

**CURRICULUM VITAE**  
**ANITA MARIA TABACCO**  
**June 4, 2024**

**Personal**

Born in Torino January 1<sup>st</sup> 1960  
Italian Citizen

**Degrees**

- Ph.D. in Mathematics, Washington University in St. Louis (MO) USA, 1986
- Master in Mathematics, Washington University in St. Louis (MO) USA, 1984
- Laurea in Matematica, Università degli Studi di Torino, 1982

**Current position**

Full professor of Mathematical Analysis at the Politecnico di Torino, Dept. of Mathematical Sciences (since October 2002)

**Previous academic posts**

- Associate Professor of Mathematical Analysis, Politecnico di Torino, Novembre 1992 – September 2002
- Assistant Professor of Mathematical Analysis, Politecnico di Torino, January 1990 – October 1992
- Teaching Assistant, Washington University, 82/83 and 85/86

**Current administrative duties**

- Director of the young leadership Academy (2024-)
- Coordinator of the University Observatory dedicated to the scientific and in-depth analysis of the activities and dynamics that characterize the missions of the academic environment (2024-)
- Project Manager of “Progetto Uzbekistan” (2021-)
- Member of the Swiss Accreditation Council (2019-)
- Scientific Coordinator for the Erasmus+ KA2 cooperation partnerships Project “HerTechVenture: Empowering Women in Tech Innovation and Entrepreneurship by developing a Supportive Ecosystem in Higher Education Institutions” (2023-)
- Local funding Coordinator for the group “Analisi funzionale e Geometria differenziale” (Functional Analysis and Differential Geometry) (1999-)

**Selection of previous administrative duties**

- Vice Rector for Education (2023-2024)

- Rector’s Delegate for transparency and internal communication (2021-2024)
- Head of the local unit of INdAM, Istituto Nazionale di Alta Matematica (2006-2024)
- Rector’s Delegate/Vice Rector for simplification (2018-2021)
- Operating Project Manager of TTPU (Turin Polytechnic University in Tashkent) (2017-2021)
- Vice Rector for Teaching (2012-2018)
- Academic head of the Language Center (2008-2018)
- Rector’s delegate for Quality (2017-2018)
- Vice Rector for recruitment (2008-2012)
- Head of the Department of Mathematical Sciences (2012)
- Member of the Governing Council of the “Fondazione per la Scuola” of the “Compagnia di San Paolo” (private foundation) (2009-2016)
- Scientific Coordinator for the Erasmus+ - Capacity Building Project “W-STEM: engaging women into STEM, building the future of Latin America” (2019-2022)
- Scientific Coordinator for the Erasmus+ Project “INGDIVS: Increasing Diversity in STEM” (2016-2019)
- Scientific Coordinator for the Erasmus+ - Capacity Building Project “OpenMed: Opening up Education in South-Mediterranean countries” (2015-2018)
- Scientific Coordinator for the LLP European Project “ATTRACT - Enhance the Attractiveness of Studies in Science and Technology” (2010-2012)
- Local Coordinator for the National Project MURST “Analisi Armonica” 2000-2001, 2002-03, 2006-07, and 2008-09
- Coordinator of a research unit of the IHP Project (CEE) “Nonlinear approximation and adaptivity: breaking complexity in numerical modeling and data representation” (2002-2006)
- Local Coordinator for the National Project MURST “Analisi Funzionale” 1996-97 and 2000-01

### **Research fields**

Functional analysis, harmonic analysis with particular interest in interpolation theory, theory of wavelets, and analysis on trees. Engineering Education.

### **Research and teaching publications**

#### **Selection of Books:**

1. Mathematical Analysis I, Pearson, 2022 (with C. Canuto)

2. Radical Solutions for Education in a Crisis Context. Singapore, Springer, 2021 (edited with Daniel Burgos, Ahmed Tlili)
3. Landscapes of Time-Frequency Analysis - ATFA 2019. Applied and Numerical Harmonic Analysis. Birkhäuser/Springer, Cham, 2020 (edited with P. Boggiatto, T. Bruno, E. Cordero, H.G. Feichtinger, F. Nicola, A. Oliaro, M. Vallarino)
4. Mathematical Analysis I, Springer-Verlag, Milano, second ed. 2015 (with C. Canuto)
5. Mathematical Analysis II, Springer-Verlag, Milano, second ed. 2015 (with C. Canuto)

**Selection of scientific papers - Mathematical Analysis:**

6. Poincaré inequalities on graphs, *Anal. Math.*, 49 (2023), no. 2, 529-544 (with M. Levi, F. Santagati, M. Vallarino)
7. Riesz transform for a flow Laplacian on homogeneous trees, *J. Fourier Anal. Appl.*, 29 (2023), no. 2, Paper No. 15, 29 pp (with M. Levi, A. Martini, F. Santagati, M. Vallarino)
8. Analysis on Trees with Nondoubling Flow Measures, *Potential Anal.*, 58 (2023), no. 4, 731-759 (with M. Levi, F. Santagati, M. Vallarino)
9. Estimates for matrix coefficients of representations, *Amer. J. Math.*, 144 (2022), no. 4, 943-965 (with T. Bruno, M.G. Cowling, F. Nicola)
10. DXA-Based Detection of Low Muscle Mass Using the Total Body Muscularity Assessment Index (TB-MAXI): A New Index with Cutoff Values from the NHANES 1999-2004, *J. of Clinical Medicine*, 11 (2022), 603-614 (with M.A. Minetto, M.G. Ballatore, A. Botter, C. Busso, A. Pietrobelli)
11. BMO Spaces on Weighted Homogeneous Trees, *J. Geom. Anal.*, 31 (2021), no. 9, 8832-8849 (with L. Arditti, M. Vallarino)
12. Diagnostic performance of the Strength and Pain Assessment (SPA) score for non-contact muscle injury screening in male soccer players, *The Physician and Sports-Medicine* (2020), 1-7 (with L. Semperboni, C. Vignati, M.G. Ballatore, C. Busso, M. A. Minetto)
13. Strichartz estimates for the metaplectic representation, *Rev. Mat. Iberoam.*, 35 (2019), no. 7, 2079-2092 (with A. Cauli, F. Nicola)
14. Highly oscillatory unimodular Fourier multipliers on modulation spaces, *J. Pseudo-Differ. Oper. Appl.*, 10 (2019), 359-378 (with F. Nicola, E. Primo)
15. Sobolev spaces on Lie groups: Embedding theorems and algebra properties, *J. Funct. Anal.*, 276 (2019), 3014-3050 (with T. Bruno, M.M. Peloso, M. Vallarino)
16. Endpoint results for Fourier integral operators on noncompact symmetric spaces. Landscapes of time-frequency analysis, 3358, *Appl. Numer. Harmon. Anal.*, Birkhäuser/Springer, Cham, 2019 (with T. Bruno, M. Vallarino)
17. Stockwell-like frames for Sobolev spaces, *J. Pseudo-Differ. Oper. Appl.*, 9:4 (2018), 701-734 (with U. Battisti, M. Berra)

### **Selection of scientific papers - Engineering Education:**

18. Multiple roads towards openness: Exploring the use of open educational practices within an Italian university, *Italian Journal of Educational Technology*, 31(1) (2023), 89-100 (with M.G. Ballatore, F. Nascimbeni, D. Burgos)
19. The Educational Benefit of a Remote Automatic Control Laboratory. A Win-Win Collaboration between Asia and Europe, *Education in the Knowledge Society*, 23 (2022) (with M.G. Ballatore, V. Razza, D. Regruto Tomalino, I.S. Stievano)
20. Think Lab: we have an IDEA (Instructional Design Elementary Application), *Irish Journal of Academic Practice*, 10 (2022), Article 8 (with M.G. Ballatore, I.S. Stievano)
21. Balance4Better: “We Are HERe” More Than a Gender Campaign, in *Women in STEM in Higher Education. Lecture Notes in Educational Technology*. Springer, Singapore (2022), 85-97 (with M.G. Ballatore, C. De Giorgi, A. Montorsi)
22. Science Education in Italy, in *Science Education in Countries Along the Belt & Road. Lecture Notes in Educational Technology*. Springer, Singapore (2022), 419-433 (with M.G. Ballatore)
23. Pedestrian Bridge Application in a Fundamentals of Structural Analysis Course Inside an Architecture Bachelor Program, *Int. J. of Eng. Pedagogy*, 11 (2021), 4-18 (with M.G. Ballatore, F. Barpi, D. Crocker)
24. How Online Solutions Help Beat the Lockdown in Higher Education: A Central Asia Case Study. In: *Radical Solutions for Education in a Crisis Context, Lecture Notes in Educational Technology*, Springer Science and Business Media Deutschland GmbH (2021), 255-261 (with M.G. Ballatore, F. Abdullayev, I.S. Stievano)
25. SAperI: approaching gender gap using Spatial Ability training week in high-school context. In: *Technological Ecosystems for Enhancing Multiculturality, Salamanca* (online), 21-23 October 2020, 142-148 (with M.G. Ballatore, G. Duffy, S. Sorby)
26. ANNA Tool: A Way to Connect Future and Past Students in STEM, *IEEE-RITA*, 15:4 (2020), 344-351 (with M.G. Ballatore, J. De Borger, J. Misiewicz)
27. TEACH-POT: Provide Opportunities in Teaching, Excellence and Innovation in Teaching and Learning (2020), 79-91 (with M.G. Ballatore, E. Felisatti, L. Montanaro)
28. Empowering Talented Students: An Italian Experience of an Enriched Curriculum in Engineering, *International Journal of Engineering Pedagogy*, 9 (2019), 56-75 (with M.G. Ballatore, L. Montanaro)
29. TEACH-GYM: Grow Your Methodologies, In: *INNOVATIONS, TECHNOLOGIES AND RESEARCH IN EDUCATION*, 2019 (Riga, Latvia), pp.180-191 (with M.G. Ballatore, F. Abdullayev, I.S. Stievano)
30. Institutional mapping of open educational practices beyond use of Open Educational Resources, *Distance Education*, 39:4 (2018), 511-527 (with D. Burgos, L. Campbell, F. Nascimbeni)