

Bibliography
Dan-Virgil Voiculescu
December 2022

1. The condenser quasicontral modulus. Preprint, arXiv:2109.07633 <https://arxiv.org/pdf/2109.07633>
2. Capacity and the quasicontral modulus *Acta Sci. Math. (Szeged)* **88** (2022), no. 1-2, 515–525. arXiv:2107.11924 [math.FA] 2021 <https://arxiv.org/pdf/2107.11924.pdf>
3. Miscellaneous on Commutants mod Normed Ideals and Quasicontral Modulus I. Preprint, arXiv:2008.06990 [math.FA math.KT math.OA], 2020 <https://arxiv.org/pdf/2008.06990.pdf>
4. The Formula for the Quasicontral Modulus in the Case of Spectral Measures on Fractals. *J. Fractal Geom.* **8** (2021), no. 4, 347 – 361 <https://ems.press/journals/jfg/articles/2768070> arXiv:2006.14456 [math.FA], 2020 <https://arxiv.org/pdf/2006.14456.pdf>
5. Some Results and a K-theory Problem about Threshold Commutants mod Normed Ideals . *Pure Appl. Funct. Anal.* **7** (2022), no. 1, 409–420 arXiv:1911.07377 [math.FA], 2019 <https://arxiv.org/pdf/1911.07377.pdf>
6. A hydrodynamic exercise in free probability: setting up free Euler equations. *Expo. Math.* **38** (2020), no. 2, 271 – 283 <https://arxiv.org/pdf/1902.02442.pdf>
7. Commutants mod normed ideals. *Advances in Noncommutative Geometry On the Occasion of Alain Connes 70th Birthday*, Springer Verlag (2020), 585–606. <https://arxiv.org/pdf/1810.12497.pdf>
8. Hybrid normed ideal perturbations of n-tuples of operators II: weak wave operators. *Operator Theory: Advances and Applications* **278** (2020), 501 – 510, <https://arxiv.org/pdf/1801.00490.pdf>
9. (with Jorge Garza Vargas) Boolean Extremes and Dagum Distributions. *Indiana Univ. Math. J.* **70** (2021), no. 2, 595 – 603 <https://arxiv.org/pdf/1711.06227.pdf>
10. A remark about supramenability and the Macaeu norm. *Groups Geom. Dyn.*, **13** (2019), no. 2, 379 – 388. <https://arxiv.org/pdf/1605.02135.pdf>
11. K-theory and perturbations of absolutely continuous spectra. *Communications in Mathematical Physics*, **365** (2019), no.1, 363 – 373. <https://arxiv.org/pdf/1606.00520.pdf>

12. Hybrid normed ideal perturbations of n-tuples of operators I. *J. Geom. Phys.* **128** (2018), 169–184.
13. Lebesgue decomposition of functionals and unique preduals for commutants modulo normed ideals. *Houston J. Math.* **43** (2017), no. 4, 1251–1262.
14. Free Probability for Pairs of Faces IV: Bi-free Extremes in the Plane. *J. Theoret. Probab.*, **30** (2017), no. 1, pp. 384–394.
15. The bi-free extension of free probability. *Mathematical analysis, probability and applications—plenary lectures*, pp. 217–233, Springer Proc. Math. Stat., 177, Springer, [Cham], 2016.
16. (with J. Bourgain) The essential centre of the mod a diagonalization ideal commutant of an n-tuple of commuting Hermitian operators. *Noncommutative analysis, operator theory and applications* pp. 77–80, Oper. Theory Adv. Appl., 252, Linear Oper. Linear Syst., Birkhuser/Springer, [Cham], 2016.
17. Some C^* -algebras which are coronas of non- C^* -Banach algebras. *J. Geom. Phys.* , **105** (2016), pp.123–129.
18. Free probability for pairs of faces III: 2-variables bi-free partial S- and T-transforms. *J. Funct. Anal.* , **270** (2016), no. 10, pp. 3623–3638.
19. Free probability for pairs of faces II: 2-variables bi-free partial R-transform and systems with rank ≤ 1 commutation. *Ann. Inst. Henri Poincar Probab. Stat.*, **52** (2016), no. 1, pp. 1–15.
20. Background and outlook, in *Free Probability and Operator Algebras*, D-V Voiculescu, N. Stammeier, M. Weber, editors, Munster Lectures in Mathematics, European Mathematical Society Publishing House (2016), pp. 1–6.
21. Almost normal operators mod Hilbert-Schmidt and the K-theory of the Banach algebras $E\Lambda(\Omega)$, *J. Noncommut. Geom.*, **8** (2014), no. 4, pp. 112–1145.
22. Countable degree-1 saturation of certain C^* -algebras which are coronas of Banach algebras. *Groups Geom. Dyn.*, **8** (2014), no. 3, pp. 985–1006.
23. Free probability for pairs of faces I. *Comm. Math. Phys.* **332** (2014), no. 3, pp. 955–980.
24. Free analysis questions II: the Grassmannian completion and the series expansions at the origin, *J. Reine Angew. Math.*, **645**, (2010), pp.155–236.

25. Aspects of free analysis. *Jpn. J. Math.*, **3**, No.2, (2008), pp.163-183.
26. (with G. Ben Arous), Free extreme values. *Ann. Probab.* **34**, No. 5, (2006), pp.2037-2059.
27. Symmetries arising from free probability theory, in *Frontiers in number theory, physics, and geometry. I*, Springer, Berlin, (2006) pp.231–243
28. Aspects of free probability, in *XIVth International Congress on Mathematical Physics*, World Sci. Publ., Hackensack, NJ, (2005), pp.145–157
29. Free probability and the von Neumann algebras of free groups. *Rep. Math. Phys.* **55** (2005), no. 1, pp.127–133.
30. Free analysis questions. I. Duality transform for the coalgebra of $\partial_{X:B}$, *Int. Math. Res. Not.* 2004, no. 16, pp.793–822.
31. The topological version of free entropy *Lett. Math. Phys.* **62** (2002), no. 1, pp71–82.
32. Analytic subordination consequences of free Markovianity *Indiana Univ. Math. J.* **51** (2002), no. 5, pp.1161–1166.
33. Cyclomorphy. *International Math. Res. Notices* (2002), no. 6, pp.299–332.
34. Free entropy. *Bull. London Math. Society* **34** (2002), pp.257–278.
35. (with P.Biane), A free probability analogue of the Wasserstein metric on trace-state space. *GAF*, vol. **II** (2001), pp.1125–1138.
36. (with S.J.Szarek), Shannon entropy power inequality via restricted Minkowski sums, in *Geometric Aspects of Functional Analysis*. (editor: V.Milman). Lecture Notes in Math, Springer, vol. **1745** (2000), pp.257–262.
37. A note on cyclic gradients. *Indiana University Math. J.* **49** (2000), pp.837–841.
38. Lectures on free probability theory, in *Lectures on Probability Theory and Statistics*, Ecole de Probabilités de Saint-Flour XXVIII (1998) (editor: P.Bernard), Springer Lecture Notes in Math **1738**, pp.280–349.
39. The coalgebra of the free difference quotient and free probability. *International Math. Res. Notices* **2** (2000), pp.79–106.
40. Free entropy dimension ≤ 1 for some generators of property T factors of type II_1 . *Jour. Reine u. Angewandte Math.* **514** (1999), pp.113–118.

41. The analogues of entropy and of Fisher information measure in free probability theory, VI: Liberation and mutual free information. *Advances in Mathematics* **146** (1999), pp.101–166.
42. The noncommutative Hilbert transform approach to free entropy. In *Quantum Probability*, vol. **43**, Banach Center Publications, Inst. of Mathematics, Polish Academy of Sciences, Warszawa 1998, pp. 421-427.
43. The analogues of entropy and of Fisher information measure in free probability theory, V: Noncommutative Hilbert transforms. *Invent. Math.* **132** (1998), pp.189–227.
44. Regularity questions for free convolution (with H. Bercovici). In *Operator Theory: Advances and Applications*, vol. **104** (Birkhauser, 1998), pp.37–47.
45. A strengthened asymptotic freeness result for random matrices with applications to free entropy. *International Math. Res. Notices* **1** (1998), pp.41–63.
46. The derivative of order $1/2$ of a free convolution by a semicircle distribution. *Indiana Univ. Math. Jour.* vol. **46**, no. 3 (1997), pp.697–703.
47. Topics in Free Entropy. In *Operator Algebras and Quantum Field Theory*, S.Doplicher, R.Longo, J.E.Roberts and L.Zsido, editors (International Press), pp.458–462.
48. The analogues of entropy and of Fisher information measure in free probability theory, IV: Maximum entropy and freeness. In *Free Probability Theory*, D.Voiculescu, ed., Fields Institute Communications, vol. 12 (American Math. Soc., 1997), pp.293–302.
49. Volumes of restricted Minkowski sums and the entropy power inequality (with S.Szarek). *Communications in Math. Physics* **178** (1996), pp.563–570.
50. The analogues of entropy and of Fisher information measure in free probability theory, III: Absence of Cartan subalgebras. *Geometric & Functional Analysis*, vol. **6**, no. 1 (1996), pp.172–199.
51. Alternative proofs for the type II free Poisson variables and for the free compression results (Appendix to a paper by A.Nica and R.Speicher). *American Jour. of Math.* **118** (1996), pp.832–837.
52. Operations on certain non-commutative operator-valued random variables. In “Recent Advances in Operator Algebras”, *Asterisque* **232** (1995), pp.243–275.
53. Free probability theory: random matrices and von Neumann algebras, *Proceedings International Congress of Mathematicians*, Zurich 1994 (Birkhauser, Boston, 1995), pp.227–241.

54. Superconvergence to the central limit and failure of the Cramer Theorem for free random variables (with H.Bercovici). *Probability Theory & Related Fields* **102** (1995), pp.215–222.
55. Dynamical approximation entropies and topological entropy in operator algebras. *Commun. Math. Phys.* **170** (1995), pp.249–281.
56. The analogues of entropy and of Fisher information measure in free probability theory II. *Inventiones Math* **118** (1994), pp.411–440.
57. A note on the augmentation ideal of certain rings associated with free groups. *Acta Sci. Math. (Szeged)* **57** (1993), pp.277–287.
58. The K-groups of the C*-algebra of a semicircular family. *K-theory* **7** (1993), pp.5–7.
59. The analogues of entropy and of Fisher's information measure in free probability theory. I. *Communications in Math. Phys.* **155** (1993), pp.71–92.
60. Around quasidiagonal operators. *Integr. Equat. Oper. Th.* **117** (1993), pp.173–149.
61. Free convolution of measures with unbounded support (with H. Bercovici). *Indiana Math. J.* **42**, No. 3 (1993), pp.733–772.
62. Entropy of random walks on groups and the Macaeu norm. *Proc. AMS* **119**, No. 3 (1993), pp.971–977.
63. Perturbations of operators, connections with singular integrals, hyperbolicity and entropy. In *Harmonic Analysis and Discrete Potential Theory*, ed. M.Picardello, (Plenum Press, 1992), New York, London, pp.181–192.
64. *Free Random Variables*, CRM Monograph Series, No. 1 (with K.Dykema and A.Nica). AMS, Providence (1992).
65. Levy-Hincin type theorems for free convolution (with H.Bercovici). *Pacific Jour. Math.* vol. **153**, no. 2 (1992), pp.217–248.
66. Free noncommutative random variables, random matrices and the II_1 factors of free groups. In *Quantum Probability and Related Topics*, vol. VI (World Scientific, 1991), pp.473–487.
67. Entropy of dynamical systems and perturbations of operators, II. *Houston Math Jour.* vol. **17**, no. 4 (1991).
68. Entropy of dynamical systems and perturbations of operators, I. *Ergodic Theory & Dynamical Systems* **11** (1991), pp.779–786.

69. A note on quasi-diagonal C^* -algebras and homotopy. *Duke Math. Jour.* **62**, no. 2 (1991), pp.267–271.
70. Limit laws for random matrices and free products. *Inventiones Math.* **104** (1991), pp.201–220.
71. Entropy of Bogoliubov automorphisms for the canonical anticommutation relations (with E. Stormer). *Communications in Math. Physics* **133** (1990), pp.521–542.
72. Circular and semicircular systems and free product factors. In *Operator Algebras, Unitary Representations, Enveloping Algebras* (Birkhauser, 1990), pp.45–60.
73. s -Numbers of singular integrals for the invariance of absolutely continuous spectra in fractional dimensions (with G. David). *Jour. Functional Analysis* vol. **94**, no. 1 (1990), pp.14–26.
74. Noncommutative random variables and spectral problems in free product C^* -algebras. *Rocky Mountain Jour. of Math.* vol. **20**, no. 2 (1990), pp.263–283.
75. Property T and the approximation of operators. *Bulletin of London Math Soc.* **22** (1990), pp.25–30.
76. On the existence of quascentral approximate units relative to normed ideals, part I. *Jour. Functional Analysis* **91** (1990), pp.1–36.
77. A note on quasidiagonal operators. In *Operator Theory: Advances and Applications*, vol. **32** (Birkhauser-Verlag, 1988), pp.265–274.
78. The analogue of Kuroda theorem for n -tuples (with H. Bercovici). In *Operator Theory: Advances and Applications*, vol. **24** (Birkhauser-Verlag, 1988), pp.57–60.
79. On a trace formula of M.G. Krein, in *Operator Theory: Advances and Applications*, vol. **24** (Birkhauser-Verlag, 1987), pp.329–332.
80. Multiplication of certain non-commuting random variables. *Jour. Operator Theory* **18** (1987), pp.223–235. <https://www.theta.ro/jot/archive/1987-018-002/1987-018-002-003.pdf>
81. Dual algebraic structures on operator algebras related to free products. *Jour. Operator Theory* **17** (1987), pp.85–98.
82. Almost inductive limit automorphisms and embeddings into AF-algebras. *Dynamical Systems & Ergodic Theory* **6** (1986), pp.475–484.

83. Addition of certain non-commuting random variables. *Jour. Functional Analysis* **66** (1986), pp.323–346.
84. Symmetries of some reduced free product C^* -algebras, in *Operator Algebras and Their Connections with Topology and Ergodic Theory*, Lecture Notes in Math., vol. **1132** (Springer-Verlag, 1985), pp.556–588.
85. Almost-normal operators modulo gp, in *Linear and Complex Analysis Problem Book*, editors V.P.Havin, S.V.Hruscev and N.K.Nikolskii, Lecture Notes in Math. vol. **1043** (Springer Verlag, 1984), pp.227–230.
86. *Approximation of Hilbert Space Operators*, vol. 2 (with C.Apostol, L.Fialkow and D.A.Herrero). Research Notes in Math. **102**, Pitman Books Ltd., 1984.
87. Asymptotically commuting finite rank unitary operators without commuting approximants. *Acta Sci. Math. (Szeged)* **45** (1983), pp.429–431.
88. The closure of the similarity orbit of a Hilbert space operator (with C.Apostol and D.A.Herrero). *Bull. New Series AMS* **6** (1982), 421–426.
89. On the smoothness of sphere extensions (with R.G.Douglas). *Jour. Operator Theory* **6** (1981), 103–111.
90. Hilbert space operators modulo normed ideals, *Proceedings International Congress of Mathematicians*, Warsaw, 1983.
91. Remarks on Hilbert-Schmidt perturbations of almost normal operators, in *Topics in Modern Operator Theory*, (Birkhauser, 1981), 311–318.
92. K -groups of reduced crossed products by free groups (with M.Pimsner). *Jour. Operator Theory* **8** (1982), pp.131–156. <https://www.theta.ro/jot/archive/1982-008-001/1982-008-001-006.pdf>
93. Some results on norm-ideal perturbations of Hilbert space operators, II. *Jour. Operator Theory* **5** (1981), pp.77–100. <https://www.theta.ro/jot/archive/1981-005-001/1981-005-001-008.pdf>
94. Remarks on the singular extension in the C^* -algebra of the Heisenberg group. *Jour. Operator Theory* **5** (1981), pp.147–170.
95. Remarks on ideals of the Calkin algebra for certain singular extensions (with M.Pimsner and S.Popa). In *Topics in Modern Operator Theory* (Birkhauser Verlag, Basel 1981), pp.269–277.

96. A note on quasitriangularity and trace-class self-commutators. *Acta Sci. Math. (Szeged)* **42** (1980), pp.195–199.
97. Exact sequences for K-groups and Ext-groups of certain cross-product C^* -algebras (with M.Pimsner). *Jour. Operator Theory* **4** (1980), pp.93–118. <https://www.theta.ro/jot/archive/1980-004-001/1980-004-001-005.pdf>
98. Imbedding the irrational rotation C^* -algebra into an AF-algebra (with M. Pimsner). *Jour. Operator Theory* **4** (1980), pp.201–210. <https://www.theta.ro/jot/archive/1980-004-002/1980-004-002-003.pdf>
99. Homogeneous C^* -extensions of $C(X) \otimes K(H)$, part 2 (with M. Pimsner and S. Popa). *Jour. Operator Theory* **4** (1980), pp.211–249.
100. Homogeneous C^* -extensions of $C(X) \otimes K(H)$, part 1 (with M.Pimsner and S.Popa). *Jour. Operator Theory* (1979), pp.55–108.
101. Some results on norm-ideal perturbations of Hilbert space operators, I. *Jour. Operator Theory* **2** (1979), pp.3–37. <https://www.theta.ro/jot/archive/1979-002-001/1979-002-001-001.pdf>
102. On a class of KMS states for the unitary group $U(\infty)$ (with S.Stratila). *Math. Ann.* **235** (1978), pp.87–110.
103. Amenability and Katz algebras, Colloque International du CNRS “Algebres d’operateurs et leurs application en physique mathematique”, Marseille, Juin 1977.
104. Tensor operations on characteristic functions of C_0 -contractions (with H.Bercovici). *Act. Sci. Math. (Szeged)* **39** (1977), pp.205–223.
105. Strongly reductive operators are normal (with C.Apostol and C.Foias). *Acta Sci. Math.* **38** (1976).
106. On strongly reductive algebras (with C. Apostol and C. Foias). *Rev. Roumaine Math. Pures et Appl.* **21** (1976), pp.633–642.
107. Representations factorielles de type II de $U(\infty)$. *J. Math. Pures et Appl.* **55** (1976), pp.1–20.
108. On crossed products, II (with S. Stratila and L. Zsido). *Rev. Roumaine Math. Pures Appl.* **22** (1977), pp.83–118.
109. On crossed products, I (with S.Stratila and L.Zsido). *Rev. Roumaine Math. Pures Appl.* **21** (1976), pp.1411–1450.

110. A non-commutative Weyl-von Neumann theorem. *Rev. Roumaine Math. Pures et Appl.* **21** (1976), pp. 97–113.
111. *Representations of AF-Algebras and of the Group $U(\infty)$* (with S.Stratila). Lecture Notes in Math. vol. 486, (Springer-Verlag, 1975).
112. Sur les representations factorielles infinies de $U(\infty)$ (with S.Stratila). *Comptes Rendus Acad. Sci. Paris* **280** (1975), Seance du 13 Janvier 1975.
113. Sur les representations factorielles finies de $U(\infty)$ et autres groupes semblables. *Comptes Rendus Acad. Sci. Paris* **279** (1974), pp.945–946.
114. Hyperquasitriangularite et theoremes du type Aronszajn-Smith. *Comptes Rendus Acad. Sci. Paris* **276** (18 Juin 1973), pp.1605–1606.
115. Structure spectrale des operateurs non-quasitriangulaires (with C.Apostol and C.Foias). *Comptes Rendus Acad. Sci. Paris* **276** (25 Juin 1973), pp.1669–1671.
116. Norm limits of algebraic operators. *Rev. Roumaine Math. Pures et Appl.* **19** (1974), pp.371–378.
117. On a problem of Halmos (with C. Apostol). *Rev. Roumaine Math. Pures et Appl.* **19** (1974), pp.283–284.
118. Some extensions of quasitriangularity, II. *Rev. Roumaine Math. Pures et Appl.* **18** (1973), pp.1439–1456.
119. Some extensions of quasitriangularity. *Rev. Roumaine Math. Pures et Appl.* **18** (1973), pp.1303–1320.
120. On the norm-closure of nilpotents, II (with C. Apostol and C. Foias). *Rev. Roumaine Math. Pures et Appl.* **18** (1974), pp.549–557.
121. Some results on non-quasitriangular operators, VI (with C.Apostol and C.Foias). *Rev. Roumaine Math. Pures et Appl.* **18** (1973), pp.1473–1494.
122. Some results on non-quasitriangular operators, V (with C.Apostol and C.Foias). *Rev. Roumaine Math. Pures et Appl.* **18** (1973), pp.1133–1149.
123. Some results on non-quasitriangular operators, IV (with C.Apostol and C.Foias). *Rev. Roumaine Math. Pures et Appl.* **18** (1973), pp.487–514
124. Some results on non-quasitriangular operators, III (with C.Apostol and C.Foias). *Rev. Roumaine Math. Pures et Appl.* **18** (1973), pp.309–324.

125. Some results on non-quasitriangular operators, II (with C.Apostol and C.Foias). *Rev. Roumaine Math. Pures et Appl.* **18** (1973), pp.159–181.
126. Sur un theoreme de Misonou, *Rev. Roumaine Math. Pures et Appl.* **17** (1972), pp.309–310.
127. Sur les sous-espaces parafermees invariants d'une algebre de von Neumann, *Bull. Sci. Math. 2e serie*, **95** (1972), pp.161–168.
128. Convergent sequences in semimetric spaces. *Publ. Math. Debrecen* **16**, (1969), pp. 141–144.
129. Spaces with convexity. I, II. (Romanian) *Stud. Cerc. Mat.* **19** (1967), 295-301; *ibid.* **19** (1967) 303–311.
130. (with Farkas, P) Some observations on convergent series. (Romanian) *Gaz. Mat. Ser. A* **72** (1967), pp. 241–245.
131. An equation concerning convex bodies and applications to associated bodies of a convex body. (Romanian) *Stud. Cerc. Mat.* **18** (1966), pp.741–745