

# CURRICULUM VITAE

Surname: **KATAVOLOS**

First Name: **Aristides**

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Born: 30th April 1950, Athens, Greece.

Nationality: Greek.

## 1. Education

**1972** B.Sc. in Physics (2nd class Honours, Upper Division): University of London (Imperial College).

**1974** M.Sc. in Mathematics (with Distinction): University of London (Bedford College).

**1977** Ph.D. in Mathematics: University of London (Bedford College). Supervisor: Professor R.F. Streater.

## 2. Academic Career

**1974 - 77**: Demonstrator, Bedford College and University College, London.

**1978 - 80** : ‘Special Scientist’ (temporary position) Department of Mathematics, University of Crete.

**since 1980**: Department of Mathematics, NKUA: Senior Assistant (1980-82), Lecturer (1982 - 85), Assistant Professor (1985 - 93), Associate Professor (1993-2000).

**2000 - August 2017**: Professor, Department of Mathematics, NKUA.

### Visiting Positions:

**Sep. 87 - Apr. 88** : Dalhousie University, Canada.

**Apr. 88 - Jun. 88** : King’s College, University of London, UK.

**Sept. 93 - Jan. 94**: University of Lancaster, UK.

## 3. Specialisation

**Main field**: Non-selfadjoint Operator Algebras.

**Other fields:** Operator Theory, Banach Algebras, Abstract Harmonic Analysis, Functional Analysis.

**Current research interests:** Semi-crossed products and Dynamical Systems, Masa bimodules and Spectral synthesis, Quantized Functional Analysis.

#### 4. Other Activities

Director of the NATO Advanced Study Institute and Aegean Conference on Operator Algebras and Applications, held in Samos, Greece, August 19-28, 1996.

Coordinator for the Erasmus exchange program, 1989 -90.

Participation in the Erasmus exchange program committee, 1991-92, 1992-93.

Coordinator for the Socrates - Erasmus exchange program, 2009-11.

Coordinator for the joint NKUA – British Council research program, 1999-2001.

Coordinator for the Greece – Russia Science and Technology Cooperation program, 1999-2001.

Coordinator for a Herakleitus research program (NKUA), 2002-05.

Participation in the Pythagoras research program (NKUA), 2005-08.

Coordinator for a Herakleitus II research program (NKUA), 2010-12.

#### 5. Research Students

*E. G. Katsoulis*, PhD 1989

Currently Professor, East Carolina University.

*M. Papadakis*, PhD 1993

Currently Professor, University of Houston, USA.

*I. G. Todorov*, PhD 1999

Currently Professor of Mathematics, University of Delaware, USA.

*G. K. Eleftherakis*, PhD 2007

Currently Associate Professor, University of Patras, Greece.

*E. Kakariadis*, PhD 2011

Currently Senior Lecturer in Pure Mathematics, Newcastle University, U.K.

*D. Andreou*, PhD 2021

*A. Chatzinikolaou*, in progress.

I have supervised eleven MSc theses.

## 6. International Conferences

I have participated in more than 35 international conferences.

### Plenary talks

- “Harmonic Analysis and Operator Algebra Theory”, one-hour invited address, 15th Panhellenic Analysis Conference, University of Crete, 2016.
- “Masa Bimodules of Toeplitz type”, one hour plenary talk, ‘ International Conference on Operator Algebras, Nanjing University of Science and Technology, China, June 20-23, 2013.
- “Morita type equivalences for dual Operator Algebra (according to G. Eleftherakis)”, one hour plenary talk, Operator Algebra Workshop, Queen’s University Belfast, 2006.
- “Reflexivity, Suppots and Spectral Synthesis”, two ninety minutes plenary talks, NATO Advanced Study Institute on “Operator Algebras and Applications”, Samos, 1996.

## 7. Publications

### (A) Books

- (1) *Introduction to the Theory of Differential Equations* (with P. Strantzalos), Kardamitsa Publishers, Athens 1987 (in Greek)
- (2) *Operator Algebras and Applications* (editor) Proceedings of the NATO ASI, Kluwer Academic Publishers, Dordrecht, 1997.
- (3) *Introduction to Operator Theory*, Symmetria Publishers, Athens 2008 (in Greek).

**Book Chapter** *von Neumann algebras and unbounded operators* (in Greek), in: *Operator Algebras and Quantum Mechanics*, M. Anoussis, S. Kotsakis, N. Hatzisavvas (editors), Proceedings of the third Summer School in Analysis, Geometry and Mathematican Physics, University of the Aegean 1995, Ziti Publishers, Thessaloniki 1997.

### (B) Research Articles

1. M. Anoussis, G. K. Eleftherakis, and A. Katavolos. *Homomorphisms of  $L^1$  algebras and Fourier algebras*. Journal of Mathematical Analysis and Applications, 2024-03 DOI: 10.1016/j.jmaa.2023.127824
2. M. Anoussis, G. K. Eleftherakis, and A. Katavolos. *Synthetic properties*

- of locally compact groups: preservation and transference.* Monatshefte für Mathematik, 201 (2), 2022 DOI: 10.1007/s00605-022-01736-8
3. M. Anoussis, G. K. Eleftherakis, and A. Katavolos. *Idempotents of large norm and homomorphisms of Fourier algebras.* Studia Math., 267(1), 2022 DOI: 10.4064/sm220111-20-1
  4. M. Anoussis, A. Katavolos, and I. G. Todorov. *Bimodules over  $VN(G)$ , harmonic operators and the non-commutative Poisson boundary.* Studia Math., 249(2), 2019
  5. M. Anoussis, A. Katavolos, and I. G. Todorov. *Ideals of the Fourier algebra, supports and harmonic operators.* Math. Proc. Cambridge Philos. Soc., 161(2):223–235, 2016.
  6. Aristides Katavolos. *Operator algebras: an introduction.* Serdica Math. J., 41(1):49–82, 2015.
  7. A. Katavolos. *Some operator algebras from semigroups.* In Algebraic methods in functional analysis, volume 233 of Oper. Theory Adv. Appl., pages 75–84. Birkhäuser/Springer, Basel, 2014.
  8. Anoussis, M.; Katavolos, A.; Todorov, I.G. *Ideals of  $A(G)$  and bimodules over maximal abelian selfadjoint algebras,* J. Funct. Anal. 266 (2014), no. 11, 6473–6500.
  9. Anoussis, M.; Katavolos, A.; Todorov, I.G. *Operator algebras from the discrete Heisenberg semigroup,* Proc. Edinburgh Math. Soc. 55 (2012), 1–22.
  10. Anoussis, M.; Katavolos, A.; Todorov, I.G. *Angles in  $C^*$ -algebras,* Houston J. Math. V. 37 (2011), No. 2, 501–517.
  11. Katavolos, A.; Paulsen, V.I. *On the ranges of bimodule projections,* Canad. Math. Bull 48 (2005), no. 1, 97–111, MR2118767 (2005j:46037).
  12. Katavolos, A.; Todorov, I.G. *Normalizers of operator algebras and reflexivity,* Proc. London Math. Soc. (3) 86 (2003), 463–484, MR1971159 (2005g:47137).
  13. Katavolos, A.; Power, S.C. *Translation and dilation invariant subspaces of  $L^2(\mathbb{R})$ ,* J. Reine Angew. Math. 552 (2002), 101–129. 47Axx (47Lxx).
  14. Donsig, A.P.; Katavolos, A.; Manoussos, A. *The Jacobson radical of an analytic crossed product,* J. Funct. Anal. 187 (2001), 129–145.
  15. Katavolos, A.; Lambrou, M. S.; Longstaff, W. E., *Pentagon subspace lattices on Banach spaces,* J. Operator Theory 46 (2001), 355–380, MR 1870412 (2003a:47137).
  16. Erdos, J.A., Katavolos, A., Shulman, V.S. *Rank one subspaces of bimodules over maximal abelian selfadjoint algebras,* J. Funct. Anal., 157 (1998), 554–587, MR 99f:47054.
  17. Katavolos, A.; Stamatopoulos, C. *Commutators of quasinilpotents and*

- invariant subspaces, *Studia Math.* 128 (1998) no. 2, 159–169, MR 99b:46070.
18. Katavolos, A. Reflexivity, supports and spectral synthesis. *Operator algebras and applications (Samos, 1996)*, 225–243, NATO Adv. Sci. Inst. Ser. C Math. Phys. Sci., 495, Kluwer Acad. Publ., Dordrecht, 1997, MR 98e:47067.
  19. Katavolos, A.; Power, S. C. The Fourier binest algebra. *Math. Proc. Cambridge Philos. Soc.* 122 (1997) no. 3, 525–539, MR 98d:47097.
  20. Barnes, B. A.; Katavolos, A. Properties of quasinilpotents in some operator algebras. *Proc. Roy. Irish Acad. Sect. A* 93 (1993) no. 2, 155–170, MR 96j:47042.
  21. Anoussis, M.; Katavolos, A. Unitary actions on nests and the Weyl relations. *Bull. Lon. Math. Soc.* 27 (1995) no. 3, 265–272, MR 96b:47049.
  22. Anoussis, M.; Katavolos, A. Isometries of  $C_p$ -spaces in nest algebras. *J. Lon. Math. Soc.* (2) 51 (1995) no. 1, 175–188, MR 95k:47063.
  23. Anoussis, M.; Katavolos, A.; Lambrou, M. On the reflexive algebra with two invariant subspaces. *J. Operator Theory* 30 (1993) no. 2, 267–299, MR 95i:47082.
  24. Katavolos, A.; Lambrou, M. S.; Papadakis, M. On some algebras diagonalized by  $M$ -bases of  $\ell^2$ . *Integral Equations Operator Theory* 17 (1993) no. 1, 68–94, MR 95c:47048.
  25. Katavolos, A.; Lambrou, M. S.; Longstaff, W. E. The decomposability of operators relative to two subspaces. *Studia Math.* 105 (1993) no. 1, 25–36, MR 94h:47082.
  26. Katavolos, A.; Papanastassiou, N. Order convergence in operator algebras. *Math. Balkanica (N.S.)* 5 (1991) no. 3, 245–249, MR 92m:47081.
  27. Katavolos, A. Decomposability of operators relative to two subspaces. *Selfadjoint and nonselfadjoint operator algebras and operator theory (Fort Worth, TX, 1990)*, 77–81, *Contemp. Math.*, 120, Amer. Math. Soc., Providence, RI, 1991, MR 92f:47045.
  28. Katavolos, A.; Katsoulis, E. Semisimplicity in operator algebras and subspace lattices. *J. Lon. Math. Soc.* (2) 42 (1990) no. 2, 365–372, MR 92b:47066.
  29. Katavolos, A.; Radjavi, H. Simultaneous triangularization of operators on a Banach space. *J. Lon. Math. Soc.* (2) 41 (1990) no. 3, 547–554, MR 91i:47058.
  30. Katavolos, A. Noncommutative  $L^p$  spaces. II. *Canad. J. Math.* 34 (1982) no. 5, 1208–1214, MR 84b:46077.
  31. Katavolos, A. Are noncommutative  $L^p$  spaces really noncommutative? *Canad. J. Math.* 33 (1981) no. 6, 1319–1327, MR 83a:46074.

- 32.** Katavolos, A.; Koch, I. Extension of Tomita-Takesaki theory to the unbounded algebra of the canonical commutation relations. Rep. Math. Phys. 16 (1979) no. 3, 335–352, MR 81g:81039.
- 33.** Katavolos, A. Isometric mappings of non-commutative  $L^p$  spaces. Canad. J. Math. 28 (1976) no. 6, 1180–1186, MR 54# 5847.