

# Curriculum Vitae

## INFORMAZIONI PERSONALI

**Nome** CAMILLO  
**Cognome** TRAPANI  
**Recapiti** Dipartimento di Matematica e Informatica  
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## FORMAZIONE TITOLI

1977: Laurea in Matematica con lode presso l'Università di Palermo  
1978-1980: Borsa di Studio del CNR  
1980-2001: Ricercatore confermato (Settore B02B fino al 2000; Settore Mat 05 dal 2000)  
dal 2001: Professore associato (SSD Mat05)  
dal 2004: Professore associato confermato  
dal 2010: Professore di I fascia (Ordinario dal 2013)

Dal 2009 al 2011: Coordinatore del Dottorato di ricerca in Matematica e Informatica.

Dal 2011: Direttore del Dipartimento di Matematica e Informatica

## ATTIVITA' DIDATTICA

Svolge attività didattica nel settore MAT05 per i corsi di Laurea in Matematica, Scienze Fisiche e per il corso di laurea magistrale in Matematica. In passato ha svolto attività didattica per il Corso di laurea in Informatica della Facoltà di Scienze MM.FF.NN. dell'Università di Palermo.

Ha esperienze di insegnamento anche presso la Facoltà d'Ingegneria dell'Università di Palermo.

È autore di tre manuali didattici.

Membro del Collegio dei docenti del Dottorato in Matematica e Informatica, Università di Palermo, fino al XXIX ciclo. Nel triennio 2009-2011 è stato Coordinatore dello stesso Dottorato di ricerca.

Dal XXX ciclo, membro del Collegio del Dottorato in Matematica e Informatica in convenzione tra le Università di Catania (Sede amministrativa), Palermo e Messina. Nell'ambito delle attività del dottorato tiene regolarmente corsi ad esso dedicati.

## RICERCHE FINANZIATE

2016 - Proprietà spettrali di quasi \*-algebre di operatori - GNAMPA

2015 - Proprietà spettrali di quasi \*-algebre di operatori - GNAMPA

2014 - Proprietà spettrali di quasi \*-algebre di operatori

differenziali

2007 - Algebre parziali di operatori: strutture ed applicazioni -  
Fondi RS-UNIPA

2006 - Algebre parziali di operatori: strutture ed applicazioni -  
Fondi RS-UNIPA

2005 - Algebre parziali di operatori: strutture ed applicazioni -  
Fondi RS-UNIPA

2004 - Algebre parziali di operatori: strutture ed applicazioni -  
Fondi RS-UNIPA

2004 - Metodi e strutture algebriche in teoria degli operatori -  
PRIN

## **ASSOCIAZIONI SCIENTIFICHE**

Fa parte dell'Unione Matematica Italiana.; del Gruppo Nazionale per l'Analisi Matematica, la Probabilità e applicazioni dell'Indam.

Socio corrispondente dell'Accademia di Scienze, Lettere e Arti di Palermo.

## **PUBBLICAZIONI**

### **1 Monographs**

1. J.-P. Antoine, A.Inoue, C.Trapani, *Partial \*-algebras and their Operator Realizations*, Mathematics and Its Applications, vol. 535, Kluwer, Dordrecht, 2002
2. J.-P. Antoine, C. Trapani, *Partial inner product spaces: Theory and Applications*, Springer Lecture Notes in Mathematics vol. 1986, Berlin, Heidelberg, 2009, ISBN 978-3-642-05135-7.

**2 Articles (published or to appear)**

1. G.Epifanio and C.Trapani, [A] *On the matrix representation of closed linear operators:an extension of von Neumann's theory*, J. Math. Phys. **20** (1979), 148-152
2. G.Epifanio and C.Trapani, *Remarks on a theorem by G.Epifanio ...*, J. Math. Phys. **20** (1979), 1673-1675
3. G.Epifanio and C.Trapani, [A] *Some spectral properties in algebras of unbounded operators*, J. Math. Phys. **22** (1981), 974-978
4. G.Epifanio and C.Trapani, [A] *Some topics in pre-Hilbert space*, J. Math. Phys. **23** (1982), 39-42
5. J.-P.Antoine, G.Epifanio and C.Trapani,[A] *Complete sets of unbounded observables*, Helv. Phys. Acta **56** (1983), 1175-1186
6. G.Epifanio and C.Trapani, *V\* -algebras: a particular class of unbounded operator algebras*, [A] J. Math. Phys. **25** (1984), 2633-2637
7. G.Epifanio and C.Trapani, [P] *Commutants of unbounded operator algebras, V\*-algebras and applications to Theoretical Physics*, Proc. II Int. Conf. on Operator Algebras, Ideals and their applications. Leipzig 1983 - pg.73 (Teubner, 1984)
8. G.Epifanio and C.Trapani, [A] *Quasi \*-algebras valued quantized fields*, Ann. Inst. H.Poincaré **46**, 175-185 (1987)
9. J.-P.Antoine, F.Mathot and C.Trapani, [A] *Partial \*-algebras of closed operators and their commutants.II. Commutants and bicommutants*, Ann. Inst. H.Poincaré, **46** (1987), 325-351
10. G.Lassner,G.A.Lassner and C.Trapani, [A] *Canonical commutation relations on the interval*, J. Math. Phys. **28** (1987), 174-177
11. G.Epifanio and C.Trapani, [A] *Partial \*-algebras of matrices and operators*, J. Math. Phys. **29** (1988), 536-54
12. C.Trapani, [A] *States and derivations on quasi \*-algebras*, J. Math. Phys **29** (1988),1885-1190
13. J.-P. Antoine, A.Inoue, C.Trapani, [A] *Partial \*-algebras of closable operators I. The basic theory and the abelian case*, Publ. RIMS Kyoto Univ. **26**, (1990) 359-395
14. J.-P. Antoine, A.Inoue, C.Trapani, [A] *Partial \*-algebras of closable operators II. States and representations of partial \*-algebras*, Publ. RIMS Kyoto Univ., **27**, (1991) 399-430
15. G.Epifanio and C.Trapani,[A] *Partial \*-algebras and Volterra convolution of distribution kernels*, J. Math. Phys., **33**, (1991) 1096-1101
16. F.Bagarello and C.Trapani, [A] *"Almost" mean field Ising models: an algebraic approach*, J. Stat. Phys. **65**, (1991) 469-482
17. G.Epifanio and C.Trapani, [P] *Il 'Rigged Hilbert space approach' alla Meccanica Quantistica*, ne 'I Fondamenti della Meccanica Quantistica', G.Cattaneo - A.Rossi eds. pag.189 (1991).
18. G.Epifanio and C.Trapani, [P] *Applicazioni di strutture algebriche parziali nelle teorie quantistiche*, ne 'I Fondamenti della Meccanica Quantistica', G.Cattaneo - A.Rossi eds. pag.195 (1991)
19. G.Epifanio, T.S.Todorov and C.Trapani, [A] *Complete set of compatible non self-adjoint observables*, Helv. Phys. Acta **65** (1992), 1-10.

20. J.-P. Antoine, A.Inoue and C.Trapani, [A], *On the regularity of the partial  $*$ -algebra generated by a closed symmetric operator*, Publ. RIMS Kyoto Univ. **28** (1992), 757-77
21. F.Bagarello and C.Trapani, [A] *A note on the algebraic approach to the "almost" mean field Heisenberg model*, Nuovo Cimento, **108B** (1993), 779-784.
22. F.Bagarello, C.Trapani, [A] *States and representations of  $CQ^*$ -algebras*, Ann. Inst. H. Poincaré **61** (1994), 103-133.
23. J.-P.Antoine, A.Inoue and C.Trapani, [A] *Spatial theory of  $*$ -automorphisms of partial  $*$ -algebras*, J. Math. Phys. **35** (1994), 3059-3073.
24. J.-P.Antoine, Y.Soulet and C.Trapani, [A] *Weights on Partial  $*$ -algebras*, J. Math. Anal. Appl **192** (1995), 920-941.
25. J.-P.Antoine, A.Inoue and C.Trapani, [A] *Spatiality of  $*$ -derivations of partial  $O^*$ -algebras*, J. Math. Phys. **36** (1995), 3743-3758.
26. C.Trapani, *Commutation properties of symmetric operators*, Math. Nachrichten **172** (1995), 305-315.
27. C.Trapani, [A] *Quasi  $*$ -algebras of operators and their applications*, Rev. Math. Phys. **7** (1995), 1303.
28. J.-P.Antoine, A.Inoue, H.Ogi and C.Trapani, [A] *Standard generalized vectors in the space of Hilbert-Schmidt operators*, Ann. Inst. H. Poincaré **63** (1995), 177-210.
29. F.Bagarello and C.Trapani, [A]  *$L^p$ -spaces as quasi  $*$ -algebras*, J.Math. Anal. Appl . **197** (1996), 810-824.
30. G.Epifanio, T.S.Todorov and C.Trapani, [A] *Complete set of compatible non self-adjoint observables: an unbounded approach*, J. Math. Phys. **37**, (1996) 1148-1160.
31. F.Bagarello and C.Trapani,[A]  *$CQ^*$ -algebras: structure properties*, Publ. RIMS, Kyoto Univ. **32** (1996), 85-116.
32. J.-P. Antoine, A.Inoue, C.Trapani, [A] *Partial  $*$ -algebras of closable operators: a review*, Rev. Math. Phys. **8** (1996), 1-42
33. F.Bagarello and C.Trapani, [A] *The Heisenberg dynamics of spin systems: a quasi  $*$ -algebra approach*, J. Math. Phys. **37** (1996), 4219-4234
34. A.Russo and C.Trapani, [A] *Quasi  $*$ -algebras and multiplication of distributions*, J. Math. Anal. Appl. **215** (1997), 423-442
35. G.Epifanio, T.S.Todorov and C.Trapani, [P] *Sets of compatible nonselfadjoint observables as examples of partial  $GW^*$ - and von Neumann algebraic structures in a complex Hilbert space*, in "Topics in Complex Analysis, Differential Geometry and Mathematical Physics", pg. 165-176, Editors S.Dimiev and K.Sekigawa, World Scientific, Singapore, 1997
36. C.Trapani, *Weak and regular representations of  $*$ -algebras*, [A] Indian Math. J. **40** (1998), 183-198.
37. J.-P. Antoine, F.Bagarello and C.Trapani, [A] *Extensions of representations in quasi  $*$ -algebras*, Ann. Inst. H.Poincaré, **69** (1998), 241-264.

38. C. Trapani, *Some results on CQ\*-algebras of Operators*, [P] Proc. Int. Workshop on Operator Theory, Cefalù, Italy, July 14-19, 1997; Suppl. Rend. Circ. Mat. Palermo **56**, (1998), 199-205.
39. J.-P. Antoine, F. Bagarello and C. Trapani, [A] *Topological partial \*-algebras: Basic properties and examples* Rev. Math. Phys. **11** (1999), 267 – 302.
40. J.-P. Antoine, A. Inoue and C. Trapani, [A] *O\*-dynamical systems and \*-derivations of unbounded operator algebras*, Math. Nachr. **204** (1999) 5-28.
41. C. Trapani, [P] *CQ\*-algebras of operators and applications to Quantum models*, Proc. of the 2nd ISAAC Conference (Fukuoka, Giappone, 16-21 Agosto 1999), Vol.I pag 679-685.
42. J.-P. Antoine, A. Inoue and C. Trapani, [A] *Biweights on partial \*-algebras*, J. Math. Anal. Appl. **242** (2000), 164-190.
43. F. Bagarello and C. Trapani, [A] *Morphisms of certain Banach C\*-modules*, Publ. RIMS, Kyoto Univ. **36** (2000), 681-705.
44. C. Trapani, [P] *Banach partial \*-algebras and Quantum models*, Proc. XII Max Born Symposium, Wrocław, Poland, September 23-26, 1998; Lecture Notes in Physics, Springer Verlag, Berlin 2000, pg 180-191.
45. F. Bagarello, A. Inoue and C. Trapani, [A] *Some classes of topological quasi \*-algebras*, Proc. Amer. Math. Soc., **129** (2001), 2973-2980.
46. F. Bagarello, A. Inoue and C. Trapani, [A] *Unbounded C\*-seminorms on partial \*-algebras*, Zeit. Anal. Anwen. **20** (2001), 295-314.
47. F. Bagarello and C. Trapani, *Algebraic dynamics in O\*-algebras: a perturbative approach*, [A] J.Math.Phys. **43** (2002) 3280-3292.
48. C. Trapani, [P] *Sesquilinear forms on certain Banach C\*-modules*, Proceedings of the IV International Conference on Functional Analysis and Approximation Theory, Suppl. Rend. Circ. Mat. Palermo **68** (2002), 855-864.
49. C. Trapani, [P] *CQ\*-algebras of operators: density properties*, in "Operator Theory and Banach Algebras", edited by M.Chidami, R.Curto, M.Mbekhta, F.H.Vasilescu ; (Proc.Conference on Théorie spectrale et Algèbres de Banach, Rabat, Morocco, April, 12-15, 1999)
50. C. Trapani, [A] *Some seminorms on quasi \*-algebras*, Studia Matematica **158** (2003) 99 -115; *Erratum/Addendum*, Studia Math. **160** (2004), 101-101.
51. F. Bagarello, A. Inoue and C. Trapani, [A] *Derivations of quasi \*-algebras*, International J.Math. Math. Sciences **21** (2004), 1077-1096.
52. C. Trapani and S. Triolo, [A] *Representations of certain Banach C\*-modules*, Mediterranean J. Math. **1** (2004), 441-461.
53. C. Trapani, [P] *C\*-seminorms defined by families of sesquilinear forms*, Proceedings of the IV International Conference on Functional Analysis and Approximation Theory, Suppl. Rend. Circ. Mat. Palermo **73** (2004) 243-255.
54. C. Trapani and F. Tschinke, [A] *Partial multiplication of operators in rigged Hilbert spaces*, Integral Equations and Operator Th. **51** (2005), 583--600.

55. C.Trapani and F.Tschinke, [A] *Partial  $*$ -algebras of distributions*, Publ. RIMS, Kyoto Univ. **41** (2005), 259-279.
56. C.Trapani and F.Tschinke, [A] *Unbounded  $C^*$ -seminorms and biweights on partial  $*$ -algebras*, Mediterranean J. Math. **2** (2005), 301-313
57. F.Bagarello, A.Inoue and C.Trapani, [A] *Exponentiating derivations of quasi  $*$ -algebras: possible approaches and applications*, International J.Math. Math. Sciences **17** (2005), 2805-2820.
58. C.Trapani, [P]  *$C^*$ -seminorms on partial  $*$ -algebras: an overview*, Proceedings of the conference on Topological Algebras and related topics, Bed ewo (Poland) May 2003, Banach Center Publ. **67**, 369 -384, Polish Acad. Sci., Warsaw, 2005
59. C.Trapani, [P] *Some results on the structure of partial  $*$ -algebras*, Proceedings of the V International Conference on Functional Analysis and Approximation Theory , Suppl. Ren. Circ. Mat. Palermo **76** (2005) 573-586.
60. C.Trapani and S. Triolo, [P] *Auxiliary seminorms and the structure of a  $CQ^*$ -algebra*, Proceedings of the V International Conference on Functional Analysis and Approximation Theory, Suppl. Ren. Circ. Mat. Palermo **76** (2005), 587-601
61. C.Trapani, [A] *Banach elements and spectrum in Banach quasi  $*$ -algebras*, Studia Mathematica **172** (2006), 249-273
62. J.-P.Antoine and C.Trapani, [A] *A note on Banach partial  $*$ -algebras*, Mediterranean J. Math **3** (2006), 67-86.
63. F.Bagarello, C.Trapani and S.Triolo, [A] *Quasi  $*$ -algebras of measurable operators*, Studia Mathematica **172** (2006), 289-305.
64. F.Bagarello, C.Trapani and S.Triolo, [A] *A note on faithful traces on a von Neumann algebra*, Ren. Circ. Mat. Palermo **55** (2006), 21-28.
65. F.Bagarello, M.Fragoulopoulou, A.Inoue and C.Trapani, [A] *The completion of a  $C^*$ -algebra with a locally convex topology*, J. Operator Theory **56** (2006), 357-376
66. C.Trapani, [A] [Unbounded  \$C^\*\$ -seminorms, biweights and  \$\*\$ -representations of partial  \$\*\$ -algebras: a review](#), International J. Math. Math.Sci., Volume **2006** (2006), Article ID 79268, 34 pages.
67. F.Bagarello, A.Inoue and C.Trapani, [A] *Completely positive invariant conjugate-bilinear maps on partial  $*$ -algebras*, Zeit. Anal. Anwen. **26** (2007), 313-330.
68. J.-P. Antoine, C.Trapani and F. Tschinke, [A] *Biweights and  $*$ -homomorphisms of partial  $*$ -algebras*, International J. Math. Math.Sci. Volume **2006** (2006), Article ID 54793, 20 pages, doi:10.1155/IJMMS/2006/54793.
69. J.-P. Antoine, C.Trapani and F. Tschinke, [A] *Continuous  $*$ -homomorphisms of Banach partial  $*$ -algebras*, Mediterranean J.Math. **4** (2007), 357-373.
70. C.Trapani, [P] *Bounded and strongly bounded elements of Banach quasi  $*$ -algebras*, Proceedings of the V International Conference on Topological Algebras and Applications, Athens 2005, Contemporary Math. **427** (2007) 417 – 424.
71. F.Bagarello, M.Fragoulopoulou, A.Inoue and C.Trapani, [A] *Structure of locally convex quasi  $C^*$ -algebras*, J.Math. Soc. Japan **60** (2008), 511-549.

72. C. Trapani and S. Triolo, [A] *Representations of modules over a  $*$ -algebra and related seminorms*, Studia Mathematica **184** (2008), 133-148.
73. C. Trapani, [A]  *$*$ -Representations, seminorms and structure properties of normed quasi  $*$ -algebras*, Studia Mathematica **186** (2008), 47-75.
74. F. Bagarello, A. Inoue and C. Trapani, [A] *Bicommutants of reduced unbounded operator algebras*, Proc. Amer. Math. Soc. **137** (2009) 3709-3716.
75. G. Bellomonte, C. Trapani and S. Triolo, [A] *Closedness and lower semicontinuity of positive sesquilinear forms*, Rend. Circolo Mat. Palermo, **58** (2009), 265-274
76. F. Bagarello, A. Inoue and C. Trapani, [A] *Representations and derivations of quasi  $*$ -algebras induced by local modifications of states*, J. Math. Anal. Appl., **356** (2009), 615-623.
77. G. Bellomonte, C. Trapani and S. Triolo, [A] *Absolutely convergent extensions of nonclosable positive linear functionals*, Mediterranean J. Math. **7** (2010), 63-74.
78. J.-P. Antoine, C. Trapani and F. Tschinke, [A] *Spectral properties of partial  $*$ -algebras*, Mediterranean J. Math. **7** (2010), 123-142.
79. F. Bagarello, M. Fragoulopoulou, A. Inoue and C. Trapani, [A] *Locally convex quasi  $C^*$ -normed algebras*, J. Math. Anal. Appl., **366** (2010), 593-606.
80. J.-P. Antoine and C. Trapani, [A] *The Partial Inner Product Space Method: A Quick Overview*, Adv. Math. Phys. Volume **2010** (2010), Article ID 457635, 37 pages.
81. C. Trapani and S. Triolo, [A] *Faithful Representations of left  $C^*$ -modules*, Rend. Circolo Mat. Palermo **59** (2010), 295-302
82. B. Bongiorno, C. Trapani and S. Triolo, [A] *Extensions of positive linear functionals on a  $*$ -algebra*, Rocky Mountain Math. J. **40** (2010), 1745-1778.
83. J.-P. Antoine and C. Trapani, [P] *Partial inner product spaces and operators on them*, Proceedings of the VI International Conference on Functional Analysis and Approximation Theory, Suppl. Ren. Circ. Mat. Palermo **82** (2010), 207-233.
84. C. Trapani, *Locally convex quasi  $C^*$ -algebras: basic aspects and commutative case*, Proceedings of the VI International Conference on Functional Analysis and Approximation Theory, Suppl. Ren. Circ. Mat. Palermo **82** (2010), 449-460.
85. G. Bellomonte and C. Trapani, [A] *Rigged Hilbert spaces and contractive families of Hilbert spaces*, Monatshefte f. Math., **164** (2011) 271-285 (DOI: 10.1007/s00605-010-0249-1, on line Oct. 8, 2010).
86. G. Bellomonte and C. Trapani, [A] *Quasi  $*$ -algebras and generalized inductive limits of  $C^*$ -algebras*, Studia Mathematica **202** (2011), 165-190.
87. F. Bagarello, C. Trapani and S. Triolo, [A] *Representable states on quasi-local quasi  $*$ -algebras*, J. Math. Phys., **52** 013510 (2011), 11 pages
88. J.-P. Antoine, C. Trapani and F. Tschinke, [A] *Bounded elements in certain topological partial  $*$ -algebras*, Studia Math. **203** (2011), 223-251



89. J.-P. Antoine, D. Lambert and C. Trapani, [A] *Partial inner product spaces: Some categorical aspects*, *Advances in Math. Phys.*, Vol. 2011 (2011) Article ID 957592, 22 pages doi: 10.1155/2011/957592
90. F. Bagarello, A. Inoue and C. Trapani, [A] *Weak commutation relations of unbounded operators and applications*, *J. Math. Phys.* **52**, 113508 (2011).
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92. F. Bagarello, A. Inoue and C. Trapani, [A] *Induced and reduced unbounded operator algebras*, *Annali di Matematica pura e applicata*, **191** (2012) 285 -292 (DOI: 10.1007/s10231-010-0183-9, on line Jan. 19, 2011)
93. J.-P. Antoine and C. Trapani, [P] *Some classes of operators on partial inner product spaces*, *Proceedings of the IWOTA2010 Conference. Berlin 2010. in Spectral Theory. Mathematical System Theory. Evolution Equations. Differential and Difference Equations, Operator theory: Advances and applications Vol. 221* (2012) 25-46.
94. C. Trapani, [P] *Order bounded elements of topological  $*$ -algebras*, *Proceedings of the Conference ICATTA 2011 (Vera Cruz, Mexico)*, *Commun. Math. Appl.*, **3** (2012) , 99 -108
95. C. Trapani, [P] *Locally convex quasi  $*$ -algebras of operators*, *Proceedings of the Conference FAO 2010 (Krakow, Poland)* *Complex Analysis and Operator Theory* **6** (2012) 719 - 728
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98. J.-P. Antoine, G. Bellomonte, C. Trapani, *Fully representable and  $*$ -semisimple topological partial  $*$ -algebras*, *Studia Mathematica*, No.2, **208** (2012), 167-194 DOI: 10.4064/sm208-2-4.
99. J.-P. Antoine and C. Trapani, [A] *Partial inner product spaces, metric operators and generalized hermiticity*, *J. Phys. A: Math. Theor.* **46** (2013) 025204 (21pp) ;doi:10.1088/1751-8113/46/2/025204
100. J.-P. Antoine and C. Trapani, *Some remarks on quasi-Hermitian operators*, *J. Math. Phys.* **55**, 013503 (2014); doi: 10.1063/1.4853815
101. G. Bellomonte, S. Di Bella and C. Trapani, *Operators in rigged Hilbert spaces: some spectral properties*, *J. Math. Anal. Appl.*, **411** (2014) 931–946 (doi: 10.1016/j.jmaa.2013.10.025
102. A. Inoue and C. Trapani, *Nonself-adjoint resolutions of the identity and associated operators*, *Complex Anal. and Operator th.*, **8**, (2014) 1531–1546
103. P. Aiena, C. Trapani and S. Triolo, *The local spectral radius formula for unbounded operators*, *Filomat*, **28:2** (2014), 263–273, DOI 10.2298/FIL1402263A
104. F. Bagarello, A. Inoue and C. Trapani, *Non-self-adjoint hamiltonians defined by Riesz bases*, *J. Math. Phys.* **55**, 033501 (2014); doi: 10.1063/1.4866779
105. C. Trapani and S. Triolo, *Locally convex quasi  $C^*$ -algebras and noncommutative integration*, *Studia Mathematica*, **228** (2015) 33-45

106. J.-P. Antoine and C. Trapani, *Operators on Partial Inner Product Spaces: Towards a Spectral Analysis*, *Mediterr. J. Math.* 13 (2016), 323–351
107. G. Bellomonte and C. Trapani, *Riesz-like bases in Rigged Hilbert Spaces*, *Zeitschrift für Analysis und ihre Anwendungen*, 35(3), (2016) 243-265.
108. S. Di Bella and C. Trapani, *Singular perturbations and operators in rigged Hilbert spaces*, *Mediterr. J. Math.* 13 (2016), 2011–2024
109. C. Trapani and F. Tschinke, *Faithfully representable topological \*-algebras: some spectral properties* (submitted).
110. J.-P. Antoine and C. Trapani, *Metric operators, generalized hermiticity and lattices of Hilbert spaces*, in **Non-Selfadjoint Operators in Quantum Physics, Mathematical Aspects**, Edited by F. Bagarello, J.-P. Gazeau, F.H. Szafraniec, M. Znojil, p. 345 - 402, John Wiley & sons, Hoboken, N.J., 2015
111. C. Trapani, *Remarks on infinite-dimensional representations of the Heisenberg algebra*, to appear in **Lie groups, Differential equations and Geometry** (provisional title)
112. J.-P. Antoine, M. Speckbacher and C. Trapani, *Reproducing pairs of measurable functions* (submitted)
113. J.-P. Antoine and C. Trapani, *Operator (quasi-)similarity, quasi-Hermitian operators and all that*, In **Non Hermitian Hamiltonian in Quantum Physics**, Edited by F. Bagarello, R. Passante and C. Trapani, p. 45 -65, Springer Proceedings in Physics 184, 2016.
114. G. Bellomonte, S. Di Bella and C. Trapani, *Bounded elements of C\*-inductive spaces*, *Annali di Matematica* (2016) 195:343–356
115. F. Bagarello, C. Trapani and S. Triolo, *Gibbs states defined by biorthogonal sequences*, *J. Phys. A: Math. Theor.* 49 (2016) 405202 (15pp)
116. S. Di Bella and C. Trapani, *Some Representation Theorems for Sesquilinear Forms*, *J. Math. Anal. Appl.* (published on line February 10, 2017)
117. R. Corso and C. Trapani, *Representation theorems for solvable sesquilinear forms*, (submitted)

### 3 Textbooks

1. C. Trapani, *Un modulo di Analisi due*, ISBN 88-7999-642-8, Aracne Editrice, Roma, 2004
2. C. Trapani e R. Messina, *Esercizi di Analisi uno*, ISBN 88-7999-911-7, Aracne, Roma, 2004
3. C. Trapani, *Analisi Matematica (Funzioni di una variabile reale)*, ISBN 978-88-386-6439-7, McGraw-Hill, Milano, 2008.

### ATTIVITA' SCIENTIFICHE

Svolge attività di ricerca in Teoria degli Operatori, Algebre di Operatori ed Analisi funzionale su cui ha pubblicato più di cento articoli scientifici e due monografie di ricerca.

E' stato fra gli organizzatori di quattro conferenze internazionali di Analisi funzionale e Teoria degli operatori e membro del Comitato scientifico di altre due. Nel 2015 è stato co-presidente del Comitato organizzatore del convegno PHHQP2015.

### AMBITI DI RICERCA

Teoria degli Operatori

Algebre di Operatori

Analisi funzionale