

CURRICULUM VITAE

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Position : PROFESSORE ORDINARIO (FULL PROFESSOR) OF MATHEMATICAL ANALYSIS, UNIVERSITY OF PALERMO, ITALY.

Fields of research: FUNCTIONAL ANALYSIS, OPERATOR THEORY, BANACH ALGEBRAS THEORY.

Academic positions:

- 1972-73: FELLOW OF THE C.N.R. (ITALIAN SCIENCE FOUNDATION). DEPARTMENT OF MATHEMATICS OF MARYLAND (U.S.A.).
- 1973-74: FELLOW OF THE C.N.R. (ITALIAN SCIENCE FOUNDATION). MATHEMATISCHES INSTITUT OF MUNSTER (GERMANIA).
- 1974-80: PROFESSOR (TENURED) OF MATHEMATICAL ANALYSIS. MATHEMATICS INSTITUT OF PALERMO..
- 1980-94: ASSOCIATE PROFESSOR OF MATHEMATICAL ANALYSIS. MATHEMATICS UNIVERSITY OF PALERMO.
- Since 1994 FULL PROFESSOR OF MATHEMATICAL ANALYSIS. MATHEMATICS UNIVERSITY OF PALERMO.

Visiting professor: (LILLE (France), SANTANDER, VALENCIA (Spain), KARLSRUHE (Germany), MERIDA, CUMANÁ, BARQUISIMETO, MARACAIBO (Venezuela).

Conferences: CATANIA, LECCE, BARI, PISA, TRENTO, MILANO, ANCONA, MESSINA, TRENTO(Italy; KARLSRUHE, MUNSTER, TUBINGEN (Germany); VALENCIA, MURCIA, GRANADA, MALAGA, SANTANDER, ORVIEDO, MADRID, LA LAGUNA (Spain); CORK (Eire); MISSISSIPPI STATE UNIVERSITY (Columbus), EDWARDSVILLE (U.S.A.); MERIDA, CARACAS, CUMANA', Maracaibo (Venezuela); LILLE, MARSEILLE (France); KENITRA, RABAT, MARRAKESH, OUJDA, MEKNES (Maroc); LEEDS (England). Yokohama, Kyoto, Fukuoka (Japan)

- Reviewer : MATHEMATICAL REVIEWS e ZENTRALBLATT FUR MATHEMATICHE.

- Referee : SEVERAL INTERNATIONAL JOURNALS.
- Since 1996 coordinator of the Functional Analysis Group of Palermo.
- National coordinator del project PRIN 2009: Operators and geometric structures in Banach spaces.
- Organizer of the INTERNATIONAL WORKSHOP ON OPERATOR THEORY, Cefalú (PA) July 1997.
- Lecturer at the CONFERENCE ON OPERATOR THEORY AND BANACH ALGEBRAS, Rabat (Marocco) April 1999.
- Lecturer at the FUNCTIONAL ANALYSIS CONFERENCE: OPERATORS IN BANACH SPACES, held in Mussomeli (CL), September 1999.
- Lecturer at the FOURTH INTERNATIONAL CONFERENCE ON FUNCTIONAL ANALYSIS AND APPROXIMATION THEORY, Maratea (Potenza), September 2000.
- Lecturer at the IVth CONFERENCE ON FUNCTION SPACES, Edwardsville (Illinois), May 2002.
- Lecturer at 30th. Aniversario Postgrado de Matemtica UCV (Caracas, Venezuela), October 2006.
- Lecturer at the V CONFERENCE ON BANACH SPACES, Cceres 2004 (Spagna).
- Lecturer at the 30 Aniversario del Postgrado en Matemtica, UCV (Caracas, Venezuela), Ottobre 2006.
- Lecturer at the Congr international de Geometrie, Thorie del les Operateurs et Application, Giugno 2007 (Oujda, Marocco).
- Lecturer at the XX Escuela Venezolana de Matemticas, Settembre 2007 (Merida, Venezuela).
- Lecturer at 2nd International Conference on Linear preserves and operator theory, June 2008, Meknes (Marocco).
- Lecturer at the conference: Banach algebras and Local spectral theory, August 2008, Copenaghen(Danimarca).
- Lecturer at IV International Course of Mathematical Analysis CIDAMA, Jerez de la Frontera (Spain), september 2009.
- Lecturer at International Conference on Prospects of non-commutative analysis in operator theory, RIMS (Kyoto) October 2009.

- Italian Coordinator of the Project of scientific collaboration between the University of Palermo and the University of Los Andes, Merida.
- Organizer of the INTERNATIONAL CONFERENCE ON OPERATOR THEORY AND OPERATOR ALGEBRAS, Altavilla M. (Pa), Giugno 2003.
- Organizer of the INTERNATIONAL CONFERENCE: FUNCTIONAL ANALYSIS; OPERATOR THEORY AND APPLICATIONS, Mondello (PA) September 2005.
- RESPONSABLE OF THE PALERMO UNIT OF THE PROJECT: Functional Analysis (PRIN 1997-1999, National Group: Functional Analysis, responsabile Delfina Roux)
- RESPONSABLE OF THE PALERMO UNIT OF THE PROJECT: Methods and algebraic structures in Operator theory (PRIN 2003-2005, National Group: Operator Theory, semigroups and applications to evolution equations and approximation problems, National Coordinator Francesco Altomare).
- SINCE 1997 RESPONSABLE OF THE PROJECT: Propriet di alcune classi di operatori ed inclusioni differenziali (ex 60DIRETTORE of the DIPARTIMENTO DI METODI E MODELLI MATEMATICI, Universit of Palermo.
- MEMBER of the ACCADEMIA DI SCIENZE; LETTERE ED ARTI of PALERMO.
- ASSOCIATED EDITOR of the journals FILOMAT (Nis) and Divulg. Math. (Venezuela).

Tutor of PHD thesis:

1) C. Carpintero, M. T. Biondi, F. Villafaña, J. Guillen, P. Peña (UCV).

Thesis under supervision: , O. Garcia, J. E. Sanabria, E. Bazan, E. Aponte.

Publications:

- 1) *Operatori generalizzati di Riesz su spazi di Banach* (with U.Oliveri); Rendiconti Seminario Matem. Univ. Padova (1979).
- 2) *Pure states in ordered locally convex Hausdorff spaces*,(with U.Oliveri); Rendiconti Circolo Mat. Palermo, 1980
- 3) *A majorant problem on Banach spaces*, (with U.Oliveri); Atti Acc.Sc.Lett. Palermo,1980 - 1981.
- 4) *Relative regularity and Riesz operators*; Rendiconti Seminario Matem. Univ. Padova (1982).
- 5) *On Calkin's theorem*; Rivista di matematica dell'Univ. di Parma 1983.
- 6) *Relative regularity and Fredholm theory in semi-prime algebras with identity*; Rendiconti Circolo Mat. Palermo, 1983.
- 7) *On a finite dimensional characterization of some classes of operators*, Boll. Un. Mat. It. 1984.
- 8) *On strictly cosingular operators and Φ -admissible perturbations*; Boll. Un. Mat. It. 1985.
- 9) *Note sulla teoria delle perturbazioni ammissibili per operatori di Fredholm e di semi-Fredholm*; Quad. Dip. Mat. Bari, 85.
- 10) *A characterization of Riesz operators*; Mathematisches Zeitschrift 1987
- 11) *Relative regular ideals in semiprime Banach algebras*; Rend.Circ.Mat. Palermo 1986.
- 12) *Una breve nota sui moltiplicatori di Riesz*; Atti Acc. Sc. Lett. Palermo 1985.
- 13) *An internal characterization of inessential operators*; Proc. Amer. Math. Society 1988.
- 14) *Riesz multipliers on $L1(G)$* ; Archiv der Mathematik (Basel) 1988.
- 15) *Riesz operators and perturbation ideals*; Note Matematiche, Lecce 1989.
- 16) *On inessential and Riesz operators*, Mathematisches Zeitschrift 1989.
- 17) *Riesz multipliers on semisimple Banach algebras*, Archiv der Mathematik (Basel) 1990.
- 18) *On spectral properties of multipliers*; Boll. Un. Mat. It. 1991
- 19) *Multipliers on Banach algebras with orthogonal bases*; Boll. Un. Mat. It. 1992.
- 20) *Fredholm multipliers of semisimple commutative Banach algebras*; Extracta Mathematicae 1991.
- 21) *Multipliers and convolution operators with natural spectrum on group algebras*; Conf. Sem. Mat. Bari 1992.
- 22) *Essentially incomparable Banach spaces and Fredholm theory*,(with M. Gonzalez); Proc. Royal Irish Acc. 1993.
- 23) *On Fredholm theory of multipliers*; Proc. Amer. Mat. Soc. 1994.
- 24) *Some aspects of spectral theory of multipliers*, Semin. Funct. Analysis, Notas Matem. Univ. Murcia 1992.
- 25) *Multipliers and projections of semisimple commutative Banach algebras*; Proc. 2nd int. Conf. Funct. Anal. and Approx. Theory, Rend. Circ. Mat. Palermo 1993.

- 26) *Inessential operators and incomparability of Banach spaces* (with M. Gonzalez), Extracta Math 1992.
- 27) *Multipliers with closed range of regular commutative Banach algebras* (with K. Laursen); Proc. Amer. Math. Soc. 1994.
- 28) *Some spectral properties of multipliers on semi-prime Banach algebras*; Questionae Math. 1994.
- 29) *Riesz theory of multipliers on semi-simple commutative Banach algebras* (with K. Laursen); Proc. Royal Irish Academy 1996, vol 96a, n.2
- 30) *Spectral theory of central double centralizers of strongly semi-simple Banach algebras*; Proc. Inter. Conf. on Banach Space Theory, Wuhan University press 1996.
- 31) *Fredholm, Riesz and local spectral theory of multipliers*; Extracta Math 1994.
- 32) *Characterization of some classes of operators by means of the Kato decomposition* (with M. Mbektha), Boll. Un. Mat. It. 1996 (7), 10 -a.
- 33) *On the perturbation classes for semi-Fredholm and Fredholm operators* (with M. Gonzalez), Proc. Conf. Funct. Anal. Math. App. Suppl. Rend. Circ. Mat. Palermo 1995.
- 34) *The Browder-Weyl spectrum of a multiplier*, Contemporary Math. (bf 232, 1999.
- 35) *On inessential and improjective operators* (with M. Gonzalez), Studia Mathematica 131 (1998).
- 36) *Some open problems relative to two classes of operators*, Proc. Int. Workshop on Operator Theory, Cefal 1997, Suppl. Rend. Circ. Mat. Palermo 56 (1998).
- 37) *Examples of improjective operators*, (with M. Gonzalez), Math. Zeitschrift **233**, 2000.
- 38) *Operator semigroups in Banach space theory*; (with M. Gonzalez e A. Martinez), Boll. Unione. Matem. Ital. **8**, 2001.
- 39) *Operators which does not have single valued extension property* (with O. Monsalve), Journ. Math. Anal. Appl **250**, (2) 2000.
- 40) *The single valued extension property and the generalized Kato decomposition property*; (with O. Monsalve) Acta Sci. Math. (Szeged) **201** (2001).
- 41) *Improjective operators which are not inessential* (with M. Gonzalez), Proc. Intern. Conf. Theorie des operateurs et algebre de Banach, Rabat 1999, Inst. of Math. of the Romanian Acad., Bucharest.
- 42) *Inessential operators between Banach spaces.*, (with M. González) Rend. Circ. Mat. Palermo, Suppl. **68**, (2002).
- 43) *On the operators which are invertible modulo an operator ideal*; (with M. Gonzalez, A. Martinez), Bull. Austr. Math. Soc. **64**, (2003).
- 44) *Operators which have closed quasi-nilpotent*, (with M. Gonzalez e M. L. Colasante), Proc. Amer. Soc. **130**, (2002).
- 45) *On a localized single valued extension property*, (with M. Neumann e L. Miller). Math. Proc. Royal Irish Acad. **104A**, (2004), no. 1, 17-34.
- 46) *Single-valued extension property at the points of the approximate point spectrum*. (with E. Rosas) , J. Math. Anal. Appl. **279** (1), (2003),

- 47) *On the perturbation classes of continuous semi-Fredholm operators.* (with M. Gonzalez e A. Martinon), Glasgow Math. J. **45**, (2003).
- 48) *Components of resolvent sets and local spectral theory.* (with F. Villafañe), Contemporary Math. **328** (2003).
- 49) *Incomparable Banach spaces and operators semigroups.*, (with M. González, A. Martínez-Abejón) Arch. Math. **79**, 2003.
- 50) *Ascent, descent, quasi-nilpotent part and analytic core of operators.*, (with M. T. Biondi) Mat. Vesnik **54**, (2002).
- 51) *Some spectral mappings theorem through local spectral theory.*, (with M. T. Biondi) Rend. Circ. Mat. di Palermo **53** (2004).
- 52) *Single-valued extension property and semi-Browder spectra.*, (with C. Carpintero) (2003) Acta Sci. Math. (Szeged).
- 53) *Weyl's theorem, a-Weyl's theorem and single valued extension property.* (with C. Carpintero) Extractae Math. **20** (2005), 35-41.
- 54) *Weyl's theorem for some classes of operators.*, (with F. Villafañe), (2003), Journal Integral Equation and Operator Theory **53** (2005), 453-466.
- 55) *Classes of operators satisfying a-Weyl's theorem.* Studia Math. **169** (2005), 105-122.
- 56) *Some characterization of operators satisfying a-Browder's theorem.* (with C. Carpintero e E. Rosas), Jour. Math. Anal. and Appl. **311** (2005), 530-544.
- 57) *On Browder's theorem and localized SVEP* (with M. T. Biondi) (2005). Mediterranean Journ. of Math. **2** (2005), 137-151.
- 58) *Weyl's theorem for perturbations of paranormal operators* (with J. Guillen) Proc. Amer. Math. Soc. **35**, (2007), 2433-2442.
- 59) *Weyl's theorem through local spectral theory*(with M.T. Biondi). Supp. Rend. Circ. Mat. Palermo **73** (2004), Proc. Intern. Conference on Operator Theory, Altavilla (PA) 2003.
- 60) *Tensor products, multiplication and Weyl's theorem*,(with B. Duggal). Rend. Circolo Mat. Palermo (2005), Serie II, (54), 387-395.
- 61) *A variation on Weyl's theorem*,(with P. Peña). J. Math. Anal. Appl. **324** (2006), 566-579.
- 62) *Weyl's and Browder's theorems through the quasi-nilpotent part of an operator* (with M. T. Biondi). Methods in Banach space theory, London Math. Soc. Lecture Note Ser., 337, Cambridge Univ. Press, Cambridge, 2006.
- 63) *Browder's theorem and the spectral mapping theorem* (with C. Carpintero e E. Rosas) Divulg. Mat. **15**, 2, (2007), 207-226
- 64) *Weyl's theorem and Kato spectrum* (with M.T. Biondi e F. Villafañe). Divulg. Mat. **15**,2,(2007), 123-142.
- 65) *Weyl's theorems type and perturbations* (with J. Guillen e P. Peña). Divulg. Mat. **16**, 1, (2008), 55-72.
- 66) *Generalized Browder's theorem and SVEP* (with Orlando Garcia). Mediterranean Journ. of Math. **4** (2007), 215-228.
- 67) *On generalized a-Browder's theorem* (with Len Miller). Studia Math. **180** (3) (2007), 285-300.
- 68) *Quasi-Fredholm operators and SVEP* (2006) Acta Sci. Math. (Szeged), **73** (2007), 251-263.

- 69) *Property (w) and perturbations* (with M. T. Biondi). J. Math. Anal. Appl. 336 (2007), 683-692 .
- 70) *Symmetrizable operators and Weyl's theorem*. (2009), Preprint.
- 71) *On Drazin invertibility* (with M. T. Biondi e Carlos Carpintero) Proc. Amer. Math. Soc. 136, (2008), 2839-2848.
- 72) *Property (w) for perturbations of polaroid operators* (with J. Guillen e P. Peña) (2006). Linear Alg. and Appl. 424 (2008), 1791-1802.
- 73) *On left and right poles of the resolvent* (with J. E. Sanabria) Acta Sci. Math. (Szeged) 74 (2008), 669-687.
- 74) *Property (w) and perturbations II* (2207). J. Math. Anal. Appl. 342, (2008) 830-837.
- 75) *Property (w) and perturbation III* (with M. T. Biondi F. Villafañe (2207). J. Math. Anal. Appl. 353 (2009), 205-214.
- 76) *Generalized Weyl's theorem and quasi-affinity* (with M. Berkani), (2009), to appear in Studia Math.
- 77) *Property (w) under Riesz commuting perturbations* (with O. Garcia), (2009), to appear in Acta Sci. Math (Szeged).
- 78) *Weyl's type theorems for left and right polaroid operators* (with E. Aponte e E. Balzan) (2009), to appear in Int. Equa. and Operator Theory.
- 79) *Polaroid operators under quasi-affinities* (with M. Gonzalez, M. Cho), 2009 (preprint).
- 80) *Property (R) for operators* (with J. Guillen e P. Peña), (2009), preprint.
- 81) *Weyl type theorems for bounded linear operators on Banach spaces*, Proc. of the International Congress in Math. Anal. CIDAMA (September, 2009). To appear.
- 82) *On the spectral properties of some classes of operators* Proc. the international Conference Prospects of non-commutative analysis in operator theory, RIMS Kyoto (2009)
- 83) *Intrinsic characterizations of some perturbation classes* (with M. Gonzalez), (2009), to appear in Archiv der Math.

Books

- 1) *Fredholm and local spectral theory, with applications to multipliers*. Kluwer Academic. Publishers 2004.
- 2) *Introduction to Banach algebras, Operators and Harmonic Analysis*. (con G. Dales, J. Eschmeier, K.B. Laursen, G. Willis) (2003). Cambridge University Press.
- 3) *The localized single-valued extension property and Fredholm theory*. Volume speciale Aniversario del Postgrado en Matemática of the UCV, 2006.
- 4) *Semi-Fredholm operators, perturbation theory and localized SVEP*. (2007). IXX Escuela Venezolana de Matemáticas, Merida (Venezuela).