

Andrew N. Jordan

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 (585) 275-2418; jordan@pas.rochester.edu

Education and Training

Texas A & M University, College Station, TX	Physics and Math	BS	1997
University of California, Santa Barbara, CA	Physics	PhD	2002

Research and Professional Experience

2021-present	Co-Director, Institute for Quantum Studies and Professor of Physics, Chapman University, Orange, CA
2021-present	Professor of Physics (Research), Department of Physics and Astronomy, University of Rochester, Rochester NY
2015-2021	Professor of Physics, Department of Physics and Astronomy, University of Rochester, Rochester NY
2012-2015	Associate Professor of Physics with tenure, Department of Physics and Astronomy, University of Rochester, Rochester NY
2006-2012	Assistant Professor of Physics, Department of Physics and Astronomy, University of Rochester, Rochester NY
2005-2006	Research Scientist, Texas A & M University, College Station, TX
2002-2006	Postdoctoral Fellow, University of Geneva, Geneva, Switzerland

Secondary Appointments

2012-2021	Affiliated Scholar, Institute for Quantum Studies, Chapman University, Orange, CA
2015	Visiting Professor, École Polytechnique, Paris, France
2010	Visiting Professor, University of Geneva, Geneva, Switzerland

Select Professional Memberships

American Physical Society (APS)
 The Optical Society (OSA)

Honors and Awards

NSF CAREER award, 2009
 Teaching Award in Physics and Astronomy, 2010
 Simons Fellow in Theoretical Physics, 2017

Select Recent Talks

Invited tutorial: “Quantum Measurement: Recent Developments”, Quantum Frontiers in Molecular Science, Telluride Science virtual Conference series. July 20-24, 2020.
 Invited talk: “Quantum Measurement Powered Engines”, Quarantine Thermo virtual seminar, April 24, 2020.

Plenary talk: “Recent developments in weak value amplification”, Workshop on Quantum Foundations: Measurement & Entanglement at KEK, Tsukuba, Japan, February, 2020.

Plenary talk: “Quantum measurement engines”, Frontiers of quantum and mesoscopic thermodynamics, Prague, Czech Republic, July 2019.

Invited talk: “Supershifts, Superoscillations, and Superresolution”, Superoscillations - Theoretical Aspects and Applications Symposium, Cetraro, Italy, June 2019.

Invited talk: “Spooky work at a distance”, Quantum Limits of Knowledge Conference at the Niels Bohr Institute, Copenhagen, Denmark, June 2019.

Invited talk: “Measuring superconducting qubits: quantum trajectories to quantum sensing”, 20th anniversary of superconducting qubits, Tsukuba, Japan, May 2019.

Invited talk: “Twisting the Quantum: from measurement-induced chaos to measurement-powered engines”, Conference on Quantum Measurement: Fundamentals, Twists, and Applications, ICTP, Trieste, Italy, April 2019.

Invited talk: “Time dependent metrology: improving precision through coherent control”, SPIE conference, San Francisco, CA, February 2019.

Invited talk: “Quantum Caustics and Chaos in Continuously Measured Quantum Systems”, Photonics for Quantum Workshop, RIT, Rochester, NY, January 2019.

Colloquium, “Tracking the state of a measured quantum system in time: Trajectories, optimal paths, and quantum information applications”, École Normale Supérieure Lyon, December 2018.

Invited talk, “Estimating with continuous quantum measurements”, Observability and estimation in quantum dynamics", Institut Henri Poincaré in Paris, France, May 2018.

Invited talk, “Charge and Heat transport in mesoscopic conductors: How to build an engine”, SPICE-Workshop on Quantum Thermodynamics and Transport in Mainz, Germany, May 2018.

Plenary talk, “Strength in weakness: Foundations, trajectories and precision measurements”, Quantum Foundations, Patna, India, December 2017.

Synergistic Activities

1. Co-Editor in Chief of Quantum Studies: Mathematics and Foundations. Editorial board member of Inference: International Review of Science.
2. Journal Referee: Nature, Science, Nature Physics, Physical Review Letters, Physical Review A and B, Journal of Physics A, Europhysics Letters, New Journal of Physics, Research Letters, etc.
3. Guest editor for Journal of the Optical Society of America (JOSA) B, feature issue on “Quantum optical information technologies”, June 2010; Physica E special issue in memory of Markus Büttiker.
4. Conference/Program organizer: Coherence and Quantum Optics 11, Rochester, NY, August 4-8, 2019, OSA Quantum information and measurement III, Berlin, Germany, March 18-20, 2014; Coherence and Quantum Optics X; Rochester, NY, June 17-19, 2013; OSA Quantum information and measurement VI, Paris, France, April 5-7, 2017; KITP Program Thermodynamics of quantum systems: Measurement, engines, and control, Santa Barbara, CA, May 29 – July 20, 2018.
5. High school outreach for the Rochester Scholars Program, teaching a “quantum strangeness” summer course for 20-30 students, July 2010 – present.

Publications

A complete list of publications of 151 items is given below. Total Google Scholar citation number: 6701; h-index: 42 on 8/2/21

Postdocs supervised

Former: Shengshi Pang, Cyril Elouard. Current: Étienne Jussiau, Debmalya Das, Bibek Bhandari.

PhD students supervised

Former: Nathan Williams, Justin Dressel, Yunjin Choi, Areeya Chantasri, Kevin Lyons, Philippe Lewalle, Jing Yang, Sreenath Kizhakkumpurath, Luis Cortez (visiting), Hazrat Ali (visiting).

Current: John Steinmetz, Spencer Rogers, Tathagata Karmakar, Robert Czapryniak, Alok Singh, Abhishek Chakraborty.

Undergraduate research students supervised

Taylor Patti, Ivan Frantz, Zhuoxuan Xie, Kurt Cylke, Sean Karg, Rudolph Mayrhofer.

Teaching Experience

(U= undergraduate, G=graduate)

Spring 2021: Physics 408, Quantum Mechanics II – G

Fall 2020: Physics 407, Quantum Mechanics I – G

Spring 2020: Physics 123, Waves & Modern Physics - U

Fall 2019: Physics 407, Quantum Mechanics I – G

Spring 2019: Physics 418, Statistical Mechanics I – G

Fall 2018: Physics 217, Electricity and Magnetism I – U

Spring 2018: On Sabbatical leave

Fall 2017: On Sabbatical leave

Spring 2017: Physics 418, Statistical Mechanics I – G

Fall 2016: Physics 521, Condensed Matter I - G

Spring 2016: Physics 418, Statistical Mechanics I – G

Fall 2015: Physics 519, Statistical Mechanics II - G

Spring 2015: Physics 522, Condensed Matter II – G

Fall 2014: Physics 113, General Physics I - U

Spring 2014: Physics 237, Quantum Mechanics of Physical Systems – U

Fall 2013: Physics 103, Physics of Music - U

Spring 2013: Physics 237, Quantum Mechanics of Physical Systems – U

Fall 2012: Physics 103, Physics of Music - U

Spring 2012: Physics 522, Condensed Matter II – G

Fall 2011: Physics 113, General physics - U

Spring 2011: Physics 121, Mechanics - U

Fall 2010: On junior faculty leave

Spring 2010: Physics 418, Statistical Mechanics I – G

Fall 2009: Physics 227, Thermodynamics and Statistical Mechanics - U

Spring 2009: Physics 418, Statistical Mechanics I – G

Fall 2008: Physics P411, Mechanics and Chaotic Dynamics - G

Spring 2008: Physics 418, Statistical Mechanics I – G

Fall 2007: Physics 113, General physics - U

Spring 2007: Physics 121, Mechanics - U

Fall 2006: Off teaching – first semester

Current, Past and Pending Research Support

Current:

Thermodynamics of Quantum Information: Engines, Measurements, and Entropy (PI)

Source of Support: John Templeton Foundation

Award Amount: \$1,000,000

Period Covered: 9/1/20 – 8/31/23

Solid State Quantum Refrigeration Superconducting, Absorption and Measurement Based (PI)

Source of Support: DOE

Award Amount (or Annual Rate:) \$385,000

Period Covered: 06/01/2020 - 05/31/2023

QII-TAQS Quantum enhanced Telescoping (co-PI) (Sub / UIUC)

Source of Support: NSF

Award Amount (or Annual Rate:) \$264,000

Period Covered: 09/01/2019 – 08/31/2023

Implementation of novel benchmarking and error management protocols in planar transmon processors (co-PI) (Sub/UC Berkeley)

Source of Support: ARO

Award Amount (or Annual Rate:) \$377,963

Period Covered: 07/01/2018 - 6/30/2022

Quantum Control, Chaos, and Measurement with Superconducting Circuits (PI)

Source of Support: NSF

Award Amount (or Annual Rate:) \$330,000

Period Covered: 09/01/2018 - 08/31/2021

Past:

Thermoelectric Energy Harvesting and Heat Management with Quantum Heterostructures (PI)

Source of Support: DOE

Award Amount (or Annual Rate:) \$385,000

Period Covered: 09/01/2017 - 07/31/2020

Continuous Quantum Measurements with Superconducting Circuits: Most Likely Paths and Optimal Control (PI)

Source of Support: NSF

Award Amount (or Annual Rate:) \$300,000

Period Covered: 09/01/2015 - 08/31/2019

Continuous Quantum State Tracking and Error Correction (co-PI) (Sub/UC Berkeley)

Source of Support: ARO

Award Amount (or Annual Rate:) \$1,216,239

Period Covered: 07/01/2015 - 08/24/2019

Structure of Time in Quantum Mechanics (co-PI) (Sub/Washington Univ. St. Louis)

Source of Support: Templeton Foundation

Award Amount (or Annual Rate:) \$200,134

Period Covered: 12/01/2015 - 08/31/2018

Advanced Quantum Sensing (co-PI) (Sub/UIUC)

Source of Support: ARO

Award Amount (or Annual Rate:) \$183,000

Period Covered: 10/01/2013 - 12/31/2017

Quantum Physics of Measurement and Control and the Role of Time Symmetry (PI)

Source of Support: Simons Foundation

Award Amount (or Annual Rate:) \$150,000

Period Covered: 07/01/2017 - 06/30/2018

Weak values and quantum amplification: Beyond the standard shot noise limit (co-PI) (Sub/UIUC)

Period Covered: 08/12/2009 to 07/12/2013

Source of Support: DOD, ARO

Award Amount (or Annual Rate:): \$450,000

Period Covered: 08/12/2009 - 07/12/2013

CAREER: Theory of Feedback and Entanglement with Continuous Quantum Measurement in the Solid State (PI)

Source of Support: NSF

Award Amount (or Annual Rate:) \$425,000

Period Covered: 07/01/2009 - 06/30/2014

Publication List

2021

151

Efficiently Fuelling a Quantum Engine with Incompatible Measurements

Sreenath K. Manikandan, Cyril Elouard, Kater W. Murch, Alexia Auffèves, Andrew N. Jordan

[arXiv:2107.13234](#)

150

Experimental demonstration of continuous quantum error correction

William P. Livingston, Machiel S. Blok, Emmanuel Flurin, Justin Dressel, Andrew N. Jordan, Irfan Siddiqi

[arXiv:2107.11398](#)

149

Minimal two-body quantum absorption refrigerator

Bibek Bhandari, Andrew N. Jordan

[arXiv:2105.05835](#)

148

Continuous measurement of a qudit using dispersively coupled radiation

John Steinmetz, Debmalya Das, Irfan Siddiqi, Andrew N. Jordan

[arXiv:2105.00808](#)

147

[Phys. Rev. Lett. 126, 220801 – Published 1 June 2021](#)

Enhanced weak-value amplification via photon recycling

Courtney Krafczyk, Andrew N. Jordan, Michael E. Goggin, Paul G. Kwiat

[arXiv:2104.14393](#)

146

Hamiltonian estimation in the Kitaev chain with tunable long-range interactions

Jing Yang, Shengshi Pang, Andrew N. Jordan

[arXiv:2104.07120](#)

145

Enhanced on-chip frequency measurement using weak value amplification
John Steinmetz, Kevin Lyons, Meiting Song, Jaime Cardenas, Andrew N. Jordan
[arXiv:2103.15752](#)

144
Quantum measurement arrow of time and fluctuation relations for measuring spin of ultracold atoms
Maitreyi Jayaseelan, Sreenath K. Manikandan, Andrew N. Jordan & Nicholas P. Bigelow
[Nature Communications](#) **12**, 1847 (2021)

143
Stochastic Path Integral Analysis of the Continuously Monitored Quantum Harmonic Oscillator
Tathagata Karmakar, Philippe Lewalle, Andrew N. Jordan
[arXiv:2103.06111](#)

142
[Phys. Rev. B](#) **104**, 045414 – Published 16 July 2021
Thermal control across a chain of electronic nanocavities
Étienne Jussiau, Sreenath K. Manikandan, Bibek Bhandari, Andrew N. Jordan
[arXiv:2103.05831](#)

141
Superresolution of partially coherent light sources using parity sorting
S. A. Wadood, Yiyu Zhou, Jing Yang, Kevin Liang, M. A. Alonso, X.-F. Qian, T. Malhotra, S.M. Hashemi Rafsanjani, Andrew N. Jordan, Robert W. Boyd, A. N. Vamivakas
[arXiv:2102.01603](#)

140
[Opt. Express](#) **29**, 11784-11792 (2021)
Confocal super-resolution microscopy based on a spatial mode sorter
Katherine Bearne, Yiyu Zhou, Boris Braverman, Jing Yang, S. A. Wadood, Andrew N. Jordan, A. N. Vamivakas, Zhimin Shi, Robert W. Boyd
[arXiv:2101.03649](#)

2020

139
[Phys. Rev. B](#) **103**, 075404 – Published 2 February 2021
Stochastic Thermodynamic Cycles of a Mesoscopic Thermoelectric Engine
R David Mayrhofer, Cyril Elouard, Janine Splettstoesser, Andrew N Jordan
[arXiv:2010.06853](#)

138
[Phys. Rev. B](#) **102**, 235427 – Published 21 December 2020
Autonomous quantum absorption refrigerators

Sreenath K. Manikandan, Étienne Jussiau, Andrew N. Jordan
[arXiv:2010.06024](#)

137

[Quantum 5, 498 \(2021\)](#)

Quantum erasing the memory of Wigner's friend

Cyril Elouard, Philippe Lewalle, Sreenath K. Manikandan, Spencer Rogers, Adam Frank,
Andrew N. Jordan

[arXiv:2009.09905](#)

136

Systems and Methods for Superconducting Quantum Refrigeration

Patent application number: 16/593,781

Filed on October 9, 2019

135

[Phys. Rev. B **103**, 085402 – Published 1 February 2021](#)

Quantum system dynamics with a weakly nonlinear Josephson junction bath

Jing Yang, Étienne Jussiau, Cyril Elouard, Karyn Le Hur, Andrew N. Jordan

[arXiv:2008.08052](#)

134

[Phys. Rev. D **102**, 064028 – Published 10 September 2020](#)

Black holes as Andreev reflecting mirrors

Sreenath K. Manikandan, Andrew N. Jordan

[arXiv:2007.09467](#)

133

[Phys. Rev. Lett. **126**, 120605 – Published 24 March 2021](#) (editor's suggestion)

A two-qubit engine fueled by entangling operations and local measurements

Léa Bresque, Patrice A. Camati, Spencer Rogers, Kater Murch, Andrew N. Jordan, Alexia
Auffèves

[arXiv:2007.03239](#)

132

[Annals of Physics, **421**, 168289 \(2020\)](#)

Nonequilibrium Steady State and Heat Transport in Nonlinear Open Quantum Systems:

Stochastic Influence Action and Functional Perturbative Analysis

Jing Yang, Jen-Tsung Hsiang, Andrew N. Jordan, B. L. Hu

[arXiv:2006.14024](#)

131

[Phys. Rev. A **102**, 062219 – Published 28 December 2020](#)

Entanglement-Preserving Limit Cycles from Sequential Quantum Measurements and Feedback

Philippe Lewalle, Cyril Elouard, Andrew N. Jordan
[arXiv:2003.02952](#)

130

[Phys. Rev. E **102**, 030102\(R\) – Published 18 September 2020](#)

A quantum heat switch based on a driven qubit

Cyril Elouard, George Thomas, Olivier Maillet, Jukka P. Pekola, Andrew N. Jordan

[arXiv:2001.10367](#)

129

Quantum Stud.: Math. Found. **7**, 341–346 (2020).

[doi:10.1007/s40509-019-00218-1](#)

Energy-based weak measurement

Waegell, M., Elouard, C. & Jordan, A.N.

[arXiv:1912.11937](#)

2019

128

High Temperature Superconductivity

Andrew Jordan

[Inference, Vol. 5, No. 1 \(2019\)](#) - Experiment Reviews

127

Some Like It Hot

Andrew Jordan and Sreenath Manikandan, *reply by* John Norton

In response to “[A Hot Mess](#)” (Vol. 4, No. 4).

[Inference, Vol. 5, No. 1 \(2019\)](#) - Letter to the Editor

126

Superresolution using supergrowth and intensity contrast imaging

Andrew N. Jordan

Quantum Stud.: Math. Found. **7**, 285–292 (2020).

<https://doi.org/10.1007/s40509-019-00214-5>

125

Method for Scanning an Object Using a Gravimeter

Andrew N. JORDAN, John C. Howell

[US Patent 20190196053A1](#)

124

Quantum Stud.: Math. Found. **7**, 203–215 (2020)

<https://doi.org/10.1007/s40509-019-00217-2>

Quantum measurement engines and their relevance for quantum interpretations

Andrew N. Jordan, Cyril Elouard, Alexia Auffèves

[arXiv:1911.06838](https://arxiv.org/abs/1911.06838)

123

Diffusive entanglement generation by continuous homodyne monitoring of spontaneous emission

Philippe Lewalle, Cyril Elouard, Sreenath K. Manikandan, Xiao-Feng Qian, Joseph H. Eberly,

Andrew N. Jordan

[arXiv:1910.01204](https://arxiv.org/abs/1910.01204)

122

Entanglement of a pair of quantum emitters under continuous fluorescence measurements

Philippe Lewalle, Cyril Elouard, Sreenath K. Manikandan, Xiao-Feng Qian, Joseph H. Eberly,

Andrew N. Jordan

[arXiv:1910.01206](https://arxiv.org/abs/1910.01206)

121

Precision frequency measurement on a chip using weak value amplification

John Steinmetz, Kevin Lyons, Meiting Song, Jaime Cardenas, Andrew N. Jordan

[SPIE Proceedings Volume 11134, Quantum Communications and Quantum Imaging XVII; 111340S](#)
(2019)

<https://doi.org/10.1117/12.2529564>

120

[Nature Communications 11, 3022 \(2020\).](#)

<https://doi.org/10.1038/s41467-020-16745-0>

Conditional Teleportation of Quantum-Dot Spin States

Haifeng Qiao, Yadav P. Kandel, Sreenath K. Manikandan, Andrew N. Jordan, Saeed Fallahi,

Geoffrey C. Gardner, Michael J. Manfra, John M. Nichol

[arXiv:1908.08306](https://arxiv.org/abs/1908.08306)

119

[Contemporary Physics, 61:1, 26-50 \(2020\)](#)

DOI: [10.1080/00107514.2020.1747201](https://doi.org/10.1080/00107514.2020.1747201)

Measuring Fluorescence to Track a Quantum Emitter's State: A Theory Review

Philippe Lewalle, Sreenath K. Manikandan, Cyril Elouard, Andrew N. Jordan

[arXiv:1908.04720](https://arxiv.org/abs/1908.04720)

118

[Quantum 4, 358 \(2020\)](#)

Always-On Quantum Error Tracking with Continuous Parity Measurements

Razieh Mohseninia, Jing Yang, Irfan Siddiqi, Andrew N. Jordan, Justin Dressel

[arXiv:1907.08882](https://arxiv.org/abs/1907.08882)

117

Quantum Stud.: Math. Found. 7, 145–153 (2019).

<https://doi.org/10.1007/s40509-019-00205-6>

Diffraction-Based Interaction-Free Measurements

Spencer Rogers, Yakir Aharonov, Cyril Elouard, Andrew N. Jordan
[arXiv:1907.05977](#)

116

[Foundations of Physics 50, 1294–1314 \(2020\)](#)
[DOI:10.1007/s10701-020-00381-1](#)

Spooky Work at a Distance: an Interaction-Free Quantum Measurement-Driven Engine
Cyril Elouard, Mordecai Waegell, Benjamin Huard, Andrew N. Jordan
[arXiv:1904.09289](#)

115

Time dependent metrology: improving precision through coherent control
[Andrew N. Jordan](#)
Proc. SPIE 10933, Advances in Photonics of Quantum Computing, Memory, and Communication XII, 1093306 (4 March 2019);
[doi: 10.1117/12.2514947](#)

114

[Phys. Rev. B 100, 045418 – Published 24 July 2019](#)
Thermal transistor and thermometer based on Coulomb-coupled conductors
Jing Yang, Cyril Elouard, Janine Splettstoesser, Björn Sothmann, Rafael Sánchez, Andrew N. Jordan
[arXiv:1903.11167](#)

113

[Phys. Rev. Applied 11, 054034 – Published 13 May 2019](#)
Superconducting quantum refrigerator: Breaking and rejoining Cooper pairs with magnetic field cycles
Sreenath K. Manikandan, Francesco Giazotto, Andrew N. Jordan
[arXiv:1902.00063](#)

112

[Phys. Rev. Lett. 123, 117701 – Published 9 September 2019](#)
Experimental realization of a quantum dot energy harvester
G. Jaliel, R.K. Puddy, R. Sanchez, A.N. Jordan, B. Sothmann, H. Beere, J.P. Griffiths, D.A. Ritchie, C.G. Smith
[arXiv:1901.10561](#)

2018

111

[Phys. Rev. D 98, 124043 – Published 28 December 2018](#)
Bosons falling into a black hole: A superfluid analogue
Sreenath K. Manikandan, Andrew N. Jordan
[arXiv:1811.03209](#)

110

[Optica 6, 534-541 \(2019\)](#)

Quantum-limited estimation of the axial separation of two incoherent point sources
Yiyu Zhou, Jing Yang, Jeremy D. Hassett, Seyed Mohammad Hashemi Rafsanjani, Mohammad Mirhosseini, A. Nick Vamivakas, Andrew N. Jordan, Zhimin Shi, Robert W. Boyd
[arXiv:1810.01027](#)

109

Quantum Stud.: Math. Found. (2019) 6: 169. <https://doi.org/10.1007/s40509-018-0175-9>

Gravitational sensing with weak value based optical sensors
Andrew N. Jordan, Philippe Lewalle, Jeff Tollaksen, John C. Howell
[arXiv:1808.00371](#)

108

[Phys. Rev. A 99, 022117 \(2019\)](#)

Fluctuation Theorems for Continuous Quantum Measurement and Absolute Irreversibility
Sreenath K. Manikandan, Cyril Elouard, Andrew N. Jordan
[arXiv:1807.05575](#)

107

[Phys. Rev. A 100, 032104 – Published 3 September 2019](#)

Optimal measurements for quantum multi-parameter estimation with general states
Jing Yang, Shengshi Pang, Yiyu Zhou, Andrew N. Jordan
[arXiv:1806.07337](#)

106

[Inference: International Review of Science 4, 1](#)

Woit's Way, Book review of "Quantum Theory, Groups and Representations" by Peter Woit
Andrew Jordan

105

Quantum Stud.: Math. Found. (2019). <https://doi.org/10.1007/s40509-019-00198-2>

Quantum state tomography with time-continuous measurements: reconstruction with resource limitations
Areeya Chantasri, Shengshi Pang, Teerawat Chalermputitarak, Andrew N. Jordan
[arXiv:1805.11807](#)

104

[Phys. Rev. A 98, 012141 – Published 31 July 2018](#)

Chaos in Continuously Monitored Quantum Systems: An Optimal Path Approach
Philippe Lewalle, John Steinmetz, Andrew N. Jordan
[arXiv:1803.07615](#)

103

Quantum Stud.: Math. Found. (2019) 6: 241. <https://doi.org/10.1007/s40509-019-00182-w>

Time reversal symmetry of generalized quantum measurements with past and future boundary conditions
Sreenath K. Manikandan, Andrew N. Jordan
[arXiv:1801.04364](#)

102

[Phys. Rev. Lett. **120**, 260601 – Published 27 June 2018](#)

Efficient Quantum Measurement Engines

Cyril Elouard, Andrew N. Jordan

[arXiv:1801.03979](#)

101

Abrupt transitions between Markovian and non-Markovian dynamics in open quantum systems

Shengshi Pang, Todd A. Brun, Andrew N. Jordan

[arXiv:1712.10109](#)

2017

100

[Phys. Rev. D **96**, 124011 \(2017\)](#)

Andreev reflections and the quantum physics of black holes

Sreenath K. Manikandan, Andrew N. Jordan

[arXiv:1709.06154](#)

99

[Inference, Vol. 3, Issue 2, Book Review](#)

Odd Man Out

Andrew Jordan

98

[Quantum Studies: Mathematics and Foundations](#) (2018) 5: 579. <https://doi.org/10.1007/s40509-017-0145-7>

Noise suppression in inverse weak value based phase detection

Kevin Lyons, John C. Howell, and Andrew N. Jordan

[arXiv:1707.03122](#)

97

[Phys. Rev. A **97**, 012118 \(2018\)](#)

Simultaneous continuous measurement of non-commuting observables: quantum state correlations

Areeya Chantasri, Juan Atalaya, Shay Hacoheh-Gourgy, Leigh S. Martin, Irfan Siddiqi, Andrew N. Jordan

[arXiv:1706.09670](#)

96

[Phys. Rev. Lett. **119**, 180801 \(2017\)](#)

Achieving optimal quantum acceleration of frequency estimation using adaptive coherent control

M. Naghiloo, A. N. Jordan, K. W. Murch

[arXiv:1706.05649](#)

95

[AIP Conference Proceedings 1841, 020003 \(2017\)](#)

Janus sequences of quantum measurements and the arrow of time

Andrew N. Jordan, Areeya Chantasri, Kater Murch, Justin Dressel, and Alexander N. Korotkov

94

[Science 356, 802 \(2017\)](#)

Classical-quantum sensors keep better time

Andrew N. Jordan

93

[Phys. Rev. A 96, 022311 \(2017\)](#)

Linear feedback stabilization of a dispersively monitored qubit

Taylor Lee Patti, Areeya Chantasri, Luis Pedro García-Pintos, Andrew N. Jordan, Justin Dressel

[arXiv:1705.03878](#)

92

[Phys. Rev. A 96, 052128 \(2017\)](#)

Weak-value amplification and optimal parameter estimation in the presence of correlated noise

Josiah Sinclair, Matin Hallaji, Aephraim M. Steinberg, Jeff Tollaksen, Andrew N. Jordan

[arXiv:1703.01496](#)

91

[Phys. Rev. A 95, 042126 \(2017\)](#)

Prediction and Characterization of Multiple Extremal Paths in Continuously Monitored Qubits

Philippe Lewalle, Areeya Chantasri, Andrew N. Jordan

[arXiv:1612.07861](#)

2016

90

[Phys. Rev. A 96, 053807 \(2017\)](#)

Quantum caustics in resonance fluorescence trajectories

M. Naghiloo, D. Tan, P. M. Harrington, P. Lewalle A. N. Jordan, K. W. Murch

[arXiv:1612.03189](#)

89

[Phys. Rev. A 96, 020301\(R\) \(2017\)](#)

Quantum parameter estimation with the Landau-Zener transition

Jing Yang, Shengshi Pang, Andrew N. Jordan

[arXiv:1612.02390](#)

88

[Phys. Rev. Lett. 119, 220507 \(2017\)](#)

Arrow of Time for Continuous Quantum Measurement

Justin Dressel, Areeya Chantasri, Andrew N. Jordan, Alexander N. Korotkov

[arXiv:1610.03818](#)

87

[Physics 9, 104 \(2016\)](#)

Viewpoint: Mapping Out the State of a Quantum System

Andrew N. Jordan

86

[Physica E, Vol.82:1–2 \(2016\)](#)

In memoriam: Markus Büttiker (1950 - 2013)

Carlo Beenakker, Philippe Jacquod, Andrew Jordan, Peter Samuelsson

[arXiv:1606.05667](#)

85

[Nature Communications 8, 14695 \(2017\)](#)

Quantum metrology with time-dependent Hamiltonians

Shengshi Pang, Andrew N. Jordan

[arXiv:1606.02166](#)

84

[Phys. Rev. A 95, 012314 \(2017\)](#)

Rapid estimation of drifting parameters in continuously measured quantum systems

Luis Cortez, Areeya Chantasri, Luis Pedro García-Pintos, Justin Dressel, Andrew N. Jordan

[arXiv:1606.01407](#)

83

[Phys. Rev. A 94, 012329 \(2016\)](#)

Protecting weak measurements against systematic errors

Shengshi Pang, Jose Raul Gonzalez Alonso, Todd A. Brun, Andrew N. Jordan

[arXiv:1605.09040](#)

82

[Phys. Rev. A 93, 043841 \(2016\)](#)

Precision optical displacement measurements using biphotons

Kevin Lyons, Shengshi Pang, Paul G. Kwiat, and Andrew N. Jordan

[arXiv:1604.06856](#)

81

[Phys. Rev. X 6, 041052 \(2016\)](#)

Quantum trajectories and their statistics for remotely entangled quantum bits

Areeya Chantasri, Mollie E. Kimchi-Schwartz, Nicolas Roch, Irfan Siddiqi, Andrew N. Jordan

[arXiv:1603.09623](#)

80

[Quantum Stud.: Math. Found. \(2016\) 3: 237](#)

Anatomy of Fluorescence: Quantum trajectory statistics from continuously measuring spontaneous emission

Andrew N. Jordan, Areeya Chantasri, Pierre Rouchon, Benjamin Huard

[arXiv:1511.06677](#)

2015

79

[Quantum Stud.: Math. Found. \(2016\) 3: 1](#)

Weak values are quantum: you can bet on it

Alessandro Romito, Andrew N. Jordan, Yakir Aharonov, Yuval Gefen

[arXiv:1508.06304](#)

78

[Physica E 74, 465 \(2015\)](#)

Three-terminal heat engine and refrigerator based on superlattices

Yunjin Choi and Andrew N. Jordan

[arXiv:1508.03060](#)

77

[Phys. Rev. A 92, 032125 \(2015\)](#)

Stochastic path integral formalism for continuous quantum measurement

Areeya Chantasri, Andrew N. Jordan

[arXiv:1507.07016](#)

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