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## List of Publications

Milán Mosonyi

**Total number of publications: 33**

papers in peer-reviewed journals: 30

peer-reviewed conference proceedings: 1

online preprints: 2

**Journal statistics:**

Communications in Mathematical Physics: 4

Annales Henri Poincaré: 1

IEEE Transactions on Information Theory: 8

Proceedings of the Royal Society A: 1

Reviews in Mathematical Physics: 3

Letters in Mathematical Physics: 2

Journal of Mathematical Physics: 10

Open Systems and Information Dynamics: 1

Leibniz International Proceedings in Informatics (LIPIcs): 1

**Citations:**

[link to google scholar](#)    [link to MTMT](#)

## Preprints

- (1) Milán Mosonyi, Gergely Bunth, Péter Vrana: *Geometric relative entropies and barycentric Rényi divergences*, (2022); <https://arxiv.org/abs/2207.14282>

## Journal papers

- (2) Milán Mosonyi, Fumio Hiai: *Some continuity properties of quantum Rényi divergences*, IEEE Transactions on Information Theory, (2023);  
<http://dx.doi.org/10.1109/TIT.2023.3324758>

Number of independent citations: 0

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- (3) Milán Mosonyi: *The strong converse exponent of discriminating infinite-dimensional quantum states*, Communications in Mathematical Physics, (2023);  
<http://dx.doi.org/10.1007/s00220-022-04598-1>  
Number of independent citations: 0
- (4) Gergely Bunth, Gábor Maróti, Milán Mosonyi, Zoltán Zimborás: *Super-exponential distinguishability of correlated quantum states*, Letters in Mathematical Physics **113**(7) (2023); <http://dx.doi.org/10.1007/s11005-022-01620-4>  
Number of independent citations: 0
- (5) Fumio Hiai, Milán Mosonyi: *Quantum Rényi divergences and the strong converse exponent of state discrimination in operator algebras*, Annales Henri Poincaré (2022); <http://dx.doi.org/10.1007/s00023-022-01250-5>  
Number of independent citations: 0
- (6) Milán Mosonyi, Fumio Hiai: *Test-measured Rényi divergences*; IEEE Transactions on Information Theory, 69(2):1074–1092, (2023)  
<http://dx.doi.org/10.1109/TIT.2022.3209892>  
Number of independent citations: 0
- (7) Milán Mosonyi, Zsombor Szilágyi, Mihály Weiner: *On the error exponents of binary quantum state discrimination with composite hypotheses*; IEEE Transactions on Information Theory, Vol. 68, Issue: 2, pp. 1032–1067, (2022);  
<http://dx.doi.org/10.1109/TIT.2021.3125683>  
Number of independent citations: 5
- (8) Milán Mosonyi, Tomohiro Ogawa: *Divergence radii and the strong converse exponent of classical-quantum channel coding with constant compositions*; IEEE Transactions on Information Theory, Vol. 67, No. 3, pp. 1668–1698, (2021);  
<http://dx.doi.org/10.1109/TIT.2020.3041205>  
Number of independent citations: 7
- (9) Fumio Hiai, Milán Mosonyi: *Different quantum f-divergences and the reversibility of quantum operations*; Reviews in Mathematical Physics, Vol. 29, No. 7, 1750023, (2017) <http://dx.doi.org/10.1142/S0129055X17500234>  
Number of independent citations: 40
- (10) Milán Mosonyi, Tomohiro Ogawa: *Strong converse exponent for classical-quantum channel coding*; Communications in Mathematical Physics, 355(1), pp. 373–426, (2017); <http://dx.doi.org/10.1007/s00220-017-2928-4>  
Number of independent citations: 49

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- (11) Tom Cooney, Milán Mosonyi, and Mark M. Wilde: *Strong converse exponents for a quantum channel discrimination problem and quantum-feedback-assisted communication*; Communications in Mathematical Physics, Volume 344, Issue 3, pp. 797–829, (2016); <http://dx.doi.org/10.1007/s00220-016-2645-4>  
Number of independent citations: 80
- (12) Milán Mosonyi, Tomohiro Ogawa: *Two Approaches to Obtain the Strong Converse Exponent of Quantum Hypothesis Testing for General Sequences of Quantum States*; IEEE Transactions on Information Theory, Vol. 61, Issue 12, pp. 6975–6994, (2015) <http://dx.doi.org/10.1109/TIT.2015.2489259>  
Number of independent citations: 10
- (13) M. Mosonyi: *Coding theorems for compound problems via quantum Rényi divergences*; IEEE Transactions on Information Theory, vol. 61, issue 6, pp. 2997–3012, (2015); <http://dx.doi.org/10.1109/TIT.2015.2417877>  
Number of independent citations: 25
- (14) M. Mosonyi, T. Ogawa: *Quantum hypothesis testing and the operational interpretation of the quantum Rényi relative entropies*; Communications in Mathematical Physics, Volume 334, Issue 3, pp. 1617–1648, (2015); <http://dx.doi.org/10.1007/s00220-014-2248-x>  
Number of independent citations: 110
- (15) Koenraad M.R. Audenaert, Milán Mosonyi: *Upper bounds on error probabilities and asymptotic error exponents in quantum multiple state discrimination*; J. Math. Phys. **55**, 102201 (2014); <http://dx.doi.org/10.1063/1.4898559>  
Number of independent citations: 17
- (16) N. Linden, M. Mosonyi, A. Winter: *The structure of Rényi entropic inequalities*; Proc. R. Soc. A, vol. 469 no. 2158, 20120737, (2013); <http://dx.doi.org/10.1098/rspa.2012.0737>  
Number of independent citations: 28
- (17) N. Datta, M. Mosonyi, M-H. Hsieh, F.G.S.L. Brandao: *A smooth entropy approach to quantum hypothesis testing and the classical capacity of quantum channels*; IEEE Transactions on Information Theory, vol. 59, issue 2, pp. 8014–8026, (2013); <http://dx.doi.org/10.1109/TIT.2013.2282160>  
Number of independent citations: 31
- (18) K.M.R. Audenaert, M. Mosonyi, F. Verstraete: *Quantum state discrimination bounds for finite sample size*; J. Math. Phys., **53**, issue 12, 122205, (2012); <http://dx.doi.org/10.1063/1.4768252>  
Number of independent citations: 22

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- (19) F. Hiai, M. Mosonyi, D. Petz, C. Bény: *Quantum  $f$ -divergences and error correction*; Rev. Math. Phys., volume 23, issue 7, pp. 691 – 747, (2011);  
<http://dx.doi.org/10.1142/S0129055X11004412>  
Number of independent citations: 94
- (20) M. Mosonyi, F. Hiai: *On the quantum Rényi relative entropies and related capacity formulas*; IEEE Trans. Inf. Theory, **57**, pp. 2474–2487, (2011);  
<http://dx.doi.org/10.1109/TIT.2011.2110050>  
Number of independent citations: 74
- (21) G. Kimura, H. Ohno, M. Mosonyi: *Relation between the Dynamics of the Reduced Purity and Correlations*; Open Systems and Information Dynamics **17**, 233–243, (2010); <http://dx.doi.org/10.1142/S123016121000014X>  
Number of independent citations: 1
- (22) F. Hiai, M. Mosonyi, M. Hayashi: *Quantum hypothesis testing with group symmetry*; J. Math. Phys. **50**, 103304, (2009); <http://dx.doi.org/10.1063/1.3234186>  
Number of independent citations: 9
- (23) M. Mosonyi, N. Datta: *Generalized relative entropies and the capacity of classical-quantum channels*; J. Math. Phys. **50**, 072104 (2009);  
<http://dx.doi.org/10.1063/1.3167288>  
Number of independent citations: 40
- (24) M. Mosonyi: *Hypothesis testing for Gaussian states on bosonic lattices*; J. Math. Phys. **50**, 032105, (2009); <http://dx.doi.org/10.1063/1.3085759>  
Number of independent citations: 10
- (25) M. Mosonyi, F. Hiai, T. Ogawa, M. Fannes: *Asymptotic distinguishability measures for shift-invariant quasi-free states of fermionic lattice systems*; J. Math. Phys. **49**, 072104, (2008); <http://dx.doi.org/10.1063/1.2953473>  
Number of independent citations: 11
- (26) F. Hiai, M. Mosonyi, T. Ogawa: *Error exponents in hypothesis testing for correlated states on a spin chain*; J. Math. Phys. **49**, 032112, (2008);  
<http://dx.doi.org/10.1063/1.2872276>  
Number of independent citations: 16
- (27) F. Hiai, M. Mosonyi, H. Ohno, D. Petz: *Free energy density for mean field perturbation of states of a one-dimensional spin chain*; Rev. Math. Phys. **20**, pp. 335–365, (2008); <http://dx.doi.org/10.1142/S0129055X08003298>  
Number of independent citations: 7

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- (28) F. Hiai, M. Mosonyi, T. Ogawa: *Large deviations and Chernoff bound for certain correlated states on a spin chain*; J. Math. Phys. **48**, 123301, (2007); <http://dx.doi.org/10.1063/1.2812417>  
Number of independent citations: 27
- (29) M. Mosonyi, D. Petz: *Structure of Sufficient Quantum Coarse Grainings*; Letters in Mathematical Physics **68**, pp. 19–30, (2004); <http://dx.doi.org/10.1007/s11005-004-4072-2>  
Number of independent citations: 19
- (30) M. Fannes, B. Haegeman, M. Mosonyi: *Entropy growth of shift-invariant states on a quantum spin chain*; Journal of Mathematical Physics **44**, pp. 6005–6019, (2003); <http://dx.doi.org/10.1063/1.1623616>  
Number of independent citations: 30
- (31) D. Petz, M. Mosonyi: *Stationary quantum source coding*; Journal of Mathematical Physics **42**, pp. 4257–4264, (2001); <http://dx.doi.org/10.1063/1.1398335>  
Number of independent citations: 32

## Conference proceedings

- (32) Milán Mosonyi: *Convexity properties of the quantum Rényi divergences, with applications to the quantum Stein's lemma*; Leibniz International Proceedings in Informatics (LIPIcs): 9th Conference on the Theory of Quantum Computation, Communication and Cryptography (TQC 2014), Singapore. Eds.: Steven T. Flammia and Aram Harrow; <http://dx.doi.org/10.4230/LIPIcs.TQC.2014.88>  
Number of independent citations: 4

## Others

- (33) M. Fannes, B. Haegeman, M. Mosonyi, D. Vanpeteghem: *Additivity of minimal entropy output for a class of covariant channels*; quant-ph/0410195  
Number of independent citations: 23