

Mauro Cappelli's Short CV

PERSONAL INFORMATION

First Name: Mauro

Family Name: Cappelli

Date of Birth: 1973/6/11

Place of Birth: Foligno (PG), Italy

Address: 25, via Umberto, 06046, Norcia (PG), Italy; 55, via della Lungaretta, 00153, Roma.

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CURRENT POSITION

Researcher at ENEA, Frascati Res. Center - Rome, FSN-FUSPHY-SCM (2015-now).

PAST POSITIONS

Head, Design and Experimental Engineering Laboratory (MEPING Lab, about 10 people) at ENEA – UTFISST, Casaccia Research Center in Rome, 2013-2015

Researcher at ENEA, Casaccia Res. Center - Rome, UTFISST-MEPING (2010-2015).

Visiting Researcher, Sofia Simulator Lab, IRSN, Paris (France): Jan-Dec 2011.

Training Manager and ILS Engineer, Consultant, ELSAG-DATAMAT (a Finmeccanica Company): 2008-2010.

Research Associate, University of Salento: 2007-2008

Scientific Consultant and Editor, The Italian Encyclopedia Treccani: 2006-2008

Research and Training Engineer, Altay Scientific Spa: 2005-2006

Certified High-School Teacher, Electronics and Computer Science, Italian Public School 2005-2010 (**Tenured Teacher** in 2013 (Electronics) and in 2015 (Computer Science))

PhD student (with grant), Electrical Engineering, Sapienza University of Rome, 2001-2004

Research Associate, University of Perugia: 2001-2002

EDUCATION

II Level Master, Fusion Energy: Science and Engineering, University of Rome Tor Vergata, 2015-2016

II Level Master, Nuclear Safety and Security, University of Pisa, 2011-2012

Specialization degree, Technology Teaching: Electronics, Romatre University of Rome, 2007-2009

Specialization degree, Technology Teaching: Computer Science, Romatre University of Rome, 2007-2009

Post-laurea course, Total Cost Engineering and Project Management, Bocconi University, 2007-2008.

PhD, Electrical Engineering, Sapienza University of Rome, 2001-2004

Laurea (BSc+MSc), Electrical Engineering, University of Perugia, 1992-2000,

RESEARCH ACTIVITIES

Main research interests: Instrumentation and Control Systems, Radiofrequency and Microwave technologies and methodologies, Microwave and Millimetre-wave Power Electronics, Human Machine Interfaces, Simulation Models, Experimental Engineering and New Technologies for Nuclear and Conventional Plants and Facilities, I&C issues for New Reactors.

Main application fields: Fusion Science and Engineering, Nuclear Engineering, Industrial I&C.

*The results of the research are published in **more than 50 papers** in national and international*

journals and conferences. He is also editor of a book on the history of Energy edited by the Italian Encyclopaedia Treccani in 2013.

MAIN PROJECTS

Task Force Contact Point, EUROfusion WPENS Project: 2016-2019

Task Force Member, ENEA CARM Project: 2016-2018

Chief Scientific Investigator: IAEA Agreement No. 18785R0 Coordinated Research Project: "Evaluation of Electromagnetic Fields from Wireless Technologies in a Nuclear Plant": 2015-2018

ENEA Scientific Responsible, H2020 European Project Modern2020 and sub-task leader: 2015-2018

ENEA Scientific Coordinator (since 2013), and ENEA scientific secretary (2012-2013): EC INSC Projects: I phase (2012-2014), II Phase (2013-2015), IV Phase (2016-2018).

Task/subtask leader for PAR (Italian Ministry of Economic Development Annual Program): 2010-2016

INTERNATIONAL ROLES

Member, European Academy of Sciences and Arts, 2016-now.

Affiliate, DEWS Center of Excellence, Università dell'Aquila (2014-now)

Member, IAEA Network of Excellence for supporting the use of Instrumentation and Control Technologies (**NE-ICT**), since 2014.

Italian delegate, OECD/NEA Human and Organizational Factors WP, 2011-2016.

Italian delegate, IAEA Technical Working Group on NPP I&C (TWG-NPPIC), 2012-2016.

Italian delegate, NATO Modeling and Simulation Group (STO), Bruxelles, 2012-2016.

Italian delegate, OECD/NEA Halden Reactor Project for the Man Technology Organization (and **substitute** at the Halden Board Management), 2011-2014.

Italian delegate, IAEA Code of Conduct on the Safety and Security of Radioactive Source, 2010-2012.

INTERNATIONAL COMMITTEES AND SCIENTIFIC SERVICE

Technical Program Committee, 3rd WINDASPES (Workshop at the IISA Conference), Chalkidiki (Greece), July 13-15 2016; 2nd WINDASPES (Workshop at the IISA Conference), Corfù (Greece), July 6-8 2015.

Track Co-Chairman, Track 5 (Advanced and Next Generation Reactors, Fusion Technology), ICONE 2017 Conference, Shanghai (China), May 14-18, 2017;

Track Co-Chairman, Track 4 (Advanced and Next Generation Reactors, Fusion Technology), ICONE 2016 Conference, Charlotte (NC, USA), June 26-30, 2016;

Track Co-Chairman (and Session Chairman), Track 14 (I&C), ICONE 2015 Conference, Chiba (Japan), May 17-21, 2015;

Track Chairman (and Session Chairman), Track 13 (I&C), ICONE 2014 Conference, Prague (Czech Republic), 30 July-2 August, 2014;

Track Co-Chairman, Track 13 (I&C), ICONE 2013 Conference, Chengdu (China), July 29-2 August, 2013;

Session Co-Chairman, technical session on I&C at the EHPG 2014 Conference, Roros (Norway), 8-12 September, 2014;

Session Co-Chairman, technical session on I&C at the EHPG 2013 Conference, Storefjell (Norway), 10-15 March, 2013.

Invited speaker, PLIM&PLEX Europe Conference 2013, Bruxelles, 18-19 April, 2013.

Local Chairman, NeT International Meeting, Casaccia RC (Rome), 10-11 June, 2013.

Local Chairman, HOLMUG Intern. Meeting, Casaccia RC (Rome), 18-19 October, 2012.

Session Co-Chairman, technical session on I&C (4.07 Initiative to Manage the Impact of Material Degradation), ICAPP 2011 Conference, Nice (FR), 2-6 May, 2011.

Scientific Journal Reviewer: Bioelectromagnetics, Nuclear Engineering and Design, Annals of Nuclear Energy, Science and Technology of Nuclear Installations, Nuclear Engineering and Design, ASME Proceedings, Neural Computing and Applications.

NATIONAL ROLES AND PROFESSIONAL SERVICE

Member, SIPS (Società Italiana per il Progresso delle Scienze), (2016-now)

Member, Nuclear Engineering Commission, The Italian Society of Professional Engineers in Rome (2014-now).

Scientific Consultant, The Italian Encyclopaedia “Giovanni Treccani” (2008-2013).

TEACHING AND TRAINING

Contract Professor, University of L'Aquila, Department of Information Engineering, Computer Science and Mathematics, Course (3 CFU) on Laboratory of Control Systems Technology and Engineering: 2016-2017.

Invited Professor, University of L'Aquila, Faculty of Information Engineering, Computer Science and Mathematics, Professional Course (3 CFU) on Instrumentation and Control Systems for Industrial Applications: 2013-2014, 2014-2015, 2015-2016.

Module Leader, DEVCO Training Module on “Electric and Instrumentation and Control Systems”: 2013 (1st edition), 2014 (2nd edition); 2016 (4th edition): DEVCO Tutoring Module on “Digital I&C for nuclear applications” (2013-2015), “Regulatory Control of Nuclear Sites: Inspection on of I&C and electrical systems” (2016).

Lecturer, DEVCO Training Module on “Electric and Instrumentation and Control Systems”: 2013 (Rome), 2014 (Rome); 2016 (Paris; Rome); DEVCO Tutoring Module on “Digital I&C for nuclear applications” (2013-2015), “Regulatory Control of Nuclear Sites: Inspection on of I&C and electrical systems” (2016).

ENEA Tutor, *Master and PhD thesis* in collaboration with: University of Rome La Sapienza, University of Rome 3, University of L'Aquila, Université Marseille-Aix (Francia): about 10 people.

Contract Professor, University of Rome Sapienza, Faculty of Philosophy, Course (6 CFU) on Fundamentals of Computer Science (2012-13), and Information Systems (2008-12).

High School Teacher (non-tenure, then tenured), Electronic and Telecommunication, Computer Science, Italian Public School: 2005-10.

LANGUAGES

English: fluent

French: fluent

Spanish: fluent