

Lindsay Jane LeBlanc, PhD

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Current Positions

- 2013 - present Assistant Professor
 Department of Physics, University of Alberta, Edmonton AB, Canada
- 2014 - 2024 Canada Research Chair for Quantum Simulation with Ultracold Quantum Gases
 Tier II (renewed in 2019 for second term)

Research experience & Education

- 2015 - 2019 Fellow, Canadian Institute for Advanced Research (CIFAR)
 Quantum Materials Programme
- 2014 - 2017 Strategic Chair (Tier 3) in Hybrid Quantum Systems
 Alberta Innovates – Technology Futures
- 2010 - 2013 Joint Quantum Institute, National Institute of Standards and Technology,
 and the University of Maryland, Gaithersburg MD, USA
 Postdoctoral fellow
 Focus: Superfluid behaviour of ultracold bosonic systems in artificial gauge fields
 Supervisors: Drs. Ian B. Spielman and William D. Phillips
- 2005 - 2010 Department of Physics, University of Toronto, Toronto ON, Canada
 PhD conferred June 2011
 Thesis: “Exploring many-body physics with ultracold atoms”
 Advisor: Prof. Joseph H. Thywissen
- 2004 - 2005 Department of Physics, University of Toronto, Toronto ON, Canada
 MSc conferred November 2005
 Thesis: “Evaporative cooling in a strongly confining microchip trap”
 Advisor: Prof. Joseph H. Thywissen
- 1999 - 2003 University of Alberta, Edmonton, AB, Canada
 BSc in Engineering Physics *with distinction* conferred June 2003
 Undergraduate research advisors: Prof. James N. McMullin & Prof. Mark R. Freeman

Career interruption

- Feb - Aug 2017 Maternity and parental leave of absence

Selected Awards and Honours

- 2015 Named Fellow of Canadian Institute for Advanced Research's Quantum Materials Program
- 2014, 2019 Named Canada Research Chair (Tier II) in Ultracold gases for Quantum Simulation, renewed in 2019 as Canada Research Chair (Tier II) in Ultracold Quantum Gases
- 2014 Named Alberta Innovates – Technology Futures Strategic Chair (Tier 3) in Hybrid Quantum Systems
- 2011 - 2013 NSERC (Natural Sciences and Engineering Research Council) Canada Postdoctoral Fellowship
Federal scholarship, for post-doctoral research, \$40 000/year
- 2012 Participant, 62nd Lindau Nobel Laureate Meeting (Lindau, Germany)
Selected in global competition as one of the participating young researchers
- 2011 DAMPhi Thesis Prize (Canadian Association of Physicists, Division of Atomic and Molecular Physics and Photon Interactions)
Awarded every two years for the best doctoral thesis in atomic and molecular physics in Canada
- 2004 - 2010 Graduate school scholarships, including: NSERC Canada Graduate Scholarship D (*Federal, \$35 000/year for two years*), NSERC Canada Graduate Scholarship M (*Federal, \$17 500/year for two years*), Walter C. Sumner Memorial Fellowship (*Academic Federal scholarship, master's level, \$17 500/year, \$6000 / year for two years*)
- 1999 - 2003 Undergraduate scholarships and prizes, including: Governor General's Silver Medal (*University of Alberta, For top academic standing, to two graduating undergraduate students*), Rt. Honourable C.D. Howe Memorial Fellowship (*University of Alberta, For top academic standing among undergraduates upon graduation, \$15 000*), President's Citation (*University of Alberta, Top-tier undergraduate scholarship, \$25 000, awarded to 7 students each year, plus approx. \$15 500 in other scholarships*)
- 1999 Governor General's Bronze Medal (Bishop Grandin High School, Calgary AB)
Awarded for top academic standing at high school

Publications

Refereed papers

(HQP in bold; Impact Factor (IF) and citations from Web of Science)

19. (In Press) **E. Saglamyurek, T. Hrushevskiy, L. W. Cooke, A. Rastogi**, L. J. LeBlanc. Single-photon-level light storage in cold atoms using the Autler-Townes splitting protocol. Accepted in *Physical Review Research*. Available at: [arxiv.org: 1905.05856](https://arxiv.org/abs/1905.05856) (2019).
18. **A. Rastogi, E. Saglamyurek, T. Hrushevskiy, S. Hubele**, L. J. LeBlanc. Discerning quantum memories based on electromagnetically-induced-transparency and Autler-Townes-splitting protocols. *Physical Review A* **100**, 012314 (2019). [IF: 2.9]

17. **A. Tretiakov** and L. J. LeBlanc. Microwave Rabi resonances beyond the small-signal regime. *Physical Review A* **99**, 043402 (2019). [IF: 2.9]
16. **E. Saglamyurek, T. Hrushevskiy, A. Rastogi**, K. Heshami, and L. J. LeBlanc, Coherent storage and manipulation of broadband photons via dynamically controlled Autler-Townes splitting. *Nature Photonics* **12**, 774–782 (2018). [IF: 32.5, Times cited: 3]
15. **A. Tretiakov** and L. J. LeBlanc, Magnetic-field-mediated coupling and control in hybrid atomic-nanomechanical systems. *Physical Review A* **94**, 043802 (2016). [IF: 2.9, Times cited: 3]
14. C. A. Potts, A. Melnyk, H. Ramp, M. H. Bitarafan, D. Vick, L. J. LeBlanc, J. P. Davis, R.G. DeCorby. Tunable open-access microcavities for on-chip cQED. *Applied Physics Letters* **108**, 041103 (2016). [IF: 3.5, Times cited: 6]
13. L. J. LeBlanc, K. Jiménez-García, R. A. Williams, M. C. Beeler, W. D. Phillips, I. B. Spielman. Gauge Matters: Observing the vortex-nucleation transition in a Bose-Einstein condensate, *New Journal of Physics* **17**, 065016 (2015). [IF: 3.6, Times cited: 12]
12. K. Jiménez-García, L. J. LeBlanc, R. A. Williams, M. C. Beeler, C. Qu, M. Gong, C. Zhang, I. B. Spielman. Tunable Spin-Orbit Coupling via Strong Driving in Ultracold Atom Systems, *Physical Review Letters*, **114**, 125301 (2015). [IF: 8.8, Times cited: 85]
11. R. A. Williams, M. C. Beeler, L. J. LeBlanc, K. Jiménez-García, and I. B. Spielman. A Raman-induced Feshbach resonance in an effectively single-component Fermi gas, *Physical Review Letters* **111**, 095301 (2013). [IF: 8.8, Times cited: 110]
10. L. J. LeBlanc, M. C. Beeler, K. Jiménez-García, A. R. Perry, S. Sugawa, R. A. Williams, and I. B. Spielman. Direct observation of Zitterbewegung in a BEC, *New Journal of Physics*, **15**, 073011 (2013). [IF: 3.6, Times cited: 99]
9. M. C. Beeler, R. A. Williams, K. Jiménez-García, L. J. LeBlanc, A. R. Perry, and I. B. Spielman. The spin Hall effect in a quantum gas, *Nature*, **498**, 201-204 (2013). [IF: 41.6, Times cited: 118]
8. L. J. LeBlanc, K. Jiménez-García, R. A. Williams, M. C. Beeler, A. R. Perry, W. D. Phillips, and I. B. Spielman. Observation of a superfluid Hall effect, *Proceedings of the National Academy of Sciences of the United States of America*, **109**, 10811 (2012). [IF: 9.5, Times cited: 45]
7. K. Jiménez-García, L. J. LeBlanc, R. A. Williams, M. C. Beeler, A. R. Perry, and I. B. Spielman. Peierls substitution in an Engineered Lattice Potential, *Physical Review Letters* **108**, 225303 (2012). [IF: 8.8, Times cited: 175]
6. R. A. Williams, L. J. LeBlanc, K. Jiménez-García, M. C. Beeler, A. R. Perry, W. D. Phillips, and I. B. Spielman. Synthetic Partial Waves in Ultracold Atomic Collisions, *Science* **335**, 314 (2012). [IF: 41.1, Times cited: 98]
5. L. J. LeBlanc, A.B. Bardon, J. McKeever, M. H. T. Extavour, J. H. Thywissen, F. Piazza, and A. Smerzi. Dynamics of a tunable superfluid junction, *Physical Review Letters* **106**, 025302 (2011).[IF: 8.8, Times cited: 73]
4. L. J. LeBlanc, J. H. Thywissen, A. Burkov, and A. Paramekanti. Repulsive Fermi gas in a harmonic trap: Ferromagnetism and spin textures, *Physical Review A* **80**, 013607 (2009). [IF: 2.9, Times cited: 51]
3. L. J. LeBlanc and J. H. Thywissen. Species-specific optical lattices, *Physical Review A* **75**, 053612 (2007). [IF: 2.9, Times cited: 102]

2. S. Aubin, S. Myrskog, M.H.T. Extavour, L. J. LeBlanc, D. McKay, A. Stummer, J. H. Thywissen. Rapid sympathetic cooling to Fermi degeneracy on a chip, *Nature Physics* **2**, 384-387 (2006). [IF: 22.7, Times cited: 63]
1. S. Aubin, M.H.T. Extavour, S. Myrskog, L.J. LeBlanc, J. Esteve, S. Singh, P. Scrutton, D. McKay, R. McKenzie, I. Leroux, A. Stummer, and J.H. Thywissen. Trapping Fermionic ^{40}K and Bosonic ^{87}Rb on a Chip. *Journal Low Temperature Phys.* **140**, 377-396 (2005). [IF: 1.04, Times cited: 26]

Book chapters

2. L. J. LeBlanc and I. B. Spielman. Bose-Einstein Condensates in Artificial Gauge Fields, *in Universal Themes of Bose-Einstein Condensation*, N. Proukakis, D. Snoke, and P. Littlewood (Eds.), Cambridge University Press (Cambridge, UK). Ch. 15, pp. 299-321 (2017).
1. M. H. T. Extavour, L. J. LeBlanc, J. McKeever, A. B. Bardon, S. Aubin, S. Myrskog, T. Schumm, and J. H. Thywissen. Fermions on atom chips, *in Atom Chips*, J. Reichel, V. Vuletic, eds., (Wiley-VCH, Weinheim, Germany) pp. 365-394 (Ch. 12) (2011).

Invited commentaries

4. L. J. LeBlanc, Viewpoint: Molecules vs. magnetism: the quest for an ultracold ferromagnet *Physics*, **11**, 131, (2018).
3. L. J. LeBlanc, Quantum Physics: Interactions propel a magnetic dance (News and Views), *Nature* **546**, 481–482 (2017).
2. L. J. LeBlanc, Quantum Physics: Two-atom bunching (News and Views), *Nature* **520**, 36-37 (2015).
1. L. J. LeBlanc, Polar exploration (News and Views), *Nature* **505**, 627-628 (2014).

Invited presentations

57. Quantum Innovators Workshop (Institute for Quantum Computing, Waterloo ON) Title TBD (29 Sept 2019)
56. 8th Conference for Quantum Information and Quantum Control (CQIQC-VIII, Toronto ON) Fast and efficient optical memory and manipulation in cold and ultracold atomic ensembles (26 August 2019)
55. Women in Physics Canada (WiPC) Conference, (Montréal, QC) Exploring and manipulating quantum matter using cold atoms. (26 June 2019)
54. Gordon Research Conference (GRC) on Atomic Physics, (Newport, RI) Spin-dependence, artificial gauge fields, and superfluidity in BECs. (13 June 2019)

53. Canadian Association of Physicists Congress, (Burnaby, BC) Spin-dependent superfluidity in ultracold BECs. (4 June 2019)
52. Photonics North, (Quebec, QC) Storing and manipulating light in a cold atomic quantum memory using Autler-Townes splitting. (21 May 2019)
51. Physics Colloquium / CAP Lecture Tour, Université de Montréal (Montréal, QC), The quantum playground: an ultracold atoms apparatus and the games we can play (22 Mar 2019).
50. Physics Colloquium / CAP Lecture Tour, Université de Sherbrooke (Sherbrooke, QC), The quantum playground: an ultracold atoms apparatus and the games we can play (20 Mar 2019).
49. Physics Colloquium / CAP Lecture Tour, Bishop's University (Sherbrooke, QC), The quantum playground: an ultracold atoms apparatus and the games we can play (20 Mar 2019).
48. Physics Colloquium / CAP Lecture Tour, Université de Laval (Québec, QC), The quantum playground: an ultracold atoms apparatus and the games we can play (19 Mar 2019).
47. Physics Colloquium, Michigan State University (East Lansing, MI) Storing and manipulating light for quantum memory and manipulation using Autler-Townes splitting in cold atoms. (19 Feb 2019)
46. Physics Seminar, Washington University in St. Louis (St. Louis, MO) Optical quantum memory and manipulation of broadband light using Autler-Townes splitting in cold atoms (17 Dec 2018)
45. (Keynote) Canadian Undergraduate Physics Conference (CUPC), (Edmonton, AB) In pursuit of quantum mechanics: A tale of lasers and labs and really cold atoms. (16 August 2018).
44. (Keynote) Quantum Alberta Workshop, (Calgary, AB) Putting the Autler-Townes effect to work for quantum memory and manipulation. (18 July 2018).
43. American Physical Society (APS) Division of Atomic, Molecular and Atomic Physics (DAMOP) Meeting, (Fort Lauderdale, FL) Coherent storage and processing of broadband light via the Autler-Townes effect in cold Rb atoms (29 May 2018).
42. (Keynote) American Physical Society Northwest Section Meeting, (Penticton, BC) Mimicking spin-orbit coupling in ultracold quantum gases (14 May 2016).
41. Physics Colloquium, McMaster University (Hamilton, ON) Quantum simulation with spin-orbit coupling in ultracold quantum gases (9 March 2016).
40. Physics Colloquium, University of Guelph (Guelph, ON) Quantum simulation with spin-orbit coupling in ultracold quantum gases (8 March 2016).
39. Physics Colloquium, University of Northern British Columbia (Prince George, BC) Collective quantum effects in ultracold atomic gases (1 February 2016).
38. Institute for Quantum Science and Technology, University of Calgary (Calgary, AB) Collective quantum effects in ultracold atomic gases (19 November 2015).
37. Canadian Association of Physicists Congress, University of Alberta (Edmonton, AB) Engineered Spin-orbit Coupling in Ultracold Quantum Gases (16 June 2015).
36. Canadian Association of Physicists Lecture Tour, University of Winnipeg (Winnipeg, MB) Exploring the secrets of many-particle quantum mechanics using laser-cooled quantum gases (13 March 2015).

35. Canadian Association of Physicists Lecture Tour, Lakehead University (Thunder Bay, ON) Exploring the secrets of many-particle quantum mechanics using laser-cooled quantum gases (12 March 2015).
34. Canadian Association of Physicists Lecture Tour, University of Lethbridge (Lethbridge, AB) Exploring the secrets of many-particle quantum mechanics using laser-cooled quantum gases (29 January 2015).
33. Alberta Quantum-Nano Meeting 2, (Red Deer, AB) Quantum simulation in ultracold atomic gases (14 July 2014).
32. CIFAR Quantum Materials Meeting, (Montréal, QC) Simulating gauge fields in ultracold quantum gases (08 May 2014).
31. CIFAR Cold Atoms Workshop, The Banff Centre, (Banff, AB) Exploring the dynamics of ultracold systems in artificial gauge fields (20 Feb 2014).
30. Department of Physics, College of William and Mary, (Williamsburg, VA) Engineered dispersion relationships using atom-light interactions (27 June 2013).
29. Department of Physics, University of Nevada, Reno (Reno, NV) Artificial gauge fields for quantum simulation with ultracold atoms (15 March 2013).
28. Focus workshop on Flat Bands: Design, Topology, and Correlations, Max Planck Institute for the Physics of Complex Systems (Dresden, Germany) Engineering dispersion relationships for ultracold atoms with Raman transitions (08 March 2013).
27. Department of Physics, University of Illinois, Urbana-Champaign (Champaign, IL) Engineering dispersion relationships for ultracold atoms (04 March 2013).
26. Department of Physics, University of Alberta (Edmonton, AB) Quantum emulation with ultracold atomic gases (28 February 2013).
25. Department of Physics, Wellesley College (Wellesley, MA) Simulating magnetic fields with ultracold atoms (25 February 2013).
24. Department of Physics, Temple University (Philadelphia, PA) Ultracold atomic gases and quantum simulation (22 February 2013).
23. Department of Physics, Brown University (Providence, RI) Using ultracold atoms for quantum simulation (19 February 2013).
22. Department of Physics, California State University, East Bay (Hayward, CA) Using artificial fields for quantum simulation with ultracold atoms (08 February 2013).
21. Department of Physics, Washington University in St. Louis (St. Louis, MO) Quantum simulation with ultracold atoms and artificial fields (04 February 2013).
20. School of Physics, Astronomy and Computational Sciences Colloquium, George Mason University (Fairfax, VA) Exploring atom-light interactions for quantum simulation (31 January 2013).
19. Institute for Quantum Computing Colloquium, University of Waterloo (Waterloo, ON) Quantum simulation and artificial fields with ultracold neutral atoms (24 January 2013).
18. Department of Physics, Florida International University (Miami, FL) Simulating magnetic fields with ultracold atoms (09 January 2013).
17. Department of Physics, Smith College (Northampton, MA) (28 November 2012).

16. Joint Quantum Institute Seminar, University of Maryland (College Park, MD) Measuring the superfluid Hall effect in a Bose-Einstein condensate (09 April 2012).
15. Quantum Optics Seminar, University of Toronto (Toronto, ON) Superfluid Hall effect for a BEC in a synthetic magnetic field (25 March 2012).
14. Frontiers of quantum condensed matter physics: light, matter and unusual devices out of equilibrium workshop, Graduate Centre of the City University, New York (New York, NY) The superfluid Hall effect, and other recent experiments with synthetic fields (07 March 2012).
13. Institute for Quantum Information Science seminar, University of Calgary (Calgary, AB) Measuring the Hall effect for ultracold atoms in a synthetic magnetic field (26 October 2011).
12. Quantum information and BEC seminar, National Institute of Standards and Technology (Gaithersburg, MD) Exploring the Hall effect in a BEC of ^{87}Rb atoms (03 August 2011).
11. Ludwig-Maximilians-Universität München (Munich, Germany) The Hall effect and other consequences of artificial gauge fields among ultracold atoms (30 June 2011).
10. Technische Universität Kaiserslautern (Kaiserslautern, Germany) Studying the Hall effect and other manifestations of artificial gauge fields in ultracold atoms (28 June 2011).
9. Universität Stuttgart (Stuttgart, Germany) Two experiments in the dynamics of ultracold ^{87}Rb : a tunable double well and artificial gauge fields. (27 June 2011).
8. DFG Research Unit - FOR 801 International Workshop, Strong Correlations in Multiflavor Ultracold Quantum Gases, Universität Hamburg Center for Optical Quantum Technologies (Hamburg-Bahrenfeld, Germany) Transport phenomena of ultracold atoms in artificial gauge fields (23 June 2011).
7. Canadian Association of Physicists Congress (St. John's, NL) Using ultracold atoms to study many-body physics (13 June 2011) (DAMOPC Thesis Prize talk).
6. Workshop on Topological Matter, Princeton Center for Theoretical Sciences (Princeton, NJ) Implementing synthetic gauge fields for ultracold atoms (22 April 2011).
5. University of Chicago (Chicago, IL) Population dynamics in a double-well BEC (19 May 2010).
4. National Institute for Standards and Technology (Gaithersburg, MD) Transport dynamics of a ^{87}Rb BEC in a double well potential (11 May 2010).
3. Vienna University of Technology (Vienna, Austria). Schmiedmayer group seminar. Searching for many-body physics on an atom chip. (10 June 2009)
2. Universität Innsbruck (Innsbruck, Austria). Grimm group seminar. Ferromagnetism and ultracold Fermi gases. (28 May 2009)
1. Simon Fraser University (Burnaby, BC), Condensed matter seminar. Understanding many-body phenomena with ultracold bosons and fermions. (15 October 2007)
0. York University (Toronto, ON) Student seminar. Finding Fermi: Progress towards a degenerate Fermi gas. (18 March 2005)

Contributed presentations

12. Canadian Association of Physicists (CAP) Congress (Halifax, NS) Autler-Townes quantum memory for broadband light storage and manipulation (13 June 2018). [Conference presentation]

11. Canadian Association of Physicists (CAP) Congress (Ottawa, ON) Vortex formation in spin-orbit coupled Bose-Einstein condensates (14 June 2016). [Conference presentation]
10. DAMOP Meeting (Madison, WI) Observing artificial-field-driven vortex nucleation in a BEC via bulk response. (04 June 2014)
9. Joint Meeting of Division of Atomic Molecular and Optical Physics (DAMOP) Meeting of the American Physical Society (APS) and Division of Atomic Molecular and Optical Physics, Canada (DAMOPEC) (Québec, QC) A direct measurement of zitterbewegung in a BEC. (04 June 2013)
8. Canadian Association of Physicists (CAP) Congress (Calgary, AB) A superfluid Hall effect measured in a Bose-Einstein condensate. (14 June 2012)
7. Division of Atomic Molecular and Optical Physics (DAMOP) Meeting of the American Physical Society (APS) (Anaheim, CA) Observing a superfluid Hall effect in a Bose-Einstein condensate. (06 June 2012)
6. DAMOP Meeting (Atlanta, GA) Transport dynamics of a ^{87}Rb BEC in an artificial gauge field. (17 June 2011)
5. DAMOP Meeting (Houston, TX) Two-frequency population dynamics in a low-barrier double-well BEC. (28 May 2010)
4. APS March Meeting (Portland, OR) Hydrodynamic to Josephson transition in a double-well BEC. (15 March 2010)
3. DAMOP Meeting (State College, PA) Ferromagnetic coherence in ultracold fermions. (30 May 2008)
2. CAP Congress (Saskatoon, SK) Exploring quantum statistics with ultracold neutral atoms. (19 June 2007)
1. DAMOP Meeting (Calgary, AB) Species-specific optical lattices. (8 June 2007)

Press

3. C. Lee, "Rough-and-ready quantum memory may link disparate quantum systems." (9 November 2018) <https://arstechnica.com/science/2018/11/rough-and-ready-quantum-memory-may-link-disparate-quantum-systems/>
2. C. Griwkowsky, "Cool U of A physicists sought to work with coldest gas" (28 January 2017) Edmonton Journal, pA8. Available at: <http://edmontonjournal.com/news/local-news/cool-physicists-sought-to-work-with-coldest-gas>
1. Physics is beauty, The Globe and Mail (11 June 2009)
Available at: www.theglobeandmail.com/life/physics-is-beauty/article1177308

Teaching experience

- 2013 - present Instructor (University of Alberta)
PHYS 495/595: Quantum Atomic and Optical Physics (2018, 2020)
PHYS 362: Optics and Lasers (2013-2016)
PHYS 292: Experiments in Physics (2015-2017,2018-2020)
- 2004 - 2010 Teaching Assistant (University of Toronto)
ESC101/102 (Praxis Physics Laboratory), PHYS 291 (Quantum Mechanics),
PHYS 205 (The Physics of Everyday Life)

Service activities

National and international service activities

- 2019 - present Member: Research and Development Working Group of the *Quantum Canada* Steering Committee (National committee)
- 2019 Panelist: Women in Physics Canada conference, Diversity panel discussion (Montréal, QC); Canadian Conference for Undergraduate Women in Physics (CCUWiP) “LGBTQ+ Roundtable” (Ottawa, ON); Université de Sherbrooke “Réalités LGBTQ+ en Sciences” (Sherbrooke, QC)
- 2018 - 2020 Local organizing committee, International Conference on Atomic Physics (ICAP) 2020 (to be held in Toronto, ON)
- 2018 - 2019 Local organizing committee, International Conference on Quantum Fluids and Solids (QFS) 2019 (to be held in Edmonton, AB)
- 2018 - present Editorial Board Member, Journal of Physics Communications
- 2015 - 2016 Secretary-Treasurer, Division of Atomic, Molecular, and Optical Physics in Canada (DAMOPC), Canadian Association of Physicists (CAP)
- 2015 Local organizing committee, Canadian Association of Physicists (CAP) Congress 2015
- 2010 - present Referee: Science, Nature, Nature Physics, Nature Communications, Scientific Reports, Physical Review X, Physical Review Letters, Physical Review A, New Journal of Physics, Optics Express, Optics Letters, Physica A, Journal of Physics B; NSERC Discovery Grants, Canada Research Chairs program
- 2008 - present Conference session chair: APS March Meeting, APS DAMOP Meeting, CAP Congress, International Conference on Atomic Physics, Gordon Research Conference

Local service and outreach activities

- 2019 - present USchool volunteer, Leading hands-on presentations (with group members) for school groups visiting the UofA
- 2018 - present Steering Committee Member and “Quantum Computing” Workpackage Leader, Quantum Technologies Major Innovation Fund Project (collaborative project funded by Alberta Economic Development and Trade)
- 2018 General interest talk at “When Worlds Collide: a Festival for Readers and Writers” (Calgary, AB)
- 2015 - 2017 Department of Physics, Condensed Matter Seminar organizer (one of two)
- 2015 - present Department of Physics, Undergraduate Laboratory Committee, member
- 2014 - present Member: Executive Committee of *Quantum Alberta* (quantumalberta.ca)
- 2014 - present Department of Physics, Graduate student recruiting activities (attending undergraduate conference career fairs, CUPC 2014, 2018 and CCUWiP 2018, 2019)
- 2014 - 2016 Co-organizer (one of three) for “Hands-on Physics,” a one-week high-school summer workshop
- 2014 Community outreach: two presentations at “Nerd Nite” events
- 2013 - 2017 Department of Physics, Outreach Committee, member
- 2013 - 2015 Department of Physics, Safety Committee, Faculty representative
- 2013 - 2016 Department of Physics, Graduate Admissions Committee, CMP representative