

# Petz Dénes publikációi<sup>1</sup>

## Könyvek:

1. D. Petz, *An invitation to the algebra of the canonical commutation relation*: Leuven University Press, Leuven, 1990. **Hiv:** 87
2. M. Ohya and D. Petz, *Quantum Entropy and Its Use*: Springer-Verlag, Heidelberg, 1993. Second edition 2004. **Hiv:** 614
3. F. Hiai and D. Petz, *The semicircle law, free random variables and entropy*: American Mathematical Society, Providence, 2000 **Hiv:** 295
4. Petz Dénes, *Lineáris Analízis* (in Hungarian): Akadémiai Kiadó, Budapest, 2002.
5. D. Petz, *Quantum Information Theory and Quantum Statistics*: Springer-Verlag, Heidelberg, 2008. **Hiv:** 31

## Tudományos dolgozatok:

1. D. Petz, A characterization of the class of compact spaces: *Studia Sci. Math. Hungar.* **12**(1977), 407–408. **Hiv:** 5
2. D. Petz, Compactness as E-pseudocompactness: *Commentationes Math. Univ. Carolinae* **19**(1978), 309–314.
3. D. Petz, On a problem of D. Newman: *Acta Math. Acad. Sci. Hungar.* **32**(1978), 161–162.
4. D. Petz, Direct integral of multifunctions into von Neumann algebras: *Studia Sci. Math. Hungar.* **18**(1978), 239–245. **Hiv:** 2
5. D. Petz, On  $(E, k)$ -compact spaces: *Colloq. Math. Soc. J. Bolyai* **23**(1980), 945–955.
6. D. Petz, Generalized connectedness and disconnectedness in topology: *Ann. Univ. Sci. Budapest. Eötvös Sect. Math.* **24**(1980), 247–252. **Hiv:** 8
7. D. Petz, On box product of syntopogenous spaces: *Acta Math. Acad. Sci. Hungar.* **36**(1980), 91–97.
8. D. Petz, On the class of compact topological spaces: *Mat. Lapok*, **28**(1980), 91–97. (in Hungarian) **Hiv:** 5

---

<sup>1</sup>az ismert hivatkozások számával, részletezett felsorolásuk a <http://www.renyi.hu/~petz/pdf/idez.pdf> lapon.

9. D. Petz, On center-valued states of von Neumann algebras:  
Acta Sci. Math. **43**(1981), 219–228.
10. D. Petz, A characterization of the canonical centre-valued trace in finite von Neumann algebras:  
J. London Math. Soc. **23**(1981), 329–331. **Hiv:** 4
11. D. Petz, Locally compact topological groups: Group von Neumann algebra and duality  
Mat. Lapok, **29**(1981), 329–341. (in Hungarian)
12. D. Petz, On spectral and central states of Banach algebras:  
Acta Math. Hungar. **42**(1983), 19–24.
13. D. Petz, Direct integral of multifunctions into von Neumann algebras:  
Studia Sci. Math. Hungar. **18**(1983), 239–245. **Hiv:** 2
14. D. Petz, On the finiteness of operator algebras with respect to an automorphism group:  
Rend. Math. **7**(1983), 483–489.
15. D. Petz, Fixed points and mean ergodic theorems:  
Colloq. Math. Soc. J. Bolyai, **35**(1983), 949–956.
16. D. Petz, Ergodic theorems in von Neumann algebras:  
Acta Sci. Math. **46**(1984), 329–344. **Hiv:** 21
17. D. Petz, Quasi-uniform ergodic theorems in von Neumann algebras:  
Bull. London Math. Soc. **16**(1984), 151–156. **Hiv:** 17
18. D. Petz, Ergodic theorems in von Neumann algebras:  
Functional Analysis: Surveys and Recent Results III, 189–196, Nort-Holland (1984).
19. D. Petz, Quantum ergodic theorems:  
Quantum Probability and Applications to the Quantum Theory of Irreversible Processes, Lecture Notes in Math. No. **1055**(1984), 289–300, Springer. **Hiv:** 2
20. D. Petz, A dual in von Neumann algebras with weights:  
Quart. J. Math. Oxford, **35**(1984), 475–483. **Hiv:** 19
21. D. Petz, A mean ergodic theorem with a look at martingales:  
Studia Sci. Math. Hungar. **19**(1984), 77–80. **Hiv:** 1
22. D. Petz, The relative entropy of states of a von Neumann algebra:  
Proc. Second Int. Conf. on Operator Algebras, Ideals and their Appl. in Theoretical Phys., Teubner Texte zur Math. No. **67**(1984), 112–117.

23. D. Petz, Spectral scale of selfadjoint operators and trace inequalities:  
J. Math. Anal. Appl. **109**(1985), 74–82. **Hiv:** 20
24. C. Cecchini, D. Petz, Norm convergence of generalized martingales in  $L^p$ -spaces  
over von Neumann algebras:  
Acta Sci. Math. **48**(1985), 55–63. **Hiv:** 7
25. D. Petz, Properties of quantum entropy:  
Quantum Probability and Applications, Lecture Notes in Math. No.**1136**(1985),  
428–441, Springer. **Hiv:** 5
26. D. Petz, Quasi-entropies for states of a von Neumann algebra:  
Publ. RIMS. Kyoto Univ. **21**(1985), 781–800. **Hiv:** 7
27. D. Petz, On invariant conditional expectations in von Neumann algebras:  
Annales Univ. Sci. **29**(1986), 227–229.
28. D. Petz, The equality of generalized conditional expectations on von Neumann  
algebras:  
Semesterbericht Funktionalanalysis **85/86**(1986), 117–125, Tübingen Uni.
29. D. Petz, Sufficient subalgebras and the relative entropy of states of a von Neumann  
algebra:  
Commun. Math. Phys. **105**(1986), 123–131. **Hiv:** 43
30. D. Petz, Almost uniform convergence on the predual of a von Neumann algebra  
and an ergodic theorem:  
Aspects of Positivity in Functional Analysis, 247–254, Elsevier (1986).
31. D. Petz, Properties of the relative entropy of states of von Neumann algebras:  
Acta Math. Hungar., **47**(1986), 65–72. **Hiv:** 8
32. D. Petz, Quasi-entropies for finite quantum systems:  
Rep. Math. Phys., **23**(1986), 57-65. **Hiv:** 20
33. D. Petz, On the equality in Jensen’s inequality for operator convex functions:  
Integral Equations Op. Theory, **5**(1986), 744–747. **Hiv:** 3
34. D. Petz, Jensen’s inequality for contractions on operator algebras:  
Proc. Amer. Math. Soc., **99**(1987), 273–277. **Hiv:** 12
35. D. Petz, A variational expression for the relative entropy:  
Commun. Math. Phys., **114**(1988), 345–348. **Hiv:** 26
36. D. Petz, Sufficiency of channels over von Neumann algebras:  
Quart. J. Math. Oxford, **39**(1988), 907–1008. **Hiv:** 22
37. D. Petz, Conditional expectation in quantum probability:  
Quantum Probability and Applications, Lecture Notes in Math., **1303**(1988), 251–  
260. **Hiv:** 5

38. D. Petz, J. Zemánek, Characterizations of the trace:  
Linear Algebra and Appl., **111**(1988), 43–52. **Hiv:** 7
39. D. Petz, Irreducible mappings of finite dimensional C\*-algebras:  
Semesterbericht Functionalanalysis, **14**(1988), 163–168.
40. C. Cecchini, D. Petz, On the Fixed Point Algebras for  $\varphi$ -conditional expectations  
in von Neumann Algebras:  
Studia Sci. Math. Hungar., **24**(1989), 133–137.
41. D. Petz, Characterization of sufficient observation channels:  
Mathematical Methods in Statistical Mechanics, 167–178, Leuven University Press  
(1989). **Hiv:** 2
42. D. Petz, G. A. Raggio and A. Verbeure, Asymptotics of Varadhan-type and the  
Gibbs variational principle:  
Commun. Math. Phys., **121**(1989), 271–282. **Hiv:** 16
43. D. Petz, Positive mappings of matrix algebras:  
Quantum Probability and Applications IV, Lecture Notes in Math., **1396**(1989),  
295–303. **Hiv:** 1
44. C. Cecchini, D. Petz, State extensions and a Radon–Nikodym theorem for condi-  
tional expectations on von Neumann algebras:  
Pacific J. Math., **138**(1989), 9–24. **Hiv:** 6
45. D. Petz, A de Finetti-type theorem with  $m$ -dependent states:  
Prob. Th. Rel. Fields, **85**(1990), 1–11. **Hiv:** 6
46. C. Cecchini, D. Petz, Classes of conditional expectations over von Neumann alge-  
bras:  
J. Functional Anal., **92**(1990), 8–29. **Hiv:** 11
47. D. Petz, First steps towards a Donsker and Varadhan theory in operator algebras:  
Quantum Probability and Applications IV, Lecture Notes in Math., **1442**(1990),  
311–319. **Hiv:** 2
48. D. Petz, On certain property of the relative entropy of states of operator algebras:  
Math. Zeitschrift **206**(1991), 351–361. **Hiv:** 6
49. C. Cecchini, D. Petz, A stochastic transition for von Neumann algebras:  
Bolletino U.M.I. (7)5-A(1991), 181–186. **Hiv:** 1
50. F. Hiai, D. Petz, The proper formula for relative entropy and its asymptotics in  
quantum probability:  
Commun. Math. Phys. **143**(1991), 99–114. **Hiv:** 145

51. D. Petz, Entropy, the central limit theorem and the algebra of the canonical commutation relation:  
Lett. Math. Phys. **24**(1992), 211–220. **Hiv:** 3
52. D. Petz, Characterization of the relative entropy of states of matrix algebras:  
Acta Math. Hungar. **59**(1992), 449–455. **Hiv:** 1
53. H. Muraki, M. Ohya, D. Petz, Entropies of general quantum states:  
Open Syst. Inf. Dynamics **1**(1992), 43–56. **Hiv:** 2
54. D. Petz, Entropy in quantum probability I:  
in *Quantum Probability and Related Topics VII*, 275–297 (World Scientific, Singapore, 1992) **Hiv:** 3
55. F. Hiai, D. Petz, The Golden-Thompson trace inequality is complemented:  
Linear Alg. Appl. **181**(1993), 153–185. **Hiv:** 42
56. D. Petz, An application of a lemma of Riesz and Sz.-Nagy:  
Acta Sci. Math. **57**(1993), 221–228 **Hiv:** 1
57. C. Cecchini, D. Petz, Chain rules for canonical state extensions on von Neumann algebras:  
Colloq. Math. **64**(1993), 115–119. **Hiv:** 1
58. D. Petz, G. Toth, The Bogoliubov inner product in quantum statistics:  
Lett. Math. Phys. **27**(1993), 205–216. **Hiv:** 31
59. D. Petz, On entropy functionals of states of operator algebras:  
Acta Math. Hungar. **64**(1994), 279–286. **Hiv:** 1
60. F. Hiai, D. Petz, Entropy densities for Gibbs states of quantum spin systems:  
Rev. Math. Phys. **5**, 693–712 (1994) **Hiv:** 3
61. D. Petz, Geometry of canonical correlation on the state space of a quantum system:  
J. Math. Phys. **35**(1994), 780–795 **Hiv:** 39
62. D. Petz, Discrimination between states of a quantum system by observations:  
J. Functional Anal. **120**(1994), 82–97 **Hiv:** 3
63. D. Petz, Entropy of Markov states:  
Riv. di Math. Pura ed Appl. **14**(1994), pp. 33–42 **Hiv:** 2
64. D. Petz, A survey of trace inequalities:  
in *Functional Analysis and Operator Theory*, 287–298, Banach Center Publications, **30** (Warszawa 1994) **Hiv:** 3
65. F. Hiai, D. Petz, Entropy density for algebraic states:  
J. Functional Anal. **125**(1994), 287–308 **Hiv:** 7

66. F. Hiai, M. Ohya, D. Petz, McMillan type convergence for quantum Gibbs states:  
Arch. der Math. **65**(1995), 154–158
67. M. Ohya, D. Petz, Notes on quantum entropy:  
Studia Sci. Math. Hungar. **31**(1996), 423–430 **Hiv:** 1
68. D. Petz, Monotone metrics on matrix spaces:  
Linear Algebra Appl. **244**(1996), 81–96 **Hiv:** 120
69. F. Hiai, D. Petz, G. Toth, Curvature in the geometry of canonical correlation:  
Studia Sci. Math. Hungar. **32**(1996), 235–249 **Hiv:** 3
70. D. Petz, Cs. Sudár, Geometries of quantum states:  
J. Math. Phys. **37**(1996), 2662–2673 **Hiv:** 103
71. D. Petz, H. Hasegawa, On the Riemannian metric of  $\alpha$ -entropies of density matrices:  
Lett. Math. Phys. **38**(1996), 221–225 **Hiv:** 17
72. D. Petz, Entropy density in quantum statistical mechanics and information theory:  
in *Contributions in Probability*, ed. C. Cecchini, 221–226, Forum, Udine, 1996,
73. F. Hiai, D. Petz, Quantum mechanics in AF  $C^*$ -systems:  
Rev. Math. Phys. **8**(1996), 819–859 **Hiv:** 4
74. F. Oravecz, D. Petz, On the eigenvalue distribution of some symmetric random matrices:  
Acta Sci. Math. **63**(1997), 483–495 **Hiv:** 10
75. H. Hasegawa, D. Petz, Non-commutative extension of information geometry II:  
in *Quantum Communication, Computing, and Measurement*, ed. O. Hirota et al, Plenum, 1997 **Hiv:** 11
76. M. Ohya, D. Petz, N. Watanabe, On capacities of quantum channels:  
Prob. Math. Stat. **17**(1997), 179–196 **Hiv:** 16
77. D. Petz, M.B. Ruskai, Contraction of generalized relative entropy under stochastic mappings on matrices:  
Infin. Dimens. Anal. Quantum Probab. Relat. Top. **1**(1998), 83–90 **Hiv:** 3
78. D. Petz, F. Hiai, Logarithmic energy as entropy functional:  
in *Advances in Differential Equations and Mathematical Physics* (eds: E. Carlen, E.M. Harrell, M. Loss), Contemporary Math. **217**(1998), 205–221 **Hiv:** 4
79. F. Hiai, D. Petz, Maximizing free entropy:  
Acta Math. Hungar., **80**(1998), 325–346 **Hiv:** 5
80. D. Petz, Information geometry of quantum states:  
in *Quantum Probability Communications*, vol. 10, ed. R.L. Hudson et al, World Scientific, 135–158, 1998 **Hiv:** 4

81. F. Hiai, D. Petz, Eigenvalue density of the Wishart matrix and large deviations:  
Infin. Dimens. Anal. Quantum Probab. Relat. Top. **1**(1998), 633–646. **Hiv:** 32
82. M. Ohya, D. Petz, N. Watanabe, Numerical computation of quantum capacity:  
Int. J. Theor. Phys. **37**(1998), 507–510 **Hiv:** 4
83. F. Hiai, D. Petz, Properties of free entropy related to polar decomposition:  
Commun. Math. Phys. **202**(1999), 421–444 **Hiv:** 2
84. D. Petz, Cs. Sudár, Extending the Fisher metric to density matrices:  
in *Geometry in Present Days Science*, eds. O.E. Barndorff-Nielsen and E.B. Vendel  
Jensen, 21–34, 1999. **Hiv:** 6
85. D. Petz, Relative entropy in quantum information theory:  
in mini-proceedings of the conference *Stochastics and Quantum Physics*, MaPhy-  
Sto, University of Aarhus, Miscellanea, No. 16, 1999
86. D. Petz, A. Jenčová, On quantum Fisher information:  
J. Electrical Engineering, 78–81, **50**, 1999
87. F. Hiai, D. Petz, A large deviation theorem for the empirical eigenvalue distribution  
of random unitary matrices:  
Ann. Inst. Henri Poincaré, Probabilités et Statistiques **36**(2000), 71–85 **Hiv:** 4
88. P.W. Michor, D. Petz and A. Andai, On the curvature of a certain Riemannian  
space of matrices:  
Infin. Dimens. Anal. Quantum Probab. Relat. Top. **3**(2000), 199–212 **Hiv:** 3
89. F. Hiai and D. Petz, Asymptotic freeness almost everywhere for random matrices:  
Acta Sci. Math (Szeged), **66**(2000), 801–826 **Hiv:** 11
90. D. Petz and M. Mosonyi, Stationary quantum source coding:  
J. Math. Phys. **42**(2001), 4857–4864. **Hiv:** 30
91. F. Hiai, M. Mizuo and D. Petz, Free relative entropy for measures and a corre-  
sponding perturbation theory:  
J. Math. Soc. Japan, **54**(2002), 679–718. **Hiv:** 1
92. M. Fannes and D. Petz, On the function  $\text{Tr exp}(A + itB)$ :  
Int. J. Math. and Math. Sci. **29**(2002), 389–394. **Hiv:** 5
93. D. Petz, Covariance and Fisher information in quantum mechanics:  
J. Phys. A: Math. Gen. **35**(2002), 929–939 **Hiv:** 22
94. D. Petz, Monotonicity of quantum relative entropy revisited:  
Rev. Math. Phys. **15**(2003), 79–91. **Hiv:** 15
95. M. Fannes and D. Petz, Perturbation of Wigner matrices and a conjecture:  
Proc. Amer. Math. Soc. **131**(2003), 1981–1988. **Hiv:** 14

96. P. Hayden, R. Jozsa, D. Petz and A. Winter, Structure of states which satisfy strong subadditivity of quantum entropy with equality:  
Commun. Math. Phys. **246**(2004), 359–374 **Hiv:** 49
97. D. Petz and J. Réffy, On asymptotics of large Haar distributed unitary matrices:  
Period. Math. Hungar. **49**(2004), 103–117. **Hiv:** 7
98. D. Petz and J. Réffy, Large deviation theorem for empirical eigenvalue density of truncated Haar unitary matrices:  
Prob. Theory Rel. Fields. **133**(2005), 175–189. **Hiv:** 1
99. M. Mosonyi and D. Petz, Structure of sufficient quantum coarse-grainings:  
Lett. Math. Phys. **68**(2004), 19–30. **Hiv:** 3
100. F. Hiai, D. Petz and Y. Ueda, Free transportation cost inequalities via random matrix approximation:  
Prob. Theory Rel. Fields. **130**(2004), 199–221. **Hiv:** 1
101. D. Petz, Quantum source coding and data compression:  
in *Entropy, Search, Complexity*, eds. I. Csiszár, G.O.H. Katona and G. Tardos, Bolyai Society Mathematical Studies **16**, 159–178, 2006. **Hiv:** 1
102. F. Hiai, D. Petz and Y. Ueda, A free logarithmic Sobolev inequality on the circle:  
Canad. Math. Bull. **49**(2006), 389–406. **Hiv:** 1
103. M. A. Nielsen and D. Petz, A simple proof of the strong subadditivity inequality:  
Quantum Information & Computation, **5**(2005), 507–513. **Hiv:** 17
104. N. Akiho, F. Hiai and D. Petz, Equilibrium states and entropy densities in gauge-invariant C\*-systems:  
Rev. Math. Phys. **17**(2005), 365–389.
105. A. Jenčova and D. Petz, Sufficiency in quantum statistical inference:  
Commun. Math. Phys. **263**(2006), 259–276. **Hiv:** 1
106. D. Petz and R. Temesi, Means of positive numbers and matrices:  
SIAM Journal on Matrix Analysis and Applications, **27**(2006), 712–720. **Hiv:** 16
107. F. Hiai and D. Petz, A free analogue of the transportation cost inequality on the circle (*dedicated to András Prékopa on the occasion of his 70th birthday*):  
*Quantum Probability*, Banach Center Publications, vol bf 73, ed. M. Bozejko, W. Młotkowski and J. Wysoczansky, pp. 199–206, Warszawa, 2006. **Hiv:** 2
108. F. Hiai and D. Petz, Large deviations for functions of two random projections:  
Acta Sci. Math. (Szeged) **72**(2006), 581–609. **Hiv:** 3
109. D. Petz, Means of positive matrices: Geometry and a conjecture:  
Annales Mathematicae et Informaticae **32**(2005), 129–139.

110. Th. Baier, D. Petz, K. M. Hangos and A. Magyar, Comparison of some methods of quantum state estimation:  
*Quantum Probability and Infinite Dimensional Analysis, Proceedings of the 26th Conference*, eds. L. Accardi, W. Freudenberg, M. Schürmann, pp. 64–78, World Scientific, 2007.
111. D. Petz, Information Geometry and Statistical Inference:  
in *Proceedings of the conference IGAlA2*, Tokyo, 2005, pp. 162–169.
112. D. Petz, Bregman divergence as relative operator entropy:  
*Acta Math. Hungar.*, **116**(2007), 127–131. **Hiv: 4**
113. A. Jenčova and D. Petz, Sufficiency in quantum statistical inference: A survey with examples:  
*J. Infinite Dimensional Analysis and Quantum Probability*, **9**(2006), 331–352.  
**Hiv: 2**
114. D. Petz, Saturation of entropy bounds and quantum Markov states:  
in *Quantum Information and Computing*, eds. L. Accardi, M. Ohya and N. Watanabe, World Scientific, 2006. pp. 285–291.
115. D. Perez-Garcia, M.M. Wolf, D. Petz and M.B. Ruskai, Contractivity of positive and trace preserving maps under  $L^p$  norms:  
*J. Math. Phys.* **47**(2006), 083506.
116. A. Magyar, D. Petz and K.M. Hangos, Bayesian qubit state estimation:  
in *Proceedings of 14th IFAC Symposium on System Identification*, Newcastle, Australia, 2006, pp. 949–954.
117. K.M. Hangos, D. Petz, A. Szántó and F. Szöllősi, State tomography for two qubits using reduced densities:  
*J. Phys. A: Math. Gen.* **39**(2006), 10901–10907.
118. D. Petz and J. Kahn, Complementary reductions for two qubits:  
*J. Math. Phys.* **48**, 012107, 2007.
119. D. Petz, K.M. Hangos and A. Magyar, Point estimation of states of finite quantum systems:  
*J. Phys. A: Math. Theor.* **40**(2007), 7955–7969.
120. D. Petz, Complementarity in quantum systems:  
*Rep. Math. Phys.* **59**(2007), 209–224. **Hiv: 3**
121. H. Ohno, D. Petz and A. Szántó, Quasi-orthogonal subalgebras of  $4 \times 4$  matrices:  
*Linear Alg. Appl.* **425**(2007), 109–118. **Hiv: 7**
122. D. Petz, Hilbert space methods for quantum mechanics:  
written version of a course in the Trieste School, to be published.

123. I. Csiszár, F. Hiai and D. Petz, A limit relation for quantum entropy and channel capacity per unit cost:  
J. Math. Phys. **48**(2007), 092102. **Hiv:** 1
124. F. Hiai and D. Petz, A new approach to mutual information:  
in *Noncommutative Harmonic Analysis with Applications to Probability*, Banach Center Publications, vol 78, eds. M. Bozejko, A. Krystek, W. Mlotkowsky and J. Wysoczansky, pp. 151–164, Warszawa, 2007.
125. D. Petz, K.M. Hangos and L. Ruppert, Quantum state tomography with finite sample size:  
in *Quantum Bio-Informatics*, eds. L. Accardi, W. Freudenberg, M. Ohya, World Scientific, 2008, pp. 247–257.
- 126 F. Hiai, M. Mosonyi, H. Ohno and D. Petz, Free energy density for mean field perturbation of states of a one-dimensional spin chain:  
Rev. Math. Phys. **20**(2008), 335 - 365.
- 127 P. Gibilisco, F. Hiai and D. Petz, Quantum covariance, quantum Fisher information and the uncertainty principle:  
IEEE Trans. Inform. Theory **55**(2009), 439–443. **Hiv:** 5
- 128 D. Petz and V.E. S. Szabó, From quasi-entropy to skew information:  
Int. J. Math. **20**(2009), 1421–1430. **Hiv:** 1
- 129 D. Petz, A. Szántó and M. Weiner, Complementarity and the algebraic structure of 4-level quantum systems:  
J. Infin. Dim. Analysis Quantum Prob. **12**(2009), 1–18. **Hiv:** 3
- 130 T. Ando and D. Petz, Gaussian Markov triplets approached by block matrices:  
Acta Sci. (Szeged) **75**(2009), 265–281.
- 131 D. Petz, Complementarity and the algebraic structure of finite quantum systems:  
J. of Physics: Conference Series **143**(2009), 012011.
132. H. Ohno and D. Petz, Generalizations of Pauli channels:  
Acta Math. Hungar. **124**(2009), 165–177.
133. F. Hiai and D. Petz, Riemannian geometry on positive definite matrices related to means:  
Lin. Alg. Appl. **430**(2009), 3105–3130.
134. A. Jenčova, D. Petz and J. Pitrik, Markov triplets on CCR-algebras:  
Acta Sci. Math. (Szeged), **76**(2010), 27-50.
135. T. Baier and D. Petz, Complementarity and state estimation:  
Rep. Math. Phys., **65**(2010), 203–214.

136. D. Petz, Complementary subalgebras. Problems to solve:  
Ann. Univ. Sci. Budapest. Eötvös Sect. Math. **51**(2008), 117–120.
137. D. Petz and J. Pitrik, Gaussian Markov triplets:  
Proceedings of the Quantum Bio-Informatics III, 291–303, eds. **L. Accardi, W. Freidenberg and M. Ohya**, World Scientific Publishing, 2010.
138. D. Petz, From  $f$ -divergence to quantum quasi-entropies and their use:  
Entropy **12**(2010), 304-325.
139. K. Audenaert, F. Hiai and D. Petz, Strongly subadditive functions:  
to be published in Acta Math. Hungar.
140. D. Petz and J. Pitrik, Markov property of Gaussian states of canonical commutation relation algebras:  
J. Math. Phys. **50**, 113517 (2009).
141. D. Petz, Algebraic complementarity in quantum theory:  
J. Math. Phys. **51**, 015215 (2010).

## Népszerűsítő és egyéb publikációk:

1. D. Petz, Quantum mechanics in view of information:  
Kagaku, 63, 569–574 (1993) (in Japanese).
2. D. Petz and M. Rédei, John von Neumann and the theory of operator algebras:  
in *The Neumann Compendium*, 163–185, eds. F. Bródi, T. Vámos, World Scientific Series in 20th Century Math. vol. 1, World Scientific, Singapore, 1995.
3. Petz D., Mérték és dimenzió:  
Természet Világa, 1997/3 (in Hungarian).
4. D. Petz and G.J. Székely, Die Entropie:  
in *Jenseits von Kunst*, Peter Weibel, Passagen Verlag, 1998.
5. D. Petz, Mathematical information theory:  
in *Enciclopedia Italiana*.
6. Petz D., A  $q$ -világa, avagy a matematika deformációja:  
Polygon, **VIII**(1999), 35–44 (in Hungarian).
7. D. Petz, Entropy, von Neumann and the von Neumann entropy:  
in *John von Neumann and the Foundations of Quantum Physics*, eds. M. Rédei and M. Stöltzner, Kluwer, 2001
8. Petz Dénes, A kvantumelmélet matematikája:  
*Tudomány a Duna két partján. Az akadémiai közös kutatások című konferencián elhangzott előadások*, Kalligram Könyvkiadó, 2002 (in Hungarian).

9. Petz D., Neumann János tudományos öröksége:  
Természet Világa, 2004. január (in Hungarian).
10. Petz D., Neumann János tudományos öröksége:  
Debreceni Szemle, 2005. január (in Hungarian)
11. Á. Császár and D. Petz, A panorama of Hungarian real and functional analysis in the 20th century:  
in *A panorama of Hungarian Mathematics in the Twentieth Century I*, ed. J. Horváth, pp. 211–244, Springer, 2005.
12. Petz Dénes, Lax Péter Abel-díjas:  
Népszabadság, 2005. március 19.
13. Petz Dénes, Mátrixok, nagy eltérések és egyenlőtlenségek:  
to be published.
14. Kovács Veronika és Petz Dénes, Számítási közép, mértani közép, meg ilyenek:  
Középiskolai Matematikai Lapok, 2006. március.
15. D. Petz, Quantum entropy:  
in *Encyclopedia of Mathematical Physics*, eds. J.-P. Francoise, G.L. Naber and Tsou S.T. Oxford: Elsevier, 2006, Vol. 3, pp. 177–182.
16. Pálfia Miklós és Petz Dénes, Tsuyoshi Ando professzorról. Unitér dilatációk és mátrixok közepei (in Hungarian):  
Polygon XVI (2007), 1–16.