CURRICULUM VITAE

Jens Eisert
Professor of Theoretical Physics

Email: jense@physik.fu-berlin.de
Web: http://www.physik.fu-berlin.de/en/einrichtungen/ag/ag-eisert

Freie Universität Berlin
Arnimallee 14
14195 Berlin

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**
10/09-09/10	**Fellow** at the **Institute for Advanced Study Berlin** (Wissenschaftskolleg)
05/08-04/11	**Full Professor**, **University of Potsdam**
03/05-05/08	**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, quantum optics

- Quantum many-body theory
- Out-of-equilibrium complex quantum systems
- Tensor networks descriptions of condensed-matter systems
- Compressed sensing and matrix completion
- Quantum optics and cold atoms in optical lattices

Research talks:

- $>$**200 invited talks** at workshops, conferences, and in colloquia

Publications:

- **163** scientific publications, of which
- **51** published in the **Phys. Rev. Lett.**
- **9** published or in press in the **Nature** group
- **3** in the **Commun. Math. Phys.**

Citations:

- **7.485 citations** according to Web of Science (WoS)
- **12.503 citations** according to Google Scholar (GS)
- **h-index 56** (GS), **47** (WoS)
- **35 publications** with $>$100 citations (GS)

AWARDS AND PRIZES

- **ERC Consolidator 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

MENTIONING IN THE ACADEMIC PRESS AND PUBLIC OUTREACH

- Regular reporting of work in scientific journals: *Nature*, *New Scientist*, *Scientific American*, *Physics News*, *PhysOrg*, *Physics*, *QIP-IRC*, *Quantum Times*, *Complexity digest*, *IST-web page* of the EC, *Science week*, *MIT Technology Review*, *ProPhysik*, *FQXi*, *Physics World*, and others
- Coverage of work in *BBC Radio 4*, the *3SAT* science TV channel

PHD

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

EDUCATION

95-98, 91-94 **Albert Ludwigs University Freiburg**, studies in physics
Degree: **Diploma in Physics**
Final grade: **very good** (grading scale: very good, good, satisfactory, sufficient)
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** (grading scale: A–4.0, . . . , D –1.0)
Scientific work in applied mathematics/numerical analysis

81–90 **Wilhelm-von-Humboldt**-High-School, Ludwigshafen
Degree: **Abitur**, average mark: **1.0** (grading scale: 1.0, 1.1, 1.2, . . . , 4.0)

RESEARCH FUNDING

- **European Research Council:** ERC Consolidator Award, *"Taming non-equilibrium quantum systems"* (2012)
- **FQXI:** Large grant, *"Decidable and undecidable in quantum physics"* (2013)
- **Research Councils of Europe:** EURYI Award (later renamed ERC Starting Grant), *"Multi-particle entanglement in complex quantum systems"* (2004)
- **European Commission (FET Open):** H2020 AQuS (2014, quantum simulations), Strep RAQUEL (2012, randomness in quantum mechanics) Strep MINOS (2008, opto-mechanical systems), Strep COMPAS (2008, continuous variable quantum information)
- **European Commission (integrated projects):** IP SIQS (2012, quantum simulation), IP QESSENCE (2010, optical quantum information and metrology), IP QAP (2005, quantum information science), the latter two in co-managing position as subproject leader, IP QUIPROCONE (2000, quantum information)
- **German Ministry for Research (BMBF):** QuOReP (2010, quantum optical quantum repeater architectures), QuOReP (2013)
- **German Research Foundation (DFG):** SPP1798 (2015, compressed sensing), SPP-1116 (2004, physics of ultra-cold atoms), SPP-1078 (1999, quantum information theory); grant on quantum simulation (2015)
- **Microsoft research:** Project on linear optical quantum computing (2006)
- **EPSRC:** Project on quantum optical quantum information processing (2004)
- **DLR:** COST project (2012, thermodynamics on the nano-scale)

EDITORIAL BOARD MEMBERSHIPS AND SERVICES TO THE COMMUNITY

- *Annals of Physics*
- *Physical Review A* (term 2008-2010)
- *Journal of Physics A*
- *Quantum Information Processing*
- *Quantum Information and Computation*
- Coauthor and lead theory editor of the *2010 road map for quantum information science* of the EU
- Editor of the *Handbook of Quantum Technologies*, planned major European book project

ORGANISATIONAL SKILLS

- **COST-conference**, 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)
- **Summer adademy of the Studienstiftung des deutschen Volkes, Görlitz 2008**, course on quantum information theory, August 2008, jointly with A. Rauschenbeutel, Mainz
- **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, August 2004, jointly with R. F. Werner
- **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 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:** Jacqueline Lekscha, Sybille Rosset, Marek Gluza, Michael Herold, Dominik Hangleiter, Marcel Goihl, Holger Bernigau, Alex Nietner, Benjamin Bach, Carina Prunkl, Henrik Wilming, Moritz von Hase, Adrian Steffens, Jonas Hoersch, Mathis Friesdorf, Alexander Kegeles, Holger Bernigau, Inka Benthin, Janet Anders, David Gross, Axel Friedenauer
- **PhD supervision:** Christian Krumnow, Carolin Wille, Henrik Wilming, Janina Gertis, Adrian Steffens, Emilio Onorati, Christian Gogolin, Martin Kliesch, Mathis Friesdorf, Andrea Mari, Matthias Ohliger, Marcus Cramer, David Gross, Konrad Kieling, Fernando Brandao, Alvaro Feito (the latter two in co-supervision)
- **Postdoctoral researchers:** Oliver Buerschaper, Ville Lahtinen, Rodrigo Gallego, Adam Nagy, Leandro Aolita, Albert Werner, Earl Campbell, Thomas Barthel, Carlos Riofrio, Martin Schwarz, Ville Lahtinen, Michael James Kastoryano, Carlos Pineda, Arnau Riera, Vincent Nesme, Robert Hübener, Niel de Beaudrap, Markus Müller, Dong Yang, Phil Hyllus, Chris Dawson, Marcus Cramer, Kenny Pregnell (co-supervised)
- **Host of Humboldt-Bessel-award winners:** Markus Aspelmeyer, Tomaz Prosen
- **Host of Humboldt and Marie-Curie stipends:** Rodrigo Gallego, Leandro Aolita, Michael James Kastoryano, Martin Schwarz

LIST OF PUBLICATIONS

Jens Eisert
Professor of Theoretical Physics

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Web: http://www.physik.fu-berlin.de/en/einrichtungen/ag/ag-eisert

Freie Universität Berlin
Arnimallee 14
14195 Berlin

PUBLICATIONS IN HIGH IMPACT JOURNALS

This list comprises all those publications that have been published in

- *Physical Review Letters*
- *Nature Physics*
- *Nature*
- *Nature Communications*
- *Nature Photonics*
- *Physical Review X*
- *Reviews of Modern Physics*
- *Communications in Mathematical Physics*
- *Proceedings of the National Academy of Sciences*

[1] "Quantum many-body systems out of equilibrium",
J. Eisert, M. Friesdorf, C. Gogolin
Nature Physics **11**, 124 (2015),
(Lanl e-print arXiv:1408.5148).

[2] "Cellular-automaton decoders for topological quantum memories",
M. Herold, E. T. Campbell, J. Eisert, M. J. Kastoryano,
Nature Quantum Information **1**, in press (2015),
(Lanl e-print arXiv:1406.2338).

[3] "Towards experimental quantum field tomography with ultracold atoms",
A. Steffens, M. Friesdorf, T. Langen, B. Rauer, T. Schweigler, R. Hübener, J. Schmiedmayer, C. A. Riofrio, J. Eisert
Nature Communications **6**, 7663 (2015),
(Lanl e-print arXiv:1406.3632).

[4] "Reliable quantum certification for photonic quantum technologies",
L. Aolita, C. Gogolin, M. Kliesch, J. Eisert
Nature Communications **6**, in press (2015),
(Lanl e-print arXiv:1407.4817).

[5] "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).

[6] "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).

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

(Lanl e-print arXiv:1408.5148).

[7] "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).

[8] "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).

[9] "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).

[10] "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).

[11] "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).

[12] "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).

[13] "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).

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

[15] "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).

[16] "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).

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

[18] "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).

[19] "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).

[20] "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).

[21] "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).

[22] "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).

[23] "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).

[24] "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).

[25] "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).

[26] "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).

[27] "Holographic quantum states",
T. J. Osborne, J. Eisert, F. Verstraete,
Physical Review Letters **105**, 260401 (2010),

(Lanl e-print arXiv:1005.1268).

[28] "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).

[29] "Real-space renormalization yields finite correlations",
T. Barthel, M. Kliesch, J. Eisert,
Physical Review Letters **105**, 010502 (2010),

(Lanl e-print arXiv:1003.2319).

[30] "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).

[31] "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).

[32] "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).

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

[34] "Gently modulating opto-mechanical systems",
A. Mari, J. Eisert,
Physical Review Letters **103**, 213603 (2009).
(Lanl e-print arXiv:0911.0433).

[35] "Tomography of quantum detectors",
J. S. Lundeen, A. Feito, H. Coldenstrodt-Ronge, K. L. Pregnell, Ch. Silberhorn, T. C. Ralph, J. Eisert, M. B. Plenio, I. A. Walmsley,
Nature Physics **5**, 29 (2009),
(Lanl e-print arXiv:0807.2444).

[36] "Supersonic quantum communication",
D. Gross, J. Eisert,
Physical Review Letters **102**, 240501 (2009),
(Lanl e-print arXiv:0808.3581).

[37] "Entangled families",
M. Aspelmeyer, J. Eisert,
Nature **455**, 180 (2008).

[38] "Assessing non-Markovian dynamics",
M. M. Wolf, J. Eisert, T. S. Cubitt, J. I. Cirac,
Physical Review Letters **101**, 150402 (2008),
(Lanl e-print arXiv:0711.3172).

[39] "Exploring local quantum many-body relaxation by atoms in optical superlattices",
M. Cramer, A. Flesch, I.P. McCulloch, U. Schollwöck, J. Eisert,
Physical Review Letters **101**, 063001 (2008),
(Lanl e-print arXiv:0805.0798).

[40] "Quenching, relaxation, and a central limit theorem for quantum lattice systems",
M. Cramer, C. Dawson, J. Eisert, T. J. Osborne,
Physical Review Letters **100**, 030602 (2008),
(Lanl e-print cond-mat/0703314).

[41] "Unifying simulation methods of quantum many-body systems",
C.M. Dawson, J. Eisert, T. J. Osborne
Physical Review Letters **100**, 130501 (2008),

(Lanl e-print arXiv:0705.3456).

[42] "Do mixtures of bosonic and fermionic atoms adiabatically heat up in optical lattices?",
M. Cramer, S. Ospelkaus, C. Ospelkaus, K. Bongs, K. Sengstock, J. Eisert,
Physical Review Letters **100**, 140409 (2008),

(Lanl e-print arXiv:0707.3633).

[43] "Percolation, renormalization, and quantum computing with non-deterministic gates",
K. Kieling, T. Rudolph, J. Eisert,
Physical Review Letters **99**, 130501 (2007),

(Lanl e-print quant-ph/0611140).

[44] "Covariance matrices and the separability problem",
O. Gühne, P. Hyllus, O. Gittsovich, J. Eisert,
Physical Review Letters **99**, 130504 (2007),

(Lanl e-print quant-ph/0611282).

[45] "Novel schemes for measurement-based quantum computation",
D. Gross, J. Eisert,
Physical Review Letters **98**, 220503 (2007),

(Lanl e-print quant-ph/0609149).

[46] "Statistics dependence of the entanglement entropy",
M. Cramer, J. Eisert, M. B. Plenio,
Physical Review Letters **98** (2007),

(Lanl e-print quant-ph/0611264).

[47] "Creating and probing macroscoping entanglement with light",
M. Paternostro, D. Vitali, S. Gigan, M. S. Kim, C. Brukner, J. Eisert, M. Aspelmeyer,
Physical Review Letters **99**, 250401 (2007),

(Lanl e-print quant-ph/0609210).

[48] "Gaussian quantum marginal problem",
J. Eisert, T. Tyc, T. Rudolph, B. Sanders,
Communications in Mathematical Physics **280**, 263 (2007),

(Lanl e-print quant-ph/0703225).

[49] "Computational difficulty of global variations in the density matrix renormalization group",
J. Eisert,
Physical Review Letters **97**, 260501 (2006),

(Lanl e-print quant-ph/0609051).

[50] "General entanglement scaling from time evolution",
J. Eisert, T. J. Osborne,
Physical Review Letters **97**, 150404 (2006),
(Lanl e-print quant-ph/0603114).

[51] "Optimizing linear optics quantum gates",
J. Eisert,
Physical Review Letters **95**, 040502 (2005),
(Lanl e-print quant-ph/0409156).

[52] "Entropy, entanglement, and area: analytical results for harmonic lattice systems",
M. B. Plenio, J. Eisert, J. Dreissig, M. Cramer,
Physical Review Letters **94**, 060503 (2005),
(Lanl e-print quant-ph/0409156).

[53] "Exact decoherence to pointer states in free open quantum systems is universal",
J. Eisert,
Physical Review Letters **92**, 210401 (2004),
(Lanl e-print quant-ph/0311022).

[54] "Towards mechanical entanglement in nano-electromechanical devices",
J. Eisert, M. B. Plenio, S. Bose, J. Hartley,
Physical Review Letters **93**, 190402 (2004),
(Lanl e-print quant-ph/0311113).

[55] "Inhomogeneous Bose-Fermi mixtures in cubic lattices".
M. Cramer, J. Eisert, F. Illuminati,
Physical Review Letters, **93**, 190405 (2004),
(Lanl e-print cond-mat/0310705).

[56] "The entangling power of passive optical elements",
M. M. Wolf, J. Eisert, M. B. Plenio,
Physical Review Letters **90**, 047904 (2003),
(Lanl e-print quant-ph/0206171).

[57] "The entanglement cost under operations preserving the positivity of partial transpose",
K. Audenaert, M. B. Plenio, J. Eisert,
Physical Review Letters **90**, 027901 (2003),
(Lanl e-print quant-ph/0207146).

[58] "Distilling Gaussian states with Gaussian operations is impossible",
J. Eisert, S. Scheel, M. B. Plenio,
Physical Review Letters **89**, 137903 (2002),
(Lanl e-print quant-ph/0204052).

[59] "Quantum and classical correlations in quantum Brownian motion",
J. Eisert, M. B. Plenio,
Physical Review Letters **89**, 137902 (2002),

(Lanl e-print quant-ph/0111016).

[60] "Conditions for the local manipulation of Gaussian states",
J. Eisert, M. B. Plenio,
Physical Review Letters **89**, 097901 (2002),

(Lanl e-print quant-ph/0109126).

[61] "Reply: Quantum games and quantum strategies",
J. Eisert, M. Wilkens, M. Lewenstein,
Physical Review Letters **87**, 069802 (2001).

[62] "The asymptotic relative entropy of entanglement",
K. Audenaert, J. Eisert, E. Jane, M. B. Plenio, S. Virmani, B. de Moor,
Physical Review Letters **87**, 217902 (2001),

(Lanl e-print quant-ph/9912080).

[63] "Catalysis of entanglement manipulation for mixed states",
J. Eisert and M. Wilkens,
Physical Review Letters **85**, 437 (2000),

(Lanl e-print quant-ph/9912080).

[64] "Classical information and distillable entanglement",
J. Eisert, T. Felbinger, P. Papadopoulos, M. B. Plenio, M. Wilkens,
Physical Review Letters **84**, 1611 (2000),

(Lanl e-print quant-ph/9907021).

[65] "Quantum games and quantum strategies",
J. Eisert, M. Wilkens, M. Lewenstein,
Physical Review Letters **83**, 3077 (1999),

(Lanl e-print quant-ph/9806088).

SUBMITTED WORK AND PREPRINTS

[66] "Total correlations of the diagonal ensemble herald the many-body localization transition",
J. Goold, S. R. Clark, C. Gogolin, J. Eisert, A. Scardicchio, A. Silva,

(Lanl e-print arXiv:1504.06872).

[67] "Defining work from operational principles",
R. Gallego, J. Eisert, H. Wilming,

(Lanl e-print arXiv:1504.05056).

[68] "Uncertainty quantification for matrix compressed sensing and quantum tomography problems",
A. Carpentier, J. Eisert, D. Gross, R. Nickl,

(Lanl e-print arXiv:1504.03234).

[69] "Fermionic orbital optimisation in tensor network states",
C. Krumnow, Ö. Legeza, J. Eisert,

(Lanl e-print arXiv:1504.00042).

[70] "Equilibration, thermalisation, and the emergence of statistical mechanics in closed quantum systems",
C. Gogolin, J. Eisert,

(Lanl e-print arXiv:1503.07538).

[71] "Renormalising entanglement distillation",
S. Waeldchen, J. Gertis, E. T. Campbell, J. Eisert,

(Lanl e-print arXiv:1503.04822).

[72] "A positive tensor network approach for simulating open quantum many-body systems",
A. H. Werner, D. Jaschke, P. Silvi, T. Calarco, J. Eisert, S. Montangero,

(Lanl e-print arXiv:1412.5746).

[73] "Weak thermal contact is not universal for work extraction",
H. Wilming, R. Gallego, J. Eisert,

(Lanl e-print arXiv:1504.06872).

[74] "Area laws and efficient descriptions of quantum many-body states",
Y. Ge, J. Eisert,

(Lanl e-print arXiv:1411.2995).

[75] "Continuous-variable quantum compressed sensing",
M. Ohliger, V. Nesme, D. Gross, Y.-K. Liu, J. Eisert,

(Lanl e-print arXiv:1111.0853).

[76] "Noise-driven quantum criticality",
J. Eisert, T. Prosen,

(Lanl e-print arXiv:1012.5013).

REGULAR REFEREED PAPERS

[77] "Local constants of motion imply information propagation",
M. Friesdorf, A. H. Werner, M. Goihl, J. Eisert, W. Brown,
New Journal of Physics **16**, in press (2015),

(Lanl e-print arXiv:1504.06872).

[78] "Continuous matrix product state tomography of quantum transport experiments",
G. Haack, A. Steffens, J. Eisert, R. Hübener,
New Journal of Physics **16**, in press (2015),

(Lanl e-print arXiv:1504.04194).

[79] "Quantum field tomography',
A. Steffens, C. A. Riofrio, R. Hübener, J. Eisert,
New Journal of Physics **16**, 123010 (2014),

(Lanl e-print arXiv:1406.3631).

[80] "Limits to catalysis in quantum thermodynamics",
N. H. Y. Ng, L. Mancinska, C. Cirstoiu, J. Eisert, S. Wehner,
New Journal of Physics, in press (2015),

(Lanl e-print arXiv:1405.3039).

[81] "Equilibration in low-dimensional quantum matrix models",
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