

#### LARA PAJEWSKI – CURRICULUM VITAE

Professor of Electromagnetic Fields Sapienza University of Rome Department of Information Engineering, Electronics and Telecommunications via Eudossiana 18, 00184 Rome, Italy Tel. +39 06 4458 5358, Mob.: +39 335 5479956 E-mail: lara.pajewski@uniroma1.it

## SHORT BIOGRAPHY

Lara Pajewski received the *Laurea* degree in Electronic Engineering *cum laude* from Roma Tre University of Rome, Italy, and the Ph.D. in Applied Electromagnetics and Electrophysics Sciences from Sapienza University of Rome, Italy. From 2004 to 2008 she worked in the Applied Electronics Department of Roma Tre University as a Technician, in the Laboratory of Applied Electromagnetics; from 2008 to 2016 she worked in the Engineering Department of Roma Tre University as a Researcher in Electromagnetic Fields. Since November 2016, she is a Professor of Electromagnetic Fields in Sapienza University of Rome, Department of Information Engineering, Electronics and Telecommunications. She was recruited in this position via a special procedure for winners of high-level EU projects (*chiamata diretta*).

She is the Chair, Grant Holder scientific representative and administrator of the COST Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar," launched in April 2013 and involving more than three hundreds experts from academia and industry, from 28 COST Countries (Austria, Belgium, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Malta, Macedonia, The Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom) and from Albania, Armenia, Australia, Colombia, Egypt, Hong Kong, Jordan, Israel, Philippines, Russia, Rwanda, Ukraine, and United States of America (www.GPRadar.eu). In September 2014, TU1208 has been identified among the running Actions as a "COST Success Story" and praised with the following statement: "TU1208 'Civil engineering applications of Ground Penetrating Radar' (Chair: Lara Pajewski, Roma Tre University, IT) – is an interdisciplinary Action and represents a milestone in GPR research. being the first European network ever existed in this field, in line with the spirit and goals of the ERA. In June 2014, it co-organised the 15th International Conference on Ground Penetrating Radar, the premier forum on GPR" ("The Cities of Tomorrow: The Challenges of Horizon 2020," September 17-19, 2014, Torino, IT - A COST strategic workshop on the development and needs of the European cities).

Her main research interests are in Ground Penetrating Radar (GPR) technology and methodology and applications, integration of GPR with complementary non-destructive testing methods, and full-wave electromagnetic modelling of complex scenarios. She is also interested in electromagnetic pollution and radiation protection.

She is the author/co-author of 67 scientific papers on peer-reviewed journals, 20 book chapters and more than 200 papers on conference proceedings. She is co-author of a book on safety issues in near-surface geophysical prospecting, editor/guest editor of 14 books and 8 journal special issues. Since 2011, she is the Western-Europe Editor of the Taylor &

Francis Journal "Nondestructive Testing and Evaluation."

Lara Pajewski is very active in the organization of international scientific events and has participated to several scientific committees. In 2013-2017, she organized and chaired 14 international meetings of the COST Action TU1208, held in various European countries. In the framework of the COST Action TU1208, she also organized 16 international Training Schools on GPR, attended by more than 420 Trainees in total, and a successful series of dissemination events called "GPR Road Show" where stakeholders, private companies, professionals and interested citizens could find out what is GPR and learn about its applications in civil engineering and beyond.

In 2014, she was co-Chair of the 15th International Conference on Ground Penetrating Radar (GPR 2014). Since 2011, she convenes the GI3.1 Session "Civil Engineering Applications of Ground Penetrating Radar" at the annual European Geosciences Union General Assembly (EGU-GA); as of 2018, she convenes also the EGU-GA GI0.1 Open Session on "Geosciences Instrumentation and Methods" (including Christiaan Huygens Medal Lecture, which is the general session of the GI - Geosciences Instrumentation & Data Systems EGU Division. She organised and chaired sessions and workshops on GPR in many other international conferences, such as the European Radar Conference (EuRAD), the European Conference on Antennas and Propagation (EuCAP), the Applied Computational Electromagnetics Society Conference (ACES) and the MetroArcheo Conference - Metrology for Archaeology and Cultural Heritage.

Lara Pajewski has often been involved in international award committees. She was coordinator and member of the GPR 2014 Early-Stage Researcher Award Committee. From 2014 to 2017, she was a member of the EGU Christiaan Huygens Medal Committee and from 2017 she is the Chair of the same committee. She is the Award Chair for the 2017 edition of the MetroArcheo Conference.

At Sapienza University, Lara Pajewski holds the "Antennas" course for the *Laurea* in Information Engineering (Bachelor's Degree) and the "Ground Penetrating Radar" course for the *Laurea Magistrale* in Electronic Engineering (Master Degree). At Roma Tre University, she held for many years the "Laboratory of Microwaves and Antennas" course for the *Laurea* in Electronic Engineering (Bachelor's Degree) and the "Electromagnetic Instrumentation" course for the Laurea Magistrale in Communication and Information Technology Engineering, Electronic Engineering, and "Bioengineering (Master's Degrees).

She is a member of the Institute of Electrical and Electronics Engineers (IEEE), IEEE Antennas and Propagation Society, IEEE Geoscience and Remote Sensing Society, European Geosciences Union, Italian Interuniversity Consortium for Telecommunications (CNIT), and Italian Society of Electromagnetics (SIEM).

#### ACADEMIC QUALIFICATIONS

**Laurea degree** (*cum laude*) in **Electronic Engineering**, with specialization in Telecommunications, Roma Tre University, Rome, Italy. Thesis dissertation: "Electromagnetic analysis of diffractive optical elements," Supervisor Prof. Giuseppe Schettini (2000).

**Professional Qualification to practice as an Engineer,** Tor Vergata University, Rome, Italy (2001).

**Doctorate in Applied Electromagnetics and Electrophysics Sciences**, Sapienza University of Rome, Italy. Thesis dissertation: "Scattering of electromagnetic waves by composite structures," Supervisor Prof. Fabrizio Frezza (2004).

**Scientific Qualification to function as Associate Professor in Electromagnetic Fields** ("09/F1" scientific area), Italian Ministry of Education, Universities and Research (2014).

#### Attended PhD Schools and Advanced Short Courses

1. September 16-21, 2001: 1st International PhD School on Selected Topics in Applied Electromagnetics: Wireless Communications, Villa Orlandi, Naples University Federico II, Anacapri, Italy.

2. September 19-20, 2002: 2nd International PhD School on Selected Topics in Applied Electromagnetics: Ground Penetrating Radars, University of Ancona, Ancona, Italy.

3. November 20-27, 2002: *International School of Quantum Electronics, 35th Course: Free and Guided Optical Beams,* Ettore Majorana Foundation and Centre for Scientific Culture, Erice, Italy.

4. September 14-19, 2003: 3rd International PhD School on Selected Topics in Applied *Electromagnetics: Metamaterials and RF Microelectromechanical systems*, University of Perugia, Perugia, Italy.

5. September 16-17, 2004: 4th International PhD School on Selected Topics in Applied Electromagnetics: The Method of Moments - From Basics to Large-Scale Applications, University of Cagliari, Cagliari, Italy.

6. October 7-9, 2005: Italian Association for the Use of Assistance Dogs (AIUCA), *Animal-assisted therapy and activities – Introductory course*, Roma, Italy.

7. October 2-6, 2006: *Antennas Centre of Excellence Course: Frequency Domain Techniques for Antenna Analysis*, University of Florence, Florence, Italy.

8. June 14, 19 and 26 & July 3 and 16, 2007: Association of Engineers of the Province of Rome, *Communication and basic organizational behaviors*, Roma, Italy.

9. October 25-26, 2007: *Distributed European Doctoral School on Metamaterials, 8th Edition: The role of metamaterials in cloaking technology*, Roma Tre University, Rome, Italy.

10. December 10-12, 2007: *Advanced Course on Uncertainty in Electromagnetic Field Measurements*, MPB Srl, Roma, Italy.

11. October 2009: Association of Nature Photographers of the University of Rome, *Photography course – Beginner*, Roma, Italy.

12. November 2009: Association of Nature Photographers of the University of Rome,

*Photography course – Advanced*, Roma, Italy.

13. July 6-9, 2010: *Advanced Course on Scientific and Technical Programming in Fortran95*, Italian Consortium for Supercomputing Applications, for Universities and Research (CASPUR), Rome, Italy.

14. October 20-21, 2010: *Advanced Course on Scientific Programming in Matlab*, CASPUR, Rome, Italy.

15. September 14-15, 2012: 8<sup>th</sup> International PhD School on Selected Topics in Applied Electromagnetics. Part I: Microwave Measurements of Materials; Part II: Electromagnetic metamaterials: homogenization theory and applications; Part III: GPR: from basic to advanced soil characterization methods; Part IV: Fibre story: how it serves optical and wireless communications?, Roma Tre University, Italy.

16. May 5-9, 2014: European School of Antennas – COST – European Microwave Association Training School *Future Radar Systems: Radar2020,* Karlsruhe Institute of Technology, Karlsruhe, Germany.

17. July 5, 2014: *Workshop and Tutorials on Ground Penetrating Radar*, Université Catholique de Louvain, Louvain-La-Neuve, Belgium.

18. September 22-25, 2014: COST Training School *Civil Engineering Applications of Ground Penetrating Radar*, University of Pisa, Pisa, Italy.

19. March 4, 2015: COST *Half-Day Training on Ground Penetrating Radar*, The University of West London, London, United Kingdom.

20. April 20-24, 2015: European School of Antennas – COST Training School *Ultra Wide-Band Antennas, Technologies and Applications,* Karlsruhe Institute of Technology, Karlsruhe, Germany.

21. May 5-7, 2015: COST Training School *Applications of GPR in Urban Areas: the Sensitive Case of Historical Cities*, Cracow University of Technology, Cracow, Poland.

22. October 12-14, 2015: COST Training School *GPR for road pavement assessment and detection of buried utilities*, The University of West London, London, United Kingdom.

23. January 25-29, 2016: COST Training School *Ground Penetrating Radar for Civil Engineering and Archaeology*, Valletta Campus of the University of Malta, Valletta, Malta.

24. March 14-18, 2016: COST Training School *Non-Destructive Testing techniques applied to civil engineering*, Universitat Politècnica de Catalunya, Barcelona, Spain.

25. May 2-6, 2016: European School of Antennas – COST Training School *Future Radar Systems: Radar2020* - II edition, Karlsruhe Institute of Technology, Karlsruhe, Germany.

26. November 9-12, 2016: COST Training School *Electromagnetic modelling techniques for Ground Penetrating Radar,* University of Split, Croatia.

27. March 6-9, 2017: COST Training School *Ground Penetrating Radar for the assessment of transport infrastructures,* Faculty of Civil Engineering of Osijek, Croatia.

#### **COORDINATION OF INTERNATIONAL RESEARCH PROJECTS**

Chair, Grant Holder representative and administrator of the COST (European COoperation in Science and Technology) Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar," 4 April 2013 – 3 October 2017.

Management Committee Member of the COST Action TU1206 "SUB-URBAN: A European network to improve understanding and use of the ground beneath our cities," 9 April 2013 – 8 April 2017.

#### **PARTICIPATION IN INTERNATIONAL RESEARCH PROJECTS**

METAMORPHOSE (METAMaterial ORganized for radio, millimetre wave, and PHOtonic Superlattice Engineering) Network of Excellence, 2006-2008 (Participant).

COST Action MP0702 "Towards Functional Sub-Wavelength Photonic Structures," 21 January 2008 – 20 January 2012 (Working Group Member).

ITER (International Thermonuclear Experimental Reactor) Task "Heating and Current Drive" HCD-08-03-01: "Conceptual Design of the LHCD System for ITER," 2009-2010 (Working Group Member).

EURATOM-ENEA Cooperation Project on Controlled Nuclear Fusion Research: "Design of systems for microwave heating and current drive," 2009-2013 (Participant).

ASTRI project "Assessment for Safety through novel Technologies for Road Inspections" funded by Roma Tre University, 2011-2013 (Participant).

RAPAS project "Close range aerial sensing of soils for improved remote sensing products" funded by BELSPO, Belgian Science Policy (Steering Committee Member).

Moreover, she participated in 10 Italian research projects on photonic/electromagnetic band-gap metamaterials and their applications, frequency-selective surfaces, antennas, microwave components, development of full-wave methods for the solution of electromagnetic scattering problems by buried objects, and innovative processes for the production of hydrogen.

### **ORGANIZATION OF INTERNATIONAL SCIENTIFIC EVENTS**

1. Session "*Civil Engineering Applications of Ground Penetrating Radar*" (GI-6), European Geosciences Union General Assembly 2011 (EGU-GA 2011), Vienna, Austria, 3-8 April 2011 (Proposer of the new Session, co-Convener, Chair of oral and poster sessions; Convener: Prof. Andrea Benedetto).

2. Session *"Civil Engineering Applications of Ground Penetrating Radar"* (GI-3.1), EGU-GA 2012, Vienna, Austria, 23-28 April 2012 (Convener, Chair of oral and poster sessions).

3. Session "*Civil Engineering Applications of Ground Penetrating Radar*" (GI-3.1), EGU-GA 2013, Vienna, Austria, 7-12 April 2013 (co-Convener, Chair of oral and poster sessions; Convener: Prof. Andrea Benedetto).

4. 7<sup>th</sup> International Workshop on Advanced Ground-Penetrating Radar (IWAGPR 2013), Nantes, Francia, 2-5 July 2013 (Member of the Scientific Committee; Chair of the Conference: Dr Xavier Derobert).

5. First General Meeting of the COST Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar," Rome, Italy, 22-24 July 2013 (Chair and Local Organizer).

6. COST TU1208 – COST TD1301 – ESoA (European School of Antennas) Training School *"Microwave Imaging and Diagnostics,"* Madonna di Campiglio, Italy, 24-28 March, 2014 (Chair and co-Organizer; School Coordinators: Prof. Andrea Massa and Prof. Tommaso Isernia).

7.2014 Working Group Progress Meeting of the COST Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar," Nantes, France, 24-25 February 2014 (Chair; Local Organizer: Dr Xavier Derobert).

8. Workshop *Electromagnetic modelling by using the Finite-Difference Time-Domain technique*, Nantes, France, 25 February 2014 (Chair; Local Organizer: Dr Xavier Derobert).

9. Session *Civil Engineering Applications of Ground Penetrating Radar* (GI3.1), EGU-GA 2014, Vienna, Austria, 27 April-2 May 2014 (Convener).

10. Splinter Meeting *Novel GPR instrumentation* (SPM2.22), EGU-GA 2014, Vienna, Austria, 27 April-2 May 2014 (Convener and Chair).

11. Splinter Meeting *GPR surveying of pavements, bridges, tunnels and buildings; underground utility and void sensing* (SPM2.23), EGU-GA 2014, Vienna, Austria, 27 April-2 May 2014 (Convener and Chair).

12. Splinter Meeting *Electromagnetic methods for near-field scattering problems by buried structures and data processing techniques* (SPM2.24), EGU-GA 2014, Vienna, Austria, 27 April-2 May 2014 (Convener and Chair).

13. Second General Meeting of the COST Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar," Austria Vienna Centre, Vienna, Austria, 30 April-2 May 2014 (Chair and Local Organizer).

14. COST-ESoA-EuMA (European Microwave Association) Training School *Future Radar Systems: Radar2020,* Karlsruhe, Germany, 5-9 May 2014 (Chair and co-Organizer; School Coordinator: Prof. Werner Wiesbeck).

15. 2014 Working Group Meeting on GPR Training and Dissemination Activities – COST Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar", Barcelona, Spain, 16 May 2014 (Chair; Local Organizer: Prof. Vega Perez-Gracia).

16. *15*<sup>th</sup> International Conference on Ground Penetrating Radar (GPR 2014), Brussels, Belgium, 30 June-5 July 2014 (co-Chair of the Conference, Member of the Scientific Panel, Chair of the TU1208 Management Committee and Working Group Meetings, Chair of the oral Session on 'Radar signal modelling and inversion', Chair of the Early-Stage Researchers Poster Session; Chair of the Conference: Prof. Sébastien Lambot).

17. COST *Training School on Civil Engineering Applications of Ground Penetrating Radar*, Pisa, Italy, 22-25 September 2014 (Chair; Local Organizer: Prof. Massimo Losa).

18. *COST Half-Day Training on Ground Penetrating Radar for Early-Stage Researchers*, London, United Kingdom, 4 March 2015 (Chair; Local Organizer: Prof. Amir Morteza Alani).

19. Third General Meeting of the COST Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar," London, United Kingdom, 4-6 March 2015 (Chair; Local Organizer: Prof. Amir Morteza Alani).

20. Session *Civil Engineering Applications of Ground Penetrating Radar* (GI3.1), EGU-GA 2015, Vienna, Austria, 12-17 April 2015 (co-Convener and Chair of oral session; Convener: Prof. Andrea Benedetto).

21. Splinter Meeting *Ground Penetrating Radar technology and methodology - Working Group Meeting of the COST Action TU1208* (SPM1.24), EGU-GA 2015, Vienna, Austria, 12-17 April 2015 (Convener and Chair).

22. COST-EuMAA (European Microwave Association)-ESoA Training School *"UWB Antennas, Technologies and Applications,"* Karlsruhe, Germany, 20-24 April 2015 (Chair and co-Organizer; School Coordinator: Prof. Werner Wiesbeck).

23. 2015 Working Group Progress Meeting "Electromagnetic modelling, inversion, imaging and data-processing techniques for Ground Penetrating Radar," Edinburgh, United Kingdom, 27-28 April 2015 (Chair; Local Organizer: Prof. Antonios Giannopoulos).

24. COST Training School *Applications of GPR in Urban Areas: the Sensitive Case of Historical Cities,* Cracow University of Technology, Cracow, Poland, 5-7 May 2015 (Chair; Local Organizer: Prof. Lidia Żakowska).

25. *Focus Session on Ground Penetrating Radar*, European Microwave Week (EuMW) 2015 – 12<sup>th</sup> European Radar Conference (EuRAD), Paris, France, 6-11 September 2015 (co-Chair; Organizer and Chair of the Session: Dr Cédric Le Bastard).

26. COST Training School Ground Penetrating Radar for road-pavement assessment and detection of buried utilities, London, United Kingdom, 12-14 October 2015 (Chair; Local

Organizer: Prof. Amir Morteza Alani).

27. Fourth General Meeting of the COST Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar," Athens, Greece, 19-20 October 2015 (Chair; Local Organizer: Prof. Christina Plati).

28. COST-Aristotle University of Thessaloniki *Training School on Numerical modelling of Ground Penetrating Radar using gprMax*, Thessaloniki, Greece, 9-11 November 2015 (Chair on COST side and co-Organizer; School Coordinator: Prof. Antonios Giannopoulos).

29. COST Training School *Ground Penetrating Radar for civil engineering and archaeology*, Valletta, Malta, 25-29 January 2016 (Chair; Local Organizer: Dr Sebastiano D'Amico).

30. First edition of the *GPR Road Show – COST Action TU1208*, Lisbon, Portugal, 2 March 2016 (Chair; Local Organizer: Dr Simona Fontul).

31. Fifth General Meeting of the COST Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar," Lisbon, Portugal, 3-4 March 2016 (Chair; Local Organizer: Dr Simona Fontul).

32. COST Training School *Non-Destructive Testing techniques applied to civil engineering*, Barcelona, Spain, 14-18 March 2016 (Chair; Local Organizer: Prof. Vega Perez-Gracia).

33. Special Session *Ground Penetrating Radar – COST Action TU1208*, 10th European Conference on Antennas and Propagation (EuCAP), Davos, Switzerland, 10-15 April 2016 (Session Organizer and Chair).

34. Workshop *Electromagnetic modelling and inversion techniques for Ground Penetrating Radar – COST Action TU1208*, 10th EuCAP, Davos, Switzerland, 10-15 April 2016 (Workshop Organizer and Chair).

35. *Exhibition of COST Action TU1208* in the COST booth, 10th EuCAP, Davos, Switzerland, 10-15 April 2016.

36. Session *Civil Engineering Applications of Ground Penetrating Radar* (GI3.1), EGU-GA 2016, Vienna, Austria, 17-22 April 2016 (Convener, Chair of oral session).

37. *26<sup>th</sup> International Conference Radioelektronika*, Kosice, Slovakia, 19-20 April 2016 (Member of the Technical Program Committee).

38. 2016 Working Group Progress Meeting of the COST Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar," Rome, Italy, 27-28 April 2016 (Chair and Local Organizer).

39. Second edition of the *GPR Road Show – COST Action TU1208*, Rome, Italy, 29 April 2016 (Chair and Local Organizer).

40. COST-ESoA Training School *Future Radar Systems: Radar2020*, Karlsruhe, Germany, 2-6 May 2016 (Chair and co-Organizer; School Coordinator: Prof. Werner Wiesbeck).

41. Third edition of the *GPR Road Show – COST Action TU1208*, Athens, Greece, 27-28 September 2016 (Chair; Local Organizer: Klisthenis Dimitriadis).

42. Sixth General Meeting of the COST Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar," Split, Croatia, 7-9 November 2016 (Chair; Local Organizer: Prof. Dragan Poljak).

43. COST Training School *Electromagnetic Modelling Techniques for Ground Penetrating Radar*, Split, Croatia, 9-12 November 2016 (Chair; Local Organizer: Dr Silvestar Sesnic).

44. 2017 Working Group Meeting 1: Guidelines for the use of GPR in civil engineering – COST Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar," COST Association, Bruxelles, Belgium, 9-13 January 2017 (Chair and Local Organizer).

45. 2017 Working Group Meeting 2: GPR Education Pack – COST Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar," COST Association, Bruxelles, Belgium, 16-20 January 2017 (Chair and Local Organizer).

46. Fourth edition of *GPR Road Show – COST Action TU1208*, Osijek, Croatia, 6 March 2017 (Chair; Local Organizer: Prof. Damir Varevac).

47. COST Training School *Ground Penetrating Radar for the assessment of transport infrastructures*, Osijek, Croatia, 6-9 March 2017 (Chair; Local Organizer: Prof. Damir Varevac).

48. Fifth edition of the *GPR Road Show – COST Action TU1208*, Novi Sad, Serbia, 10 March 2017 (Chair; Local Organizer: Prof. Miro Govedarica).

49. Special Session *Inverse Scattering Techniques for GPR and Subsurface Imaging*, 2017 International Applied Computational Electromagnetics Society (ACES) Symposium, Firenze, Italy, 26-30 March 2017 (Session Organizer and Chair).

50. Session *Civil Engineering Applications of Ground Penetrating Radar* (GI3.1), EGU-GA 2017, Vienna, Austria, 23–28 April 2017 (Convener, Chair of oral and poster sessions).

51. Sixth edition of the *GPR Road Show – COST Action TU1208*, Pardubice, Czech Republic, 25 May 2017 (Chair; Local Organizer: Dr Vladislav Borecky).

52. 2017 Working Group Meeting 3: Guidelines for GPR assessment of concrete structures – COST Action TU1208 "Civil Engineering Applications of Ground Penetrating Radar," Rome, Italy, 29 May-1 June 2017 (Chair and Local Organizer).

53. 7<sup>th</sup> International Workshop on Advanced Ground-Penetrating Radar (IWAGPR 2013), Edinburgh, United Kingdom, 28-30 June 2017 (Member of the Scientific Committee; Chair of the Conference: Prof. Antonios Giannopoulos).

54. COST Training School on *Science Management*, Split, Croatia, 18-20 September 2017 (Chair; Local Organizer: Prof. Dragan Poljak).

55. Final Conference of COST Action TU1208 "Civil engineering applications of Ground

Penetrating Radar," Warsaw, Poland, 25-27 September 2017 (Chair).

56. Special Session *Ground Penetrating Radar for archaeological prospection and culturalheritage management*, International Conference on Metrology for Archaeology and Cultural Heritage – MetroArcheo, Lecce, Italy, 23-25 October 2017 (Organizer).

57. Convened Session *GPR Subsurface Imaging - Recent Advances and Future Trends*, 12<sup>th</sup> EuCAP, London, United Kingdom, 8–13 April 2018 (Convener).

58. Open Session *Geosciences Instrumentation and Methods* (including Christiaan Huygens Medal Lecture) (GI0.1), EGU-GA 2018, Vienna, Austria, 8–13 April 2018 (Convener).

59. Session *Civil Engineering Applications of Ground Penetrating Radar* (GI3.1), EGU-GA 2018, Vienna, Austria, 8–13 April 2018 (co-Convener).

60. *17th International Conference on Ground Penetrating Radar* (GPR 2018), Rapperswil, Switzerland, 18–21 June 2018 (Member of the Scientific Committee; Chair of the Conference: Prof. Johannes Hugenschmidt).

Moreover, she was a Member of the Organizing Committees of the following Italian events: Workshop "Applications of the Finite Element Method in Electric and Information Engineering" (Roma Tre University, Rome, Italy, 13-15 December 2010) and XIX Riunione Nazionale di Elettromagnetismo (RiNEm), a biennial meeting on Electromagnetics (Roma Tre University, Rome, Italy, 10-14 September 2012).

### **EDITORIAL ACTIVITY**

Western-Europe Editor of the Taylor & Francis Journal *Nondestructive Testing and Evaluation* (since 2011).

Guest Editor of X Special Issues on international journals published by Elsevier, European Association of Geoscientists and Engineers (EAGE), Institute of Electrical and Electronic Engineers (IEEE) and Taylor & Francis. Editor of Y international books published by Springer International, IEEE and Aracne Editrice Srl.

### List of edited Special Issues and Books:

EJ1. Special Issue *"Civil Engineering Applications of Ground Penetrating Radar," Nondestructive Testing and Evaluation* (Taylor & Francis), L. Pajewski & A. Benedetto (IT), Guest Eds, Vol. 27(3), September 201 – Special Issue including Preface and 11 papers.

EJ2. "Ground Penetrating Radar for Nondestructive Evaluation of Pavements, Bridges and Subsurface Infrastructures," Journal of Applied Geophysics (Elsevier), L. Pajewski, Leading Guest Ed., A. Benedetto (IT), A. Loizos (EL) & E. Slob (NL), Guest Eds, Vol. 97, October 2013 – Special Issue including Preface and 12 papers.

EB1. "*Proceedings of the First Action's General Meeting* – Rome, Italy, July 2013" 1<sup>st</sup> edition, COST Action TU1208, Aracne, L. Pajewski & A. Benedetto (IT), Eds, Rome, Italy, July 2013, ISBN 978-88-548-6191-6, available online at www.GPRadar.eu.

EB2. "*Booklet of Participants and Institutions,*" 1<sup>st</sup> edition, COST Action TU1208, Aracne, L. Pajewski & A. Benedetto (IT), Eds, Rome, Italy, July 2013, ISBN 978-88-548-6192-3, available online at www.GPRadar.eu.

EB3. "*Proceedings of the First General Meeting – COST Action TU1208 – Rome, Italy, July 2013,*" 2<sup>nd</sup> edition, COST Action TU1208, Aracne, L. Pajewski & A. Benedetto (IT), Eds, Rome, Italy, May 2014, ISBN 978-88-548-7221-9, available online at www.GPRadar.eu.

EB4. "Proceedings of the 2013 Working Group Progress Meeting – COST Action TU1208 – Nantes, France, February 2014," COST Action TU1208, Aracne, L. Pajewski & X. Derobert (FR), Eds, Rome, Italy, May 2014, ISBN 978-88-548-7223-3, available online at www.GPRadar.eu.

EB5."*Booklet of Participants and Institutions,*" 2<sup>nd</sup> edition, COST Action TU1208, Aracne, L. Pajewski & A. Benedetto (IT), Eds, Rome, Italy, May 2014, ISBN 978-88-548-7222-6.

EB6. "*Proceedings of the Second General Meeting – COST Action TU1208 –* Vienna, Austria, April-May 2014," COST Action TU1208, Aracne, L. Pajewski & A. Benedetto (IT), Eds, Rome, Italy, 2014, ISBN 978-88-548-7224-0.

EB7. "*Short Term Scientific Missions and Training Schools – Year 1*," COST Action TU1208, Aracne, L. Pajewski & M. Marciniak (PL), Eds, Rome, Italy, 2014, ISBN 978-88-548-7225-7.

EB8. "Proceedings of the 15<sup>th</sup> International Conference on Ground Penetrating Radar -GPR2014, June 30 – July 4, 2014, Bruxelles, Belgium," S. Lambot (BE), A. Giannopoulos (UK), L. Pajewski, F. De André (BE), E. Slob (NL) & C. Craeye (BE), Eds, IEEE Conference Record Number: 35163, ISBN: 978-1-4799-6789-6, IEEE Part Number: CFP14538-ART, October 2014.

EB9. "*Civil engineering applications of Ground Penetrating Radar*," A. Benedetto (IT) & L. Pajewski, Eds., Springer International, April 2015, Book Series: "*Springer Transactions in Civil and Environmental Engineering*;" e-book ISBN: 978-3-319-04813-0; hardcover book ISBN: 978-3-319-04812-3; DOI: 10.1007/978-3-319-04813-0.

EB10. Proceedings of the Third General Meeting | London, UK, March 2015 – COST Action TU1208, L. Pajewski, Ed.; Publishing House: Aracne; Rome, Italy, May 2015; ISBN 978-88-548-8486-1.

EB11. Proceedings of the 2015 Working Group Progress Meeting | Edinburgh, UK, April 2015 – COST Action TU1208, L. Pajewski, A. Giannopoulos (UK), S. Sesnic (HR), Eds; Publishing House: Aracne; Rome, Italy, May 2015; ISBN 978-88-548-8487-8.

EB12. *Short-Term Scientific Missions - Year 2*, COST Action TU1208, L. Pajewski, M. Marciniak (PL) & S. Lambot (BE), Eds; Publishing House: Aracne; Rome, Italy, May 2015; ISBN 978-88-548-8488-5.

EB13. *Training Schools - Year 2*, COST Action TU1208, L. Pajewski, Ed.; Publishing House: Aracne; Rome, Italy, May 2015; ISBN 978-88-548-8489-2.

EB14. GPR activities in COST Countries, COST Action TU1208, L. Pajewski, S. Lambot (BE), L.

Matera (IT), Eds; Publishing House: Aracne; Rome, Italy, May 2015; ISBN 978-88-548-8491-5.

EJ3. Special Issue "Civil and Environmental Engineering Applications of Ground Penetrating Radar," Near Surface Geophysics (EAGE), A. Benedetto (IT), A. Loizos (EL), L. Pajewski & F. Tosti (UK), Guest Eds, Vol. 14(2), April 2016 – Special Issue including Foreword and 9 papers.

EJ4. Special Issue "Advances in Ground Penetrating Radar research and applications," S. Lambot (BE), A. Giannopoulos (UK), L. Pajewski, E. Slob (NL), & M. Sato (Japan), Guest Eds, *IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing* (JSTARS), January 2016, Vol. 9(1) – Special Issue including Foreword and 25 papers.

EJ5. Special Issue *"Recent Progress in Electromagnetic Theory and its Applications,"* H. Baghdasaryan (ARM), M. Marciniak (PL) & L. Pajewski, Gest Eds., *Journal of Telecommunications and Information Technology* (published by the National Institute of Telecommunications of Poland), September-October 2017 (open access).

EJ6. Special Issue "Ground-Penetrating Radar and Complementary Non-Destructive Testing Techniques in Civil Engineering," Construction and Building Materials (Elsevier), Amir Morteza Alani (UK), Andrea Benedetto (IT) & Lara Pajewski (IT), Guest Eds, Fabio Tosti (UK), Leading Guest Ed., 2017.

EJ7. Special Issue *"Civil Engineering Applications of Ground Penetrating Radar," International Journal for Engineering Modelling* (published by the University of Split, Croatia), Lara Pajewski, Antonios Giannopoulos (UK) & Dragan Poljak (HR), Guest Eds, 2017 (open access).

EJ8. Special Issue "*Ground Penetrating Radar Technology, Methodology and Applications,*" *e-GFOS* (international electronic Journal published by the Faculty of Civil Engineering Osijek, Croatia), Lara Pajewski (IT) & Damir Varevac (HR), Guest Eds, 2018 (open access).

# **PEER-REVIEW ACTIVITY**

Active Reviewer for the following International Journals:

- IEEE: Transactions on Antennas and Propagation, Transactions on Microwave Theory and Techniques, Transactions on Geoscience and Remote Sensing, Journal of Selected Topics in Applied Earth Observations and Remote Sensing.
- Taylor & Francis: Nondestructive Testing and Evaluation, Journal of Electromagnetic Waves and Applications.
- *Elsevier: Journal of Applied Geophysics, Construction and Building Materials.*
- Cambridge: International Journal of Microwave and Wireless Technologies.
- Hindawi: International Journal of Geophysics, International Journal on Antennas and Propagation.
- EAGE: Near Surface Geophysics.

- Progress in Electromagnetic Research.
- *Journal of Telecommunications and Information* Technology (published by the National Institute of Telecommunications of Poland.
- International Journal for Engineering Modelling (published by the University of Split).

## **COORDINATION AND PARTICIPATION IN AWARD COMMITTEES**

Member of the EGU Christian Huygens Medal Committee (2014-2017). Chair of the EGU Christian Huygens Medal Committee (since 2017).

Coordinator and Member of the Early-Stage Researcher Award Committee *15th International Conference on Ground Penetrating Radar* (GPR 2014), Brussels, Belgium, 30 June - 4 July 2014.

Award Chair, International Conference on Metrology for Archaeology and Cultural Heritage – MetroArcheo, Lecce, Italy, 23-25 October 2017.

# VISITING SCIENTIST

The University of Edinburgh, UK: October – December 2013 (2 months).

National Institute of Telecommunications of Poland, PL: May 2015 (2 weeks) and June 2017 (3 weeks).

### LARA PAJEWSKI - Papers on International Peer-Reviewed Journals

[J1] R. Borghi, F. Frezza, L. Pajewski, M. Santarsiero, G. Schettini, "Full-wave Analysis of the Optimum Triplicator," *Journal of Electromagnetic Waves and Applications*, vol. 15(5), pp. 689-708, May 2001 doi:10.1163/156939301X00346

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