CV AND PUBLICATIONS LIST

FRANCESCO FIDALEO

1. Curriculum Vitae

- **Personal Data**:
  - Born 21/02/1960 in Formia, Italy.
  - Citizenship: Italian.
- **Education and Training**:
  - B.A. in Physics, *cum laude*, Università degli Studi SAPIENZA, Rome, Italy, 1985.
  - Ph.D. in Mathematics, Università degli Studi TOR VERGATA, Rome, Italy, 1993.
- **Appointments**:
  - Compulsory Military Service In Italian Army as Officer: 09/1985-01/1987.
  - Research Fellow: Italian INDAM, 02/1987-12/1987.
  - Researcher in Remote Sensing, Telespazio SpA : 01/1988-04/1988.
  - Teacher on annual contract: University of Cassino in the academic years 96/97, 97/98, 98/99, 99/00, 00/01, 03/04 and 04/05; Uni?versity of Rome SAPIENZA in the academic year 02/03.
  - Researcher: Università TOR VERGATA, Rome, Dipartimento di Matematica, 02/1992-09/2001.
  - Associate Professor: Università TOR VERGATA, Rome, Dipartimento di Matematica, 10/2001-01/2013.
  - Full Professor: Università TOR VERGATA, Rome, 02/2013-current.
  - Visiting Professor: Texas A&M University TX, USA, Department of Mathematics, 09/2007-05/2008.
  - Visiting Professor: International Islamic University Malaysia, Malaysia, Department of Mathematics, 01/2009-04/2009.
  - Visiting Professor: Padre Conceicao College of Engineering, Goa, India 05/2009-06/2009.
  - Visiting Professor: University of Pretoria, South Africa Republic, 03/2010-05/2010.
  - One month visiting positions: Indian Statistical Institute, Bangalore India, 09/2001; University of Tartu, Estonia, 09/ 2010; Simion Stoilow Mathematical Institute, Romanian Academy, Bucharest, 05/2011; Padre Conceicao College of Engineering, Goa, India 12/2012; Chungbuk National University, Korea 07/2012 and 08/2014; Universidad Autonoma Metropolitana, Mexico City 01/2014, 08/2015 and 05/2016.

- **Others**:

- Editor of *Infinite Dimensional Analysis Quantum Probability and Related Topics*, January 2012-December 2017.
- Current referee for several peer-review journals.
- Referee for several academic-scientific Institutions.
- Reviewer for Mathematical Reviews.
- Memberships of scientific institutions: Centro Interdisciplinare Vito Volterra; QPIDA; GDRE GREFI-GENCO; INDAM/GNAMPA.
- Principal Investigator and Partecipant to several grants.

- **Summary of the Teaching Activity** (Courses taught):
  - Calculus, Advanced Calculus, Linear Algebra, Differential Equations, Harmonic Analysis, Complex Analysis, Functional Analysis, Measure Theory, Operator Theory, Operator Algebras.

- **Summary of the Research Activity** (Field of interest: Operator Algebras and applications):
  - C^*-algebras and W^*-algebras: von Neumann Algebras; inclusions of W^*-algebras, Jones theory of Index with applications to Quantum Groups; Structure of operator algebras, reduction theory. Applications of Operator Algebras to Quantum Field Theory, Statistical Mechanics and Probability Theory.
  - Functional Analysis: Banach Spaces; Operator Spaces; Bounded, Completely Bounded, Compact, Nuclear and Metrically Nuclear maps between Banach and Operator Spaces with applications to the structure of Operator Algebras and Quantum Field Theory; non commutative measure theory and integration with applications to Quantum Probability.
  - Group Theory: Generalisation of the Mackey's Theorem of Imprimitivity to Polish non locally compact groups.
  - Quantum Probability: Martingale Convergence Theorems in non commutative L^p-spaces; Exchangeable and Stationary Stochastic Processes and De Finetti-like theorems for several noncommutative examples (Bose, Fermi, Free and q-deformed, Boolean and Monotone); Quantum Markov Processes with applications to Statistical Mechanics.
  - Ergodic Theory: Noncommutative dynamics, nonconventional ergodic theorems, Entangled Ergodic Theorem, multiple correlations.
  - Harmonic Analysis on amenable and non amenable networks: Spectral analysis of the Adjacency and Laplace operators on networks, transience, recurrence, Perron-Frobenius Theory, applications to Statistical Mechanics (Bose-Einstein Condensation appearing in the Pure Hopping model describing infinitely extended arrays of Josephson junctions).
  - Quantum Statistical mechanics: Markov properties of Ising-Like and fermionic models on lattices; Disordered Systems, Spin Glasses; Bose-Einstein Condensation and condensation of q-particles; Non equilibrium thermodynamics.
  - Noncommutative geometry: Type III representations and modular spectral triples for Noncommutative tori, Noncommutative Harmonic Analysis for noncommutative tori.

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