

Curriculum vitae of Sandra Saliani

Born in Bari on 10/23/1963, married, two children.

-Degree in Mathematics at the University of Bari, November 20, 1987, vote 110/110 cum laude, supervised by Prof. Joel M. Cohen, thesis: "Sulla dimensione di von Neumann". -Participation in summer schools of the "Scuola Matematica Interuniversitaria" of Perugia in 1987 and 1988.

- Fellow at the "Istituto Nazionale di Alta Matematica, Francesco Severi", Rome, in the years 1987-88 and 1988-89.

- Scholarship for foreign-CNR at the University of Maryland, College Park, Maryland from August 1989 to July 1991.

- Ph.D. in Mathematics at the University of Maryland, College Park, Maryland, USA, from August 1989 to July 1993, the program ended on July 23, 1993, supervised by Prof. John J. Benedetto, Ph.D. thesis: "Nonlinear Wavelet Packets",

- From 22 July 1991 researcher at the Faculty of Sciences of the University of Basilicata, Department of Mathematics, disciplinary sector MAT/05, Mathematical Analysis.

- She has been the local coordinator (for Potenza) for the research project of national importance (PRIN ex 40%): "Functional analysis" for the period 1997-1999 (national coordinator Prof. Roux).

- Participant to PRIN:

- 2000 "HARMONIC ANALYSIS IN EUCLIDEAN AND HYPERBOLIC SPACES, ON LIE GROUPS AND ON DISCRETE STRUCTURES. WAVELETS".
- 2002 "FOURIER ANALYSIS; LIE GROUPS; DISCRETE STRUCTURES; WAVELETS "
- 2005 "FOURIER ANALYSIS; LIE GROUPS; DISCRETE STRUCTURES; WAVELETS "
- 2007 "FOURIER ANALYSIS; HARMONIC ANALYSIS ON LIE GROUPS; WAVELETS; HARMONIC ANALYSIS ON DISCRETE STRUCTURES "
- 2010-2011 "REAL AND COMPLEX MANIFOLDS: GEOMETRY, TOPOLOGY AND HARMONIC ANALYSIS"

- 2012: invited speaker at February Fourier Talks, Dept of Math, University of Maryland.

-2013: plenary speaker at CIMPA13, New Trends in Applied Harmonic Analysis Sparse Representations, Compressed Sensing and Multifractal Analysis, Mar del Plata, ARGENTINA.

- In 2015: organizer of the "XXXV National meeting of harmonic analysis", May 26 - 28, Matera.

- In 2006, participating in "Progetto Lauree Scientifiche" for area mathematics, University of Basilicata.

- From 2008 to 2015: Head of "Progetto Lauree Scientifiche" for area mathematics for the University of Basilicata.

-In 2010: member of the technical structure of the School Regional Office of Basilicata for the regional plan "Teaching and Learning of Mathematics".

- Since 2014: responsible for the area of mathematics in the project "Lincei for a new teaching in schools: a national network" for the University of Basilicata.

- Since 2006: Reviewer for Mathematical Reviews.

-Since 1990: member of the American Mathematical Society. - Since 1991: Member of the Italian

Mathematical Union.

- Since 1992: member of the "National Group for Functional Analysis and Its Applications "(GNAFA) of the National Research Council, (later GNAMPA).

Publications

1. S.SALIANI (2015). On various levels of linear independence for integer translates of a finite number of functions. In: Balan R. Begué M. Benedetto J.J. Czaja W. Okoudjou K.A., Excursions in Harmonic Analysis, Volume 3: The February Fourier Talks at the Norbert Wiener Center. New York:Birkhäuser.
2. S.SALIANI (2014). Linear independence of translates implies linear independence of affine Parseval frames on LCA groups. Manoscritto.
3. S. SALIANI (2014). Parseval frames built up from generalized shift-invariant systems. *Mediterr. J. Math.*, vol. 11 , p. 617-632,
4. G. KUHN, S.SALIANI, T. STEGER (2013). Free group representations from vector-valued multiplicative functions, II. Manoscritto.
5. S. SALIANI (2013). l^2 -Linear independence for the system of integer translates of a square integrable function. *Proc. Amer. Math. Soc.*, vol.141, p. 937-941
6. S. SALIANI (2011). The solution of a problem of Coifman, Meyer, and Wickerhauser on wavelet packets. *Constr. Approx.*, vol. 33, p. 15-39.
7. S. SALIANI (2008). On stable refinable function vectors with arbitrary support. *J. Approx. Theory*, vol. 154, p. 105-125,
8. S. SALIANI, D. SENATO PULLANO (2006). Compactly supported wavelets through the classical umbral calculus. *J. Fourier Anal. Appl.*, vol. 12, p. 27-36.
9. S. SALIANI (2006). On stability and orthogonality of refinable functions. *Applied Comp. Anal.*, vol. 21, p. 254-261.
10. S. SALIANI (2003). Measures associated to wavelet packets. *J. Fourier Anal. Appl.*, vol. 9, p. 115-124.
11. S. SALIANI (1999). Exceptional sets and wavelet packets orthonormal bases. *J. Fourier Anal. Appl.*, vol. 5, p. 421-430.
12. J.J BENEDETTO, M. LEON, S. SALIANI (1998). Self -similar pyramidal structures and signal reconstruction. In: *WAVELET APPLICATIONS V-SPIE-International Society for Optical Engineering*. vol. 3391, p. 304-314, Orlando, FL, USA, 1998.
13. S. SALIANI (1995). On the possible wavelet packets orthonormal bases. In: *Approximation theory, Wavelets and Applications*. vol. 454, p. 433 -442, NATO-ASI series, (Sankatha Prasad Singh, Antonio Carbone, B. Watson ed.), Kluwer Academic Publishers, Maratea (Italia), 1994.
14. BENEDETTO J. J., S. SALIANI (1994). Subband coding for sigmoidal nonlinear operations. In: *WAVELET APPLICATIONS, SPIE*. vol. 2242, p. 19-27, Orlando, FL, USA , 1994.