,** A13 (Nov. 2014).

105. Planck Collaboration XIV. *Planck* 2013 results: Zodiacal emission. *A&A* **571,** A14 (Nov. 2014).

106. Planck Collaboration XV. *Planck* 2013 results: CMB power spectra and likelihood. *A&A* **571,** A15 (Nov. 2014).

107. Planck Collaboration XVI. *Planck* 2013 results: Cosmological parameters. *A&A* **571,** A16 (Nov. 2014).

108. Planck Collaboration XVII. *Planck* 2013 results: Gravitational lensing by large-scale structure. *A&A* **571,** A17 (Nov. 2014).

109. Planck Collaboration XVIII. *Planck* 2013 results: Gravitational lensing by star-forming galaxies. *A&A* **571,** A18 (Nov. 2014).

110. Planck Collaboration XIX. *Planck* 2013 results: The integrated Sachs-Wolfe effect. *A&A* **571,** A19 (Nov. 2014).

111. Planck Collaboration XX. *Planck* 2013 results: Cosmology from Planck SZ cluster counts. *A&A* **571,** A20 (Nov. 2014).

112. Planck Collaboration XXI. *Planck* 2013 results: All-sky Compton parameter map and characterization. *A&A* **571,** A21 (Nov. 2014).

113. Planck Collaboration XXII. *Planck* 2013 results: Constraints on inflation. *A&A* **571,** A22 (Nov. 2014).

114. Planck Collaboration XXIII. *Planck* 2013 results: Isotropy and statistics of the CMB. *A&A* **571,** A23 (Nov. 2014).

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116. Planck Collaboration XXV. *Planck* 2013 results: Searches for cosmic strings and other topological defects. *A&A* **571,** A25 (Nov. 2014).

117. Planck Collaboration XXVI. *Planck* 2013 results: Geometry and topology of the Universe. *A&A* **571,** A26 (Nov. 2014).

118. Planck Collaboration XXVII. *Planck* 2013 results: Special relativistic effects on the CMB dipole. *A&A* **571,** A27 (Nov. 2014).

119. Planck Collaboration XXVIII. *Planck* 2013 results: The Planck Catalogue of Compact Sources. *A&A* **571,** A28 (Nov. 2014).

120. Planck Collaboration XXIX. *Planck* 2013 results: The Planck catalogue of Sunyaev-Zeldovich sources. *A&A* **571,** A29 (Nov. 2014).

121. Planck Collaboration XXX. *Planck* 2013 results: Cosmic infrared background measurements and implications for star formation. *A&A* **571,** A30 (Nov. 2014).

122. Planck Collaboration XXXI. *Planck* 2013 results: Consistency of the data. *A&A* **571,** A31 (Nov. 2014).

123. Fraisse, A. A. *et al.* SPIDER: probing the early Universe with a suborbital polarimeter. *J. Cosmology Astropart. Phys.* **4,** 47. arXiv: 1106.3087 [astro-ph.CO] (Apr. 2013).

124. Planck Collaboration. Planck intermediate results. IV. The XMM-Newton validation programme for new Planck galaxy clusters. *A&A* **550,** A130. arXiv: 1205.3376 [astro-ph.CO] (Feb. 2013).

125. Planck Collaboration. Planck intermediate results. IX. Detection of the Galactic haze with Planck. *A&A* **554,** A139. arXiv: 1208.5483 [astro-ph.GA] (June 2013).

126. Planck Collaboration. Planck intermediate results. V. Pressure profiles of galaxy clusters from the Sunyaev-Zeldovich effect. *A&A* **550,** A131. arXiv: 1207.4061 [astro-ph.CO] (Feb. 2013).

127. Planck Collaboration. Planck intermediate results. VI. The dynamical structure of PLCKG214.6+37.0, a Planck discovered triple system of galaxy clusters. *A&A* **550,** A132. arXiv: 1207.4009 [astro-ph.CO] (Feb. 2013).

128. Planck Collaboration. Planck intermediate results. VII. Statistical properties of infrared and radio extragalactic sources from the Planck Early Release Compact Source Catalogue at frequencies between 100 and 857 GHz. *A&A* **550,** A133. arXiv: 1207.4706 [astro-ph.CO] (Feb. 2013).

129. Planck Collaboration. Planck intermediate results. VIII. Filaments between interacting clusters. *A&A* **550,** A134. arXiv: 1208.5911 [astro-ph.CO] (Feb. 2013).

130. Planck Collaboration. Planck intermediate results. X. Physics of the hot gas in the Coma cluster. *A&A* **554,** A140. arXiv: 1208.3611 [astro-ph.CO] (June 2013).

131. Planck Collaboration. Planck intermediate results. XI. The gas content of dark matter halos: the Sunyaev-Zeldovich-stellar mass relation for locally brightest galaxies. *A&A* **557,** A52. arXiv: 1212.4131 (Sept. 2013).

132. Planck Collaboration & AMI Collaboration. Planck intermediate results. II. Comparison of Sunyaev-Zeldovich measurements from Planck and from the Arcminute Microkelvin Imager for 11 galaxy clusters. *A&A* **550,** A128. arXiv: 1204.1318 [astro-ph.CO] (Feb. 2013).

133. Planck Collaboration. Planck intermediate results. I. Further validation of new Planck clusters with XMM-Newton. *A&A* **543,** A102 (July 2012).

134. O'Dea, D. T. *et al.* SPIDER Optimization. II. Optical, Magnetic, and Foreground Effects. *ApJ* **738,** 63. arXiv: 1102.0559 (Sept. 2011).

135. Planck Collaboration. Planck early results. I. The Planck mission. *A&A* **536,** A1. arXiv: 1101.2022 [astro-ph.IM] (Dec. 2011).

136. Planck Collaboration. Planck early results. II. The thermal performance of Planck. *A&A* **536,** A2. arXiv: 1101.2023 (Dec. 2011).

137. Planck Collaboration. Planck early results. IX. XMM-Newton follow-up for validation of Planck cluster candidates. *A&A* **536,** A9. arXiv: 1101.2025 (Dec. 2011).

138. Planck Collaboration. Planck early results. VII. The Early Release Compact Source Catalogue. *A&A* **536,** A7. arXiv: 1101.2041 (Dec. 2011).

139. Planck Collaboration. Planck early results. VIII. The all-sky early Sunyaev-Zeldovich cluster sample. *A&A* **536,** A8. arXiv: 1101.2024 (Dec. 2011).

140. Planck Collaboration. Planck early results. X. Statistical analysis of Sunyaev-Zeldovich scaling relations for X-ray galaxy clusters. *A&A* **536,** A10. arXiv: 1101.2043 (Dec. 2011).

141. Planck Collaboration. Planck early results. XII. Cluster Sunyaev-Zeldovich optical scaling relations. *A&A* **536,** A12. arXiv: 1101.2027 (Dec. 2011).

142. Planck Collaboration. Planck early results. XIII. Statistical properties of extragalactic radio sources in the Planck Early Release Compact Source Catalogue. *A&A* **536,** A13. arXiv: 1101.2044 (Dec. 2011).

143. Planck Collaboration. Planck early results. XIV. ERCSC validation and extreme radio sources. *A&A* **536,** A14. arXiv: 1101.1721 (Dec. 2011).

144. Planck Collaboration. Planck early results. XIX. All-sky temperature and dust optical depth from Planck and IRAS. Constraints on the "dark gas" in our Galaxy. *A&A* **536,** A19. arXiv: 1101.2029 (Dec. 2011).

145. Planck Collaboration. Planck early results. XVI. The Planck view of nearby galaxies. *A&A* **536,** A16. arXiv: 1101.2045 (Dec. 2011).

146. Planck Collaboration. Planck early results. XVII. Origin of the submillimetre excess dust emission in the Magellanic Clouds. *A&A* **536,** A17. arXiv: 1101.2046 (Dec. 2011).

147. Planck Collaboration. Planck early results. XVIII. The power spectrum of cosmic infrared background anisotropies. *A&A* **536,** A18. arXiv: 1101.2028 (Dec. 2011).

148. Planck Collaboration. Planck early results. XX. New light on anomalous microwave emission from spinning dust grains. *A&A* **536,** A20. arXiv: 1101.2031 (Dec. 2011).

149. Planck Collaboration. Planck early results. XXI. Properties of the interstellar medium in the Galactic plane. *A&A* **536,** A21. arXiv: 1101.2032 (Dec. 2011).

150. Planck Collaboration. Planck early results. XXII. The submillimetre properties of a sample of Galactic cold clumps. *A&A* **536,** A22. arXiv: 1101.2034 (Dec. 2011).

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