CURRICULUM VITAE

Jens Eisert
Professor of Theoretical Physics

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PERSONAL DETAILS

- **Date of birth:** 9th of October 1970
- **Nationalities:** German and Swedish
- **Marital status:** Married, one child

ACADEMIC APPOINTMENTS

05/11-	**Full professor**, Dahlem Center for Complex Quantum Systems, **Freie Universität Berlin**
08/19-	**Group leader**, Quantum Computing and Simulation, **Helmholtz Center Berlin**
10/09-09/10	**Fellow** at the **Institute for Advanced Study Berlin** (Wissenschaftskolleg)
05/08-04/11	**Full professor**, **University of Potsdam**
03/05-5/08	**Lecturer** (permanent), Institute for Mathematical Sciences, **Imperial College London**
12/02-03/05	**Junior professor**, Quantum Optics and Quantum Information, **University of Potsdam**
12/02-01/03	**Visiting scholar**, IQI, **California Institute of Technology**
07/01-11/02	**Feodor Lynen Fellow** in QOLS, **Imperial College London**
02/01-07/01	**Postdoctoral researcher** in QOLS, **Imperial College London**, supported by the EU

RESEARCH

Research interests: Quantum many-body theory, quantum information theory

- Complex quantum systems
- Quantum computing and simulation
- Quantum many-body theory
- Quantum information theory
- Quantum systems identification

Research talks:

- >**250 invited talks** at workshops, conferences, and in colloquia

Publications:

- **270** scientific publications, of which
- **76** published in **Phys. Rev. Lett.** or **Phys. Rev. X**
- **17** published in the **Nature** and **Science** groups
- **13** in **Quantum** and **SciPost Physics**
- **4** in the **Commun. Math. Phys.**

Citations:

- **16.717 citations** according to Web of Science (WoS)
- **29.012 citations** according to Google Scholar (GS)
- **h-index 81** (GS)
- **h-index 61** (WoS)

AWARDS AND PRIZES

- **Google NISQ Award** of Google AI, 2019
- **ERC Award** of the European Research Council, 2012
- **Institute for Advanced Study Berlin** Fellow, 2010-2011
- **European Research Young Investigator** (EURYI) Award, 2004
- **Feodor Lynen** Scholarship of the **Alexander von Humboldt Foundation**, 2001
- **Michelson Prize**, 1998
- **Sigma Pi Sigma Honour Society Award**, 1995
- **J. W. Fulbright** Scholarship, 1994

PHD

04/98-01/01 **PhD, University of Potsdam**, thesis advisor M. Wilkens,
"Entanglement in Quantum Information Theory"
Final grade: **Summa cum laude**

EDUCATION

95-98, 91-94 **Albert Ludwigs University Freiburg**, studies in physics
Degree: **Diploma in Physics**
Final grade: **Very good**
Topic of dissertation: *"Quantum Brownian Motion: A Quantum Monte Carlo Approach"*

94–95	**University of Connecticut**, as a J. W. Fulbright Fellow, Postgraduate studies in mathematics and physics Degree: **Master of Science**, GPA: **3.88** (4.0) Scientific work in applied mathematics/numerical analysis
81–90	**Wilhelm-von-Humboldt**-High-School, Ludwigshafen Degree: **Abitur**, average mark: **1.0** (1.0)

EDITORIAL BOARD MEMBERSHIPS AND SERVICES TO THE COMMUNITY

- **Agenda on quantum computing of the German government**, coauthor with I. Bloch and T. Calarco, 2020
- **EU's Strategic Research Agenda** on quantum technologies, coauthor, 2019
- **Physical Review Letters**, divisional editor, 2017-2020
- **EU road map for quantum information science**, lead author of the quantum simulations section, 2016
- **Quantum**, advisory board member, 2016-
- **QUTEGA steering committee** planning the German implementation of the *EU Flagship for Quantum Technologies*, member, 2016
- **Quantum Science and Technologies**, editor, 2016-
- **Quantum Information and Computation**, editor, 2011-
- **Physical Review A**, divisional editor, 2008-2010
- **Journal of Physics A**, 2012-2016
- **Quantum Information Processing**, 2012-2016
- **2010 EU road map for quantum information science**, coauthor and lead theory editor, 2010

ORGANISATIONAL SKILLS

- **Einstein Research Unit**, Perspectives of a quantum digital transformation: Near-term quantum computational devices and quantum processors on near-term quantum computing, project coordinator of an anticipated project within the Berlin University Alliance of the German Excellence Initiative, involving 19 PIs, October 2021-
- **FOR 2724**, project leader of a DFG Research Unit on quantum thermodynamics, January 2019-
- **TQC2016**, head organizer, major conference on quantum information, September 2016
- **Subproject leader** in EU projects QAP and QESSENCE
- **COST Action MP1209** "Thermodynamics in the Quantum Regime", co-author and working group leader, 2012
- **COST-conference**, first COST conference on quantum thermodynamics held in Potsdam, January 2014
- **QQQ-Meeting**, regular meeting in the Berlin-Potsdam academic landscape on quantum information, quantum optics, and quantum many-body theory (organizer and co-founder), 2015-2011
- **Summer adademy of the Studienstiftung des deutschen Volkes, Görlitz 2008**, course on quantum information theory, jointly with A. Rauschenbeutel, August 2008
- **PAQ07, head of local organizing committee**, major international conference on quantum optics and quantum information, Royal Society London, September 2007
- **Summer academy of the Studienstiftung des deutschen Volkes, Rot an der Rot 2004**, course on quantum information theory, jointly with R. F. Werner, August 2004
- **Member of many conference scientific boards**
- **IQING 2002**, organizer of an international conference for PhD students and postdocs on quantum information science in theory and experiment
- **IQING 2001**, jointly with C. Simon (Oxford) and D. Jonathan (Cambridge), 2001
- **YAO '99 – Young Atom Opticians**, jointly with T. Felbinger and C. Henkel (Potsdam), 1999
- **A2-Consortium For Quantum Information**, 1998 – 2001, 2003

GROUP LEADING SKILLS AND SUPPORT OF YOUNG SCIENTISTS

- **Diploma and MSc supervision:** J. Anders, B. Bach, I. Benthin, H. Bernigau, P. Fährmann, A. Friedenauer, M. Friesdorf, M. Gluza, M. Goihl, D. Gross, D. Hangleiter, M. von Hase, M. Herold, J. Hoersch, A. Kegeles, S. Lahs, J. Lekscha, B. Lu, J. J. Meyer, A. Nietner, C. Prunkl, S. Qasim, S. Rosset, A. Steffens, A. Studt, L. Trotta, C. Verheuven, F. Wilde, H. Wilming, J. Wilkens

- **PhD supervision:** A. Bauer, P. Boes, J. Conrad, M. Cramer, P. Fährmann, M. Friesdorf, J. C. M. de la Fuente, J. Gertis, M. Gluza, M. Goihl, C. Gogolin, D. Gross, F. Hahn, J. Haferkamp, D. Hangleiter, A. Jahn, M. Kesselring, K. Kieling, M. Kliesch, C. Krumnow, A. Mari, J. Meyer, A. Nietner, M. Ohliger, E. Onorati, I. Roth, A. Serafini (long term visitor), A. Steffens, F. Wilde, C. Wille, H. Wilming, A. Wilms, F. G. S. L. Brandao (with M. B. Plenio), A. Feito (co-supervised)
- **Postdoctoral researchers:** T. Barthel, N. de Beaudrap, J. Bermejo-Vega, O. Buerschaper, E. T. Campbell, M. Cramer, C. Dawson, P. Faist, R. Gallego, D. Gross, R. Hübener, P. Hyllus, R. Küng, V. Lahtinen, M. Müller, A. Nagy, V. Nesme, F. Pastawski, C. Pineda, A. Riera, C. Riofrio, J. Roffe, R. Sweke, N. Tarantino, A. H. Werner, D. Yang, Z. Zimboras, K. Pregnell (co-supervised)
- **Host of Humboldt-Bessel-award winners:** M. Aspelmeyer, T. Prosen
- **Host of Humboldt and Marie-Curie stipends:** F. Arzani, L. Aolita, R. DiCandia, R. Gallego, F. Pastawski, M. J. Kastoryano, R. Laurenza, N. Ng, A. Pappa, M. Schwarz, A. Streltsov, S. Sotiriadis, N. Tischler, R. Sweke, N. Walk

LIST OF PUBLICATIONS

Jens Eisert
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PUBLICATIONS IN HIGH IMPACT JOURNALS

This list comprises all those publications that have been published in

- *Communications in Mathematical Physics*
- *Communications Physics (Nature)*
- *Nature*
- *Nature Communications*
- *Nature Photonics*
- *Nature Physics*
- *Nature PJ Quantum Information*
- *Nature Reviews Physics*
- *Physical Review Letters*
- *Physical Review X*
- *Proceedings of the National Academy of Sciences*
- *PRX Quantum*
- *Reviews of Modern Physics*
- *Reports on Progress in Physics*
- *Science Advances*

[1] "Entangling power and quantum circuit complexity",
J. Eisert,
Physical Review Letters **127**, 020501 (2021),
(Lanl e-print arXiv:2104.03332).

[2] "Recovering quantum correlations in optical lattices from interaction quenches",
M. Gluza and J. Eisert,
Physical Review Letters **127**, 090503 (2021),
(Lanl e-print arXiv:2005.09000).

[3] "Decay and recurrence of non-Gaussian correlations in a quantum many-body system",
T. Schweigler, M. Gluza, M. Tajik, S. Sotiriadis, F. Cataldini, S.-C. Ji, F. S. Møller, J. Sabino, B. Rauer, J. Eisert, J. Schmiedmayer,
Nature Physics **17**, 559-563 (2021),
(Lanl e-print arXiv:2003.01808).

[4] "Emergent statistical mechanics from properties of disordered random matrix product states",
J. Haferkamp, C. Bertoni, I. Roth, J. Eisert,
PRX Quantum **2**, in press (2021),
(Lanl e-print arXiv:2103.02634).

[5] "A variational toolbox for quantum multi-parameter estimation",
J. J. Meyer, J. Borregaard, J. Eisert,
Nature PJ Quantum Information **7**, 89 (2021),
(Lanl e-print arXiv:2006.06303).

[6] "Quantum field thermal machines",
M. Gluza, J. Sabino, N. H. Y. Ng, G. Vitagliano, M. Pezzutto, Y. Omar, I. Mazets, M. Huber, J. Schmiedmayer, J. Eisert,
PRX Quantum **2**, 030310 (2021),
(Lanl e-print arXiv:2006.01177).

[7] "Bounding the resources for thermalizing many-body localized systems",
C. Sparaciari, M. Goihl, P. Boes, J. Eisert, N. H. Y. Ng,
Communications Physics (Nature) **4**, 3 (2021),
(Lanl e-print arXiv:1912.04920).

[8] "Easing the Monte Carlo sign problem",
D. Hangleiter, I. Roth, D. Nagaj, J. Eisert,
Science Advances **6**, eabb8341 (2020),
(Lanl e-print arXiv:1906.02309).

[9] "Dynamical structure factors of dynamical quantum simulators",
M. L. Baez, M. Goihl, J. Haferkamp, J. Bermejo-Vega, M. Gluza, J. Eisert,
Proceedings of the National Academy of Sciences **117**, 26123-26134 (2020),
(Lanl e-print arXiv:1912.06076).

[10] "Quantum certification and benchmarking",
J. Eisert, D. Hangleiter, N. Walk, I. Roth, D. Markham, R. Parekh, U. Chabaud, E. Kashefi,
Nature Reviews Physics **2**, 382-390 (2020),
(Lanl e-print arXiv:1910.06343).

[11] "Closing gaps of a quantum advantage with short-time Hamiltonian dynamics",
J. Haferkamp, D. Hangleiter, A. Bouland, B. Fefferman, J. Eisert, J. Bermejo-Vega,
Physical Review Letters **125**, 250501 (2020),
(Lanl e-print arXiv:1908.08069).

[12] "Floquet engineering topological many-body localized systems",
K. S. C. Decker, C. Karrasch, J. Eisert, D. M. Kennes,
Physical Review Letters **124**, 190601 (2020),
(Lanl e-print arXiv:1911.01269).

[13] "Rates of multi-partite entanglement transformations and applications in quantum networks",
A. Streltsov, C. Meignant, J. Eisert,
Physical Review Letters **125**, 080502 (2020),
(Lanl e-print arXiv:1709.09693).

[14] "Quantum read-out for cold atomic quantum simulators",
M. Gluza, T. Schweigler, B. Rauer, C. Krumnow, J. Schmiedmayer, J. Eisert,
Communications Physics (Nature) **3**, 12 (2020),
(Lanl e-print arXiv:1807.04567).

[15] "Holography and criticality in matchgate tensor networks",
A. Jahn, M. Gluza, F. Pastawski, J. Eisert,
Science Advances **5**, eaaw0092 (2019),
(Lanl e-print arXiv:1711.03109).

[16] "Randomized benchmarking for individual quantum gates",
E. Onorati, A. H. Werner, J. Eisert,
Physical Review Letters **123**, 060501 (2019),
(Lanl e-print arXiv:1811.11775).

[17] "Sample complexity of device-independently certified quantum supremacy",
D. Hangleiter, M. Kliesch, J. Eisert, C. Gogolin,
Physical Review Letters **122**, 210502 (2019),
(Lanl e-print arXiv:1812.01023).

[18] "A tensor network annealing algorithm for two-dimensional thermal states",
A. Kshetrimayum, M. Rizzi, J. Eisert, R. Orus,
Physical Review Letters **122**, 070502 (2019),
(Lanl e-print arXiv:1809.08258).

[19] "Entanglement-ergodic quantum systems equilibrate exponentially well",
H. Wilming, M. Goihl, I. Roth, J. Eisert,
Physical Review Letters **123**, 200604 (2019),
(Lanl e-print arXiv:1802.02052).

[20] "Von Neumann entropy from unitarity",
P. Boes, J. Eisert, R. Gallego, M. P. Mueller, H. Wilming,
Physical Review Letters **122**, 210402 (2019),
(Lanl e-print arXiv:1807.08773).

[21] "Single-shot holographic compression from the area law",
H. Wilming, J. Eisert,
Physical Review Letters **122**, 190501 (2019),
(Lanl e-print arXiv:1809.10156).

[22] "Quantum network routing and local complementation",
F. Hahn, A. Pappa, J. Eisert,
Nature PJ Quantum Information **5**, 76 (2019)
(Lanl e-print arXiv:1805.04559).

[23] "Recovering quantum gates from few average gate fidelities",
I. Roth, R. Kueng, S. Kimmel, Y.-K. Liu, D. Gross, J. Eisert, M. Kliesch,
Physical Review Letters **121**, 170502 (2018),
(Lanl e-print arXiv:1803.00572).

[24] "Catalytic quantum randomness",
P. Boes, H. Wilming, R. Gallego, J. Eisert,
Physical Review X **8**, 041016 (2018),
(Lanl e-print arXiv:1804.03027).

[25] "Statistical ensembles without typicality",
P. Boes, H. Wilming, J. Eisert, R. Gallego,
Nature Communications **9**, 1022 (2018),
(Lanl e-print arXiv:1707.08218).

[26] "Fidelity witnesses for fermionic quantum simulations",
M. Gluza, M. Kliesch, J. Eisert, L. Aolita,
Physical Review Letters **120**, 190501 (2018),
(Lanl e-print arXiv:1703.03152).

[27] "Strong coupling corrections in quantum thermodynamics",
M. Perarnau-Llobet, H. Wilming, A. Riera, R. Gallego, J. Eisert,
Physical Review Letters **12**, 120602 (2018),

(Lanl e-print arXiv:1704.05864).

[28] "Architectures for quantum simulation showing a quantum speedup",
J. Bermejo-Vega, D. Hangleiter, M. Schwarz, R. Raussendorf, J. Eisert,
Physical Review X **8**, 021010 (2018),

(Lanl e-print arXiv:1703.00466).

[29] "Towards holography via quantum source-channel codes",
F. Pastawski, J. Eisert, H. Wilming,
Physical Review Letters **119**, 020501 (2017),

(Lanl e-print arXiv:1611.07528).

[30] "Experimental quantum compressed sensing for a seven-qubit system",
C. A. Riofrio, D. Gross, S. T. Flammia, T. Monz, D. Nigg, R. Blatt, J. Eisert,
Nature Communications **8**, 15305 (2017),

(Lanl e-print arXiv:1608.02263).

[31] "Combining topological hardware and topological software: Color code quantum computing with topological superconductor networks",
D. Litinski, M. S. Kesselring, J. Eisert, F. von Oppen,
Physical Review X **7**, 031048 (2017),

(Lanl e-print arXiv:1704.01589).

[32] "Structure of the resource theory of quantum coherence",
A. Streltsov, S. Rana, P. Boes, J. Eisert,
Physical Review Letters **119**, 140402 (2017),

(Lanl e-print arXiv:1705.04189).

[33] "Mixing properties of stochastic quantum Hamiltonians",
E. Onorati, O. Buerschaper, M. Kliesch, W. Brown, A. H. Werner, J. Eisert,
Communications in Mathematical Physics **355**, 905 (2017),

(Lanl e-print arXiv:1606.01914).

[34] "Diagnosing topological edge states via entanglement monogamy",
K. Meichanetzidis, J. Eisert, M. Cirio, V. Lahtinen, J. K. Pachos,
Physical Review Letters **116**, 130501 (2016),

(Lanl e-print arXiv:1511.04459).

[35] "Fermionic orbital optimisation in tensor network states",
C. Krumnow, L. Veis, Ö. Legeza, J. Eisert,
Physical Review Letters **117**, 210402 (2016),

(Lanl e-print arXiv:1504.00042).

[36] "Equilibration via Gaussification in fermionic lattice systems",
M. Gluza, C. Krumnow, M. Friesdorf, C. Gogolin, J. Eisert,
Physical Review Letters **117**, 190602 (2016),

(Lanl e-print arXiv:1601.00671).

[37] "Renormalising entanglement distillation",
S. Waeldchen, J. Gertis, E. T. Campbell, J. Eisert,
Physical Review Letters **116**, 020502 (2016),

(Lanl e-print arXiv:1503.04822).

[38] "A positive tensor network approach for simulating open quantum many-body systems",
A. H. Werner, D. Jaschke, P. Silvi, M. Kliesch, T. Calarco, J. Eisert, S. Montangero,
Physical Review Letters **116**, 237201 (2016),

(Lanl e-print arXiv:1412.5746).

[39] "Equilibration, thermalisation, and the emergence of statistical mechanics in closed quantum systems",
C. Gogolin, J. Eisert,
Reports on Progress in Physics **79**, 056001 (2016),

(Lanl e-print arXiv:1503.07538).

[40] "Quantum many-body systems out of equilibrium",
J. Eisert, M. Friesdorf, C. Gogolin,
Nature Physics **11**, 124 (2015),

(Lanl e-print arXiv:1408.5148).

[41] "Many-body localisation implies that eigenvectors are matrix-product states",
M. Friesdorf, A. H. Werner, W. Brown, V. B. Scholz, J. Eisert,
Physical Review Letters **114**, 170505 (2015),

(Lanl e-print arXiv:1409.1252).

[42] "Observation of non-Markovian micro-mechanical Brownian motion",
S. Groeblacher, A. Trubarov, N. Prigge, M. Aspelmeyer, J. Eisert,
Nature Communications **6**, 7606 (2015),

(Lanl e-print arXiv:1305.1953).

[43] "Advances in quantum teleportation",
S. Pirandola, J. Eisert, C. Weedbrook, A. Furusawa, S. L. Braunstein,
Nature Photonics **9**, 641 (2015),

(Lanl e-print arXiv:1505.07831).

[44] "Towards experimental quantum field tomography with ultracold atoms",
A. Steffens, M. Friesdorf, T. Langen, B. Rauer, T. Schweigler, R. Huebener, J. Schmiedmayer, C. A. Riofrio, J. Eisert,
Nature Communications **6**, 7663 (2015),

(Lanl e-print arXiv:1406.3632).

[45] "Reliable quantum certification for photonic quantum technologies",
L. Aolita, C. Gogolin, M. Kliesch, J. Eisert
Nature Communications **6**, 8498 (2015),

(Lanl e-print arXiv:1407.4817).

[46] "Cellular-automaton decoders for topological quantum memories",
M. Herold, E. T. Campbell, J. Eisert, M. J. Kastoryano,
Nature PJ Quantum Information **1**, 15010 (2015),

(Lanl e-print arXiv:1406.2338).

[47] "Matrix product operators and states - NP-hardness and undecidability",
M. Kliesch, D. Gross, J. Eisert,
Physical Review Letters **113**, 160503 (2014),
(Lanl e-print arXiv:1404.4466).

[48] "Locality of temperature",
M. Kliesch, C. Gogolin, M. J. Kastoryano, A. Riera, J. Eisert,
Physical Review X **4**, 031019 (2014),
(Lanl e-print arXiv:1309.0816).

[49] "Breakdown of quasilocality in long-range quantum lattice models",
J. Eisert, M. van den Worm, S. R. Manmana, M. Kastner,
Physical Review Letters **111**, 260401 (2013),
(Lanl e-print arXiv:1309.2308).

[50] "Wick's theorem for matrix product states",
R. Hübener, A. Mari, J. Eisert,
Physical Review Letters **110**, 040401 (2013),
(Lanl e-print arXiv:1207.6537).

[51] "Precisely timing dissipative quantum information processing",
M. J. Kastoryano, M. M. Wolf, J. Eisert,
Physical Review Letters **110**, 110501 (2013),
(Lanl e-print arXiv:1205.0985).

[52] "Probing the relaxation towards equilibrium in an isolated strongly correlated 1D Bose gas",
S. Trotzky, Y.-A. Chen, A. Flesch, I. P. McCulloch, U. Schollwöck, J. Eisert, I. Bloch,
Nature Physics **8**, 325 (2012),
(Lanl e-print arXiv:1101.2659).

[53] "Positive Wigner functions render classical simulation of quantum computation efficient",
A. Mari, J. Eisert,
Physical Review Letters **109**, 230503 (2012),
(Lanl e-print 1208.3660).

[54] "Quantum measurement occurrence is undecidable",
J. Eisert, M. P. Mueller, C. Gogolin,
Physical Review Letters **108**, 260501 (2012),
(Lanl e-print arXiv:1111.3965).

[55] "Gaussification and entanglement distillation of continuous variable systems: a unifying picture",
E. T. Campbell, J. Eisert,
Physical Review Letters **108**, 020501 (2012),
(Lanl e-print arXiv:1107.1406).

[56] "Extracting dynamical equations from experimental data is NP hard',
T. S. Cubitt, J. Eisert, M. M. Wolf,
Physical Review Letters **108**, 120503 (2012),
(Lanl e-print arXiv:1005.0005).

[57] "Cooling by heating",
A. Mari, J. Eisert,
Physical Review Letters **108**, 120602 (2012),
(Lanl e-print arXiv:1104.0260).

[58] "Thermalization in nature and on a quantum computer,
A. Riera, C. Gogolin, J. Eisert,
Physical Review Letters **108**, 080402 (2012),
(Lanl e-print arXiv:1102.2389).

[59] "Deciding whether a quantum channel is Markovian is NP-hard",
T. S. Cubitt, J. Eisert, M. M. Wolf,
Communications in Mathematical Physics **310**, 383 (2012)
(Lanl e-print arXiv:0908.2128).

[60] "A dissipative quantum Church-Turing theorem",
M. Kliesch, T. Barthel, C. Gogolin, M. Kastoryano, J. Eisert,
Physical Review Letters **107**, 120501 (2011),
(Lanl e-print arXiv:1105.3986).

[61] "Entangled inputs cannot make imperfect quantum channels perfect",
F. G. S. L. Brandao, J. Eisert, M. Horodecki, D. Yang,
Physical Review Letters **106**, 230502 (2011),
(Lanl e-print arXiv:1010.5074).

[62] "Absence of thermalization in non-integrable systems",
C. Gogolin, M. P. Mueller, J. Eisert,
Physical Review Letters **106**, 040401 (2011),
(Lanl e-print arXiv:1009.2493).

[63] "Experimental implementation of the optimal linear-optical controlled phase gate",
K. Lemr, A. Cernoch, J. Soubusta, K. Kieling, J. Eisert, M. Dusek,
Physical Review Letters **106**, 013602 (2011),
(Lanl e-print arXiv:1007.4797).

[64] "Preparing the bound instance of quantum entanglement",
J. DiGuglielmo, A. Samblowski, B. Hage, C. Pineda, J. Eisert, R. Schnabel,
Physical Review Letters **107**, 240503 (2011),
(Lanl e-print arXiv:1006.4651).

[65] "Directly estimating non-classicality",
A. Mari, K. Kieling, B. Melholt Nielsen, E. S. Polzik, J. Eisert,
Physical Review Letters **106**, 010403 (2011),
(Lanl e-print arXiv:1005.1665).

[66] "Concentration of measure for quantum states with a fixed expectation value",
M. Mueller, D. Gross, J. Eisert,
Communications in Mathematical Physics **303**, 785 (2010),
(Lanl e-print arXiv:1003.4982).

[67] "Holographic quantum states",
T. J. Osborne, J. Eisert, F. Verstraete,
Physical Review Letters **105**, 260401 (2010),
(Lanl e-print arXiv:1005.1268).

[68] "Solving frustration-free spin systems",
N. de Beaudrap, M. Ohliger, T. J. Osborne, J. Eisert,
Physical Review Letters **105**, 060504 (2010),
(Lanl e-print arXiv:1005.3781).

[69] "Real-space renormalization yields finite correlations",
T. Barthel, M. Kliesch, J. Eisert,
Physical Review Letters **105**, 010502 (2010),
(Lanl e-print arXiv:1003.2319).

[70] "Quantum state tomography via compressed sensing",
D. Gross, Y.-K. Liu, S.T. Flammia, S. Becker, J. Eisert,
Physical Review Letters **105**, 150401 (2010),
(Lanl e-print arXiv:0909.3304).

[71] "Area laws for the entanglement entropy",
J. Eisert, M. Cramer, M. B. Plenio,
Reviews of Modern Physics **82**, 277 (2010),
(Lanl e-print arXiv:0808.3773).

[72] "Most quantum states are too entangled to be useful as computational resources",
D. Gross, S. Flammia, J. Eisert,
Physical Review Letters **102**, 190501 (2009),
(Lanl e-print arXiv:0810.4331).

[73] "Entanglement combing",
D. Yang, J. Eisert,
Physical Review Letters **103**, 220501 (2009),
(Lanl e-print arXiv:0907.4757).

[74] "Gently modulating opto-mechanical systems",
A. Mari, J. Eisert,
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