David C. Moore

Wright Laboratory
Department of Physics
Yale University
New Haven, CT 06511

Phone: (203) 432-7986
Email: david.c.moore@yale.edu

Education

Ph.D., Physics, California Institute of Technology, 2012
Dissertation title: "*A search for low-mass dark matter with the Cryogenic Dark Matter Search and the development of highly-multiplexed phonon-mediated particle detectors*"
Adviser: Prof. Sunil Golwala

B.S., Physics, Mathematics, Yale University, 2006
magna cum laude, with distinction in both majors

Academic appointments

2016-present: Assistant Professor of Physics, Yale University
2012-2016: Postdoctoral Scholar, Stanford University

Research positions

2019-present: Subsystem Scientist for nEXO Photon Detector
2017-present: Member of nEXO Executive Council
2016-present: EXO-200/nEXO Collaboration Board member
2015-2017: EXO-200 analysis coordinator
2006-2012: Graduate research assistant, California Institute of Technology
2005-2006: Undergraduate researcher, Yale University
2004: Summer research internship, Fermilab
2003: Summer researcher, Universidad de Chile and Yale University

Teaching

Phys 524: *Introduction to Nuclear Physics*, Yale, Fall 2021
Phys 430: *Electromagnetic Fields & Optics*, Yale, Spring 2021
Phys 524: *Introduction to Nuclear Physics*, Yale, Fall 2020
Phys 430: *Electromagnetic Fields & Optics*, Yale, Spring 2020
Phys 165L: *General Physics Laboratory*, Yale, Fall 2019
Phys 430: *Electromagnetic Fields & Optics*, Yale, Spring 2019
Phys 469/Phys 471: *Independent Projects in Physics*, Yale, Fall 2018
Phys 472: *Independent Projects in Physics*, Yale, Spring 2017
Phys 205L/Phys 206L: *Modern Physical Measurement I&II*, Yale, Fall 2016

Honors and awards

Alfred P. Sloan Research Fellowship in Physics, 2018
NSF Early Career Award, 2017
Lee Grodzins Postdoctoral Award, MIT, 2015
Mitsuyoshi Tanaka Dissertation Award in Experimental Particle Physics, APS, 2013
John Stager Stemple Memorial Prize in Physics, Caltech, 2009
NSF Graduate Research Fellowship Program, Honorable Mention, 2006
Howard L. Schultz Prize in Physics, Yale, 2006
Anthony D. Stanley Prize in Mathematics, Yale, 2006
De Forest Senior Prize in Mathematics, Yale, 2006
National Merit Scholarship, 2002

Selected publications

1. G. Adhikari et al. (nEXO), "nEXO: Neutrinoless double beta decay search beyond 10^{28} year half-life sensitivity," J. Phys. G: Nucl. Part. Phys. 49 015104 (2022), arXiv:2106.16243.
2. A. Avasthi et al., "Kiloton-scale xenon detectors for neutrinoless double beta decay and other new physics searches," Phys. Rev. D 104, 112007 (2021), arXiv:2110.01537.
3. G. Afek, D. Carney, and D.C. Moore, "Coherent scattering of low mass dark matter from optically trapped sensors," arXiv:2111.03597 (2021).
4. S. Al Kharusi et al., "Search for Majoron-emitting modes of ^{136}Xe double beta decay with the complete EXO-200 dataset," Phys. Rev. D 104, 112002 (2021), arXiv:2109.01327.
5. G. Afek, F. Monteiro, B. Siegel, J. Wang, S. Dickson, J. Recoaro, M. Watts, and D.C. Moore, "Control and measurement of electric dipole moments in levitated optomechanics," Phys. Rev. A 104, 053512 (2021), arXiv:2108:04406.
6. D. Carney, H. Häffner, D.C. Moore, and J. Taylor, "Trapped electrons and ions as particle detectors,"Phys. Rev. Lett. 127, 061804 (2021), arXiv:2104.05737 (*PRL Editor's suggestion*).
7. G. Afek et al., "Limits on the abundance of millicharged particles bound to matter," Phys. Rev. D 104, 012004 (2021) arXiv:2012.08169.
8. D. Carney et al., "Mechanical quantum sensing in the search for dark matter," Quantum Sci. Technol. 6 024002 (2021) arXiv:2008.06074.
9. D.C. Moore and A.A. Geraci, "Searching for new physics using optically levitated sensors," Quantum Sci. Technol. 6 014008 (2021) arXiv:2008.13197.
10. F. Monteiro et al., "Search for composite dark matter with optically levitated sensors," Phys. Rev. Lett. 125, 181102 (2020) arXiv:2007.12067.
11. F. Monteiro et al., "Force and acceleration sensing with optically levitated nanogram masses at microkelvin temperatures," Phys. Rev. A 101, 053835 (2020), arXiv:2001.10931 (*PRA Editor's suggestion*).
12. G. Anton et al., "Measurement of the scintillation and ionization response of liquid xenon at MeV energies in the EXO-200 experiment," Phys. Rev. C 101, 065501 (2020), arXiv:1908.04128.
13. Z. Li et al., "Simulation of charge readout with segmented tiles in nEXO," JINST 14 P09020 (2019), arXiv:1907.07512.
14. G. Anton et al., "Search for Neutrinoless Double-Beta Decay with the Complete EXO-200 Dataset," Phys. Rev. Lett. 123, 161802 (2019) arXiv:1906.02723. (*PRL Editor's suggestion*)
15. C. Chambers et al., "Imaging individual barium atoms in solid xenon for barium tagging in nEXO," Nature 569, 203 (2019), arXiv:1806.10694.

16. F. Monteiro, S. Ghosh, E.C. van Assendelft, and D.C. Moore, "Optical Rotation of Levitated Spheres in High Vacuum," Phys. Rev. A 97, 051802(R) (2018), arXiv:1803.04297 (*PRA Editor's suggestion*).
17. J.B Albert et al., "Sensitivity and Discovery Potential of nEXO to Neutrinoless Double Beta Decay," Phys. Rev. C 97, 065503 (2018), arXiv:1710.05075.
18. S. Al Kharusi et al., "nEXO Pre-Conceptual Design Report," arXiv:1805.11142 (2018).
19. J.B. Albert et al., "Search for Neutrinoless Double-Beta Decay with the Upgraded EXO-200 Detector," Phys. Rev. Lett. 120, 072701 (2018), arXiv:1707.08707 (*Featured in APS Physics "Viewpoint"*).
20. A. Jamil et al., "VUV-sensitive Silicon Photomultipliers for Xenon Scintillation Light Detection in nEXO," IEEE Trans. Nucl. Sci. 65, 2823 (2018), arXiv:1806.02220.
21. F. Monteiro, S. Ghosh, A.G. Fine, and D.C. Moore, "Optical levitation of 10 nanogram spheres with nano-g acceleration sensitivity," Phys. Rev. A, 96, 063841 (2017), arXiv:1711.04675.
22. D.C. Moore, A.D. Rider, and G. Gratta, "Search for Millicharged Particles Using Optically Levitated Microspheres," Phys. Rev. Lett., 113, 251801 (2014), arXiv:1408.4396 (*Featured in APS Physics "Synopsis"*).
23. J.B. Albert et al., "Search for Majorana neutrinos with the first two years of EXO-200 data," Nature 510, 229 (2014), arXiv:1402.6956.
24. Z. Ahmed et al., "Results from a Low-Energy Analysis of CDMS II Germanium Data," Phys. Rev. Lett. 106, 131302 (2011), arXiv:1011.2482 (*PRL Editor's suggestion*).
25. D.C. Moore et al., "Position and energy-resolved particle detection using phonon-mediated microwave kinetic inductance detectors," Appl. Phys. Lett. 100, 232601 (2012), arXiv:1203.4549.
26. Z. Ahmed et al., "Dark matter search results from the CDMS II experiment," Science 327, 1619 (2010), arXiv:0912.3592.

Colloquia, seminars, and invited conference presentations

1. SURF Long-term Vision Workshop (online), Sanford Underground Research Facility (SURF), Lead, SD, September 15, 2021
2. Challenges for Witnessing Quantum Aspects of Gravity in a Lab (online), ICTP-SAIFR, São Paulo, Brazil, June 10, 2021
3. Physics Colloquium, Massachusetts Institute of Technology (online), Cambridge, MA, April 22, 2021
4. SCIPP Seminar, University of California, Santa Cruz (online), Santa Cruz, CA, April 20, 2021
5. British Optomechanical Research Network (BORN) UniKORN Seminar (online), United Kingdom, March 10, 2021
6. Yale Quantum Institute Seminar (online), Yale University, New Haven, CT, December 4, 2020
7. Snowmass Mini Workshop: $0\nu\beta\beta$ Experiment (online), August 5, 2020
8. Group on Precision Measurement & Fundamental Constants Workshop, APS DAMOP (online), June 1, 2020
9. Quantum Information Science for Fundamental Physics, Aspen Center for Physics, Aspen, CO, February 21, 2020
10. West-Lake Photonics Symposium, Photonics Asia, Hangzhou, China, October 20, 2019
11. CoQuS Colloquium, Univesity of Vienna, Vienna, Austria, October 14, 2019
12. Physics Colloquium, University of Albany, Albany, NY, September 27, 2019
13. ITAMP Laboratory Cosmology Workshop, Harvard CfA, Cambridge, MA, September 17, 2019
14. Levitated Optomechanics (699th WE-Heraeus-Seminar), Bad Honnef, Germany, August 1, 2019
15. Indirect Searches for New Physics across the Scales, Mainz Institute for Theoretical Physics (MITP), Mainz, Germany, June 18, 2019

16. First Arizona Workshop on Precision Searches for Fundamental Physics (AZPP2019), Tempe, AZ, February 4, 2019
17. HEP Seminar, Penn State University, State College, PA, October 24, 2018
18. Quantum Engineering of Levitated Systems, Benasque, Spain, September 17, 2018
19. Optical Trapping and Optical Micromanipulation XV, San Diego, CA, August 20, 2018
20. High Energy Physics at the Sensitivity Frontier, Kavli Institute for Theoretical Physics, Santa Barbara, CA, April 3, 2018
21. Physics Colloquium, Amherst College, Amherst, MA, February 6, 2018
22. Physics Colloquium, Yale University, New Haven, CT, January 22, 2018
23. Beyond the Standard Model in Tabletop Experiments, Weizmann Institute, Rehovot, Israel, November 15, 2017
24. APS Division of Nuclear Physics, Pittsburgh, PA, October 28, 2017
25. Neutrino Seminar Series, Fermilab, Batavia, IL, October 19, 2017
26. International Workshop on Baryon & Lepton Number Violation, Case Western Reserve University, Cleveland, OH, May 15, 2017
27. AFCI Seminar, University of Massachusetts, Amherst, MA, April 18, 2017
28. 3IT Seminar, Sherbrooke University, Quebec, Canada, April 7, 2017
29. Particle and Astroparticle Seminar, McGill University, Montreal, Canada, April 6, 2017
30. Particle Physics Seminar, Stony Brook University, Stony Brook, NY, April 3, 2017
31. 52nd Rencontres de Moriond, Electroweak Interactions And Unified Theories, La Thuile, Italy, March 23, 2017
32. KICP Seminar, University of Chicago, Chicago, IL, March 10, 2017
33. Sub-eV Dark Matter Workshop, LBNL, Berkeley, CA, December 9, 2016
34. Workshop on Statistical Issues in Experimental Neutrino Physics, Fermilab, Batavia, IL, September 20, 2016
35. Dark Energy in the Laboratory, Royal Society at Chicheley Hall, Buckinghamshire, UK, April, 22, 2016
36. SLAC Experimental Particle Physics Seminar, Menlo Park, CA, March 17, 2016
37. Physics Colloquium, University of Colorado, Boulder, CO, March 14, 2016
38. Physics Colloquium, University of Alabama, Tuscaloosa, AL, March 2, 2016
39. Nuclear, Particle, and Astrophysics Seminar, Yale University, New Haven, CT, February 25, 2016
40. Nuclear and Particle Physics Colloquium, MIT, Cambridge, MA, February 22, 2016
41. HEP-Astro Seminar, University of Michigan, Ann Arbor, MI, February 1, 2016
42. HEAP Seminar, University of California, Los Angeles, CA, January 28, 2016
43. Physics Colloquium, Virginia Tech, Blacksburg, VA, January 25, 2016
44. High Energy Physics Seminar, Caltech, Pasadena, CA, January 12, 2016
45. Physics Colloquium, New Mexico State University, Las Cruces, NM, November 12, 2015
46. Lee Grodzins Postdoctoral Award Colloquium, MIT, Cambridge, MA, September 14, 2015
47. Workshop on Dark Matter Direct Detection, LBNL, Berkeley, CA, June 9, 2015
48. Physics Colloquium, University of Texas, Austin, TX, February 23, 2015
49. Nuclear, Particle, and Astrophysics Seminar, Yale University, New Haven, CT, February 19, 2015
50. Laboratory for Particle Physics and Cosmology Seminar, Harvard University, Cambridge, MA, February 18, 2015
51. Astronomy and Physics Seminar, University of California, Berkeley, CA, February 12, 2015
52. Center for Particles and Fields Seminar, University of Texas, Austin, TX, January 23, 2015

53. Kavli Institute for Particle Astrophysics and Cosmology Tea Talk, Menlo Park, CA, March 14, 2014
54. Tanaka Dissertation Prize Lecture, APS DPF 2013, Santa Cruz, CA, August 27, 2013
55. Particle Astrophysics Seminar, McGill University, Montreal, Canada, March 28, 2012
56. HEPL Seminar, Stanford University, Stanford, CA, March 21, 2012
57. Observational Cosmology Seminar, Caltech, Pasadena, CA, June 2, 2011
58. Aspen Winter Conference on Indirect and Direct Detection of Dark Matter, Aspen, CO, February 10, 2011
59. Fermilab Particle Astrophysics Seminar, Batavia, IL, February 21, 2011
60. Observational Cosmology Seminar, Caltech, Pasadena, CA, February 3, 2011
61. Physics of the Universe Summit 2011, Hawthorne, CA, January 8, 2011
62. High Energy Physics Seminar, Caltech, Pasadena, CA, February 8, 2010

Other conference presentations

1. New Technologies for Discovery IV: The CPAD Instrumentation Frontier Workshop, Providence, RI, December 12, 2018
2. 28th Texas Symposium on Relativistic Astrophysics, Geneva, Switzerland, December 14, 2015
3. 20th Particles and Nuclei International Conference, Hamburg, Germany, August 23, 2014
4. 24th Workshop on Weak Interactions and Neutrinos, Natal, Brazil, September 19, 2013
5. Low Temperature Detectors 14, Heidelberg, Germany, August 4, 2011
6. 4th Workshop on the Physics and Applications of Superconducting Microresonators, Grenoble, France, July 29, 2011
7. APS April Meeting, Anaheim, CA, May 2, 2011
8. APS April Meeting, Washington, DC, February 13, 2010
9. 3rd Workshop on the Physics and Applications of Superconducting Microresonators, Santa Barbara, CA, January 22, 2010
10. Low Temperature Detectors 13 (poster), Stanford, CA, July 23, 2009
11. 24th International Symposium on Lattice Field Theory (poster), Tucson, AZ, July 25, 2006

All publications

1. G. Adhikari et al. (nEXO), "nEXO: Neutrinoless double beta decay search beyond 10^{28} year half-life sensitivity," J. Phys. G: Nucl. Part. Phys. 49 015104 (2022), arXiv:2106.16243.
2. A. Avasthi et al., "Kiloton-scale xenon detectors for neutrinoless double beta decay and other new physics searches," Phys. Rev. D 104, 112007 (2021), arXiv:2110.01537.
3. S. Al Kharusi et al., "Search for Majoron-emitting modes of ^{136}Xe double beta decay with the complete EXO-200 dataset," Phys. Rev. D 104, 112002 (2021), arXiv:2109.01327.
4. G. Afek, F. Monteiro, B. Siegel, J. Wang, S. Dickson, J. Recoaro, M. Watts, and D.C. Moore, "Control and measurement of electric dipole moments in levitated optomechanics," Phys. Rev. A 104, 053512 (2021), arXiv:2108:04406.
5. G. Afek, D. Carney, and D.C. Moore, "Coherent scattering of low mass dark matter from optically trapped sensors," arXiv:2111.03597 (2021).
6. N. Ackerman et al., "The EXO-200 detector, part II: Auxiliary systems," arXiv:2107.06007 (2021).
7. M. Wagenpfeil et al., "Reflectivity of VUV-sensitive Silicon Photomultipliers in Liquid Xenon," JINST 16 P08002 (2021), arXiv:2104.07997.

8. D. Carney, H. Häffner, D.C. Moore, and J. Taylor, "Trapped electrons and ions as particle detectors,"Phys. Rev. Lett. 127, 061804 (2021), arXiv:2104.05737 (*PRL Editor's suggestion*).
9. D. Carney et al., "Mechanical quantum sensing in the search for dark matter," Quantum Sci. Technol. 6 024002 (2021) arXiv:2008.06074.
10. D.C. Moore and A.A. Geraci, "Searching for new physics using optically levitated sensors," Quantum Sci. Technol. 6 014008 (2021) arXiv:2008.13197.
11. G. Afek et al., "Limits on the abundance of millicharged particles bound to matter," Phys. Rev. D 104, 012004 (2021) arXiv:2012.08169.
12. P. Lv et al., "Reflectance of Silicon Photomultipliers at Vacuum Ultraviolet Wavelengths," IEEE Trans. Nucl. Sci. 67, 2501 (2020), arXiv:1912.01841.
13. F. Monteiro et al., "Search for composite dark matter with optically levitated sensors," Phys. Rev. Lett. 125, 181102 (2020) arXiv:2007.12067.
14. T. Stiegler et al., "Event Reconstruction in a Liquid Xenon Time Projection Chamber with an Optically-Open Field Cage," Nucl. Instr. Meth. Phys. Res. A 1000, 165239 (2021), arXiv:2009.10231.
15. G. Anton et al., "Measurement of the scintillation and ionization response of liquid xenon at MeV energies in the EXO-200 experiment," Phys. Rev. C 101, 065501 (2020), arXiv:1908.04128.
16. F. Monteiro et al., "Force and acceleration sensing with optically levitated nanogram masses at microkelvin temperatures," Phys. Rev. A 101, 053835 (2020), arXiv:2001.10931 (*PRA Editor's suggestion*).
17. S. Al Kharusi et al., "Measurement of the Spectral Shape of the β-Decay of ^{137}Xe to the Ground State of ^{137}Cs in EXO-200 and Comparison with Theory," Phys. Rev. Lett. 124, 232502 (2020), arXiv:2002.00108.
18. O. Njoya et al., "Measurements of electron transport in liquid and gas xenon using a laser-driven photocathode," NIM A 972, 163965 (2020), arXiv:1911.11580.
19. P. Nakarmi et al., "Reflectivity and PDE of VUV4 Hamamatsu SiPMs in liquid xenon," JINST 15 P01019 (2020), arXiv:1910.06438.
20. G. Gallina et al., "Characterization of the Hamamatsu VUV4 MPPCs for nEXO," Nucl. Instrum. Meth. Phys. Res. A, 940, 371 (2019), arXiv:1903.03663.
21. S. Ghosh et al., "Fabrication of large vaterite microspheres for optical trapping and rotation in high vacuum," SPIE Proc 11083, Optical Trapping and Optical Micromanipulation XVI; 1108317 (2019).
22. Z. Li et al., "Simulation of charge readout with segmented tiles in nEXO," JINST 14 P09020 (2019), arXiv:1907.07512.
23. G. Anton et al., "Search for Neutrinoless Double-Beta Decay with the Complete EXO-200 Dataset," Phys. Rev. Lett. 123, 161802 (2019) arXiv:1906.02723. (*PRL Editor's suggestion*)
24. C. Chambers et al., "Imaging individual barium atoms in solid xenon for barium tagging in nEXO," Nature 569, 203 (2019), arXiv:1806.10694.
25. X.L. Sun et al., "Study of silicon photomultiplier performance in external electric fields," JINST 13 T09006 (2018), arXiv:1807.03007.
26. A. Jamil et al., "VUV-sensitive Silicon Photomultipliers for Xenon Scintillation Light Detection in nEXO," IEEE Trans. Nucl. Sci. 65, 2823 (2018), arXiv:1806.02220.
27. R. Agnese et al., "Nuclear-recoil energy scale in CDMS II silicon dark-matter detectors," Nucl. Instr. Meth. Phys. Res. A 905, 71 (2018), arXiv:1803.02903.
28. S. Al Kharusi et al., "nEXO Pre-Conceptual Design Report," arXiv:1805.11142 (2018).
29. S. Delaquis et al., "Deep neural networks for energy and position reconstruction in EXO-200," JINST 13, P08023 (2018), arXiv:1804.09641.
30. F. Monteiro, S. Ghosh, E.C. van Assendelft, and D.C. Moore, "Optical Rotation of Levitated Spheres in High Vacuum," Phys. Rev. A 97, 051802(R) (2018), arXiv:1803.04297.
31. A.D. Rider, C.P. Blakemore, G. Gratta, and D.C. Moore, "Single-beam Dielectric Microsphere Trapping with Optical Heterodyne Detection," Phys. Rev. A 97, 013842 (2018), arXiv:1710.03558.

32. J.B. Albert et al., "Search for Neutrinoless Double-Beta Decay with the Upgraded EXO-200 Detector," Phys. Rev. Lett. 120, 072701 (2018), arXiv:1707.08707.
33. M. Jewell et al., "Characterization of an Ionization Readout Tile for nEXO," JINST 13 P01006 (2018), arXiv:1710.05109.
34. J.B Albert et al., "Sensitivity and Discovery Potential of nEXO to Neutrinoless Double Beta Decay," Phys. Rev. C 97, 065503 (2018), arXiv:1710.05075.
35. J.B Albert et al., "Search for nucleon decays with EXO-200" Phys. Rev. D 97, 072007 (2018), arXiv:1710.07670.
36. F. Monteiro, S. Ghosh, A.G. Fine, and D.C. Moore, "Optical levitation of 10 nanogram spheres with nano-g acceleration sensitivity," Phys. Rev. A, 96, 063841 (2017), arXiv:1711.04675.
37. J.B. Albert et al., "Searches for Double Beta Decay of ^{134}Xe with EXO-200," Phys. Rev. D 96, 092001 (2017), arXiv:1704.05042.
38. D.S. Leonard et al., "Trace radioactive impurities in final construction materials for EXO-200," Nucl. Instrum. Meth. A 871, 169 (2017), arXiv:1703.10799.
39. J.B. Albert et al., "Measurement of the Drift Velocity and Transverse Diffusion of Electrons in Liquid Xenon with the EXO-200 Detector," Phys. Rev. C, 95, 025502 (2016), arXiv:1609.04467.
40. A.D. Rider, D.C. Moore, C.P. Blakemore, M. Louis, M. Lu, G. Gratta, "Search for Screened Interactions Below the Dark Energy Length Scale Using Optically Levitated Microspheres," Phys. Rev. Lett., 117, 101101 (2016), arXiv:1604.04908.
41. C.G. Davis et al., "An Optimal Energy Estimator to Reduce Correlated Noise for the EXO-200 Light Readout," JINST 11, P07015 (2016), arXiv:1605.06552.
42. J.B. Albert et al., "First search for Lorentz and CPT violation in double beta decay with EXO-200," Phys. Rev. D 93, 072001 (2016), arXiv:1601.07266.
43. J.B. Albert et al., "Cosmogenic Backgrounds to $0\nu\beta\beta$ in EXO-200," JCAP 04, 029 (2016), arXiv:1512.06835.
44. J.B. Albert et al., "Search for $2\nu\beta\beta$ decay of ^{136}Xe to the 0+1 excited state of ^{136}Ba with EXO-200," submitted to Phys. Rev. C (2015), arXiv:1511.04770.
45. J.B. Albert et al., "Measurements of the ion fraction and mobility of alpha and beta decay products in liquid xenon using EXO-200," Phys. Rev. C 92, 045504 (2015), arXiv:1506.00317.
46. J.B. Albert et al., "Investigation of radioactivity-induced backgrounds in EXO-200," Phys. Rev. C 92, 015503 (2015), arXiv:1503:06241.
47. T. Brunner et al., "An RF-only ion-funnel for extraction from high-pressure gases," Int. J. Mass Spec. 379, 110 (2015), arXiv:1412.1144.
48. B. Mong et al., "Spectroscopy of Ba and Ba+ deposits in solid xenon for barium tagging in nEXO," Phys. Rev. A 91, 022505 (2014), arXiv:1410.2624.
49. R. Agnese et al., "Maximum Likelihood Analysis of Low Energy CDMS II Germanium Data," Phys. Rev. D 91, 052021 (2014), arXiv:1410.1003.
50. J.B. Albert et al., "Search for Majoron-emitting modes of double-beta decay of ^{136}Xe with EXO-200," Phys. Rev. D 90, 092004 (2014), arXiv:1409.6829.
51. R. Agnese et al., "First direct limits on Lightly Ionizing Particles with electric charge less than e/6," Phys. Rev. Lett. 114, 111302 (2014), arXiv:1409.3270.
52. D.C. Moore, A.D. Rider, and G. Gratta, "Search for Millicharged Particles Using Optically Levitated Microspheres," Phys. Rev. Lett., 113, 251801 (2014), arXiv:1408.4396.
53. K. Twelker et al., "An apparatus to manipulate and identify individual Ba ions from bulk liquid Xe," Rev. Sci. Instrum. 85, 095114 (2014), arXiv:1407.0618.
54. J.B. Albert et al., "Search for Majorana neutrinos with the first two years of EXO-200 data," Nature 510, 229 (2014), arXiv:1402.6956.

55. R. Agnese et al., "Search for Low-Mass Weakly Interacting Massive Particles Using Voltage-Assisted Calorimetric Ionization Detection in the SuperCDMS Experiment," Phys. Rev. Lett. 112, 041302 (2014), arXiv:1309.3259.
56. J.B. Albert et al., "An improved measurement of the $2\nu\beta\beta$ half-life of Xe-136 with EXO-200," Phys. Rev. C 89, 015502 (2014), arXiv:1306.6106.
57. R. Agnese et al., "Demonstration of Surface Electron Rejection with Interleaved Germanium Detectors for Dark Matter Searches," Appl. Phys. Lett. 103, 164105 (2013), arXiv:1305.2405.
58. R. Agnese et al., "Silicon Detector Dark Matter Results from the Final Exposure of CDMS II," Phys. Rev. Lett. 111, 251301 (2013), arXiv:1304.4279.
59. R. Agnese et al., "Silicon detector results from the first five-tower run of CDMS II," Phys. Rev. D 88, 031104 (2013), arXiv:1304.3706.
60. D.C. Moore, "A search for low-mass dark matter with the cryogenic dark matter search and the development of highly multiplexed phonon-mediated particle detectors," Ph.D. thesis, California Institute of Technology (2012).
61. D.C. Moore et al., "Position and energy-resolved particle detection using phonon-mediated microwave kinetic inductance detectors," Appl. Phys. Lett. 100, 232601 (2012), arXiv:1203.4549.
62. Z. Ahmed et al., "Search for annual modulation in low-energy CDMS II data" (2012), arXiv:1203.1309.
63. D.C. Moore et al., "Phonon mediated microwave kinetic inductance detectors," J. Low Temp. Phys. 167, 329 (2012).
64. Z. Ahmed et al., "Combined Limits on WIMPs from the CDMS and EDELWEISS Experiments," Phys. Rev. D. 84, 011102 (2011), arXiv:1105.3377.
65. Z. Ahmed et al., "Search for inelastic dark matter with the CDMS II experiment," Phys. Rev. D. 83, 112002 (2011), arXiv:1012.5078.
66. Z. Ahmed et al., "Results from a Low-Energy Analysis of CDMS II Germanium Data," Phys. Rev. Lett. 106, 131302 (2011), arXiv:1011.2482.
67. D.S. Akerib et al., "A low-threshold analysis of CDMS shallow-site data," Phys. Rev. D 82, 122004 (2010), arXiv:1010.4290.
68. B.A. Mazin et al., "ARCONS: A highly multiplexed superconducting optical to near-IR camera," Proc. SPIE 7735, 773518 (2010).
69. H.G. LeDuc et al., "Titanium Nitride Films for Ultrasensitive Microresonator Detectors," Appl. Phys. Lett. 97, 102509 (2010).
70. Z. Ahmed et al., "Dark matter search results from the CDMS II experiment," Science 327, 1619 (2010), arXiv:0912.3592.
71. Z. Ahmed et al., "Analysis of the low-energy electron-recoil spectrum of the CDMS Experiment," Phys. Rev. D 81, 042002 (2010), arXiv:0907.1438.
72. Z. Ahmed et al., "Search for Axions with the CDMS Experiment," Phys. Rev. Lett. 103, 141802 (2009), arXiv:0902.4693.
73. D.C. Moore et al., "Quasiparticle Trapping in Microwave Kinetic Inductance Strip Detectors," LTD-13, AIP Conf. Proc. 1185, 168 (2009).
74. D.N. Seitz et al., "SuperCDMS Detector Readout Cryogenic Hardware," LTD-13, AIP Conf. Proc. 1185, 282 (2009).
75. N. Mirabolfathi et al., "The Cryogenic Dark Matter Search (CDMS) Experiment: Results, Status, and Perspective," LTD-13, AIP Conf. Proc. 1185, 623 (2009).
76. C.N. Bailey et al., "Bulk and Surface Charge Collection: CDMS Detector Performance and Design Implications," LTD-13, AIP Conf. Proc. 1185, 643 (2009).
77. P.L. Brink et al., "SuperCDMS Detector Fabrication Advances," LTD-13, AIP Conf. Proc. 1185, 655 (2009).

78. Z. Ahmed et al., "Characterization of SuperCDMS 1-inch Ge Detectors," LTD-13, AIP Conf. Proc. 1185, 659 (2009).
79. N.G. Czakon et al., "Microwave Kinetic Inductance Detector (MKID) Camera Testing for Submillimeter Astronomy," ISSTT2009, P8F (2009).
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