Curriculum Vitae
Amy E. Lowitz

Contact

Address: Kavli Institute for Cosmological Physics
University of Chicago
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Education

PhD **University of Wisconsin Madison**, 2017, Physics
Dissertation: *Kinetic Inductance Detectors for CMB Polarimetry at 100 GHz*
Advisor: Prof. Peter Timbie
MS **University of Wisconsin - Madison**, 2012, Physics
ScB **Brown University**, 2009, Physics

Appointments

Kavli Institute for Cosmological Physics, University of Chicago — Mar 2017-present
Postdoctoral scholar with the South Pole Telescope collaboration, working on:
- SQUID amplifier characterization, milikelvin SQUID readout development.
- Digital frequency multiplexed TES readout testing, integration, and optimization.
- Field maintenance and deployment of telescope receiver instrumentation.

South Pole Telescope, South Pole, Antarctica (for the University of Chicago) — Jan 2016 - Nov 2016
Winter telescope operator

Timbie Laboratory, University of Wisconsin - Madison — 2011 - 2017
Graduate student working on:
- Kinetic indictance detectors for cosmic microwave background polarimetry.
- Nanofabrication material- and process- development.

MIT Lincoln Laboratory, Lexington, MA — 2009-2010
Feature-based classifier algorithm development
Computer vision algorithm development and validation
Statistical validation of simulations

Dell'Antonio Laboratory, Brown University — 2008-2009
Honors thesis: "Photometric Redshifts for Galaxies in a Lensing Survey"

Page Laboratory, Princeton University — Summers 2007 - 2008
Recombination spectrum distortion detection, cryostat construction
Cryogenic system repair/comissioning for the ABS telescope

Tucker Laboratory, Brown University — 2008
Pointing system rebuild for the BLAST telescope

Valles Laboratory, Brown University — 2006-2007
Paramecium response to altered-gravity environments

Languages

English, American Sign Language, French
MATLAB, Python

Service and Outreach

Adler Planetarium Astronomy Conversations Lecturer, Chicago, Il	2017-present
Women and Gender Minorities in Physics, Founding Member, UW Madison	2015-2017
IEEE, Chairperson, CSC Student and Recent Graduate Outreach Committee	2013-2014
Wonders of Physics/Physics Fair: Science outreach event, UW-Madison	2011-2015
Expand Your Horizons: Girls' Science Day, UW-Madison	2010-2013
Women in Science and Engineering (WiSE), Brown University	
Member	2005-2009
Peer-mentor	2007-2009
Founder and chairperson of physicsWiSE	2007-2009

Honors

Enrico Fermi Institute 88th Compton Lecturer	Fall 2018
Antarctica Service Medal	2016
NASA Space Technology Research Fellow	2012-2015
IEEE Council on Superconductivity Fellow	2012
Wisconsin Space Grant Fellow	2011-2012
Van Vleck Fellow, University of Wisconsin - Madison	2010
Bachelor of Science with Honors, Brown University	2009

Teaching

Introductory Physics, private tutor	Madison, WI	2011-2015
General Physics, teaching assistant	UW Madison	Spring 2011
Physics in the Arts, teaching assistant	UW Madison	Fall 2010
MATCH School AP Calculus, volunteer tutor	Boston, MA	2009-2010
Introductory calculus, tutor	Brown University	2007-2009
Introductory physics, tutor	Brown University	2007-2009
Sophia Academy, volunteer math tutor	Providence, RI	2007-2008

Publications

AE Lowitz, AN Bender, MA Dobbs, AJ Gilbert, **"Digital frequency multiplexing with sub-Kelvin SQUIDs."** *Proc. SPIE 10708: Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy IX*, 107081D (2018)

D Dutcher, PAR Ade, Z Ahmed, AJ Anderson, JS Avva, R Basu Thakur, AN Bender, BA Benson, JE Carlstrom, FW Carter, TW Cecil, CL Chang, JF Cliche, A Cukierman, T de Haan, J Ding, MA Dobbs, W Everett, A Foster, J Gallicchio, A Gilbert, JC Groh, AH Harke-Hosemann, ST Guns, NW Halverson, NL Harrington, JW Henning, WL Holzapfel, N Huang, KD Irwin, OB Jeong, M Jonas, TS Khaire, AM Kofman, M Korman, DL Kubik, S Kuhlmann, C-L Kuo, AE Lowitz, AT Lee, SS Meyer, D Michalik, J Montgomery, A Nadolski, T Natoli, H Nguyen, GI Noble, V Novosad, S Padin, Z Pan, J Pearson, CM Posada, W Quan, A Rahlin, JE Ruhl, JT Sayre, E Shirokoff, G Smecher, JA Sobrin, AA Stark, KT Story, A Suzuki, KL Thompson, C Tucker, K Vanderlinde, JD Vieira, G Wang, N Whitehorn, V Yefremenko, KW Yoon, MR Young, **"Characterization and performance of the second-year SPT-3G focal plane."** *Proc. SPIE 10708: Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy IX*, 107081Z (2018)

D Barron, K Arnold, T Elleflot, J Groh, D Kaneko, N Katayama, A Lee, L Lowry, H Nishino, A Suzuki, S Takatori, P Ade, Y Akiba, A Ali, M Aguilar, A Anderson, P Ashton, J Avva, D Beck, C Baccigalupi, S Beckman, A Bender, F Bianchini, D Boettger, J Borrill, J Carron, S Chapman, Y Chinone, G Coppi, K Crowley, A Cukierman, T de Haan, M Dobbs, R Dunner, J Errard, G Fabbian, S Feeney, C Feng, G Fuller, N Galitzki, A Gilbert, N Goeckner-Wald, T Hamada, N Halverson, M Hasegawa, M Hazumi, C Hill, W Holzapfel, L Howe, Y Inoue, J Ito, G Jaehnig, O Jeong, B Keating, R Keskitalo, T Kisner, N Krachmalnicoff, A Kusaka, M Le Jeune, D Leon, E Linder, A Lowitz, A Madurowicz, D Mak, F Matsuda, T Matsumura, A May, N Miller, Y Minami, J Montgomery, T Natoli, M Navroli, J Peloton, A Pham, L Piccirillo, D Plambeck, D Poletti, G Puglisi, C Raum, G Rebeiz, C Reichardt, P Richards, H Roberts, C Ross, K Rotermund, Max Silva Feaver, Y Segawa, B Sherwin, P Siritanasak, L Steinmetz, R Stompor, O Tajima, S Takakura, D Tanabe, R Tat, G Teply, A Tikhomirov, T Tomaru, C Tsai, C Verges, B Westbrook, N Whitehorn, A Zahn, **"Electrical characterization and tuning of the integrated POLARBEAR-2a focal plane and readout."** *Proc. SPIE 10708: Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy IX*, 1070808 (2018)

Amy N Bender, Peter Ade, Zeeshan Ahmed, Adam Anderson, Jason Austermann, Jessica Avva, Peter Barry, Ritoban Basu Thakur, Bradford Benson, Lindsey Bleem, Karen Byrum, John E Carlstrom, Faustin Carter, Thomas Cecil, Clarence Chang, Hsaio-Mei Cho, Jean-Franois Cliche, Thomas Crawford, Ari Cukierman, Edward Denison, Tijmen de Haan, Junjia Ding, Matthew Dobbs, Daniel Dutcher, Wendeline Everett, Allen Foster, Renae Gannon, Adam Gilbert, John Groh, Nils Halverson, Angelina Harke-Hosemann, Nicholas Harrington, Jason Henning, Gene Hilton, Gil Holder, William Holzapfel, Nicholas Huang, Kent Irwin, Oliver Jeong, Michelle Jonas, Trupti Khaire, Lloyd

Knox, Anna Kofman, Milo Korman, Donna Kubik, Steve Kuhlmann, Chao-Lin Kuo, Adrian Lee, Erik Leitch, Amy Lowitz, Stephan Meyer, Daniel Michalik, Joshua Montgomery, Andrew Nadolski, Tyler Natoli, Hogan Ngyuen, Gavin Noble, Valentine Novosad, Stephen Padin, Zhaodi Pan, John Pearson, Chrystian Posada, Alexandra Rahlin, Christian Reichardt, John Ruhl, Lauren Saunders, James Sayre, Ian Shirley, Erik Shirokoff, Graeme Smecher, Joshua Sobrin, Antony Stark, Kyle Story, Aritoki Suzuki, Qing-Yang Ting, Keith Thompson, Carole Tucker, Leila Vale, Keith Vanderlinde, Joaquin Vieira, Gensheng Wang, Nathan Whitehorn, Vladimir Yefremenko, Ki Won Yoon, Matthew Young, **"Year 2 instrument status from the SPT-3G cosmic microwave background receiver."** *Proc. SPIE 10708: Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy IX*, 1070803 (2018)

A Nadolski, AM Kofman, JD Vieira, PAR Ade, Z Ahmed, AJ Anderson, JS Avva, R Basu Thakur, AN Bender, BA Benson, JE Carlstrom, FW Carter, TW Cecil, CL Chang, JF Cliche, A Cukierman, T de Haan, J Ding, MA Dobbs, D Dutcher, W Everett, A Foster, J Fu, J Gallichio, A Gilbert, JC Groh, ST Guns, R Guyser, NW Halverson, AH Harke-Hosemann, NL Harrington, JW Henning, WL Holzapfel, N Huang, KD Irwin, OB Jeong, M Jonas, A Jones, TS Khaire, M Korman, DL Kubik, S Kuhlmann, C-L Kuo, AT Lee, AE Lowitz, SS Meyer, D Michalik, J Montgomery, T Natoli, H Nguyen, GI Noble, V Novosad, S Padin, Z Pan, J Pearson, CM Posada, W Quan, A Rahlin, JE Ruhl, JT Sayre, E Shirokoff, G Smecher, JA Sobrin, AA Stark, KT Story, A Suzuki, KL Thompson, C Tucker, K Vanderlinde, G Wang, N Whitehorn, V Yefremenko, KW Yoon, MR Young, **"Broadband anti-reflective coatings for cosmic microwave background experiments."** *Proc. SPIE 10708, Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy IX*, 1070843 (2018)

AJ Anderson, PAR Ade, Z Ahmed, JE Austermann, JS Avva, PS Barry, R Basu Thakur, AN Bender, BA Benson, LE Bleem, K Byrum, JE Carlstrom, FW Carter, T Cecil, CL Chang, HM Cho, JF Cliche, TM Crawford, A Cukierman, EV Denison, T de Haan, J Ding, MA Dobbs, D Dutcher, W Everett, A Foster, RN Gannon, A Gilbert, JC Groh, NW Halverson, AH Harke-Hosemann, NL Harrington, JW Henning, GC Hilton, GP Holder, WL Holzapfel, N Huang, KD Irwin, OB Jeong, M Jonas, T Khaire, L Knox, AM Kofman, M Korman, D Kubik, S Kuhlmann, N Kuklev, CL Kuo, AT Lee, EM Leitch, AE Lowitz, SS Meyer, D Michalik, J Montgomery, A Nadolski, T Natoli, H Nguyen, GI Noble, V Novosad, S Padin, Z Pan, J Pearson, CM Posada, A Rahlin, CL Reichardt, JE Ruhl, LJ Saunders, JT Sayre, I Shirley, E Shirokoff, G Smecher, JA Sobrin, AA Stark, KT Story, A Suzuki, QY Tang, KL Thompson, C Tucker, LR Vale, K Vanderlinde, JD Vieira, G Wang, N Whitehorn, V Yefremenko, KW Yoon, MR Young, **"Spt-3g: A multichroic receiver for the south pole telescope."** *Journal of Low Temperature Physics*, 1-9. (2018)

J Ding, PAR Ade, Z Ahmed, AJ Anderson, JE Austermann, JS Avva, R Basu Thakur, AN Bender, BA Benson, JE Carlstrom, FW Carter, T Cecil, CL Chang, JF Cliche, A Cukierman, EV Denison, T de Haan, R Divan, MA Dobbs, D Dutcher, W Everett, A Foster, RN Gannon, A Gilbert, JC Groh, NW Halverson, AH Harke-Hosemann, NL Harrington, JW Henning, GC Hilton, WL Holzapfel, N Huang, KD Irwin, OB Jeong, M Jonas, T Khaire, AM Kofman, M Korman, D Kubik, S Kuhlmann, CL Kuo, AT Lee, AE Lowitz, SS Meyer, D Michalik, CS Miller, J Montgomery, A Nadolski, T Natoli, H Nguyen, GI Noble, V Novosad, S Padin, Z Pan, J Pearson, CM Posada, A Rahlin, JE Ruhl, LJ Saunders, JT Sayre, I Shirley, E Shirokoff, G Smecher, JA Sobrin, L Stan, AA Stark, KT Story, A Suzuki, QY Tang, KL Thompson, C Tucker, LR Vale, K Vanderlinde, JD Vieira, G Wang, N Whitehorn, V Yefremenko, KW Yoon, MR Young, **"Thermal Links and Microstrip Transmission Lines in SPT-3G Bolometers."** *Journal of Low Temperature Physics*, 1-8. (2018)

CM Posada, PAR Ade, Z Ahmed, AJ Anderson, JE Austermann, JS Avva, R Basu Thakur, AN Bender, BA Benson, JE Carlstrom, FW Carter, T Cecil, CL Chang, JF Cliche, A Cukierman, EV Denison, T de Haan, J Ding, R Divan, MA Dobbs, D Dutcher, W Everett, A Foster, RN Gannon, A Gilbert, JC Groh, NW Halverson, AH Harke-Hosemann, NL Harrington, JW Henning, GC Hilton, WL Holzapfel, N Huang, KD Irwin, OB Jeong, M Jonas, T Khaire, AM Kofman, M Korman, D Kubik, S Kuhlmann, CL Kuo, AT Lee, AE Lowitz, SS Meyer, D Michalik, CS Miller, J Montgomery, A Nadolski, T Natoli, H Nguyen, GI Noble, V Novosad, S Padin, Z Pan, J Pearson, A Rahlin, JE Ruhl, LJ Saunders, JT Sayre, I Shirley, E Shirokoff, G Smecher, JA Sobrin, L Stan, AA Stark, KT Story, A Suzuki, QY Tang, KL Thompson, C Tucker, LR Vale, K Vanderlinde, JD Vieira, G Wang, N Whitehorn, V Yefremenko, KW Yoon, MR Young, **"Fabrication of Detector Arrays for the SPT-3G Receiver."** *Journal of Low Temperature Physics*, 1-9. (2018)

Zhaodi Pan, PAR Ade, Zeeshan Ahmed, AJ Anderson, JE Austermann, JS Avva, R Basu Thakur, AN Bender, BA Benson, JE Carlstrom, FW Carter, Thomas Cecil, CL Chang, Jean-Francois Cliche, Ariel Cukierman, EV Denison, Tijmen de Haan, Junjia Ding, MA Dobbs, Daniel Dutcher, Wendeline Everett, Allen Foster, RN Gannon, Adam Gilbert, JC Groh, NW Halverson, AH Harke-Hosemann, NL Harrington, JW Henning, GC Hilton, WL Holzapfel, Nicholas Huang, KD Irwin, OB Jeong, Michalle Jonas, Trupti Khaire, AM Kofman, Milo Korman, Donna Kubik, Steve Kuhlmann, CL Kuo, AT Lee, AE Lowitz, SS Meyer, Daniel Michalik, Joshua Montgomery, Andrew Nadolski, Tyler Natoli, Hogan Nguyen, GI Noble, Valentyn Novosad, Stephan Padin, John Pearson, CM Posada, Alexandra Rahlin, JE Ruhl, LJ Saunders, JT Sayre, Ian Shirley, Erik Shirokoff, Graeme Smecher, JA Sobrin, AA Stark, KT Story, Aritoki Suzuki, QY Tang, KL Thompson, Carole Tucker, LR Vale, Keith Vanderlinde, JD Vieira, Gensheng Wang, Nathan Whitehorn, Volodymyr Yefremenko, Ki Won Yoon, MR Young, **"Optical Characterization of the SPT-3G Camera."** *Journal of Low Temperature Physics*, 1-9. (2018)

FW Carter, PAR Ade, Z Ahmed, AJ Anderson, JE Austermann, JS Avva, R Basu Thakur, AN Bender, BA Benson, JE Carlstrom, T Cecil, CL Chang, JF Cliche, A Cukierman, EV Denison, T de Haan, J Ding, R Divan, MA Dobbs, D

Dutcher, W Everett, A Foster, RN Gannon, A Gilbert, JC Groh, NW Halverson, AH Harke-Hosemann, NL Harrington, JW Henning, GC Hilton, WL Holzapfel, N Huang, KD Irwin, OB Jeong, M Jonas, T Khaire, AM Kofman, M Korman, D Kubik, S Kuhlmann, CL Kuo, V Kutepova, AT Lee, AE Lowitz, SS Meyer, D Michalik, CS Miller, J Montgomery, A Nadolski, T Natoli, H Nguyen, GI Noble, V Novosad, S Padin, Z Pan, J Pearson, CM Posada, A Rahlin, JE Ruhl, LJ Saunders, JT Sayre, I Shirley, E Shirokoff, G Smecher, JA Sobrin, L Stan, AA Stark, KT Story, A Suzuki, QY Tang, KL Thompson, C Tucker, LR Vale, K Vanderlinde, JD Vieira, G Wang, N Whitehorn, V Yefremenko, KW Yoon, MR Young, **"Tuning SPT-3G Transition-Edge-Sensor Electrical Properties with a Four-Layer TiAuTiAu Thin-Film Stack."** *Journal of Low Temperature Physics*, 1-8. (2018)

JS Avva, PAR Ade, Z Ahmed, AJ Anderson, JE Austermann, R Basu Thakur, D Barron, AN Bender, BA Benson, JE Carlstrom, FW Carter, T Cecil, CL Chang, JF Cliche, A Cukierman, EV Denison, T de Haan, J Ding, MA Dobbs, D Dutcher, T Elleflot, W Everett, A Foster, RN Gannon, A Gilbert, JC Groh, NW Halverson, AH Harke-Hosemann, NL Harrington, M Hasegawa, K Hattori, JW Henning, GC Hilton, WL Holzapfel, Y Hori, N Huang, KD Irwin, OB Jeong, M Jonas, T Khaire, AM Kofman, M Korman, D Kubik, S Kuhlmann, CL Kuo, AT Lee, AE Lowitz, SS Meyer, J Montgomery, A Nadolski, T Natoli, H Nguyen, H Nishino, GI Noble, V Novosad, S Padin, Z Pan, J Pearson, CM Posada, A Rahlin, K Rotermund, JE Ruhl, LJ Saunders, JT Sayre, I Shirley, E Shirokoff, G Smecher, JA Sobrin, AA Stark, KT Story, A Suzuki, QY Tang, KL Thompson, C Tucker, LR Vale, K Vanderlinde, JD Vieira, G Wang, N Whitehorn, V Yefremenko, KW Yoon, MR Young, **"Design and Assembly of SPT-3G Cold Readout Hardware."** *Journal of Low Temperature Physics*, 1-9. (2018)

JW Henning, JT Sayre, C L Reichardt, PAR Ade, AJ Anderson, JE Austermann, JA Beall, AN Bender, BA Benson, LE Bleem, JE Carlstrom, CL Chang, HC Chiang, H-M Cho, R Citron, C Corbett Moran, TM Crawford, AT Crites, T de Haan, MA Dobbs, W Everett, J Gallicchio, EM George, A Gilbert, NW Halverson, N Harrington, GC Hilton, GP Holder, WL Holzapfel, S Hoover, Z Hou, JD Hrubes, N Huang, J Hubmayr, KD Irwin, R Keisler, L Knox, AT Lee, EM Leitch, D Li, A Lowitz, A Manzotti, JJ McMahon, SS Meyer, L Mocanu, J Montgomery, A Nadolski, T Natoli, JP Nibarger, V Novosad, S Padin, C Pryke, JE Ruhl, BR Saliwanchik, KK Schaffer, C Sievers, G Smecher, AA Stark, KT Story, C Tucker, K Vanderlinde, T Veach, JD Vieira, G Wang, N Whitehorn, WLK Wu, V Yefremenko, **"Measurements of the Temperature and E-Mode Polarization of the CMB from 500 Square Degrees of SPTpol Data."** *The Astrophysical Journal* 852(2), p. 97 (2018).

AE Lowitz,**"Kinetic Inductance Detectors for CMB Polarimetry at 100 GHz"**. PhD Thesis. Defense Dec 2016.

S Scully, D Burke, C O'Sullivan, D Gayer, M Gradziel, JA Murphy, M De Petris, D Buzi, M Zannoni, A Mennella, M Gervasi, A Tartari, B Maffei, J Aumont, S Banfi, P Battaglia, ES Battistelli, A Bau, B Belier, D Bennet, L Berge, J-Ph Bernard, M Bersanelli, M-A Bigot-Sazy, N Bleurvacq, G Bordier, J Brossard, EF Bunn, D Cammileri, F Cavaliere, P Chanial, C Chapron, A Coppolecchia, F Couchot, G D'Alessandro, P De Bernardis, T Decourcelle, F Del Torto, L Dumoulin, C Franceschet, A Gault, A Ghribi, M Giard, Y Giraud-Heraud, L Grandsire, JC Hamilton, V Haynes, S Henrot-Versille, N Holtzer, J Kaplan, A Korotkov, J Lande, A Lowitz, S Marnieros, J Martino, S Masi, Mark McCulloch, Simon Melhuish, L Montier, D Neel, MW Ng, F Pajot, A Passerini, C Perbost, O Perdereau, F Piacentini, M Piat, L Piccirillo, G Pisano, D Prele, R Puddu, D Rambaud, O Rigaut, M Salatino, A Schillaci, M Stolpovskiy, P Timbie, M Tristram, G Tucker, D Vigano, F Voisin, B Watson, **"Optical design and modelling of the QUBIC instrument, a next-generation quasi-optical bolometric interferometer for cosmology."** *Proc. SPIE 9914, Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy VIII*, 99142S (2016); doi:10.1117/12.2231717

AE Lowitz, AD Brown, and TR Stevenson, PT Timbie, and EJ Wollack, **"Design, fabrication, and testing of a TiN/Ti/TiN trilayer KID array for 3 mm CMB observations."** Proceedings of the 16th International Workshop on Low Temperature Detectors, Grenoble, FR, July 2015. *Journal of Low Temperature Physics*, 184 (2016).

A Tartari, J Aumont, S Banfi, P Battaglia, ES Battistelli, A Bau, B Belier, D Bennett, L Berge, J Ph Bernard, M Bersanelli, MA Bigot-Sazy, N Bleurvacq, G Bordier, J Brossard, EF Bunn, D Buzi, D Cammilleri, F Cavaliere, P Chanial, C Chapron, A Coppolecchia, G DAlessandro, P De Bernardis, T Decourcelle, F Del Torto, M De Petris, L Dumoulin, C Franceschet, A Gault, D Gayer, M Gervasi, A Ghribi, M Giard, Y Giraud-Heraud, M Gradziel, L Grandsire, J Ch Hamilton, V Haynes, N Holtzer, J Kaplan, A Korotkov, J Lande, A Lowitz, B Maffei, S Marnieros, J Martino, S Masi, M McCulloch, S Melhuish, A Mennella, L Montier, A Murphy, D Neel, MW Ng, C OSullivan, F Pajot, A Passerini, C Perbost, F Piacentini, M Piat, L Piccirillo, Giampaolo Pisano, D Prle, D Rambaud, O Rigaut, M Salatino, A Schillaci, S Scully, MM Stolpovskiy, P Timbie, G Tucker, D Vigano, F Voisin, B Watson, M Zannoni, **"QUBIC: a Fizeau interferometer targeting primordial B-modes."** Proceedings of the 16th International Workshop on Low Temperature Detectors, Grenoble, FR, July 2015. *Journal of Low Temperature Physics*, 184 (2016).

AE Lowitz, AD Brown, and TR Stevenson, PT Timbie, and EJ Wollack, **"Design, fabrication, and testing of lumped element kinetic inductance detectors for 3 mm CMB Observations,"** *Proc. SPIE 9153, Millimeter, Submillimeter, and Far-Infrared Detectors and Instrumentation for Astronomy VII*, 91532R (2014); doi:10.1117/12.2057102.

AE Lowitz, EM Barrentine, SR Golwala, and PT Timbie, **"A Comparison of Fundamental Noise in Kinetic Indictance Detectors and Transition Edge Sensors for Millimeter-wave Applications,"** Proceedings of the 15th International Workshop on Low Temperature Detectors, Pasadena, CA, June 2013. *Journal of Low Temperature Physics*, 176 (2014). DOI 10.1007/s10909-014-1133-5. arXiv1403.3601.

A Ghribi, J Aumont, ES Battistelli, A Bau, L Berge, J-Ph Bernard, M Bersanelli, M-A Bigot-Sazy, G Bordier, ET Bunn, F Cavaliere, P Chanial, A Coppolecchia, T Decourcelle, P De Bernardis, M De Petris, A-A Drilien, L Dumoulin, MC Falvella, A Gault, M Gervasi, M Giard, M Gradziel, L Grandsire, D Gayer, J-Ch Hamilton, V Haynes, Y Giraud-Heraud, N Holtzer, J Kaplan, A Korotkov, J Lande, A Lowitz, B Maffei, S Marnieros, J Martino, S Masi, A Mennella, L Montier, A Murphy, MW Ng, E Olivieri, F Pajot, A Passerini, F Piacentini, M Piat, L Piccirillo, G Pisano, D Prele, D Rambaud, O Rigaut, C Rosset, M Salatino, A Schillaci, S Scully, C O'Sullivan, A Tartari, P Timbie, G Tucker, L Vibert, F Voisin, B Watson, M Zannoni, **"Latest Progress on the QUBIC Instrument,"** Proceedings of the 15th International Workshop on Low Temperature Detectors, Pasadena, CA, June 2013. *Journal of Low Temperature Physics*, 176 (2014). doi:10.1007/s10909-013-1024-1. arXiv1307.5701.

Invited Talks

"Nuts and Bolts Cosmology," **University of Chicago, Enrico Fermi Institute**, Chicago, IL, Fall 2018 (Public eight-lecture series)

"Detector and Readout Architectures for mm-wave Cosmology with SPT3g and Beyond", **Cornell University Department of Physics**, Ithaca, NY, 26 Feb 2018 (academic talk)

"Kinetic Indictance Detectors for 100 GHz CMB Polarimetry," **UCSD Department of Physics**, La Jolla, CA, 31 July 2017 (academic talk)

"Kinetic Inductance Detectors for 100 GHz CMB Polarimetry," **UIUC Department of Astronomy**, Champaign, Il, 9 June 2017 (academic talk)

"Kinetic Inductance Detectors for 100 GHz CMB Polarimetry," **Kavli Institute for Cosmological Physics**, University of Chicago, Chicago, Il, 17 Mar 2017. (academic talk)

"The Cosmic Microwave Background," **Amundsen-Scott South Pole Station Summer Science Lecture Series**, South Pole, Antarctica, 6 Nov 2016. (public lecture)

"Detecting the Cosmic Microwave Background," **Madison Astronomical Society**, Madison, WI, 21 Feb 2015. (public lecture)

"The Cosmic Microwave Background," **Madison Astronomical Society**, Madison, WI, 10 January, 2014. (public lecture)

"A Comparison of Fundamental Noise Limits in TESs and MKIDs," **Keck Institute for Space Studies**, 2nd Superconducting Nitride Detector Workshop. Pasadena, CA, 21 February 2012. (academic talk)