

Published research articles

Frank Hansen

43. Metric adjusted skew information: Convexity and restricted forms of superadditivity (with Liang Cai). *Lett. Math. Phys.* **93**, 1–13 (2010).
42. Application of operator monotone functions in economics. *Proceedings of the Estonian Academy of Sciences* **59** (2010), 42–47.
41. Non-commutative Hardy inequalities. *Bull. London Math. Soc.* **41**(2009), 1009–1016.
40. Quantum statistics and measures of quantum information; in *Algebraic and Geometric Methods in Statistics*, Chapter 20, 327–338. Cambridge University Press (2010).
39. Differential analysis of matrix convex functions II (with Jun Tomiyama). *Journal of Inequalities in Pure and Applied Mathematics* **10**(2) (2009), article 32.
38. On a correspondence between regular and non-regular operator monotone functions (with P. Gibilisco and T. Isola). *Linear Algebra Appl.* **430** (2009), 2225–2232.
37. Some operator monotone functions. *Linear Algebra Appl.* **430** (2009), 795–799.
36. Inequalities for quantum skew information (with Koenraad Audenaert and Liang Cai). *Lett. Math. Phys.* **85**, 135–146 (2008).
35. Metric adjusted skew information. *Proc. Natl. Acad. Sci. USA* **105**, No. 29, 9909–9916 (2008).
34. Decreasing relative risk premium. *The Berkeley Electronic Journal of Theoretical Economics* 7, Iss. 1 (Topics), Article 37 (2007).
33. Jensen’s operator inequality and its converses (with Josip Pečarić and Ivan Perić). *Math. Scand.* 100 (2007), 61-73.
32. The Wigner-Yanase entropy is not subadditive. *Journal of Statistical Physics* **126** (2007), 643–648.

31. Differential analysis of matrix convex functions (with Jun Tomiyama). *Linear Algebra and its Applications* **420** (2007) 102–116.
30. Characterizations of symmetric monotone metrics on the state space of quantum systems. *Quantum Information and Computation* **6**, (2006) 597–605.
29. Extensions of Lieb’s concavity theorem. *Journal of Statistical Physics* **124** (2006), 87–101.
28. Trace functions as Laplace transforms. *Journal of Mathematical Physics* **47**, 043504 (2006)
27. Jensen’s inequality for conditional expectations. *Journal of Inequalities in Pure and Applied Mathematics* **6**(5), Art. 133 (2005), 1–5.
26. A general model of decision making. *The Australian Journal of Mathematical Analysis and Applications* **2**(2), Art. 5 (2005), 1–13.
25. Monotone trace functions of several variables. *International Journal of Mathematics* **16** (2005), 777–785.
24. Lower bounds on products of correlation coefficients. *J. Inequal. Pure and Appl. Math.* **5**(1) Art. 16 (2004), 1–5.
23. Gaps between classes of matrix monotone functions (with Guoxing Ji and Jun Tomiyama). *Bull. London Math. Soc.* **36** (2004), 53–58.
22. Jensen’s trace inequality in several variables (with G.K. Pedersen). *International Journal of Mathematics* **14** (2003), 667–681.
21. Jensen’s operator inequality (with G.K. Pedersen). *Bull. London Math. Soc.* **35** (2003), 553–564.
20. Operator monotone functions of several variables. *Mathematical Inequalities and Applications* **6** (2003), 1–17.
19. Convex matrix functions. *Cubo Matemática Educational* **4** (2002), 163–182.
18. Convex trace functions of several variables. *Linear Algebra and its Applications* **341** (2002), 309–315.

17. Operator inequalities associated with Jensen's inequality, 67–98. In T.M. Rassias, editor, *Survey on Classical Inequalities*. Kluwer Academic Publishers, 2000.
16. Jensen's operator inequality for functions of several variables (with H. Araki). *Proc. Amer. Math. Soc.* **128** (2000), 2075–2084.
15. Operator convex functions of several variables. *Publ. RIMS, Kyoto Univ.* **33** (1997), 443–463.
14. Jensen's operator inequality for functions of two variables. *Proc. Amer. Math. Soc.* **125** (1997), 2093–2102.
13. Perturbation formulas for traces on C^* -algebras (with G.K. Pedersen). *Publ. RIMS, Kyoto Univ.* **31** (1995), 169–178.
12. Extrema for concave operator mappings. *Math. Japonica* **40** (1994), 331–338.
11. Functions of matrices with nonnegative entries. *Linear Algebra and its Applications* **166** (1992), 29–43.
10. The moyal product and spectral theory for a class of infinite dimensional matrices. *Publ. RIMS, Kyoto Univ.* **26** (1990), 885–933.
9. Quantum mechanics in phase space. *Rep. Math. Phys.* **19** (1984), 361–381.
8. Fast simulation of lattice systems. *Comp. Phys. Comm.* **30** (1983), 337–347 (with H. Bohr, E. Katznelson and K. Jensen).
7. Means and concave products of positive semi-definite matrices. *Math. Ann.* **264** (1983), 119–128.
6. Jensen's inequality for operators and Löwner's theorem. *Math. Ann.* **258** (1982), 229–241 (with G.K. Pedersen).
5. Selfadjoint means and operator monotone functions. *Math. Ann.* **256** (1981), 29–35.
4. Self-polar norms on an indefinite inner product space. *Publ. RIMS, Kyoto Univ.* **16** (1980), 889–913.
3. An operator inequality. *Math. Ann.* **246** (1980), 249–250.

2. Perturbations of centre-fixing dynamical systems. *Math. Scand.* **41** (1977), 295–307 (with Dorte Olesen).
1. Inner one-parameter groups acting on a factor. *Math. Scand.* **41** (1977), 113–116.