

CURRICULUM VITAE di CLAUDIO D'ANTONI

Academic Positions

Laurea in Physics ,University of Rome "La Sapienza",Nov.1972.

2002- Professor (Mathematical Analysis) ,Dept.of Math. University of Rome " Tor Vergata "

1991- 2002 "Professore Associato" (Mathematical Analysis) ,Dept.of Math. University of Rome " Tor Vergata " .

1987-1991 "Professore Associato" (Mathematical Analysis) ,Dept.of Math. University of Rome "La Sapienza" .

1982-1991 "Professore Associato" (Mathematical Analysis) , Dept. of Math. University of L'Aquila.

1978-1982 "Professore incaricato" (Mathematical Analysis) , Dept. of Math. University of L'Aquila.

1977-78 "Professore incaricato"(Theoretical Physics) ,Dept.of Math. University of Lecce.

1975-1977 Research and teaching Fellowship "Assegno" ,Ministry of Public Education.

1974-75 C.N.R. Research fellowship.

1973 Accademia Nazionale dei Lincei ,research fellowship.

Grants and Visiting positions

October-December 1975 + April 1976 member of the project "Mathematical Problems of Quantum Dynamics" ZIF Bielefeld.

May-June 1979 visiting fellow at MMath.Dept University of Pennsylvania USA

September 1980 visiting at INCREST, Bucharest (Romania)

June-July 1983 maitre-assistant associe at Universite' de Marseille

July 1984 member of the II ZIF project ,Bielefeld (Germany).

September-October 1984 Nato senior fellowship at Hamburg University

May-December 1988 A.von Humboldt fellowship at Hamburg University

April 1995 Visiting Math.Dept University of Florida ,Gainesville,FL

May-September 1995 A.von Humboldt fellow at Hamburg University.

May 1996 Visiting Professor Math Department University of Pretoria South Africa

September 1997 Member of the ESI (Erwin Schroedinger Institut) project "Local Quantum Theory"

July-August 2002 ESI program "Quantum field theory on curved spacetimes" Vienna (Austria)

November 2003 Hamburg University Alexander von Humboldt Stiftung) fellow

Publications

- [1] C.D'Antoni ,P.Scanzano *An application of information theory :longitudinal measurability bounds in classical and quantum physics.* Found.Phys. **10** (1980) 875.
- [2] C.D'Antoni *Functional calculus and representation of locally compact abelian groups .* Rend.Circ. Mat. Palermo **Suppl.No 1** (1981),107-110.

- [3] C.D'Antoni ,R.Longo ,L.Zsido *A spectral mapping theorem for locally compact groups of operators.* Pacific J. Math. **103** (1982),17-24.
- [4] W.Arendt, C.D'Antoni *A spectral mapping theorem for representations of compact groups.* Zeitschrift f.Analysis **2** (1983),127-133.
- [5] C.D'Antoni ,R.Longo *Interpolation by type I factors and the flip automorphism.* J.Funct.Anal. **51** (1983),361-371.
- [6] C.D'Antoni *Normal product states for local algebras.* Operator algebras and groups representations,(Neptun,1980) Monographs Stud.Math. **17** Pitman, Boston (1984).
- [7] C.D'Antoni *Statistical independence of local algebras.* Quantum probability and applications to the Quantum Theory of irreversible processes,(Villa Mondragone,1982) Lecture Notes Math. **1055** Springer, Berlin (1984)
- [8] C.D'Antoni ,K.Fredenhagen , *Charges in spacelike cones.* Commun.Math.Phys **94** (1984),537-544
- [9] C.D'Antoni *Nuclearity and normal product states.* Quantum probability and applications II (Heidelberg,1984) Lecture Notes Math. **1136** Springer, Berlin (1986)
- [10] D.Buchholz ,C.D'Antoni ,K.Fredenhagen , *The Universal structure of local algebras.* Commun.Math.Phys **111** (1987),123-135.
- [11] C.D'Antoni ,K.Fredenhagen ,R,Longo ,S.Doplicher *Convergence of local charges and continuity properties of W^* -inclusions .* Commun.Math.Phys **116** (1987),325-348.
- [12] D.Buchholz ,C.D'Antoni ,R.Longo , *Nuclear maps and modular structure I: general theory.* J.Funct.Anal **88** (1990),233.
- [13] D.Buchholz ,C.D'Antoni ,R.Longo , *Nuclear maps and modular structure II: Applications to Quantum Field Theory.* Commun.Math.Phys **129** (1990),115-138.
- [14] C.D'Antoni, *Technical properties of the quasi-local algebra .* in *The algebraic theory of superselection sectors.* Editor D.Kastler. World Scientific Publisher. Singapore 1990.
- [15] D.Buchholz and C.D'Antoni, *Phase space properties of charged fields in the theory of local observables .* Rev.Math.Phys. **7** (1995),527-557.
- [16] C.D'Antoni, L.Zsido, *Methods of Functional Analysis in problems of Analytic Extension.* Rend. Circ. Mat. Palermo Suppl. **52** (1998), 373-391.
- [17] C.D'Antoni, L.Zsido, *Groups of linear isometries and Multiplier C^* -Algebras.* Pacific Journal of Mathematics **193** (2000), no. 2, 279-306.
- [18] R.Conti, C.D'Antoni, *Extension of anti-automorphisms and PCT-symmetry.* Rev. Math. Phys. **12** (2000), no. 5, 725-738.
- [19] R.Conti, C. D'Antoni, *Extension techniques in C^* -cross products by compact group duals and quantum field theory.* Proceedings of the Symposium on Mathematical Physics and Quantum Field Theory (Berkeley, CA, 1999), 23-35 (electronic), Electron. J. Differ. Equ. Conf., 4, Southwest Texas State Univ., San Marcos, TX, 2000.
- [20] C.D'Antoni, R.Longo, F. Radulescu *Conformal nets,Maximal Temperature and models from Free Probability .* J. Operator Theory **45** (2001), no. 1, 195-208.
- [21] C.D'Antoni, L.Zsido, *The flat tube theorem for vector valued functions.* Mathematical physics in mathematics and physics (Siena, 2000), 115-138, Fields Inst. Commun., 30, Amer. Math. Soc., Providence, RI, 2001.

- [22] C.D'Antoni, L.Zsido, *Analytic extension of vector valued functions*. Recent advances in operator theory and related topics (Szeged, 1999), 171–202, Oper. Theory Adv. Appl., 127, Birkhuser, Basel, 2001.
 - [23] C.D'Antoni, L.Zsido, *Abelian strict approximation in Multiplier C^* -Algebras and related questions*. J. Operator Theory 49 (2003), no. 1, 99–113.
 - [24] R.Conti, C.D'Antoni, L. Geatti, *Group automorphisms preserving equivalence classes of unitary representations*. Forum Math. 16 (2004), no. 4, 483–503
 - [25] C.D'Antoni, K.Fredenhagen, S.Koester *Implementation of conformal covariance by diffeomorphism symmetry*. Lett. Math. Phys. 67 (2004), no. 3, 239–247.
 - [26] C.D'Antoni, G.Morsella, R.Verch, *Scaling algebras for charged fields and short-distance analysis for localizable and topological charges*. Ann. Henri Poincaré 5 (2004), no. 5, 809–870.
 - [27] C.D'Antoni, S.Hollands, *Nuclearity, local quasiequivalence and split property for Dirac quantum fields in curved spacetime*. Commun.Math.Phys **261** (2006), 133–159
 - [28] C.D'Antoni, G.Morsella, *Scaling algebras and superselection sectors : study of a class of models*. Rev. Math. Phys. 18 (2006), no. 5, 565–594.
 - [29] D.Buchholz, C.D'Antoni, R.Longo, *Nuclearity and thermal states in conformal field theory*. Commun.Math.Phys **270** (2007), 267–293
 - [30] C.D'Antoni, G.Morsella, R.Verch, *Scaling algebras for charge carrying fields and superselection sectors at short-distance*. Prospects in mathematical physics, 31–43, Contemp. Math., 437, Amer. Math. Soc., Providence, RI, 2007.
 - [31] C.D'Antoni, L.Zsido, *Abelian strict approximation in AW^* -Algebras and Weyl-von Neumann Type Theorems* Trans. Amer. Math. Soc. 360 (2008) no. 9, 4705–4738
 - [32] R.Conti, C.D'Antoni, G.Morsella, *Renormalization group in algebraic quantum field theory: past, present and future*. Hot Topics in Operator Theory: Conference Proceedings, Timisoara, June 29–July 4, 2006. Edited by R.G.Douglas, J.Esterle, D.Gaspar, D.Timotin, F-H.Vasilescu. Theta, Bucharest, 2008
 - [33] H.Bostelmann, C.D'Antoni, G.Morsella, *Scaling algebras and pointlike fields: A nonperturbative approach to renormalization*. Commun. Math. Phys. 285 (2009), no. 2, 763 - 798
- Libri
- [a] G.Benfatto C.D'Antoni, F.Nicolo', G.Rossi *Introduzione alle algebre di von Neumann e Teorema di Tomita-Takesaki*. Quaderni del CNR (GNAFA-GNFM) (1976)