Spring 2018, '20, '22; Winter '21

CONTACT INFORMATION	Varian Physics Building 382 Via Pueblo Mall Stanford, CA 94305	Tel.: (650) 497-3069 E-mail: schleier@stanford.edu Web: sslab.stanford.edu
EDUCATION	Massachusetts Institute of Technology (Cambridge, Massa Ph.D., Physics  Thesis: Cavity-Enabled Spin Squeezing for a Quantum-E	,
	Harvard University (Cambridge, Massachusetts) A.B., magna cum laude with highest honors in Chemistry and I	2001 - 2005
EMPLOYMENT	Stanford University (Stanford, California) Associate Professor Nina C. Crocker Faculty Scholar in the School of Humanities &	September, 2019 - 2019 - 2022
	Stanford University (Stanford, California) Assistant Professor	September, 2013 - August, 2019
	Max Planck Institute of Quantum Optics & Ludwig Maximilian University (Munich, Germany) Postdoctoral Fellow	June, 2011 - August, 2013
Honors	Benjamin Franklin NextGen Award	2023
& Awards	American Physical Society (APS) Fellowship	2021
	I. I. Rabi Prize in Atomic, Molecular, and Optical Physics	2021
	MacArthur Foundation Fellowship	2020
	President's Early Career Award for Scientists and Engineers (P	ECASE) 2019
	Science News SN10: Scientists to Watch	2019
	National Science Foundation Career Award	2018
	Research Corporation Cottrell Scholar Award	2017
	Hellman Faculty Scholar Award	2015
	Alfred P. Sloan Research Fellowship	2014
	Air Force Office of Scientific Research (AFOSR) Young Investig	gator Award 2014
	Hertz Doctoral Thesis Prize	2011
	Fannie and John Hertz Foundation Fellowship	2005 - 2010
	National Science Foundation Graduate Research Fellowship	2005 - 2010
	Phi Beta Kappa	2005
TEACHING AT STANFORD	Physics 23 (Undergraduate) Electricity, Magnetism, and Optics	Winter '24
	D1	G

Physics 14N (Undergraduate)
Quantum Information: Visions and Emerging Technologies

Applied Physics 203 (Graduate)

Atoms, Fields, and Photons

Autumn 2019-21

Physics 170 (Undergraduate)

Autumn 2015-17

Statistical Mechanics and Thermodynamics

Physics 107 (Undergraduate)

Winter 2014-16

Intermediate Physics Laboratory II: Experimental Techniques and Data Analysis

Physics 190 (Undergraduate)

Autumn 2014 - present

Independent Research and Study

Physics 290 (Graduate)

Autumn 2014

2023 - present

2018

Research Activities at Stanford

Professional Service

# Service to Journals

Reviewer for journals: Physical Review Letters, Physical Review A, Physical Review X, Science, Nature, Nature Physics, Applied Physics Letters, Proceedings of the National Academy of Sciences

Editorial board member: PRX Quantum 2019 - 2023

## Service to Funding Agencies

Department of Energy High Energy Physics Advisory Panel (HEPAP) member 2023 - present

Reviewer for grant agencies: NSF, ARO, AFOSR, DOE, MacArthur Foundation, Austrian Academy of Sciences, Research Corporation, German Research Foundation (DFG)

Panelist for grant agencies: NSF, DOE

## Leadership in the Academic Community

Kavli Institute for Theoretical Physics (KITP) Advisory Board Member

CPAD Instrumentation Workshop for High-Energy Physics,

co-convenor of sessions on quantum sensing

Travil institute for Theoretical Physics (INTT) Travisory Board Member	2020 present
NSF Challenge Institute for Quantum Computing, advisory board member	2020 - present
APS Division of Atomic, Molecular, and Optical Physics (DAMOP), executive committee member	2020 - 2023
Fannie and John Hertz Foundation, early-career board member	2019 - 2022
Conference Organization	
Aspen Summer Program on Programmable Quantum Matter, co-organizer	2022
Virtual AMO Seminar (VAMOS), co-founder and board member	2020 - 2021
Templeton Foundation Symposium on Horizons of Quantum Complexity, co-organize	er 2020
Quantum Gravity in the Lab, organizing committee member	2019
KITP Program on Open Quantum System Dynamics: Quantum Simulators and Simulations Far From Equilibrium, scientific advisor	2019
Aspen Winter Conference on Many-Body Quantum Chaos, co-organizer	2019

Dynamics and Dissipation in Quantum Simulation Workshop, co-organizer	2018
APS DAMOP Meeting, program committee member	2017 - 2019
APS March Meeting, organizer of tutorial on Topological Physics with Cold Atoms	2017
Bay Area Cold Atom Meeting (BACAM), co-founder and co-organizer	2015 - present
Southwest Quantum Information and Technology (SQuInT) steering committee	2015 - present
CLEO QELS subcommittee for Quantum Optics of Atoms, Molecules, and Solids	2014 - 2016
University Service	
Q-FARM (Stanford-SLAC quantum initiative), executive committee member	2019 - present
Academic Council Committee on Research (C-Res), member	2021 - 2022
Faculty Senate, member	2020 - 2022
Stanford Science Fellows, steering committee member	2019 - 2022
Stanford-SLAC Engagement Workgroup (SLEW), member	2021
Stanford Program for Inspiring the Next Generation of Women in Physics, advisor Student-led virtual summer program on coding and physics for high-school girls.	2021-present
Guest Speaker for Simons-NSBP Scholars Program Virtual talk on quantum science in summer research program for undergraduates.	7/2022
Speaker at American Academy of Arts & Sciences (AAAS) Annual Meeting Panel on "Quantum for the People: Connecting Quantum Information Science & Sc	2/2022 Society."
Featured Guest on Sean Carroll's Mindscape Podcast Interview for an episode on "Cold atoms and emergent spacetime."	12/2021
Dear Doctor career panel, Black in Physics Week Virtual panel featuring career advice for Ph.D. students in physics	10/2021
Heinz R. Pagels Public Lecture, Aspen Physics Center Virtual talk on Atoms and Photons: From Fundamental Physics to Quantum Techn	8/2021 nology.
Research Universities Alliance (RUA) Faculty Job Search Bootcamp, panelist Advice on faculty careers for postdocs in math, physical sciences, and engineering.	5/2021
International Science and Engineering Fair (ISEF), panelist Excellence in Science and Technology Panel for high-school students worldwide.	5/2021
National Public Radio Short Wave Podcast, featured guest Interview for an episode entitled "Quantum mechanics for beginners."	10/2020
IBM Qiskit Global Summer School, panelist Virtual panel on careers in quantum computing for 5000 students worldwide.	7/2020
International Science and Engineering Fair (ISEF), panelist Women in STEM Panel attended virtually by high-school students worldwide.	5/2020
Rising Stars in Physics Workshop, chair of organizing committee Two-day career workshop for women postdocs.	4/2019
APS Bridge & National Mentoring Community Conference, speaker	11/2018

OUTREACH

Advice on academic careers and applying to graduate school.

APS Conference for Undergraduate Women in Physics (CUWiP), speaker Research talk targeted to undergraduates.	1/2018
Rising Stars in Physics Workshop at MIT, panelist Career advice to women postdocs and senior graduate students.	11/2016
Stanford Summer Research Program for Teachers, guest presentation Workshop on introducing concepts of quantum mechanics with hands-on optics activities	7/2018
Panelist for Fannie & John Hertz Foundation Summer Workshop Advice to graduate students on pursuing an academic career.	2016
Guest lecturer at Carleton College in a series on "What Physicists Do" Colloquium targeted to undergraduates and meeting with Women in Physics	2016
Guest lecturer in MITRE Corporation Summer Student Program	2013

# Publications & Preprints

E. S. Cooper, P. Kunkel, A. Periwal, and M. Schleier-Smith. "Graph states of atomic ensembles engineered by photon-mediated entanglement," *Nature Physics* (2024). https://doi.org/10.1038/s41567-024-02407-1

Introduced high-school students to topics of forefront research in quantum metrology

- J. A. Hines, S. V. Rajagopal, G. L. Moreau, M. D. Wahrman, N. A. Lewis, O. Markovic, and M. Schleier-Smith. "Spin squeezing by Rydberg dressing in an array of atomic ensembles," *Phys. Rev. Lett.* **131**, 063401 (2023).
- A. Rudelis, B. Hu, J. Sinclair, E. Bytyqi, A. Schwartzman, R. Brenes, T. K. Zhitomirsky, M. Schleier-Smith, and V. Vuletić. "Degradation of  $Ta_2O_5/SiO_2$  dielectric cavity mirrors in ultra-high vacuum," Optics Express 31, 39670–39680 (2023).
- A. Periwal, E. S. Cooper, P. Kunkel, J. F. Wienand, E. J. Davis, and M. Schleier-Smith. "Programmable interactions and emergent geometry in an array of atom clouds," *Nature* **600**, 630-635 (2021).
- G. Anikeeva, O. Markovic, V. Borish, J. A. Hines, S. V. Rajagopal, E. S. Cooper, A. Periwal, A. H. Safavi-Naeini, E. J. Davis, and M. Schleier-Smith. "Number partitioning with Grover's algorithm in central spin systems," *PRX Quantum* **2**, 020319 (2021).
- E. Davis, A. Periwal, E. Cooper, G. Bentsen, S. Evered, K. Van Kirk, and M. Schleier-Smith. "Protecting spin coherence in a tunable Heisenberg model," *Phys. Rev. Lett.* **125**, 060402 (2020).
- V. Borish, O. Marković, J. A. Hines, S. V. Rajagopal, and M. Schleier-Smith. "Transverse-field Ising dynamics in a Rydberg-dressed atomic gas," *Phys. Rev. Lett.* **124**, 063601 (2020).
- G. Bentsen, I.-D. Potirniche, V. B. Bulchandani, T. Scaffidi, X. Cao, X.-L. Qi, M. Schleier-Smith, and E. Altman. "Integrable and chaotic dynamics of spins coupled to an optical cavity," *Phys. Rev.* X 9, 041011 (2019).
- G. Bentsen, T. Hashizume, A. Buyskikh, E. Davis, A. Daley, S. Gubser, and M. Schleier-Smith. "Tree-like interactions and fast scrambling with cold atoms," *Phys. Rev. Lett.* **123**, 130601 (2019). **Featured as** *Editor's Suggestion*.
- E. Davis, G. Bentsen, L. Homeier, T. Li, and M. Schleier-Smith. "Photon-mediated spin-exchange dynamics of spin-1 atoms," *Phys. Rev. Lett.* **122**, 010405 (2019). **Featured as** *Editor's Suggestion*.

- J. Marino, Y. Shchadilova, M. Schleier-Smith, and E. Demler. "Spectrum, Landau-Zener theory and driven-dissipative dynamics of a staircase of photons," *New J. Phys.* **21**, 013009 (2019).
- X. Qi, E. Davis, A. Periwal, and M. Schleier-Smith. "Measuring operator size growth in quantum quench experiments," arXiv:1906.00524[quant-ph].
- E. Davis, Z. Wang, A. Safavi-Naeini, and M. Schleier-Smith. "Painting non-classical states of spin or motion with shaped single photons," *Phys. Rev. Lett.* **121**, 123602 (2018).
- I.-D. Potirniche, A. C. Potter, M. Schleier-Smith, A. Vishwanath, and N. Y. Yao. "Floquet symmetry-protected topological phases in cold atomic systems," *Phys. Rev. Lett.* **119**, 123601 (2017).
- J. Borregaard, E. Davis, G. Bentsen, M. H. Schleier-Smith, and A. S. Sørensen. "One- and two-axis squeezing of atomic ensembles in optical cavities," New J. Phys. 19 093021 (2017).
- B. Swingle, G. Bentsen, M. Schleier-Smith, and P. Hayden. "Measuring the scrambling of quantum information," *Phys. Rev. A* **94**, 040302(R) (2016). **Selected as** *50th Anniversary Milestone*.
- T. Li, L. Duca, M. Reitter, F. Grusdt, E. Demler, M. Endres, M. Schleier-Smith, I. Bloch, and U. Schneider. "Bloch state tomography using Wilson lines," *Science* **352**, 1094 (2016).
- E. Davis, G. Bentsen, and M. Schleier-Smith. "Approaching the Heisenberg limit without single-particle detection," *Phys. Rev. Lett.* **116**, 053601 (2016).
- L. Duca, T. Li, M. Reitter, I. Bloch, M. Schleier-Smith, and U. Schneider. "An Aharonov-Bohm interferometer for determining Bloch band topology," *Science* **347**, 288 (2015). **Featured in** *Perspective:* New SQUID on the Bloch.
- S. K. Baur, M. H. Schleier-Smith, and N. R. Cooper. "Dynamic optical superlattices with topological bands." *Phys. Rev. A* **89**, 051605(R) (2014).
- R. P. McConnell, H. Zhang, S. Ćuk, J. Hu, M. H. Schleier-Smith, and V. Vuletić. "Generating entangled spin states for quantum metrology by single-photon detection." *Phys. Rev. A* 88, 063802 (2013).
- H. Zhang, R. P. McConnell, S. Cuk, Q. Lin, M. H. Schleier-Smith, I. D. Leroux, and V. Vuletić. "Collective state measurement of mesoscopic ensembles with single-atom resolution," *Phys. Rev. Lett.* **109**, 133603 (2012).
- I. D. Leroux, M. H. Schleier-Smith, H. Zhang, and V. Vuletić. "Unitary cavity spin squeezing by quantum erasure," *Phys. Rev. A* **85**, 013803 (2012).
- M. H. Schleier-Smith, I. D. Leroux, H. Zhang, M. A. Van Camp, and V. Vuletić. "Optomechanical cavity cooling of an atomic ensemble," *Phys. Rev. Lett.* **107**, 143005 (2011).
- I. D. Leroux, M. H. Schleier-Smith, and V. Vuletić. "Orientation-dependent entanglement lifetime in a squeezed atomic clock," *Phys. Rev. Lett.* **104**, 250801 (2010). **Featured in** *Physics* **Focus: Atomic Clock Beats the Quantum Limit.**
- I. D. Leroux, M. H. Schleier-Smith, and V. Vuletić. "Implementation of cavity squeezing of a collective atomic spin," *Phys. Rev. Lett.* **104**, 073602 (2010). **Featured as** *Editor's Suggestion***.**
- M. H. Schleier-Smith, I. D. Leroux, and V. Vuletić. "Squeezing the collective spin of a dilute atomic ensemble by cavity feedback," *Phys. Rev. A* 81, 021804(R) (2010).
- M. H. Schleier-Smith, I. D. Leroux, and V. Vuletić. "States of an ensemble of two-level atoms with reduced quantum uncertainty," *Phys. Rev. Lett.* **104**, 073604 (2010).

- M. Schnell, P. Lützow, J. van Veldhoven, H. Bethlem, J. Küpper, B. Friedrich, M. Schleier-Smith, H. Haak, and G. Meijer. "A linear AC trap for polar molecules in their ground state," *J. Phys. Chem. A* 111, 7411-7419 (2007).
- A. N. Kolmogorov, V. H. Crespi, M. H. Schleier-Smith, and J. C. Ellenbogen. "Nanotube-substrate interactions: distinguishing carbon nanotubes by the helical angle," *Phys. Rev. Lett.* **92**, 085503 (2004).
- M. H. Schleier-Smith, L. D. van Buuren, J. M. Doyle, S. N. Dzhosyuk, D. M. Gilliam, C. E. H. Mattoni, D. N. McKinsey, L. Yang, and P. R. Huffman. "The production of nitrogen-13 by neutron capture in boron compounds," *Nucl. Instrum. Meth. B* **215**, 531-536 (2004).

#### INVITED PAPERS

- G. Bentsen, E. Davis, L. Homeier, A. Periwal, E. Cooper, K. van Kirk, and M. Schleier-Smith. "Photon-Mediated Spin Mixing Dynamics," *Proceedings of SPIE* **10934**, 109342P (2019).
- E. Davis, G. Bentsen, T. Li, and M. Schleier-Smith. "Advantages of Interaction-Based Readout for Quantum Sensing," *Proceedings of SPIE* **10118**, 101180Z (2017).
- H. Tanji-Suzuki, Ian D. Leroux, M. H. Schleier-Smith, M. Cetina, A. Grier, J. Simon, and V. Vuletić. "Interaction between Atomic Ensembles and Optical Resonators: Classical Description," *Adv. At. Mol. Opt. Phys.*, **60**, 201 (2011).
- M. H. Schleier-Smith, I. D. Leroux, and V. Vuletić. "Preparation of reduced-quantum-uncertainty input states for an atomic clock," *Proceedings of SPIE* **7431**, 743107 (2009).
- I. D. Leroux, M. H. Schleier-Smith, and V. Vuletić. "Producing squeezed input states for an atomic clock using an optical cavity," Frequency Control Symposium, Joint with the 22nd European Frequency and Time Forum. IEEE International, 220-225 (2009).
- M. H. Schleier-Smith, I. D. Leroux, and V. Vuletić. "Spin squeezing on an atomic-clock transition," *Proceedings of the XXI International Conference on Atomic Physics*, 107 (2008).

#### Invited Commentary

- M. Schleier-Smith. "Perspective: Solving a Puzzle with Atomic Qubits," *Science* **376**, 1155-1156 (2022).
- P. Kunkel and M. Schleier-Smith. "News & Views: Measure in Circles," *Nature Physics* **18**, 124-125 (2022).
- E. Altman *et al.*. "Quantum Simulators: Architectures and Opportunities," *PRX Quantum* 2, 017003 (2021).
- M. Schleier-Smith. "Perspective: Squeezing out higher precision," Science (2019).
- M. Schleier-Smith. "News & Views: Probing information scrambling," Nature Physics (2017).
- M. Schleier-Smith. "Editorial: Hybridizing quantum physics and engineering," editorial in *Phys. Rev. Lett.* **117**, 100001 (2016).
- M. Schleier-Smith and H. Tanji-Suzuki. "Viewpoint: Pure photons for quantum communications," *Physics* 7, 6 (2014).

#### BOOK CHAPTER

V. Vuletić, I. D. Leroux, and M. H. Schleier-Smith. "Microchip-based trapped-atom clocks," in *Atom Chips*, ed. J. Reichel and V. Vuletić, 265-282 (Weinheim, Germany: Wiley-VCH, 2011).

# Patents

V. H. Crespi, A. N. Kolmogorov, J. C. Ellenbogen, and M. H. Schleier-Smith. Directed flow method and system for bulk separation of single-walled tubular fullerenes based on helicity (2008). U.S. Patent 7,347,981.

M. H. Schleier-Smith and J. C. Ellenbogen. The MITRE Corporation. Method for bulk separation of single-walled tubular fullerenes based on chirality (2003). U.S. Patent 6,669,918.

# INVITED PRESENTATIONS

APS March Meeting, Minneapolis, MN	3/2024
$ITAMP\ Workshop:\ Topological\ Phases\ and\ Strong\ Correlations\ in\ Many-Body\ Systems\ Matter\ Hybrids,\ Cambridge,\ MA$	and Light- 11/2023
KITP Conference on Frontiers of Quantum Metrology, Santa Barbara, CA	10/2023
CIFAR Quantum Information Science Program Meeting, Banff, Canada	10/2023
$Gordon\ Conference\ on\ Quantum\ Control\ of\ Light\ and\ Matter,\ {\bf Newport},\ {\bf Rhode\ Island}$	8/2023
It from Qubit Conference, Perimeter Institute, Waterloo, Canada	7/2023
Conference on Lasers and Electro-Optics Europe (CLEO/Europe) & European Quantum Electronics Conference (EQEC), Munich, Germany	7/2023
Gordon Conference on Atomic Physics, Newport, Rhode Island	6/2023
ITAMP Workshop: Frontiers of Interacting Rydberg Atoms II, Cambridge, MA	6/2023
$Simons\ Foundation\ Presidential\ Lecture,\ {\tt New\ York},\ {\tt NY}$	5/2023
$Conference\ on\ Quantum\ Gases,\ Fundamental\ Interactions,\ and\ Cosmology,\ Pisa,\ Italy$	10/2022
$\label{eq:purdue University AMO/QIS Seminar, West Lafayette, IN (virtual)} Purdue \ University \ AMO/QIS \ Seminar, \ West Lafayette, \ IN \ (virtual)$	10/2022
CIFAR Quantum Information Science Program Meeting, Quebec City, Canada	9/2022
Quantum Extreme Universe from Quantum Information, Kyoto, Japan (virtual)	9/2022
International Conference on Atomic Physics, Toronto, Canada	7/2022
Conference on Quantum Systems and Technology, Monte Verità, Ascona, Switzerland	6/2022
Open System Control of Atomic and Photonic Matter, Bad Honnef, Germany	6/2022
University of Wisconsin Physics Colloquium, Madison, WI	4/2022
Princeton Quantum Colloquium, Princeton, NJ	3/2022
University of Maryland Physics Colloquium, College Park, MD	2/2022
SLAC Colloquium, Menlo Park, CA	1/2022
Optical Sciences Winter School, University of Arizona (virtual)	1/2022
Aspen Conference on Many-Body Cavity-QED, Aspen, CO	12/2021
$Quantum\ Engineering:\ Fundamental\ Aspects\ to\ Applications,\ Lyon,\ France\ (virtual)$	11/2021
Virtual AMO Seminar (virtual)	10/2021
CU Boulder Physics Colloquium, Boulder, CO	10/2021
University of Washington Physics Colloquium, Seattle, WA	10/2021
Chilloquium, Harvard Society for Physics Students (virtual)	9/2021
BEC Conference, Sant Feliu, Spain	9/2021
KITP Conference: Transport & Efficient Energy Conversion in Quantum Systems (virt	ual) 9/2021

Munich Center for Quantum Science and Technology (MCQST) Colloquium (virtual)	7/2021
Heraeus Seminar: Collective Effects and Non-Equilibrium Quantum Dynamics (virtual)	6/2021
TASI Summer School: Black Holes, Quantum Information, and Dualities (virtual)	6/2021
I. I. Rabi Prize Lecture, DAMOP Meeting of the American Physical Society (virtual)	6/2021
Perimeter Institute for Theoretical Physics Colloquium (virtual)	5/2021
Howard Schultz Prize Lecture, Yale University (virtual)	5/2021
UC Berkeley Physics Colloquium (virtual)	4/2021
Indiana University Physics Colloquium (virtual)	4/2021
Oklahoma University Physics Colloquium (virtual)	4/2021
Quantum Science Seminar (virtual)	4/2021
U. of Oregon Physics Colloquium (virtual)	2/2021
Royal Society Meeting: New Perspectives on Quantum Many-Body Chaos (virtual)	2/2021
California Institute of Technology Physics Colloquium (virtual)	1/2021
Heraeus Seminar: Exploring Quantum Many-Body Physics with Ultracold Atoms and Molecules (virtual)	12/2020
Workshop on Qubits and Black Holes, Institute for Advanced Study (virtual)	12/2020
Qiskit Quantum Information Science Seminar (virtual)	12/2020
QChaos 2020 Seminar, University of New Mexico (virtual)	11/2020
Princeton University Physics Colloquium (virtual)	11/2020
IOP International Quantum 2020 Conference (virtual)	10/2020
$OSA\ Quantum\ 2.0\ \&\ FiO+LS\ Conferences\ (virtual)$	9/2020
Workshop on Analog Computational Methods, U. of Pittsburgh (virtual)	8/2020
Online School on Ultra Quantum Matter, Perimeter Institute (virtual)	8/2020
Johannes Gutenberg University of Mainz QUANTUM Seminar (virtual)	6/2020
UC Davis Physics Colloquium (Frederica Darema Lecture), Davis, CA	3/2020
Minerva-Genter Symposium on Quantum Simulations, Tze'elim, Israel	2/2020
Israeli Physical Society Meeting, Rehovot, Israel	2/2020
U. of Heidelberg Center for Quantum Dynamics Colloquium, Heidelberg, Germany	1/2020
Cornell University Physics Colloquium (Krumhansl Lecture), Ithaca, NY	11/2019
Quantum Gravity in the Lab, Google X, Mountain View, CA	11/2019
$Laboratoire\ Kastler\ Brossel\ (LKB)\ Seminar,\ Ecole\ Normale\ Sup\'erieure,\ Paris,\ France$	9/2019
Otto Stern Fest, Frankfurt, Germany	9/2019
Quantum Information and Quantum Gravity V, Davis, CA	8/2019
Many Facets of Non-Equilibrium Physics, Mazara del Vallo, Italy	7/2019
Quantum Metrology and Physics Beyond the Standard Model, Hannover, Germany	6/2019
$DAMOP\ Meeting\ of\ the\ American\ Physical\ Society,$ Milwaukee, WI	5/2019
University of Nevada Physics Colloquium, Reno, NV	4/2019

April Meeting of the American Physical Society, Denver, CO	4/2019
March Meeting of the American Physical Society, Boston, MA	3/2019
Harvard Physics Colloquium, Cambridge, MA	2/2019
$Emerging\ Directions\ \mathcal{E}\ Opportunities\ in\ Quantum\ Science,$ Santa Barbara, CA	2/2019
Berkeley Statistical Mechanics Meeting, Berkeley, CA	1/2019
KITP Conference: Chaos and Order, Santa Barbara, CA	12/2018
Dynamics of Open Quantum Systems, Glasgow, UK	10/2018
UIUC Condensed Matter Seminar, Urbana-Champaign, IL	10/2018
$U.S. ext{-}Japan\ Quantum\ Electronics\ and\ Laser\ Spectroscopy},\ Kanazawa,\ Japan$	9/2018
Cambridge University AMOP Seminar, Cambridge, United Kingdom	9/2018
Correlations and Entanglement with Photons in Cavities, Chicheley Hall, U.K.	9/2018
Gordon Conference on Quantum Science, Stonehill, MA	8/2018
Quantum Fluids of Light and Matter, Les Houches, France	6/2018
MIT Physics Colloquium, Cambridge, MA	3/2018
Rice Physics Colloquium, Houston, TX	3/2018
U. of Michigan Physics Colloquium, Ann Arbor, MI	3/2018
Caltech Condensed Matter Physics Seminar, Pasadena, CA	1/2018
University of New Mexico Physics Colloquium, Albuquerque, NM	1/2018
Joint Quantum Institute (JQI) Seminar, College Park, MD	11/2017
ITAMP Workshop on Many-Body Cavity QED, Cambridge, MA	10/2017
Quantum Sensing with Quantum Correlated Systems, Dresden, Germany	9/2017
BEC Conference, Sant Feliu, Spain	9/2017
Physics Next: from Quantum Fields to Condensed Matter, Riverside, NY	8/2017
ICTS Program on Open Quantum Systems, Bangalore, India	7/2017
PRACQSYS, Seattle, WA	7/2017
Frontiers in Emergent Quantum Phenomena, New York, NY	7/2017
APS DAMOP Meeting, Sacramento, CA	6/2017
James Franck Institute Seminar, University of Chicago, IL	4/2017
Frontiers in Quantum Coherent Science, Berkeley, CA	1/2017
KITP Conference on Designer Quantum Systems Out of Equilibrium, Santa Barbara, CA	11/2016
KITP Program on Synthetic Quantum Matter, Santa Barbara, CA	9/2016
ITAMP Workshop on Laboratory Cosmology, Cambridge, MA	9/2016
Dynamics of Open Quantum Systems, Glasgow, Scotland, UK	9/2016
March Meeting of the American Physical Society, Baltimore, MD	3/2016
Gordon Conference on Mechanical Systems in the Quantum Regime, Ventura Beach, CA	3/2016

Fundamental Bounds on Quantum Dynamics, Stanford, CA	10/2015
KITP Conference on Non-Equilibrium Dynamics of Strongly Interacting Photons, Santa Barbara, CA	10/2015
Gordon Conference on Atomic Physics, Newport, RI	6/2015
Heraeus-Seminar on Continuous-Variable Entanglement in Atomic Systems, Bad Honnef, Germany	5/2015
Harvard-MIT Center for Ultracold Atoms, Cambridge, Massachusetts	4/2015
Conference on Non-Equilibrium Quantum Matter, Aspen, Colorado	3/2015
$Southwest\ Quantum\ Information\ Network\ (SQuInT),\ Berkeley,\ California$	2/2015
Heraeus-Seminar on Designed Quantum States of Matter, Bad Honnef, Germany	12/2014
Niels Bohr Institute, University of Copenhagen, Denmark	12/2014
Nano- and Quantum Physics Seminar, University of Basel, Switzerland	12/2013
International Conference on Laser Spectroscopy (ICOLS), Berkeley, California	6/2013
Quantum Optics Seminar, Universität des Saarlandes, Saarbrücken, Germany	3/2013
DAMOP Meeting of the American Physical Society, Orange County, California	6/2012
Molecular Physics Seminar, Fritz Haber Institute of the Max Planck Society, Berlin	5/2012
Laboratoire Kastler Brossel (LKB) Seminar, Ecole Normale Supérieure, Paris	3/2012
$\label{thm:quantum:price} \textit{Quantum Optics of Micro- and Nanomechanical Systems},  \text{Monte Verita, Switzerland}$	7/2011
Young Atom Opticians School, Leibniz-Universität Hannover, Germany	2/2011
Cavity-Mediated Molecular Cooling (CMMC) Meeting, Herrsching, Germany	3/2010