\star = works with significant technical contributions

Preprints

- 55. G. Robson, et al. The Simulation and Design of an On-Chip Superconducting Millimetre Filter-Bank Spectrometer. 2111.04632 (2021).
- 54. ★ K. S. Karkare, et al. SPT-SLIM: A Line Intensity Mapping Pathfinder for the South Pole Telescope. 2111.04631 (2021).
- 53. ★ J. A. Sobrin, A. J. Anderson, et al.. The Design and Integrated Performance of SPT-3G. 2106.11202 (2021).
- 52. J. Montgomery, et al. Performance and characterization of the SPT-3G digital frequency-domain multiplexed readout system using an improved noise and crosstalk model. 2103.16017 (2021).
- 51. M. Millea, et al. Optimal CMB Lensing Reconstruction and Parameter Estimation with SPTpol Data. 2012.01709 (2020).
- 50. ★ Z. Ahmed, et al. Search for annual modulation in low-energy CDMS II data. 1203.1309 (2012).

Refereed Publications

- L. Balkenhol, et al. Constraints on ΛCDM Extensions from the SPT-3G 2018 EE and TE Power Spectra. Phys. Rev. D 104, 083509 (2021).
- 48. S. Guns, et al. Detection of Galactic and Extragalactic Millimeter-Wavelength Transient Sources with SPT-3G. ApJ **916**, 98 (2021).
- 47. ★ D. Dutcher, et al. Measurements of the E-Mode Polarization and Temperature-E-Mode Correlation of the CMB from SPT-3G 2018 Data. Phys. Rev. D 104, 022003 (2021).
- 46. P. A. R. Ade, et al. A Demonstration of Improved Constraints on Primordial Gravitational Waves with Delensing. Phys. Rev. D 103, 022004 (2021).
- 45. F. Bianchini, et al. Searching for Anisotropic Cosmic Birefringence with Polarization Data from SPTpol. Phys. Rev. D 102, 083504 (2020).
- 44. C. L. Reichardt, S. Patil, et al. An Improved Measurement of the Secondary Cosmic Microwave Background Anisotropies from the SPT-SZ + SPTpol Surveys. ApJ 908, 119 (2021).
- 43. A. Nadolski, et al. Broadband, millimeter-wave antireflection coatings for large-format, cryogenic aluminum oxide optics. Appl. Opt. 59, 3285-3295 (2020).
- 42. F. Bianchini, et al. Constraints on cosmological parameters from the 500 deg² SPTpol lensing power spectrum. ApJ 888, 119 (2020).
- 41. J. T. Sayre, et al. Measurements of B-mode polarization of the cosmic microwave background from 500 square degrees of SPTpol data. Phys. Rev. D 101, 122003 (2020).
- 40. L. E. Bleem, et al. The SPTpol Extended Cluster Survey. ApJ Suppl. 247, 25 (2020).
- 39. J. S. Adams, et al., Micro-X Sounding Rocket: Transitioning from First Flight to a Dark Matter Configuration. J. Low Temp. Phys. 199, 1072-1081 (2019).

38. ★ A. J. Anderson, et al., Performance of Al-Mn Transition-Edge Sensor Bolometers in SPT-3G. J. Low Temp. Phys. 199, 320-329 (2019).

- 37. ★ A. N. Bender, A. J. Anderson, J. S. Avva, et al. On-sky performance of the SPT-3G frequency-domain multiplexed readout. J. Low Temp. Phys. 199, 182-191 (2019).
- 36. N. Huang, et al. Galaxy clusters selected via the Sunyaev-Zel'dovich effect in the SPTpol 100-square-degree survey. Astron. J. 159, 110 (2020).
- 35. S. Raghunathan, et al. A detection of CMB-cluster lensing using polarization data from SPTpol. Phys. Rev. Lett. 123, 181301 (2019).
- 34. N. Gupta, et al. Fractional polarisation of extragalactic sources in the 500-squaredegree SPTpol survey. MNRAS 490, 5712-5721 (2019).
- 33. W. L. K. Wu, et al. A Measurement of the cosmic microwave background lensing potential and power spectrum from 500 square degrees of SPTpol temperature and polarization data. ApJ 884, 70 (2019).
- 32. S. Raghunathan, et al. Mass calibration of optically selected DES clusters using a measurement of CMB-cluster lensing with SPTpol data. ApJ 872, 170 (2019).
- 31. W. Everett, et al. Design and Bolometer Characterization of the SPT-3G First-Year Focal Plane. J. Low Temp. Phys. 193, 1085-1093 (2018).
- 30. V. Yefremenko, et al. Impact of Electrical Contacts Design and Materials on the Stability of Ti Superconducting Transition Shape. J. Low Temp. Phys. 193, 732-738 (2018).
- 29. ★ A. J. Anderson, et al., SPT-3G: A Multichroic Receiver for the South Pole Telescope. J. Low Temp. Phys. 193, 1057-1065 (2018).
- 28. J. Ding, et al. Thermal Links and Microstrip Transmission Lines in SPT-3G. J. Low Temp. Phys. 193, 712-719 (2018).
- 27. J. S. Avva, et al. Design and Assembly of SPT-3G Cold Readout Hardware. J. Low Temp. Phys. 193, 547-555 (2018).
- 26. Z. Pan, et al. Optical Characterization of the SPT-3G Camera. J. Low Temp. Phys. 193, 305-313 (2018).
- C. M. Posada, et al. Fabrication of Detector Arrays for the SPT-3G Receiver. J. Low Temp. Phys. 193, 703-711 (2018).
- F. W. Carter, et al. Tuning SPT-3G Transition-Edge-Sensor Electrical Properties with a Four-Layer Ti-Au-Ti-Au Thin-Film Stack. J. Low Temp. Phys. 193, 695-702 (2018).
- 23. R. Agnese, et al. Nuclear-recoil energy scale in CDMS II Silicon Dark-Matter Detectors, Nucl. Instrum. Meth. A 905, 71-81 (2018).
- 22. ★ A. Leder, A. J. Anderson, J. Billard, et al. Unfolding Neutron Spectrum with Markov Chain Monte Carlo at MIT Research Reactor with He-3 Neutral Current Detectors. JINST 13, P02004 (2018).
- 21. J. W. Henning, et al. Measurements of the temperature and E-mode polarization of the CMB from 500 square degrees of SPTpol data. ApJ 852, 97 (2018).

 R. Agnese, et al. Low-mass dark matter search with CDMSlite. Phys. Rev. D 97, 022002 (2018).

- R. Agnese, et al. Projected sensitivity of the SuperCDMS SNOLAB experiment. Phys. Rev. D 95, 082002 (2017).
- 18. R. Agnese, et al. New Results from the search for low-mass weakly interacting massive particles with the CDMS low-ionization threshold experiment. Phys. Rev. Lett. 116, 071301 (2016).
- 17. ★ E. Figueroa-Feliciano, A. J. Anderson, D. Castro, D. Goldfinger, et al. Searching for keV Sterile Neutrino Dark Matter with X-ray Microcalorimeter Sounding Rockets. ApJ 814, 82 (2015).
- R. Agnese, et al. Improved WIMP-search reach of the CDMS II germanium data. Phys. Rev. D 92 072003 (2015).
- 15. ★ A. J. Anderson, P. J. Fox, Y. Kahn, and M. McCullough. *Halo-Independent Direct Detection Analyses Without Mass Assumptions*. JCAP **1510**, 012 (2015).
- 14. K. Schneck, et al. Dark matter effective field theory scattering in direct detection experiments Phys. Rev. D **91**, 092004 (2015).
- 13. R. Agnese, et al. Maximum likelihood analysis of low energy CDMS II germanium data. Phys. Rev. D **91**, 052021 (2015).
- 12. R. Agnese, et al. First direct limits on lightly ionizing particles with electric charge less than e/6. Phys. Rev. Lett. 114, 111302 (2015).
- 11. ★ R. Agnese, et al. Search for low-mass weakly interacting massive particles with SuperCDMS. Phys. Rev. Lett. 112, 241302 (2014).
- 10. R. Agnese, et al. Search for low-mass weakly interacting massively particles using voltage-assisted calorimetric ionization detection in the SuperCDMS experiment. Phys. Rev. Lett. 112, 041302 (2014).
- 9. ★ A. J. Anderson, *Phonon-Based Position Determination in SuperCDMS iZIP Detectors*. J. Low Temp. Phys., **176**, 959 (2014).
- 8. ★ R. Agnese, et al. Demonstration of surface electron rejection with interleaved germanium detectors for dark matter searches. Appl. Phys. Lett. 103, 164105 (2013).
- 7. R. Agnese, et al. Silicon detector dark matter results from the final exposure of CDMS II. Phys. Rev. Lett. 111, 251301 (2013).
- 6. R. Agnese, et al. Silicon detector results from the first five-tower run of CDMS II. Phys. Rev. D 88, 031104(R) (2013).
- ★ A. J. Anderson, J. M. Conrad, E. Figueroa-Feliciano, C. Ignarra, G. Karagiorgi, K. Scholberg, M. H. Shaevitz, and J. Spitz. Measuring active-to-sterile neutrino oscillations with neutral current coherent neutrino-nucleus scattering. Phys. Rev. D 86, 013004 (2012).
- 4. ★ A. J. Anderson, S. W. Leman, M. Pyle, E. Figueroa-Feliciano, K. A. McCarthy, T. Doughty, M. Cherry, B. A. Young. *Simulations of noise in phase-separated transition-edge sensors for SuperCDMS*. J. Low Temp. Phys., **167**, 135 (2012).
- 3. ★ K. A. McCarthy, et al. Validation of phonon physics in the CDMS detector Monte Carlo. J. Low Temp. Phys., 167, 1160 (2012).

2. ★ J. A. Formaggio, E. Figueroa-Feliciano, and A. J. Anderson. Sterile neutrinos, coherent scattering, and oscillometry measurements with low-temperature bolometers. Phys. Rev. D 85, 013009 (2012).

★ A. J. Anderson, J. M. Conrad, E. Figueroa-Feliciano, K. Scholberg, and J. Spitz. Coherent neutrino scattering in dark matter detectors. Phys. Rev. D 84, 013008 (2011).

Non-Refereed Publications

- 9. J. S. Avva, et al. Particle Physics with the Cosmic Microwave Background with SPT-3G. J Phys. Conf. Ser. 1468, 012008 (2020).
- 8. D. Dutcher, et al. Characterization and performance of the second-year SPT-3G focal plane. Proc. SPIE, 10708, 107081Z (2018).
- J. A. Sobrin, et al. Design and characterization of the SPT-3G receiver. Proc. SPIE, 10708, 107081H (2018).
- A. Nadolski, et al. Broadband anti-reflective coatings for cosmic microwave background experiments. Proc. SPIE, 10708, 1070843 (2018).
- J. Ding, et al. Optimization of Transition Edge Sensor Arrays for Cosmic Microwave Background Observations With the South Pole Telescope. IEEE Trans. Appl. Supercond. 27, 2100204 (2017).
- 4. A. Bender, et al. Integrated performance of a frequency domain multiplexing readout in the SPT-3G receiver. Proc. SPIE, **9914**, 99141D (2016).
- 3. ★ A. J. Anderson, Constraints on Light WIMPs from SuperCDMS. Proceedings of Rencontres de Moriond Electroweak 2014, arXiv:1405.4210.
- 2. J. Sander, SuperCDMS status from Soudan and plans for SNOlab. AIP Conf. Proc. 1534, 129-135 (2013).
- ★ A. J. Anderson, J. Conrad, E. Figueroa-Feliciano, J. A. Formaggio, J. Spitz, M. Pyle. Coherent Neutrino Scattering with Cryogenic Semiconductor Detectors. Proceedings of Moriond Electroweak 2012.

Books

1. ★ Y. Kahn and A. J. Anderson. Conquering the Physics GRE, 3rd ed. Cambridge University Press: 2018.