

Curriculum Vitae
Fabrizio Frezza (Rome, 31-10-1960)

Overview:

My research activity has concerned guiding structures, antennas and resonators for microwaves and millimeter waves, numerical methods, scattering, optical propagation, plasma heating, anisotropic media, artificial materials and metamaterials, biomedical applications, cultural-heritage applications, history of science.

Present Position:

Full Professor of Electromagnetic Fields, “La Sapienza” University of Rome, 2005-present
Faculty of Information Engineering, Informatics and Statistics
Department of Information Engineering, Electronics and Telecommunications (DIET)
“La Sapienza” Research Center for Aerospace Research (CRAS)
“La Sapienza” Research Center for Nanotechnology Engineering (CNIS)

Past Positions:

Associate Professor, “La Sapienza” University of Rome, 1998-2004
Temporary Professor of Electromagnetic Fields, “La Sapienza” University of Rome, 1994-1997
Assistant Professor, “La Sapienza” University of Rome, 1990-1998

Education:

Laurea Degree (*cum laude*) in Electronic Engineering, “La Sapienza” University of Rome, 1986
Doctoral degree (PhD) in Applied Electromagnetism and Electrophysical Sciences, “La Sapienza” University of Rome, 1991

Significant Professional Activities:

Institutional representative, Board of European School of Antennas (ESoA), 2004-present
National representative, Management Committee, COST Action TU1208 “Civil Engineering Applications of Ground Penetrating Radar”, 2013-present
Head of the ASI project “Techniques of three-dimensional (3D) evaluation of cellular growth and morphology in microgravity condition through electromagnetic diffraction”, 2014-2016
Institutional Member, “Metamorphose”, Virtual Institute on Artificial Materials and Metamaterials
Scientific Council Member, Microwave Engineering Center for Space Applications (MECSA)
Council Member, International Research Center on Mathematics and Mechanics of Complex Systems (M&MOCS)
Member, Italian University Consortium for Telecommunications (CNIT)
Full Member, Sigma Xi, The Scientific Research Society
Senior Member, IEEE
Senior Member, OSA

Editorial Work:

Topical Editor of Journal of the Optical Society of America A, 2014-present
Director of Book Series on Electromagnetism and Optics (L’Ondivaga), Aracne Editor, Rome, 2013-present
Co-Editor of the volume “New Frontiers in Radiation and Guidance Phenomena: a Tribute to Arthur A. Oliner”, Borgia, Rome, December 2007
Scientific Committee of Italian Journal of Composites and Nanotechnologies (Materials, Aerospace, Special Technologies), 2005-present
Co-Editor of the Special Issue of “Atti della Fondazione Giorgio Ronchi”, January-April 2004

Awards and recognitions:

2016, one paper rewarded at International URSI Symposium on Electromagnetic Theory
2015, one paper rewarded at URSI Atlantic Radio Science Conference
2014, three papers rewarded at International URSI General Assembly and Scientific Symposium on Electromagnetic Theory

2013, one paper rewarded at International URSI Symposium on Electromagnetic Theory, and another at 6th UCMMT conference
2012, Best Paper Award at International Symposium on Antennas and Propagation
2010, “Sapienza Ricerca” Prize
1994, “Giorgio Barzilai” Prize
1986, “Giovanni Carosio” Prize

Papers: more than 450 papers

Citations (Google Scholar): 2387; H index = 26, i10-index = 59

Books:

P. Bernardi, P. Lampariello, and F. Frezza, Editors, *Ricordo di Giorgio Barzilai*, Borgia, Rome, June 2007.
F. Frezza and P. Lampariello, Editors, *New Frontiers in Radiation and Guidance Phenomena: a Tribute to Arthur A. Oliner*, Borgia, Rome, December 2007.
F. Frezza, P. Mandarini, M. Peroni, and A. Roveri, Editors, *Bruno Peroni: una raccolta di suoi scritti*, Department of Information Engineering, Electronics and Telecommunications, “La Sapienza” University of Rome, September 2011.
F. Frezza, *Compendio di Campi elettromagnetici*, Aracne, Rome, 2013.
F. Frezza, *A primer on electromagnetic fields*, Springer, May 2015.

Patents:

Leaky-wave antenna based on stepped rectangular waveguide, #RM95A000590 (1995)
Software for the calculation of electromagnetic-wave scattering from an arbitrary number of cylindrical objects buried in a dielectric halfspace, #009073 (2013)
System for acquisition and comparison of graph curves, #RM2014A000045 (2014)

Former PhD Students, Year of graduation, and last known positions:

1. Lara Pajewski, 2004, Associate Professor, “La Sapienza” University of Rome, Italy, DIET Department
2. Giampiero Lovat, 2005, Researcher, “La Sapienza” University of Rome, Italy, DIAEE Department
3. Simone Paulotto, 2006, Maxtena Inc., Washington D.C., USA
4. Alessandro Ciorba, 2008, Italian Ministry of Defense, Rome, Italy
5. Paolo Nocito, 2009, Italian Presidency of the Council of Ministers, Rome, Italy
6. Piero Angeletti, 2010, ESA-ESTEC Research Center, Noordwijk, The Netherlands
7. Felice M. Vanin, 2012, ESA-ESTEC Research Center, Noordwijk, The Netherlands
8. Fabrizio De Paolis, 2013, ESA-ESOC Research Center, London, UK
9. Elisa Spinozzi, 2013, GEM Electronics, San Benedetto del Tronto (Ascoli Piceno), Italy
10. Nicola Tedeschi, 2013, Research Assistant, “La Sapienza” University of Rome, Italy, DIET Department
11. Roberto Laurita, 2014, Value Team Co., Rome, Italy
12. Fabio Mangini, 2014, Research Assistant, Enrico Fermi Research Center, Rome, Italy
13. Endri Stoja, 2014, Assistant Professor, Epoka University, Tirana, Albania
14. Marco Tannino, 2015, Vatican Radio, Vatican City
15. Muhammad Khalid Wattoo, 2016, Assistant Professor, Quaid-i-Azam University, Islamabad, Pakistan
16. Carlo Santini, 2016, Professor of Mathematics and Physics in High Schools, Rome
17. Santo Prontera, 2016, COST Action TU1208
18. Emiliano Sassolini, 2016, Post-doctoral Fellow, CNR Institute for Plasma Physics (IFP), Milan
19. Vincenzo Schena, 2016, R&D Responsible at Advanced Project & Studies, Laboratories Domain Observation and Navigation Italy (DONI), Thales Alenia Space
20. Patrizio Simeoni, 2016, National Transport Authority, Ireland
21. Fabrizio Timpani, 2016, Professor of Electronics in High Schools, Rome
22. Andrea Veroli, 2016, Post-doctoral Fellow

Visiting Professor:

Aalto University, Finland, 2012 and 2013
University of Lancaster, UK, 2014
Queen’s University of Belfast (QUB), UK, 2015 and 2016

Further Studies

at Pontificia Universitas Gregoriana (PUG), Rome, Italy: Phylosophy, Exegesis, Art, Cinema

Roberto Fusco