

Full List of Publications (citations 2600, h-index 28 as of June 2021; where not highlighted, appear as co-author in alphabetical order)

A note on collaborative programs is at the end of this document.

Primary Journals

1. BICEP/Keck XIII:: Constraints on Primordial Gravitational Waves [BK18], Ade et al. 2021, submitted to PRL
2. [The X Faster Power Spectrum and Likelihood Estimator for the Analysis of CMB Maps](#), SPIDER Collaboration 2021
3. [A Constraint on Primordial \$B\$ -Modes from the First Flight of the SPIDER Balloon-Borne Telescope](#), SPIDER Collaboration 2021
4. [Improved constraints on primordial gravitational waves with delensing](#), BICEP/Keck/SPTpol Collaborations 2021, PRD 103, 022004
5. [Constraints on axion-like polarization oscillations in the CMB](#), BICEP/Keck Array Collaboration 2021, Phys. Rev. D 103, 042002
6. [Probing Cosmic Reionization and Molecular Gas Growth with TIME](#), Sun et al. 2021, ApJ, 915, 33
7. [CMB-S4: Forecasting Constraints on Primordial Gravitational Waves](#), The CMB-S4 Collaboration 2020, accepted to ApJ
8. [BICEP2/Keck-Array XI: beam characterization and temperature-to-polarization leakage in BK15](#), Ade et al. 2019, ApJ, 884, 114
9. [Measuring Cross-Spectra of the Cosmic Infrared Background from 95 to 1200 GHz](#), Viero et al. 2019, ApJ, 881, 96
10. [Relative alignment between magnetic field and molecular gas structure in Vela C giant molecular cloud](#), Fissel et al. 2019, ApJ, 878, 110
11. [Submillimeter Polarization Spectrum of the Carina Nebula](#), Shariff et al. 2019, ApJ, 872, 197.
12. [BICEP2/Keck-Array X: Constraints on Primordial Gravitational Waves \[BK15\]](#), Ade et al. 2018, Phys. Rev. Lett. 121, 221301
13. [A Foreground Masking Strategy for \[CII\] Intensity Mapping Experiments](#), Sun, **Moncelsi**, et al. 2018, ApJ, 856, 107.
14. [First Observation of the Submm Polarization Spectrum in a Translucent Molecular Cloud](#), Ashton et al. 2018, ApJ, 857, 10
15. [BICEP2/Keck-Array IX: CMB polarization rotation, axion-like particles, primordial magnetic fields](#), Ade et al 2017, PhysRevD 96, 102003
16. [A New Limit on CMB Circular Polarization from SPIDER](#), Nagy et al. 2017, ApJ, 844, 151.
17. [The relation between column density structures and the magnetic field orientation in Vela C](#), Soler et al. 2017, A&A, 603, 64.
18. [Combination of BLASTPol polarized emission and NIR interstellar polarization for Vela C](#), Santos et al. 2017, ApJ, 837, 161.
19. [The EBEX Balloon-Borne Experiment - Gondola, Attitude Control, Control Software](#), Aboobaker et al. 2017, ApJS, 239, 9
20. [Balloon-borne submillimeter polarimetry of the Vela C molecular cloud](#), Fissel et al. 2016, ApJ, 824, 134.
21. [Submillimeter polarization spectrum in the Vela C molecular cloud](#), Gandilo et al. 2016, ApJ, 824, 84
22. [A cryogenic rotation stage with a large clear aperture for a half-wave plate](#), Bryan et al. 2016, Rev. Sci. Instrum. 87, 014501.
23. [The thermal design, characterization, and performance of the SPIDER cryostat](#), Gudmundsson et al. 2015, Cryogenics, 72, 65
24. [Antenna-coupled TES bolometers used in BICEP2, Keck array and SPIDER](#), Ade et al. 2015, ApJ, 812, 176.
25. [HerMES: CIB estimates consistent with correlated emission from known \$z \leq 4\$ galaxies](#), Viero, **Moncelsi**, et al. 2015, ApJL, 809, L22
26. [Comparison of prestellar core elongations & large-scale molecular cloud structures in Lupus I](#), Poidevin et al. 2014, ApJ, 791, 43.
27. [Empirical modeling of the BLASTPol achromatic half-wave plate](#), **Moncelsi** et al. 2014, MNRAS, 437, 2772.
28. [The Herschel Stripe 82 Survey \(HerS\): Maps & Early Catalog](#), Viero, Asboth, Roseboom, **Moncelsi**, et al. 2014, ApJS, 210, 22.
29. [Lupus I Observations from the 2010 Flight of BLASTPol](#), Matthews et al. 2014, ApJ, 784, 116.
30. [HerMES: The Contribution to the CIB from Galaxies Selected by Mass and Redshift](#), Viero, **Moncelsi**, et al. 2013, ApJ, 779, 32.
31. [Correlations in the \(Sub\)millimeter Background from ACT \$\times\$ BLAST](#), Hajian et al., 2012, ApJ, 744, 40.
32. [Star formation in high- \$z\$ massive galaxies: a MIR-to-submm study of the GNS sample](#), Viero, **Moncelsi**, et al. 2012, MNRAS, 421, 2161
33. [A panchromatic study of BLAST counterparts: total SFR, morphology, AGN & stellar mass](#), **Moncelsi** et al. 2011 ApJ, 727, 83.
34. [Polypropylene embedded metal-mesh broadband mm-wave HWP](#), Zhang, Ade, Mauskopf, Savini, **Moncelsi** 2011 AppliedOptics 50, 3750
35. [Submm observations of galaxy clusters with BLAST: star-formation activity in Abell 3112](#), Braglia et al 2011, MNRAS, 412, 1187
36. [A joint analysis of BLAST 250–500 \$\mu\text{m}\$ and LABOCA 870 \$\mu\text{m}\$ observations in the ECFDS](#), Chapin et al. 2011, MNRAS, 411, 505.
37. [Evolution of the star formation histories of BLAST galaxies](#), Dye, Eales, **Moncelsi** and Pascale, 2010, MNRAS Letters, 407, L69.
38. [BLAST: the far-infrared/radio correlation in distant galaxies](#), Ivison et al. 2010, MNRAS, 402, 245.
39. [New artificial dielectric metamaterial and THz AR-coating](#), Zhang, Ade, Mauskopf, **Moncelsi**, Savini, 2009, Applied Optics, 48, 6635
40. [BLAST: The Redshift Survey](#), Eales et al. 2009, ApJ, 707, 1779.
41. [BLAST: Correlations in the CIB at 250, 350, 500 \$\mu\text{m}\$ reveal clustering of star-forming galaxies](#), Viero et al. 2009, ApJ, 707, 1766.
42. [Submillimeter Number Counts from Statistical Analysis of BLAST Maps](#), Patanchon et al. 2009, ApJ, 707, 1750.

43. [BLAST: A Far-IR Measurement of the History of Star Formation](#), Pascale et al. 2009, ApJ, 707, 1740.
44. [BLAST: Resolving the Cosmic Submillimeter Background](#), Marsden et al. 2009, ApJ, 707, 1729.
45. [BLAST 2006: Calibration and Flight Performance](#), Truch et al. 2009, ApJ, 707, 1723.
46. [Radio and Mid-Infrared Identification of Blast Source Counterparts in the CDFS](#), Dye et al. 2009, ApJ, 703, 285.
47. [Over half of the far-infrared background light comes from galaxies at \$z \geq 1.2\$](#) , Devlin et al. 2009, Nature, 458, 7239, pp. 737-739.

Conference Proceedings and Selected arXiv Entries

48. [Receiver development for BICEP Array, a next-generation CMB polarimeter at the South Pole](#), **Moncelsi** et al. 2020, Proc. SPIE
49. [Analysis of Temperature-to-Polarization Leakage in BICEP3 and Keck 2016–2018 Data](#), St. Germaine et al. 2020, Proc. SPIE
50. [Polarization Calibration of the BICEP3 CMB polarimeter at the South Pole](#), Cornelison et al. 2020, Proc. SPIE
51. [Observing low elevation sky and the CMB Cold Spot with BICEP3 at the South Pole](#), Kang et al. 2020, Proc. SPIE
52. [Design and pre-flight performance of SPIDER 280 GHz receivers](#), Shaw et al. 2020, Proc. SPIE
53. [Particle response of antenna-coupled TES arrays: results from SPIDER and the lab](#), Osherson et al. 2020, JLTP, Proc. LTD18
54. [Design and performance of the first BICEP Array receiver](#), Schillaci et al. 2020, JLTP, Proc. LTD18
55. [Characterizing the Sensitivity of 40 GHz TES Bolometers for BICEP Array](#), Zhang et al. 2020, JLTP, Proc. LTD18
56. [Optical Design and Characterization of 40 GHz Detector and Module for BICEP Array](#), Soliman et al. 2020, JLTP, Proc. LTD18
57. [Optical characterization of the Keck-Array/BICEP3 Polarimeters from 2016 to 2019](#), St Germaine et al. 2020, JLTP, Proc. LTD18
58. [Microwave Multiplexing on the Keck Array](#), Cukierman et al. 2020, JLTP, Proc. LTD18
59. [CMB-S4 Science Case, Reference Design, and Project Plan](#), The CMB-S4 Collaboration 2019, arXiv:1907.04473
60. [Sub-Kelvin Cooling for the BICEP Array Project](#), Duband, Prouve, Bock, **Moncelsi** and Schillaci, 2018, Proceedings of 20th ICC
61. [B-mode Measurements with BICEP/Keck at the South Pole](#), Ade et al. 2018 (**Moncelsi** corresponding author), Proc. CIPANP 2018
62. [2017 upgrade and performance of BICEP3](#), Kang et al. 2018, Proc. SPIE Vol. 10708
63. [Ultra-thin large-aperture vacuum windows for millimeter wavelengths receivers](#), Barkats et al. 2018, Proc. SPIE Vol. 10708
64. [Wide-band corrugated walls for the BICEP Array detector modules at 30/40 GHz](#), Soliman et al. 2018, Proc. SPIE V. 10708
65. [BICEP Array cryostat and mount design](#), Crumrine et al. 2018, Proc. SPIE Vol. 10708
66. [BICEP Array: a multi-frequency degree-scale CMB polarimeter](#), Hui et al. 2018, Proc. SPIE Vol. 10708
67. [Hafnium films and magnetic shielding for TIME, a mm-wavelength spectrometer array](#), Hunacek et al. 2018, JLTP, Proc. LTD17
68. [SPIDER: CMB polarimetry from the edge of space](#), Gualtieri et al. 2018, JLTP, Proc. LTD17
69. [280 GHz focal plane design & characterization for the SPIDER-2 suborbital polarimeter](#), Bergman et al. 2018, JLTP, Proc. LTD17
70. [CMB-S4 Technology Book](#), Abitbol et al. 2017, arXiv:1706.02464
71. [Design of 280 GHz feedhorn-coupled TES arrays for the balloon-borne polarimeter SPIDER](#), Hubmayr et al. 2016, Proc. SPIE
72. [SPIDER: Probing the dawn of time from above the clouds](#), **Moncelsi** et al. 2016, IJMPD, Proc. 14th Marcel Grossmann
73. [Pre-flight integration and characterization of the Spider balloon-borne telescope](#), Rahlin et al. 2014, Proc. SPIE V. 9153, 915313
74. [Design and construction of a carbon fiber gondola for the SPIDER telescope](#), Soler et al. 2014, Proc. SPIE V. 9145, 91450T
75. [Attitude Determination for Balloon-borne Experiments](#), Gandilo et al. 2014, Proc. SPIE V. 9145, 91452U
76. [BLASTbus electronics: readout and control for balloon-borne experiments](#), Benton et al. 2014, Proc. SPIE V. 9145, 91450V
77. [Pointing control for the Spider balloon-borne telescope](#), Shariff et al. 2014, Proc. SPIE V. 9145, 91450U
78. [BLASTPol: Performance and results from the 2012 Antarctic flight](#), Galitzki et al. 2014, Proc. SPIE V. 9145, 91450R
79. [Thermal Design and Performance of BLASTPol](#), Soler et al. 2014, Proc. SPIE V. 9145, 914534
80. [Antenna-coupled TES bolometers for the Keck Array, Spider, and Polar-1](#), O'Brient et al. 2012, Proc. SPIE, 8452, 84521G.
81. [BLASTPol: performance and results from the 2010 Antarctic flight](#), Pascale et al. 2012, Proceedings of the SPIE, 8444, 844415.
82. [The Balloon-borne Large-Aperture Submillimeter Telescope for polarimetry](#), Fissel et al. 2010, Proc. SPIE, V. 7741, p. 77410E
83. [Characterising the SCUBA-2 superconducting bolometer arrays](#), Bintley et al. 2010, Proc. SPIE, V. 7741, pp. 774106-774106-14.
84. [The Balloon-borne Large-Aperture Submillimeter Telescope for polarization](#), Marsden et al. 2008, Proc. SPIE, V. 7020, 702002.
85. [Mapping clusters of galaxies with a stratospheric balloon experiment](#), Masi et al. 2007, 18th Rocket and Balloon ESA Symposium

Note on collaborative programs

Where not highlighted in boldface, my name appears as co-author in alphabetical order, as per standard policy in the BICEP/Keck, CMB-S4, BLAST(Pol), SPIDER, EBEX, TIME and SCUBA-2 collaborations. In each of these, I was allowed to sign the paper as a member of the collaboration or of the specific study, a status that was granted to me only after a set quota of individual work for each project.

The details my contributions to the BLAST and BLASTPol projects are described in Section 1.3.1 of my [PhD thesis](#).

In other papers without strict alphabetical order, the position of my name in the author list reflects the extent of my contribution relative to the lead author. In particular, I was a crucial contributor to Viero et al. 2012, 2013, 2015, as well as Sun et al. 2018.