Curriculum Vitae of Dajana Cassioli

Education

- **Doctor of Philosophy Degree** in Telecommunications and Microelectronics Engineering, Electronic Engineering Department, *University of Rome "Tor Vergata,"* Italy, *November 6, 2003*.
  Thesis: "Ultra-Wideband Wireless Communication Systems: from the Statistical Propagation Model to Simulations and Performance Analysis"
  Advisor: Prof. Francesco Vatalaro – University of Rome "Tor Vergata," Italy.
  Co-Advisor: Prof. Moe Win – Massachusetts Institute of Technology, Cambridge, MA, USA.

- **Registered Engineer** qualification in 2002 (grade : 119/120).

- **Laurea (master-level) degree** in Electronic Engineering, received from the University of Rome "Tor Vergata," Rome, Italy, *March 11, 1999*. Top Grade (100/100). Major in Electronics, minor in Telecommunications. Title of her thesis was "Numerical model of frequency converters based on four-wave mixing in semiconductor optical amplifiers for application in optical networks employing wavelength division multiplexing (WDM)." Her thesis work was performed at the Fondazione Ugo Bordoni (FUB) from January 1998 to March 1999, under the supervision of Prof. Antonio Mecozzi. Her thesis advisor was Prof. Paolo Lugli -Electronic Engineering Department of the University of Rome "Tor Vergata."
- **High school degree** received on July 1990 from the "Liceo scientifico statale Francesco d'Assisi," Rome, Italy. Top grade (60/60), first 5 percent of her grade. The 5 year high school studies were focused on Mathematics, Physics and Humanities. In the last 4 years, she was the student representative of her class in the high School council.

Experience

- **May 2011 - Present**: *Assistant Professor* at the Computer Science Department of the University of L'Aquila, Italy, SSD INF/01 - Informatica; since **2010** she is the *Principal Investigator* of the ERC Starting Independent Researcher Grant **VISION** - **V**ideo-or**i**ented UWB-ba**s**ed **I**ntelligent Ubiquit**o**us Se**n**sing, funded by the *European Research Council*;
- **Nov. 2005 – Jan. 2012:** *Director* of the Associated Laboratory of RADIOLABS at the University of L'Aquila, established in Nov. 2005;
- **Apr. 2002 – Oct. 2005:** *Senior Researcher* with "Consorzio Università Industria - Laboratori di Radiocomunicazioni", RADIOLABS (Roma, Italy; www.radiolabs.it) - *Project Manager* of research activities on ultra-wideband systems and technology;
- **Nov. 1999 – Oct. 2002:** *Ph.D. research fellowship* from the University of Rome "Tor Vergata," earned after ranking first out of 20 candidates at the acceptance exam.
- **Oct. 2001 – Jan. 2002:** *Researcher* with OPTOSPEED ITALIA S.R.L. mainly involved in the development of computer models (based on experimental data) of semiconductor optical amplifiers to optimize their design parameters.
- **Jul. 2000 – Sept. 2000:** *Summer Manager* with a short-term scholarship with AT&T – RESEARCH, NEWMAN SPRING LABS, 100 Schultz Dr., Red Bank, NJ, USA. The first propagation model for ultra-wideband channels has been defined within this internship.
- **Oct. 1999 – Jan. 2000:** *Research fellowship* from the Electronic Engineering Department of the **University of Rome** "Tor Vergata," obtained after passing an open competition. The topic of the fellowship was "Research on new generation mobile communication systems (Universal Mobile Telecommunications System) employing time division multiple access (TDMA)."
- **May 1999 – Jul. 1999:** *Research fellowship* from FUB (Rome, Italy). The topic of the research was the development of a simulator of active optical components based on semiconductor optical amplifiers for all-optical signal processing. The focus was mainly on applications in optical networks based on wavelength division multiplexing.

Research highlights:

- **Wireless Multimedia Sensor Networks (WMSNs)**: within the ERC Starting Grant VISION she is designing and investigating novel architectures for WMSNs based on UWB 60 GHz radios, IP technology, and full context-awareness and adaptability.
- **60 GHz communication channel**: within the ERC Starting Grant VISION she has performed an extensive measurement campaign of the 60 GHz communication channels from 54 to 59 GHz and from 61 to 66 GHz in many different environments. She is devising a comprehensive channel model for these bands.
- **Routing in UWB sensor networks for low-data rate location/tracking applications for logistics and industrial environments**: she has introduced a new multi-hop routing protocol with energy-aware feature, based on the *greedy-perimeter stateless routing* and showed its potentials in many papers for international conferences, in which he described numerous tests of the algorithm, through simulations in the Omnet++ environment, assuming different degrees of connectivity, propagation in different environments, under conditions of low traffic or heavy loads of beacons required by the positioning capabilities. This routing protocol has been integrated in the Network layer of the system prototyped in WP3b PULSERS Phase II of the project. Using a semi-analytical approach, she proposed a cross-layer analysis of the system in order to optimize the performance of the routing, properly designing the positioning and MAC modules.
- **Evaluation of network architectures for UWB applications at high data rate (HDR and VHDR) and low data rate (LDR)**: she investigated the performance of several network architectures for UWB applications at HDR, VHDR and LDR, through simulations in OPNET and Matlab, and semi-analytical models, within the WP3a of the Integrated Project PULSERS.
- **Ultra-Wideband Communications**: she derived the *first complete channel model* for UWB radios that enables fast simulations and tractable performance analysis of UWB systems operating in the frequency range below 1 GHz; the model has had so far a great impact in the scientific community and has been included in the standard model of the IEEE 802.15.4a. She related the strong immunity to fading of UWB signals to the peculiarities of the UWB propagation channel; based on those propagation properties, she proposed the "*Partial Rake*" as the best trade-off in ultra-wideband channels between complexity and performance issues.
  Specific contributions include:
  - **Propagation Measurements and Statistical Modeling**: Devised a statistical propagation channel model based on experimental data in the band below 1 GHz. Performed extensive measurement campaigns within the ULTRAWAVES framework at higher frequencies (center frequency at 4.78 GHz) using a direct-sequence correlative channel sounder. Derived an accurate statistical characterization of the UWB indoor channel in the band around 5 GHz.
  - **Receiver Design, Analysis and Simulations:** Proposed numerical analysis based on the above mentioned model which enable the efficient design of UWB transmission. Proposed reduced-complexity Rake receivers based on partial combining (PRake), evaluated their link performance in realistic UWB channels and proposed a comparison with the selective combining (SRake). Evaluated the effects of spreading bandwidth and carrier frequency of UWB systems in dense multipath environments in terms of receiver performance, receiver complexity, and channel parameters. Showed how many fingers should be included in the Rake receivers for ultra-wideband systems to achieve the best performance at the price of a minimum complexity increase.
  - **Spectral Analysis**: Derived general expressions for the PSD of a variety of UWB spread-spectrum signaling schemes including random and periodic scrambling.
- **Bluetooth**: Devised a semi-analytical framework that enables tractable analysis of the performance of Bluetooth devices in a multi-piconet environment. This framework allows us to take into account the mitigation effects of the propagation impairments. Based on this framework, accurate capacity and performance analysis of Bluetooth devices in dense piconet areas have been conducted.
- **Extension of GPS in railway tunnels at high speed:** within a collaboration between RadioLabs and RFI, she was involved in the design of the re-irradiation system. She has been the responsible for the analysis and derivation of the channel model for the propagation of GPS signals in railway tunnels on the basis of simulations of both ray-launcing and propagation measurements conducted in a tunnel.
- **Simulation of WDM optical networks and optimization of semiconductor optical amplifiers**: She

designed a modular tool for the simulation of WDM optical networks. She modeled and simulated semiconductor optical amplifiers to optimize the design parameters so as to maximize the gain and saturation power. These results were used as the basis for the production of optimized Optospeed's devices.

Funding ID

- **2010-2014**. *Principal Investigator* of the ERC Starting Independent Researcher Grant **VISION** - **V**ideo-or**i**ented UWB-ba**s**ed **I**ntelligent Ubiquit**o**us Se**n**sing, of the *European Research Council*.
  - *Start date*: 1 April 2010.
  - *Duration*: 48 months.
  - *Total budget*: 1,2 M€ (EU-funding: 1,2 M€).
  - *Host Institution*: Università degli Studi dell'Aquila (Principal Beneficiary)
  - *Beneficiaries*: Università degli Studi di Roma Tor Vergata.

- **2009-2011**. Scientific Responsible for RadioLabs of the European Project **WiNNOVATE** - Mediterranean Wireless Innovation (1G-MED08-525) of the STC Programme MED.
  - *Start date*: 1 May 2009
  - *Duration*: 36 months.
  - *Total budget*: 1,5 M€ (EU-funding: 1,5 M€).
  - 8 partners (4 public institutions and 4 research centers).

- **2006-2008**. Involved in the proposal writing and in the technical work (with the role of *responsible of RadioLabs' work in WP3b "UWB Sensor Networks for Industrial and Logistics Applications"*) of the of the Integrated Project **PULSERS Phase II** - *Pervasive Ultra-wideband Low Spectral Energy Radio Systems* of the VI Framework of the European Community (Contract no. FP6-027142).
  - *Start date*: 1 January 2006.
  - *Duration*: 30 Months.
  - Total budget: 16.5 M€ (EU-funding: 7.7 M€).
  - 38 partners (accademia and industry).
  - *Successfully completed*.

- **2004-2005**. Involved in the proposal writing and in the technical work (with the role of *responsible of RadioLabs' work in WP3a*) of the Integrated Project **PULSERS** - *Pervasive Ultra-wideband Low Spectral Energy Radio Systems* of the VI Framework of the European Community (Contract no. 506897).
  - *Start date*: 1 January 2004.
  - *Duration*: 24 Months.
  - Total budget: 20.7 M€ (EU-funding: 12.4 M€).
  - 30 partners (accademia and industry).
  - Evaluated *successfully completed* at the end date of February 20-21, 2006.

- **2002-2004**. *Scientific responsible* for RadioLabs of the European project **ULTRAWAVES** - *ULTRA Wideband Audio Video Entertainment System* (Contract no. IST-2001-35189) of the V Framework.
  - *Start date*: 14 April 2002.
  - *Duration*: 30 Months.
  - Total budget: 4.03 M€ (EU funding: 2.56 M€).
  - 6 partners (accademia and industry).
  - Evaluated *successfully completed* at the end date of October 20, 2004.

- **2001**. She was awarded by the *Young Researchers Project* 2001 – University of Rome "Tor Vergata."

Activities for the European Commission and other Countries

She was selected as an *Expert* for Evaluations of Grant proposals at the Swiss National Science Foundation (SNSF) - Div. Mathematics, Physical and Engineering Sciences, in 2012.

She was selected as an *Evaluator* of IST Fp7 European Projects for the Objective 1.1 "The network of the future," since 2009.

She has been an *External Evaluator* for Greek National Projects for the following programs:
- Greek Research Program "Archimedes III"
- Greek Research Program "Thalis"
- Greek National Action "Cooperation 2011"

She is/was a *Reviewer* for the following IST Fp7 European Projects:

- *Network of Excellence ACROPOLIS* (Advanced coexistence technologies for radio optimisation in licensed and unlicensed spectrum) of the FP7 (Project Reference: 257626). Start Date: 1 October 2010. Duration: 36 months. Total cost: 4.13 million euro. EU contribution: 3 million euro. Area: The Network of the Future (ICT-2009.1.1).
- *Collaborative Project EXALTED* (EXpAnding LTE for Devices) of the FP7 (Project Reference: 258512). Start Date: 1 September 2010. Duration: 30 months. Total cost: 10.98 million euro. EU contribution: 7.36 million euro. Area: The Network of the Future (ICT-2009.1.1).
- *Collaborative Project ULOOP* (User-centric Wireless Local-Loop) of the FP7 (Project Reference: 257418). Start Date: 1 September 2010. Duration: 36 months. Total cost: 5.85 million euro. EU contribution: 4.08 million euro. Area: The Network of the Future (ICT-2009.1.1).
- *Collaborative Project SELECT* (Smart and Efficient Location, idEntification, and Cooperation Techniques) of the FP7 (Project Reference: 257544). Start Date: 1 September 2010. Duration: 36 months. Total cost: 3.91 million euro. EU contribution: 2.85 million euro. Area: Microsystems and Smart Miniaturised Systems (ICT-2009.3.9).
- *Collaborative project FIVER* (Fully-Converged Quintuple-Play Integrated Optical-Wireless Access Architectures) of the FP7 (Project Reference: 249142). Start Date: 1 Jan. 2010. Duration: 36 months. Total cost: 4.18 million euro. EU contribution: 2.77 million euro Area: The Network of the Future (ICT-2009.1.1).
- *Collaborative project WHERE2* (Wireless Hybrid Enhanced Mobile Radio Estimators – Phase 2) of the FP7 (Project Reference: 248894). Start Date: 1 Jul. 2010. Duration: 36 months. Total cost: 7.45 million euro. EU contribution: 5.26 million euro. Area: The Network of the Future (ICT-2009.1.1).
- *Collaborative Project UCELLS* (Ultra-wide band real-time interference monitoring and CELLular management strategies) of the FP7 (Project Reference: 216785). Start Date: 1 Jan. 2008. Duration: 36 months. Total cost: 3.88 million euro. EU contribution: 2.67 million euro. Area: The Network of the Future (ICT-2007.1.1).
- *Integrated Project FUTON* (Fibre optic networks for distributed and extendible heterogeneous radio architectures) of the FP7 (Project Reference: 215533). Start Date: 1 Jan. 2008. Duration: 30 months (extended). Total cost: 9.79 million euro. EU contribution: 6.58 million euro. Area: The Network of the Future (ICT-2007.1.1).

Fellowships and Awards:

- **Chair of the IEEE Joint Italy Chapter VT06/COM16** (Vehicular Technology and Communication Society)
- **Senior Member** of *IEEE*
- *Member* of *IEEE Communication Society* and the *IEEE Computer Society*
- *Member* of the *ACM*
- **PhD research fellowship** from the University of Rome "Tor Vergata,", earned after ranking first out of 20 candidates at the acceptance exam.
- **Research fellowship** from the Electronic Engineering Department of the University of Rome "Tor Vergata," obtained after passing an open competition. The topic of the fellowship was "Research on

new generation mobile communication systems (Universal Mobile Telecommunications System) employing time division multiple access (TDMA)." October 1999 - October 2000.

- **Research fellowship** from FUB (May-July 1999). The topic of the research was the development of a simulator of active optical components based on semiconductor optical amplifiers for all-optical signal processing. The focus was mainly on applications in optical networks based on wavelength division multiplexing.

Teaching and Training

She served/serves as:

- *Co-Advisor* of PhD candidates,
- *Advisor* and *Co-Advisor* of many bachelor students and as
- *Co-Advisor* for Master Thesis

She thought University classes:

- *Year 2012/2013*: "*Systems and Applications on Networks*" of the Integrated Class of "Advanced Computer Networks" for undergraduate and master students in *Computer Science* at the University of L'Aquila.
- *Year 2011/2012*: "*Systems and Applications on Networks*" of the Integrated Class of "Advanced Computer Networks" for undergraduate and master students in *Computer Science* at the University of L'Aquila.
- *Year 2010/2011*: "*Systems and Applications on Networks*" of the Integrated Class of "Advanced Computer Networks" for undergraduate and master students in *Computer Science* at the University of L'Aquila.
- *Year 2009/2010*: "*Systems and Applications on Networks*" of the Integrated Class of "Advanced Computer Networks" for undergraduate and master students in *Computer Science* at the University of L'Aquila.
- *Year 2008/2009*: "*Systems and Applications on Networks*" of the Integrated Class of "Advanced Computer Networks" for undergraduate and master students in *Computer Science* at the University of L'Aquila.
- *Year 2005/2006*: "*Software for Telecommunications*" for undergraduate students in Telecommunications Engineering at the University of Rome Tor Vergata.
- *Year 2004/2005*: "*Software for Telecommunications*" for undergraduate students in Telecommunications Engineering at the University of Rome Tor Vergata.
- *Year 2003/2004*: "*Laboratory of Software Applications*" for undergraduate students in Telecommunications Engineering at the University of Rome Tor Vergata.

Significant Career Breaks

On November 1, 2002 Dajana Cassioli's daughter, Elisabetta, was born. She has been in **maternity leave** from October 1, 2002 to March 1, 2003 and then had further 3 months of part-time engagement.
On February 1, 2006 Dajana Cassioli's son, Alberto, was born. She has been in **maternity leave** from January 1, 2006 to June 1, 2006 and then had further 3 months of part-time engagement.
On April 6, 2009 Dajana Cassioli was resident and employed in L'Aquila, Italy, and she experienced the **earthquake** that destroyed the town; this led to a break whose duration can be roughly estimated to be one year.

Early Achievement-Track-Record

1. Citation Report

The following Table lists the citations received by the most significant publications of Dajana Cassioli according to the following databases on October 2, 2012:

1. *ISI Web of Knowledge,* Thomson Reuters (ISI)

2. *Google* (Google)

From those data it results a *h-index* of 5 according to ISI and of 14 according to Google.
The complete list of publications is annexed to the application.

Publications in leading international peer-reviewed journals	**Citations**	
	ISI	Google
[1] **D. Cassioli**, Moe Z. Win and Andreas F. Molisch, "The Ultra-Wide Bandwidth Indoor Channel: from Statistical Model to Simulations" *IEEE J. on Sel. Areas on Commun*., **20**, 6, 1247-1257, Aug. 2002.	488	808
[2] A. F. Molisch, **D. Cassioli,** C.-C. Chong, S. Emami, A. Fort, B. Kannan, J. Karedal, J. Kunisch, H. G. Schantz, K. Siwiak, M. Z. Win, "A Comprehensive Standardized Model for Ultrawideband Propagation Channels," *IEEE Trans. on Ant. and Propag.,* **54**, 3151–3166, Nov. 2006.	196	360
[3] **D. Cassioli**, M. Z. Win, A. F. Molisch and F. Vatalaro, "Low-complexity Rake receivers in Ultra-wideband channels," *IEEE Trans. on Wireless Commun.*, **6**, 4, 1265-1275, Apr. 2007.	55	95
[4] **D. Cassioli**, S. Scotti, e A. Mecozzi, "A Time-Domain Computer Simulator of the Nonlinear Response of Semiconductor Optical Amplifiers," *IEEE Journal of Quantum Electronics*, **36**, 1072-1080, Sep. 2000.	34	43
[5] W. Ciccognani, A. Durantini, and **D. Cassioli**, "Time domain propagation measurements of the UWB indoor channel using PN–sequence in the FCC–compliant band 3.6-6 GHz," *IEEE Trans. on Ant. and Propag*, **53**, 1542–1549, Apr. 2005.	27	61
[6] **D. Cassioli**, S. Persia, V. Bernasconi and A. Valent, "Measurements of the Performance Degradation of UMTS Receivers due to UWB Emissions," *IEEE Commun. Letters*, **9**, 5, 441–443, May 2005.	6	17
[7] **D. Cassioli** and F. Mazzenga, "Spectral Analysis of UWB Multiple Access Schemes using Random Scrambling," *IEEE Trans. on Wireless Commun.,* **3**, 5, 1637-1647, Sept. 2004.	4	9
[8] **D. Cassioli** and A. Durantini, "Measurements, Modeling and Simulations of the UWB Propagation Channel based on Direct-Sequence Channel Sounding," *Wireless Commun. and Mobile Comput. Journal,* **5**, 5, 513-523**,** Aug. 2005.	0	5
[9] F. Mazzenga, **D. Cassioli**, A. Detti, I. Habib, P. Loreti and F. Vatalaro, "Performance Evaluation in Bluetooth Dense Piconet Areas," *IEEE Trans. on Wireless Commun.*, **3**, 6, 2362–2373, Nov. 2004.	4	7
[10] **D. Cassioli**, R. Giuliano and F. Mazzenga, "Analysis of UWB System Capacity in a Realistic Multipath Environment with Coexistence Constraints," *IET Commun*, **1**, 3, 391–397, Jun. 2007.	3	5
[11] **D. Cassioli** and A. Mecozzi, "Minimum-Phase Impulse Response Channels," IEEE Transactions on Communications, **57**, 12, 3529-3532, Dec. 2009.	1	3

Publications in peer-reviewed conferences proceedings	**Citations**	
	ISI	Google
[12] **D. Cassioli**, M. Z. Win, F. Vatalaro, and A. F. Molisch, "Performance of Low-Complexity Rake Reception in a Realistic UWB Channel," *IEEE ICC 2002*, **2**, 763-767, May 2002. NY, USA.	217	371
[13] **D. Cassioli**, Moe Z. Win and Andreas F. Molisch, "A Statistical Model for the UWB Indoor Channel", *IEEE VTC 2001*, **2**, 1159-1163, May 2001. Rhodes GR.	59	185
[14] A.F. Molisch, K. Balakrishnan, **D. Cassioli**, C.C. Chong, S. Emami, A. Fort, J. Karedal, *et al.*, "A comprehensive model for ultrawideband propagation channels," *IEEE Global Telecommunications Conference (GLOBECOM'05)*, 6, pp.-3653, 2005	6	38
[15] **D. Cassioli**, M. Z. Win, F. Vatalaro, and A. F. Molisch, "Effects of Spreading Bandwidth on the Performance of UWB Rake Receivers," *IEEE ICC 2003*, **5**, 3545–3549, May 2003. AK, USA.	14	32
[16] F. Mazzenga, **D. Cassioli**, P. Loreti, and F. Vatalaro, "Evaluation of Packet Loss Probability in Bluetooth Networks," *IEEE ICC 2002*, **1**, 313-317, May 2002. NY, USA.	--	23

[17] **D. Cassioli** and A. Durantini, "A time domain propagation model of the UWB indoor channel in the FCC-compliant band 3.6-6 GHz based on PN-sequence channel measurements", *IEEE VTC 2004*, **1**, 213–217, May 2004. Milan, IT.	9	21
[18] A. Durantini, W. Ciccognani, and **D. Cassioli**, "UWB Propagation Measurements by PN-Sequence Channel Sounding,", *IEEE ICC 2004*, **6**, 3414–3418, Jun. 2004. Paris, FR.	--	26
[19] **D. Cassioli**, A. Durantini, and W. Ciccognani, "The role of path loss on the selection of the operating bands of UWB systems," *IEEE Int. Symp. on Pers., Indoor and Mob. Radio Commun.*, **4**, 2787–2791, Sep. 2004. Barcelona, ES.	12	23
[20] A. Durantini and **D. Cassioli**, "A multi-wall path loss model for UWB indoor propagation," *IEEE Veh. Techn. Conf.* **1**, 213–217, May 2005. Stockholm, SE.	5	14
[21] **D. Cassioli**, A. Detti, P. Loreti, F. Mazzenga, and F. Vatalaro, "The Bluetooth Technology: State of the Art and Networking Aspects," *Networking 2002*, 479-490, May 2002. Pisa, IT.	--	5
[22] **D. Cassioli,** R.Giuliano, F. Mazzenga, "Performance evaluation of high data rate UWB systems based on IEEE 802.15.3," *IEEE ICU 2005*, 678-683, Sep. 2005.	--	6
[23] S. Persia, and **D. Cassioli**, "Routing Design for UWB Sensor Networks in Industrial and Logistics Scenarios," *16th IST Mobile and Wireless Commun. Summit 2007*, 1–5, 1-5 Jul. 2007, Budapest, HU.	--	3
[24] S. Persia, **D. Cassioli**, F. Vatalaro, and F. Ananasso "Impact of Mobility on Geographic Routing," in the *Proceedings of the IEEE Int. Symp. on Wireless Pervasive Computing*, pp.717-721, May 2008, Santorini, GR.	--	1
[25] **D Cassioli**, "UWB Moves up to mmWaves: A channel modeling perspective," *IEEE International Conference on Ultra-Wideband (ICUWB) 2011*, 521-525, Sep. 2011. (Invited Paper).	--	1

2. **Research monographs, chapters in collective volumes and any translations** thereof

[26] **D. Cassioli** *et al.*, "UWB propagation channels", in *UWB Communication Systems - A Comprehensive Overview*. EURASIP Book Series, 2005.

Contributions to IEEE Standards

[27] F. Molisch, K. Balakrishnan, **D. Cassioli**, C.-C. Chong, S. Emami, A. Fort, J. Karedal, J. Kunisch, H. Schantz, U. Schuster, and K. Siwiak, "IEEE 802.15.4a channel model – final report," Nov. 2004.

[28] Molisch, M. Win, and **D. Cassioli**, "The Ultra-Wide Bandwidth Indoor Channel: from Statistical Model to Simulations," IEEE P802.15-02/284-SG3a and IEEE P802.15-02/285-SG3a, Jun. 2002.

4. **Invited presentations to peer-reviewed, internationally established conferences**

[29] D. Cassioli, "60 GHz UWB Channel Measurement and Model," *International Conference on Ultra-wideband (ICUWB 2012)*, Syracuse, NY, USA, Sep. 2012. **Invited Paper**.

[30] S. Persia and **D. Cassioli**, "IPv4 Wireless multimedia sensor networks," *Third International Workshop on Software Engineering for Sensor Network Applications (SESENA)*, June 2012. **Invited Paper**.

[31] **D. Cassioli**, "UWB Moves up to mmWaves: a Channel Modeling Perspective," *IEEE International Conference on Ultra-Wideband (ICUWB)*, 14-16 Sep. 2011, Bologna, IT. **Invited paper**.

[32] **D. Cassioli** and A. Durantini, "Statistical Characterization of UWB Indoor Propagation Channels based on Extensive Measurement Campaigns," *Int. Symp. Wireless Personal Multimedia Commun., WPMC2004,* **1**, 236-240, 12-15 Sep. 2004, Abano Terme (PD), IT. **Invited paper**.

[33] **D. Cassioli**, R. Giuliano, F. Mazzenga, "Capacity Analysis of UWB systems in Realistic Multipath Channels," *Int. Symp. Wireless Personal Multimedia Commun., WPMC2004,* **1**, 241-245, 12-15 Sep. 2004, Abano Terme (PD), IT. **Invited paper**.

5. **Organization of International Conferences**

She is the Co-Chair of

- the *Wireless Sensor Networks Symposium* of *The 9th International Wireless Communications & Mobile Computing Conference (IWCMC 2013),* July 1 – 5, 2013 – Cagliari, Sardinia, Italy.

She has been a Technical Program Committee (TPC) Co-Chair of:

- *15th International Telecommunications Network Strategy and Planning Symposium (NETWORKS 2012),* October 15-18, 2012, Rome, Italy.

She has been a Technical Program Committee (TPC) member of:

- IEEE *Int. Conf. on Ultra Wideband (ICUWB 2013),* Sydney, Australia, 15-18 Sept., 2013.
- IEEE *Internat. Symp. on Personal, Indoor and Mobile Radio Commun.,* PIMRC 2013, 8-11 Sept. 2013, London, UK.
- IEEE *International Conference on Communications, (ICC 2013) - Workshop on Advances in Network Localization and Navigation (ANLN),* Budapest, Hungary, 9-13 June, 2013.
- *IEEE GLOBECOM 2011* - Communication Theory Symposium, Houston, Texas, USA, 5-9 Dec. 2011.
- *IEEE Int. Conf. on Ultra Wideband 2011 (ICUWB 2011),* Bologna, Italy. 14-16 Sep., 2011.
- *FITCE Congress 2011,* Palazzo Chiaramonte "Steri", Palermo (Sicily), Italy, Aug. 31 - Sept. 3, 2011.
- *IEEE Communication Networks and Services Research Conf., CNSR 2010,* Ottawa, Canada, May 2011.
- *3rd Internat. Symposium on Applied Sciences in Biomedical and Commun. Technol.,* Rome, Italy, Nov. 2010.
- *IEEE Internat. Symp. on Personal, Indoor and Mobile Radio Commun., PIMRC 2010,* Istanbul, Turkey, Sep. 2010.
- *IEEE Vehicular Technology Conference, VTC2010-Spring,* Taipei, Taiwan, May 2010.
- *IEEE Commun. Networks and Services Research Conf., CNSR 2010,* Montreal, Canada, May 2010.
- *IEEE International Conference on Ultra Wideband 2009 (ICUWB 2009),* Vancouver, Canada, Sep. 2009.
- *IEEE Intern. Symp. on Pers., Indoor and Mobile Radio Commun., PIMRC 2009,* Tokio, Japan, Sep. 2009.
- *IEEE Commun. Networks & Services Research Conf., CNSR 2009,* New Brunswick, Canada, May 2009.
- *IEEE Vehicular Technology Conference, VTC2009-Spring,* Barcelona, Spain, Apr. 2009
- *IEEE Wireless Commun. and Networking Conference, WCNC 2009*, Budapest, HU. Apr. 2009.
- *IEEE Intern. Symp. on Pers., Indoor and Mobile Radio Commun., PIMRC 2008*, Cannes, FR. Sep. 2008.
- *Wireless Commun. Symp.* of *IEEE Int. Conf. on Commun. ICC 2007,* Glasgow, GB. Jun. 2007.
- *IEEE Radio & Wireless Symposium 2007 (RWS'07)*. Long Beach, CA. Jan., 2007.
- *IEEE Int. Conf. on Ultra Wideband 2006 (ICUWB 2006)*, Waltham, MA, USA. Sep., 2006.
- *IEEE Radio & Wireless Symposium 2006 (RWS'06)*. San Diego, CA. Jan., 2006.
- *IEEE 10th International Symposium on Computers and Communications (ISCC 05).* Universidad Politécnica de Cartagena, ES. Jun. 2005.
- *NEUWB^2 - Second International Workshop Networking with UWB* - Workshop on Ultra Wide Band for Sensor Networks. Rome, IT. Jul. 2005.
- *Joint UWB Systems and Technol. Conf. & Int. Workshop on UWB Sys. 2004,* Kyoto, JP. May 2004.

She also served as a **Session Chair** at

- *IEEE Int. Symp. on Spread Spectrum Techn. and Appl. ISSSTA2008*, 25-28 Aug. 2008, Bologna, IT.
- *IEEE Intern. Symp. on Wireless Pervasive Comput. ISWPC 2008*. 7-9 May 2008. Santorini, GR.
- *IEEE Vehicular Technology Conference (VTC 2005)*, Spring. May 2005. Stockholm, SE.

6. Editorial Activities

- **Editorial Board Member:**
  - *ISRN Communications and Networking of Hindawi Publishing Corporation***.** ISRN Communications and Networking is an open access, peer-reviewed journal, one of the International Scholarly Research Network (ISRN) series of journals, which are designed to provide a fast peer review process for all submitted manuscripts.

7. Other

She served/serves as a **reviewer** of many international journal and international conferences, including *IEEE Journal on Selected Areas in Communications*, *IEEE Transactions on Communications, IEEE Transactions on Wireless Communications, IEEE Transactions on Vehicular Technology, IEEE Communications Letters, IEEE Wireless Communications Letters, IEEE Transactions on Antennas and Propagation*, *IEEE Journal of Quantum Electronics*, *IEEE International Conference on Communications* and *IEEE Vehicular Technology Conference*.