

Curriculum Vitae of CLAUDIA CAMPOLO

General information

Full Name: CAMPOLO, Claudia

Citizenship: Italian

Position: Tenure Track Senior Research Assistant

Contact Information: University Mediterranea of Reggio Calabria, Department of ICT, Infrastructures, and Sustainable Energy (DIIES), Loc. Feo di Vito, 89100, Reggio Calabria, Italy.
Fax: (+39) 09651693247. Phone: (+39) 0965 1693276. Mobile: (+39) 349 1775654

E-mail: claudia.campolo@unirc.it

Index

Short CV.....	2
Current position.....	2
Education and Research Responsibilities.....	2
Research Activities.....	3
Impact of the Research and Bibliometric Indexes.....	4
National and International Cooperation.....	5
Honors and Awards.....	6
Visiting Periods.....	6
Tutorials.....	7
Seminars.....	7
Attended Conferences as a Speaker.....	7
Professional Activities.....	8
Teaching Activities.....	9
Students Activities.....	10
National and International Projects.....	10
Affiliations.....	11
Publications.....	11

Short CV

Claudia Campolo was born in Reggio Calabria, Italy, on 21th August 1984. Since March 2017 she holds a Tenure-Track Senior Research Assistant Position on Telecommunications at the University Mediterranea of Reggio Calabria. Before her current appointment, she received a Laurea degree in Telecommunications Engineering (Oct. 2007) and a PhD degree (Feb. 2011) from the University Mediterranea of Reggio Calabria, Italy. Since March 2011 she has been with the same university as a Post-Doc researcher and, then, as a junior research assistant on Telecommunications. In 2008 she was a visiting PhD student at the Department of Electronics Engineering of Politecnico di Torino under the supervision of Prof. Carla-Fabiana Chiasserini and a DAAD fellow at University of Paderborn, Germany, under the supervision of Prof. Falko Dressler (March 2015-April 2015). She was also a visiting researcher at the INRIA research center, Lille, France, in 2012 and 2013 and at the University of Halmstad, Sweden, in 2013, funded within the PALMARES and COST WiNeMo mobility actions, respectively.

Her research interests are mainly in the field of *wireless and vehicular networking, future Internet architectures and 5G systems*. The research activities is conducted in cooperation with many Italian and foreign research teams, from academia and industries. Achieved results are reported in more than 75 scientific publications: 29 international peer-reviewed journals, 45 contributions to the major international conferences in the telecommunications field, 5 book chapters.

The scientific value of the conducted research has been recognized by the research community with several *citations* (more than 1050, source Scopus), a *h-index* equal to 19 (source Scopus), many *popular articles* for IEEE and Elsevier journals, three *Best Paper Awards* and the *IEEE ComSoc EMEA Outstanding Young Researcher Award* in 2015. She has given a tutorial at IEEE WCNC 2012, she has two accepted tutorial proposals in ICC 2017 and EuCNC 2017, and she is involved in the organization of many international conferences/workshops as *Special Session Organizer, TPC Chair, Publicity Chair, Tutorial Chair, Steering Committee/TPC member*. She is *co-editor of the book* “Vehicular ad hoc networks: standards, solutions and research”, published by Springer-Verlag in June 2015 and *Guest Editor of the Special Issue on Multi-radio, Multi-technology, Multi-system Vehicular Communications*”, published by Computer Communications, Elsevier, Nov. 2016. Since 2010 she is involved in teaching activities at the University “Mediterranea” of Reggio Calabria, where she is currently teaching “*Advanced Communications Techniques for 5G Wireless Networks*” (6 CTS) and “*Telecommunications Laboratory*” (6 CTS). She also contributes to national and international research and mobility projects.

Current position

[March 2017-Today] “Tenure-track” Senior Research Assistant on Telecommunications at the University Mediterranea of Reggio Calabria, Italy (according to Italian law: “art. 24 comma 3 lettera b”, SSD ING-INF/03, Telecommunications, 9/F2).

Research activity: Wireless Networks, Vehicular Ad Hoc Networks.

Education and Research responsibilities

[July 2015-February 2017] Full time two years-long renewal contract as Junior Research Assistant on Telecommunications at the University Mediterranea of Reggio Calabria, Italy (according to Italian law: “art. 24 comma 3 lettera a”, SSD ING-INF/03, Telecommunications, 9/F2).

Research activity: The research activities encompass: (i) the design and deployment of networking solutions, smart objects and applications to support smart environments (e.g., smart city, smart home, intelligent transportation systems); (ii) the design and implementation of innovative network architectures for the future Internet, the design of protocols and algorithms for wireless sensor and actuator networks, for wireless (Wi-Fi, ZigBee) and mobile (e.g., LTE, LTE-A) communications, by addressing mobility and energy efficiency issues.

[July 2012-June 2015] Full time Junior Research Assistant on Telecommunications at the University Mediterranea of Reggio Calabria, Italy (according to Italian law: “art. 24 comma 3 lettera a”, SSD ING-INF/03, Telecommunications, 9/F2).

Research activity: The research activities have been carried within the national research project TETRis (Innovative Open Source Services over TETRA), funded by MIUR, and they concern the design and deployment of interworking solutions between commercial mobile communication networks (Wi-Fi, 3G) and professional radio systems (TETRA, TEDS).

[March 2011- June 2012] Post-Doc Research Fellowship at University Mediterranea of Reggio Calabria.

Research activity: “Vehicle-to-vehicle and vehicle-to-infrastructure communications in VANETs based on the IEEE 802.11p/WAVE standard”.

[January 2008-December 2011] Ph.D. in Telecommunications Engineering, at the University Mediterranea of Reggio Calabria.

Thesis: “Vehicular Communications: Challenges and Solutions for the Upcoming IEEE 802.11p/WAVE Standards”.

Supervisor: Prof. Antonella Molinaro.

[May 2008-October 2008] Visiting student at the Department of Electrical Engineering at Politecnico di Torino, Italy

Supervisor: Prof. Carla-Fabiana Chiasserini.

Activity supported by the Italian grant of POR-CALABRIA 2000-2006 – Misura 3.7.

[October 2007] Master’s Degree in Telecommunications Engineering, with full marks, from the University Mediterranea of Reggio Calabria.

Thesis "Cooperation in future generation wireless networks" (in Italian).

[November 2005] Bachelor's degree in Telecommunications Engineering, with full marks, from the University Mediterranea of Reggio Calabria.

Thesis: “Quality of Service Management in heterogeneous wireless networks: the new *Situation&Location-Aware* Paradigm” (in Italian).

Research activities

Her research interests are in the following fields: *vehicular networks, future Internet architectures, 5G systems*. Activities span from the design of innovative protocols, algorithms and techniques, mainly at the medium access control (MAC) and routing/networking layer and architectural solutions, to the definition of analytical models, prototyping design, and simulation modeling. Such activities have been conducted in cooperation with other researchers from Italian and foreign research institutes and academia.

Vehicular networks. In such field, the conducted research was mainly devoted to the design of protocols enhancing the IEEE 802.11 standard performance and on LTE (Long Term Evolution) solutions for vehicular communications. The research addresses the proposal, implementation and evaluation of:

- *Multi-channel protocols.* Claudia contributed to the design of channel selection schemes and channel allocation techniques to improve spectrum usage and data delivery performance by accounting for issues like channel switching and adjacent channel interference for both safety and non-safety infotainment applications;

- *Decentralized congestion control techniques.* Contributions in this field include solutions aimed to improve scalability and delivery performance of cooperative awareness messages crucial to enable road safety applications in VANETs.
- *Protocols exploiting full-duplex radios.* Contributions in this field are devoted: (i) to improve the performance of safety broadcast traffic by leveraging the simultaneous transmission and sensing capability of full-duplex (FD) radios and (ii) to analytically model FD-based MAC protocols.
- *LTE solutions for vehicular application.* Claudia investigated the potential of LTE as an enabling technology for vehicular communications. Solutions have been proposed based on the Device-to-Device (D2D) communication technology of LTE for challenging cooperative vehicular safety applications and platooning.
- *Opportunistic delivery techniques for floating car data.* Claudia contributed to the design and implementation of an open platform for the retrieval of data from sensors and vehicles engines and their remote opportunistic delivery over Wi-Fi/cellular connections, by leveraging emerging offloading techniques, in Android smartphones.
- *Software-defined networking for VANETs.* Claudia is contributing to the design of software-defined solutions to improve the performance of vehicular communications, e.g., by adapting radio parameters, network interface selection decisions, routing.

Solutions have been evaluated mainly through simulation models enhancing existing simulation environments (i.e., Network Simulator-2, Veins) for a more realistic and accurate assessment of conceived protocols. Accurate analytical frameworks have been also derived to capture the behavior of MAC-layer dynamics.

Future Internet architectures. She contributed to the Future Internet research field through the design of solutions based on the Information-Centric Networking (ICN) paradigm. By using named data instead of end-to-end host-centric communications for content retrieval and in-network caching, ICN particularly fits wireless, resource-constrained and mobile environments characterized by dynamic topologies, unreliable broadcast channels, short-lived and intermittent connectivity. The objective of the research in this field was the design of novel ICN solutions for wireless networks, with special focus on mobile ad hoc networks, vehicular networks and wireless sensor networks/Internet of Things (IoT) environments. The synergies of ICN with other emerging concepts like mobile cloud computing have been also investigated, in line with recent trends on network softwarization. Contributions to the field can be summarized as follows:

- Novel *naming strategies* targeting content retrieval, IoT sensing and actuation, cloud operations;
- Smart and efficient *forwarding algorithms* coping with harsh propagation environments and dynamic network topologies, like mobile ad hoc and vehicular networks;
- Reliable *transport solutions* in multi-hop wireless (vehicular) ad hoc networks;
- *ICN architectures* for IoT and interoperability with IP-based networking.
- Enhancements of the ICN philosophy to support *cloud computing and mobile edge computing*.

She is also currently investigating ID-oriented networking enhanced by leveraging concepts from the Social Internet of Things (SIoT) paradigm.

5G systems. The research on this topic has been recently started with focus on end-to-end *network slicing* solutions, aiming to support the delivery of heterogeneous services over the same physical infrastructure by leveraging software-defined networking (SDN) and network function virtualization techniques (NFV) techniques. Preliminary studies have been conducted with the aim to design network slices for vehicular applications, ranging from autonomous driving to infotainment services.

Impact of the Research and Bibliometric Indexes

- *h-index:* 23 (source: Google Scholar) and 20 (source: Scopus).
- *Number of citations:* more than 1800 (source: Google Scholar) and more than 1000 (source: Scopus).
- *Most cited paper* (with more than 240 citations) “LTE for Vehicular Networking: A Survey” published in *IEEE Communications Magazine* in 2013.

- The paper “Enhancing IEEE 802.11p/WAVE to provide Infotainment Applications in VANETs” is among the “Top 25 Hottest Articles” (ranked 13th) in 2012 for the journal *Ad Hoc Networks*, Elsevier and among the “Most cited articles” since 2011 (ranked 7th, <http://www.journals.elsevier.com/ad-hoc-networks/most-cited-articles>).
- The paper “Information-Centric Networking for Connected Vehicles: A Survey and Future Perspectives” is among the *Popular articles of IEEE Communications Magazine* (ranked 15th), February 2016.
- The paper “From today's VANETs to tomorrow's planning and the bets for the day after” is among the “Most cited articles” for *Vehicular Communications*, Elsevier, 2016.
- The paper “Information-Centric Networking for the Internet of Things: Challenges and Opportunities” is among the *Popular articles of IEEE Network Magazine* (ranked 4th), April 2016.

National and International Research Cooperation

- *Politecnico di Torino*: joint research activities conducted in the field of multicasting and network coding in wireless ad hoc networks.
- *Università di Roma Tre*: joint research activities conducted in the field of opportunistic vehicular networks.
- *Politecnico di Bari*: joint research activities conducted in the field of future Internet architectures and device-to-device communications for vehicular networks.
- *Istituto Superiore Mario Boella (Torino)*: joint research activities conducted in the field of vehicular networks.
- *Università di Bologna/CNR*: joint research activities conducted in the field of full-duplex communications in vehicular networks.
- *University of Tampere (Finland)*: joint research activities conducted in the field of multi-channel vehicular networks.
- *Simula Norway* research center (Norway): joint research activities conducted in the field of multi-channel vehicular networks.
- *Stellenbosch University (South Africa)*: joint research activities in the field of opportunistic vehicular networks and information-centric networking.
- *INRIA, Lille (France)*: joint research activities in the field of information-centric networking in wireless sensor networks.
- *University of Halmstad (Sweden)*: joint research activities in the field of multi-channel vehicular networks.
- *University of Paderborn (Germany)*: joint research activities in the field of multi-channel vehicular networks and adjacent channel interference modeling.
- *Basil University (Switzerland)*: joint research activities in the field of transport solutions for information-centric wireless networks.
- *University of British Columbia, Vancouver (Canada)*: joint research activities in the field of information-centric networking for VANETs.
- *Ryerson University, Toronto (Canada)*: joint research activities in the field of MAC protocols for VANETs.
- *Instituto de Telecomunicações, Aveiro (Portugal)*: joint research activities in the field of information-centric networking for Internet of Things.
- *BMW, Munich (Germany)*: joint research activities in the field of LTE for vehicular applications.
- *NTT Data Italia*: joint research activities conducted in the field of network slicing for 5G networks.
- *Huawei (China)*: joint research activities in the field of Social-Internet of Things and future ID-oriented networking.
- *Telefonica, Munich (Germany)*: joint research activities in the field of LTE for vehicular applications.
- *University of Campinas (Brasil)*: joint research activities conducted in the field of software-defined networking for VANETs.
- *CentralSupélec, Paris (France)*: joint research activities conducted in the field of full-duplex communications in vehicular networks.

- *Peoples' Friendship University (Russia)*: joint research activities conducted in the modeling of LTE-based vehicular communications.
- *University of Catania*: joint research activities in the field of Social-Internet of Things and future ID-oriented networking.
- *University of Cagliari*: joint research activities in the field of Social-Internet of Things and future ID-oriented networking.

Honors and Awards

- Included in the list of “10 women in networking and communications that you should know” “N2Women: Rising Stars in Networking and Communications” for year 2017 <http://n2women.comsoc.org/10-women-in-networkingcommunications-that-you-should-know/2017-10-women-in-networkingcommunications-that-you-should-watch/>
- *IEEE Communication Society Outstanding Young Researcher Award in the Europe, Middle East, and Africa (EMEA) Region for her promising research activities for the benefit of the society* (year 2015).
- *IEEE Vehicular Networking Conference (VNC) 2016 Certificate of Appreciation for her activities as Publicity Chair.*
- *Exemplary Reviewer* for IEEE Communications Letters (2015).
- *Exemplary Reviewer* for IEEE Communications Letters (2014).
- *Exemplary Reviewer* for IEEE Communications Letters (2013).
- *Best Paper Award* for the paper “D2D in LTE vehicular networking: system model and upper bound performance”, in *ICUMT 2015*.
- *Best Paper Award* for the paper “Roadside and Moving WAVE Providers: Effectiveness and Potential of Hybrid Solutions in Urban Scenarios”, in the *ITST (International Conference on ITS Telecommunications) 2011* conference.
- *Best Paper Award* for the paper “CRaSCH: A Cooperative Scheme for Service Channel Reservation in 802.11p/WAVE Vehicular Ad Hoc Networks”, in the *Nets4Cars 2009* workshop, co-located with the international conference *ICUMT (International Congress on Ultra Modern Telecommunications and Control Systems) 2009*.
- *Travel Grant* funded by IEEE Communications Society for the conference *IEEE/IET International Symposium on Communication Systems, Networks and Digital Signal Processing (CSNDSP)*, July 2010, Newcastle, UK.
- *Travel Grant* for the conference *IEEE PIMRC (International Symposium on Personal, Mobile, and Radio Communications) 2008*, Cannes, France, under the framework of the national initiative “Avviso Pubblico per la realizzazione di programmi intensivi di alta formazione rivolti a ricercatori universitari e dei centri di ricerca pubblici calabresi”, *POR FSE CALABRIA 2007-2013*.
- *Author of the invited paper* for the international journal *Vehicular Communications* (Elsevier): C. Campolo, A. Molinaro, R. Scopigno, “From today's VANETs to tomorrow's planning and the bets for the day after”.
- *Author of the invited paper* for the international journal *Journal of Sensors and Actuator Networks*, within the Special Issue on “Connected Vehicles”: M. Amadeo, C. Campolo, A. Molinaro, “Priority-based Content Delivery in the Internet of Vehicles through Named Data Networking”.
- *Author of the invited paper* for the international conference *AdHocNets 2012*: C. Campolo, A. Molinaro, “Design Challenges and Solutions for Multi-Channel Communications in Vehicular Ad Hoc Networks”.
- Invited to participate to the *meeting* of the *Special Interest Group on ITS* within the *COST IC0906 WiNeMO* action (Wireless Networking for Moving Objects), Munich, Germany, as an expert of vehicular communications (March 2011).

Visiting Periods

- *Visiting researcher* at University of Paderborn, Germany, under the supervision of Prof. Falko Dressler. Research stay funded by the DAAD (*Deutscher Akademischer Austauschdienst/German*

Academic Exchange) initiative [March 2015-April 2015]. Research topic: “Offloading through Parked Vehicles: Design and Realistic Evaluation in Multi-channel VANETs”.

- *Short Term Scientific Mission* (STSM) at Halmstad University, Sweden, under the framework of the COST Action IC0906 WiNeMO (Wireless Networking for Moving Objects) 2009-2014 [September 2013]. Research topic: “Improving Service Advertisements Procedures in Multi-Channel Vehicular Networks”.
- *Visiting researcher* at INRIA (Institut national de recherche en informatique et en automatique), Lille, France, under the framework of the international project “PALMARES: Una Internet di Oggetti Intelligenti” [2-4 April 2012 and 16-17 May 2013].
- *Visiting student* at the Department of Electrical Engineering at Politecnico di Torino, Italy [May 2008-October 2008].

Tutorials

- Instructor of the Tutorial “The 5G path of V2X for the future of connected and autonomous vehicles”, hold in European Conference on Networks and Communications (EuCNC) 2017, Oulu, Finland, 12 June 2017.
- Instructor of the Tutorial “The roadmap to 5G V2X: technologies enablers for more connected and autonomous vehicles”, hold in IEEE International Conference on Communications (ICC) 2017, Paris, France, 25 May 2017.
- Instructor of the Tutorial “Vehicular Ad-Hoc Networks: Technical Challenges, Solutions, and Evaluation Methodologies” hold in the *IEEE Wireless Communications and Networking Conference (WCNC) 2012*, April 2012, Paris, France (Acceptance rate 25%).

Seminars

- Seminar “Vehicular Ad Hoc Networks: Research and Perspectives” hold at Halmstad University, Sweden, during the STSM funded by COST Action IC0906, WiNeMO (Wireless Networking for Moving Objects), September 2013.
- Seminar “Vehicular Ad Hoc Networks” hold at INRIA, Lille, France, under the framework of the “PALMARES: Una Internet di Oggetti Intelligenti” project, April 2012.
- Seminar “The IEEE 802.11p/WAVE standard for VANETs: challenges and solutions”, Istituto Superiore Mario Boella (ISMB), Torino, Italy, December 2011.

Attended Conferences as a Speaker

- IEEE PIMRC (International Symposium on Personal, Mobile, and Radio Communications) 2016, Valencia, Spain.
- IEEE VENITS (International Workshop on Vehicular Networking and Intelligent Transportation Systems) workshop within PIMRC (International Symposium on Personal, Mobile, and Radio Communications) 2016, Valencia, Spain.
- AdHocNow 2015, Athens, Greece.
- EuCNC (European Conference on Networks and Communications) 2014, Bologna, Italy.
- IEEE ICC (International Conference on Communications) 2013, Budapest, Hungary.
- Nets4Cars/Nets4Trains 2013, Lille, France.
- IEEE ICVES (International Conference on Vehicular Electronics and Safety) 2012, Istanbul, Turkey.
- ACM VANET 2012, Lake District, UK.
- IEEE WCNC (Wireless Communications and Networking Conference) 2012, Paris, France.
- IEEE PIMRC 2011, Toronto, Canada.
- IEEE ICT (International Conference on Telecommunications) 2011, Ayia Napa, Cyprus.
- IEEE GLOBECOM (Global Communications Conference) 2010, Miami, Florida, USA.
- IEEE/IET International Symposium on Communication Systems, Networks and Digital Signal Processing (CSNDSP) 2010, Newcastle, UK.

- IEEE PIMRC 2008, Cannes, France.

Professional Activities

- *Guest Editor for the Special Issue on “Multi-radio, Multi-technology, Multi-system Vehicular Communications”*, for Computer Communications journal, Elsevier, Vol. 93, pp. 1-84, Nov. 2016.
- *Editor of the book “Vehicular Ad Hoc Networks: Standards, Solutions, and Research”*, Springer-Verlag, published in June 2015. The book is among the most downloaded Springer e-books in 2015.
- *Member of the Editorial Board of Transactions on Emerging Telecommunications Technology (Wiley).*
- *Member of the Editorial Board of Wireless Communications and Mobile Computing Journal (Hindawi/Wiley).*
- *Organizer of the Workshop “International Workshop on Network programmability: From the data center to the Ground (NetFoG) 2017”*, within the IEEE Conference on Network Softwarization (NetSoft 2017), Bologna, Italy, July 2017.
- *Organizer of the Special Track “Computational science and technologies for Mobile Edge Computing”*, within the IEEE International Conference on Computational Science and Engineering (CSE 2016), Paris, France, August 2016.
- *Organizer of the Special Session “Emerging communications, networking and computing technologies for VANETs 2.0”* in the AdHocNow 2015 conference, Athens, Greece, June 2015.
- *Technical Committee Member for Computer Communications (Elsevier).*
- *Member of the Reviewer Board of IEEE Communications Magazine.*
- *Tutorial co-chair for ITST 2011 (International Conference on Intelligent Transport Systems Telecommunications).*
- *Publicity chair for the IEEE Vehicular Networking Conference (VNC) 2016.*
- *Steering Committee Member for the international workshop RAFNET (Recent Advancements in Future Networking Technologies) organized within the IEEE Vehicular Technology Conference 2017, Sydney, Australia, June 2017.*
- *Session Chair at VENITS 2016, Valencia, Spain.*
- *Session Chair at IEEE PIMRC 2016, Valencia, Spain.*
- *Technical Program Committee (TPC) Member for the following workshop and conferences:*
 - IEEE Consumer Communications and Networking Conference (CCNC) 2018
 - IFIP Networking 2018
 - IEEE Vehicular Networking Conference (VNC) 2017
 - International Workshop on Internet of Things, the Road Ahead: Applications, Challenges and Solutions, IEEE PIMRC 2017.
 - International Workshop on Softwarized Infrastructures for 5G and Fog Computing (Soft5 2017)
 - ACM SMARTOBJECTS co-located with ACM Mobicom 2017
 - OMNeT++ Community Summit 2017
 - IEEE Consumer Communications and Networking Conference (CCNC) 2017
 - International Conference on ITS Telecommunications (ITST) 2017
 - IEEE Vehicular Technology Conference (VTC)-Spring 2017
 - IEEE Vehicular Technology Conference (VTC)-Fall 2017
 - IEEE Vehicular Networking Conference (VNC) 2016
 - Int. Workshop on Communication Technologies for Vehicles (Net4Cars/Nets4Trains) 2016
 - IEEE Consumer Communications and Networking Conference (CCNC) 2016
 - IEEE Vehicular Technology Conference (VTC)-Spring 2016
 - Int. Workshop on Multiple Access Communications MACOM 2016
 - International Workshop on Automotive IoT (WF-IoT 2015), organized within WF-IoT 2015 conference
 - IEEE International Conference on Connected Vehicles and Expo (ICCVE) 2015
 - International Conference on Ad Hoc Networks and Wireless, Ad Hoc Now, 2015
 - Self-Organizing Wireless Access Networks for Smart City (SWANSITY), organized within IEEE SECON 2015

- Int. Workshop on Communication Technologies for Vehicles (Net4Cars/Nets4Trains) 2015
- International Workshop on Recent Advances in Broadband Access Networks (RABAN) 2015, organized within ICUMT 2015
- IFIP Wireless and Mobile Networking Conference (WMNC 2015)
- IEEE Vehicular Technology Conference (VTC)-Fall 2015, Cellular Networks track
- Int. Workshop on Multiple Access Communications MACOM 2015
- IEEE International Conference on Connected Vehicles and Expo (ICCVE) 2014
- IEEE International Conference on High-Performance Computing and Communications (HPCC) 2014
- Int. Workshop on Multiple Access Communications (MACOM) 2014
- Int. Workshop on Communication Technologies for Vehicles (Net4Cars/Nets4Trains) 2014
- Self-Organizing Wireless Access Networks for Smart City (SWANSITY), organized within IEEE SECON 2014
- International Workshop on Multiple Access Communications (MACOM) 2013
- International Conference on ITS Telecommunications (ITST) 2013
- Int. Workshop on Communication Technologies for Vehicles (Nets4cars/Nets4Trains) 2013
- IEEE Personal Indoor and Mobile Radio Communications (PIMRC) 2013
- International Conference on Connected Vehicles and Expo (ICCVE) 2013
- IEEE Vehicular Technology Conference (VTC)-Fall 2013, Wireless Networks and Security Track
- International Workshop on Recent Advances in Broadband Access Networks (RABAN) 2012-2013, organized within ITST 2013
- International Workshop on Staminial Self-Organizing, Self-Configuring, Self-Evolving Networks (S4Nets), organized within MoWNET 2013
- IEEE Symposium on Wireless Technology and Applications (ISWTA) 2012-2013
- The 15th International Conference on Computational Science and Engineering (CSE 2012)
- The 3rd International Workshop on Recent Advances in Broadband Access Networks (RABAN 2012)
- The Eighth Workshop on Wireless Ad hoc and Sensor Networks (WWASN 2011)
- International Workshop on Seamless Connectivity in Vehicular Networks (SVCN 2011)
- The 2nd International Workshop on Recent Advances in Broadband Access Networks (RABAN 2011)
- Flexibility in Broadband Wireless Access Network Workshop (FlexBWAN 2011).
- Reviewer for the following journals:
 - IEEE Journal on Selected Areas of Communications, IEEE Communications Letters, IEEE Transactions on Communications, IEEE Transactions on Wireless Communications, IEEE Transactions on Vehicular Technology, IEEE Transactions on Parallel and Distributed Systems, IEEE Transactions on Computers, IEEE Transactions on Intelligent Transportation Systems, IEEE Transactions on Industrial Informatics, IEEE Transactions on Dependable and Secure Computing, IEEE Transactions on Network and Service Management, IEEE Transactions on Green Communications and Networking, IEEE Transactions on Mobile Computing, IEEE Vehicular Technology Magazine, Wiley Transactions on Emerging Telecommunications Technologies, Journal of the Network and Systems Management, Elsevier Ad Hoc Networks, Elsevier Computer Communications, Elsevier Computer Networks, Elsevier Journal of Networks and Computer Applications, Elsevier Vehicular Communications, EURASIP Journal on Wireless Communications and Networking, International Journal of Ad Hoc and Ubiquitous Computing, Springer Wireless Networks, Wireless Communications and Mobile Computing.
- and for the following international workshop and conferences:
 - IEEE PIMRC, IEEE Globecom IEEE VTC, IEEE ICC, CoCoNet, IEEE ICCSC, ITU-Kaleidoscope, ITST, Nets4cars, Intelligent Vehicles Symposium, ICNC, IEEE WiMob.

Teaching Activities

- *Advanced Communication Techniques for 5G Wireless Networks* (Master Degree)
Regular course of 48 hours in the Academic Year 2016/2017, University of Reggio Calabria.

- *Laboratory of Telecommunications* (Bachelor Degree)
Regular course of 48 hours in the Academic Years 2016/2017, University of Reggio Calabria.
- *Advanced Communication Techniques for 5G Wireless Networks* (Master Degree)
Regular course of 24 hours in the Academic Years 2014/2015, 2015/2016, University of Reggio Calabria.
- *Advanced Systems for Personal Communications* (Master Degree)
Regular course of 24 hours in the Academic Years 2013/2014, University of Reggio Calabria.
- *Laboratory of Telecommunications* (Bachelor Degree)
Regular course of 24 hours in the Academic Years 2013/2014, 2014/2015, 2015/2016, University of Reggio Calabria.
- *Advanced Systems for Personal Communications* (Master Degree),
Regular course of 60 hours in the Academic Years 2010/2011, 2012/2013, University of Reggio Calabria.
- *Telematics* (Bachelor Degree)
Practical lessons in the Academic Years 2007/2008, 2008/2009, 2011/2012, University of Reggio Calabria.

Students Activities

- Co-tutor of undergraduate and graduate student Internships at University of Reggio Calabria on topics about network simulation tools.
- Co-supervisor of several undergraduate and graduate student thesis activities on different topics, mainly VANETs, interworking of heterogeneous wireless technologies, information-centric networking, software-defined networking. All of such supervised students are now in very good positions at companies or at Universities.
- Member of the Ph.D. Program Board in Information Engineering at the University Mediterranea of Reggio Calabria (2016).
- Member of the Ph.D. Program Board in Information Engineering at the University Mediterranea of Reggio Calabria (2013).
- Reviewer and Member of the International Board for the evaluation of the PhD thesis of the candidate Jorge E. Luzuriaga at the Department of Computer Engineering, Universitat Politècnica de València (UPV), Valencia, Spain, April 2017.

National and International Projects

- “Social Internet of Things and Future-Oriented Functional Component Design as Intrinsic Networking Capability (SOW)”, funded by Huawei.
- DOMUS “Sistemi Domotici per il Servizio di Brokeraggio Energetico Cooperativo”, funded by MIUR under the initiative "P.O.N. Ricerca e Competitività 2007-2013. Member of the RU at University of Reggio Calabria.
- DOMUS “Piattaforma intelligente per il monitoraggio e la gestione della sicurezza in-home di persone e strutture”, funded by MIUR under the initiative "P.O.N. Ricerca e Competitività 2007-2013. Member of the RU at University of Reggio Calabria.
- “PALMARES: An Internet of Smart Objects”, International research project funded by MIUR under the framework of the Cooperlink (Cooperazione Interuniversitaria Internazionale - A.F. 2011) initiative, in cooperation with INRIA, Lille, France and Stellenbosch University, South-Africa [2011-2013]. Member of the Research Unit (RU) at University of Reggio Calabria. The project aimed at the interconnection of heterogeneous smart objects in the Future Internet under mobility and intermittent connectivity conditions through innovative networking paradigms, like *information-centric networking*, *machine-to-machine*, *opportunistic networking*.
- “IOT_ TOI Internet of Things: Road Traffic Over Internet” [2011-2012]. Contribution to the national project with Istituto Superiore Mario Boella (ISMB) that funded the Post-Doc scholarship. The project tackled the problems of traffic and pollution in a unified way through the collection and distribution of data from fixed and mobile nodes (e.g., through 802.11p protocols).

- “TETRis - Innovative Open Source Services over TETRA”, funded by MIUR under the initiative “P.O.N. Ricerca e Competitività 2007-2013” [2011-2013]. Member of the RU at University of Reggio Calabria. Task of RU was to contribute to the research activities aimed at augmenting the interoperability capacity of the professional TETRA/TEDS systems with different commercial standard telecommunication systems and with different networks of mobile devices, sensors, actuators and smart objects.
- “GELMINCAL - Generatore Eolico a Levitazione Magnetica in Calabria”, funded by MIUR under the initiative PONa3_00308 [2011-2014]. Contribution to the interdisciplinary project aimed at increasing facilities and equipments for the design, validation and implementation of communication protocols for smart grid and energy management at the Telecommunications Group at University of Reggio Calabria.
- “SMARTEL-Poli Innovazione Regione Calabria”. The project funded by Regione Calabria is aimed at the improvement of the safety of people and vehicles in harbour areas during the movement operations of cargo and containers [2014-2015].

Affiliations

- Member of the Institute of Electrical and Electronics Engineers (IEEE);
- Member of IEEE Communications Society (COMSOC);
- Member of the Italian Group of Telecommunications and Information Theory (GTTI, Gruppo Nazionale Telecomunicazioni e Teoria dell'Informazione);
- Member of the Italian Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT).
- Member of the IRTF Information-Centric Networking Research Group (ICNRG).

Publications

Journals

- J1. C. Campolo, A. Molinaro, A. Iera, F. Menichella, “5G Network Slicing for Vehicle-to-Everything Services”, *IEEE Wireless Communications Magazine*, Special Issue on Emerging Technology for 5G Enabled Vehicular Networks, in press, 2017.
- J2. M. Amadeo, C. Campolo, A. Molinaro, “A Novel Hybrid Forwarding Strategy for Content Delivery in Wireless Information-Centric Networks”, *Elsevier Computer Communications*, vol. 109, pp. 104-116, September 2017.
- J3. C. Campolo, A. Molinaro, A. Berthet, A. Vinel, “Full-Duplex Radios for Vehicular Communications”, *IEEE Communications Magazine*, vol. 55, no. 6, pp. 182-189, June 2017.
- J4. R. Fontes, C. Campolo, C.E. Rothenberg, A. Molinaro, “From Theory to Experimental Evaluation: Resource Management in Software-Defined Vehicular Networks”, *IEEE Access*, Special Issue on Resource Management in Vehicular Ad-Hoc Networks: Energy Management, Communication Protocol and Future Applications, vol. 5, pp. 3069-3076, 2017.
- J5. C. Campolo, A. Molinaro, G. Araniti, A. Berthet, “Better Platooning Control Toward Autonomous Driving: An LTE Device-to-Device Communications Strategy That Meets Ultralow Latency Requirements”, *IEEE Vehicular Technology Magazine*, vol. 12, no. 1, pp. 30-38, 2017.
- J6. M. Amadeo, C. Campolo, A. Molinaro, “Priority-based Content Delivery in the Internet of Vehicles through Named Data Networking”, *Journal of Sensors and Actuator Networks*, Special Issue on *Connected Vehicles*, vol. 5, no. 17, November 2016 (**invited paper**).
- J7. C. Campolo, A. Molinaro, A. Vinel, Y. Zhang, “Modeling and Enhancing Infotainment Service Access in Vehicular Networks with Dual-radio devices”, *Vehicular Communications*, vol. 6, pp. 7-16, October 2016.
- J8. M. Amadeo, C. Campolo, A. Molinaro, “NDNe: Enhancing Named Data Networking to Support Cloudification at the Edge”, *IEEE Communications Letters*, vol. 20, n. 11, pp. 2264-2267, November 2016.
- J9. G. Piro, M. Amadeo, G. Boggia, C. Campolo, L.A. Grieco, A. Molinaro, G. Ruggeri, “Gazing into the crystal ball: when the Future Internet meets the Mobile Clouds”, *IEEE Transactions on Cloud Computing*, in press, 2016.

- J10. M. Amadeo, O. Briante, C. Campolo, A. Molinaro, G. Ruggeri, "Information-Centric Networking for M2M Communications: Design and Deployment", Special Issue on the "Internet of Things: Research Challenges and Solutions", *Elsevier Computer Communications*, vol. 89-90, pp. 105-116, September 2016.
- J11. M. Amadeo, C. Campolo, A. Molinaro, "Information-Centric Networking for Connected Vehicles: A Survey and Future Perspectives", *IEEE Communications Magazine*, Automotive Networking Series, vol. 54, n. 2, pp. 98-104, February 2016.
- J12. M. Amadeo, C. Campolo, J. Quevedo, D. Corujo, A. Molinaro, A. Iera, R. Aguiar, A.V. Vasilakos, "Information-Centric Networking for the Internet of Things: Challenges and Opportunities", *IEEE Network Magazine*, vol. 3, n. 2, pp. 92-100, March 2016.
- J13. C. Campolo, A. Molinaro, R. Scopigno, "From today's VANETs to tomorrow's planning and the bets for the day after" *Vehicular Communications* (Elsevier), vol. 2, n. 3, pp. 158-171, July 2015 **(invited paper)**.
- J14. M. Amadeo, C. Campolo, A. Molinaro, "Forwarding strategies in named data wireless ad hoc networks: Design and evaluation", *Journal of Network and Computer Applications*, Special Issue on Information-Centric Network Architecture, Protocols, Algorithms and Applications, vol. 50, pp. 148-158, April 2015.
- J15. O. Briante, C. Campolo, A. Iera, A. Molinaro, S.Y. Paratore, G. Ruggeri, "Supporting augmented floating car data through smartphone-based crowd-sensing", *Vehicular Communications* (Elsevier), vol. 1, n. 4, pp. 181-196, October 2014.
- J16. M. Amadeo, C. Campolo, A. Molinaro, G. Ruggeri, "Content-Centric Wireless Networking: A Survey", *Elsevier Computer Networks*, vol. 72, pp. 1-13, October 2014.
- J17. C. Campolo, A. Molinaro, A. Vinel, Y. Zhang, "Modeling Event-Driven Safety Messages Delivery in IEEE 802.11p/WAVE Vehicular Networks", *IEEE Communications Letters*, vol. 17, n. 12, pp 2392-2395, December 2013.
- J18. M. Amadeo, C. Campolo, A. Molinaro, "Enhancing Content-Centric Networking for Vehicular Environments", *Elsevier Computer Networks*, Special Issue on Information-Centric Networking, vol. 57, n. 16, pp. 3222-3234, November 2013.
- J19. C. Campolo, A. Molinaro, "Multi-channel communications in Vehicular Ad hoc NETWORKs: A Survey," *IEEE Communications Magazine*, Automotive Networking Series, vol. 51, n. 5, pp.158-169, May 2013.
- J20. G. Araniti, C. Campolo, M. Condoluci, A. Iera, A. Molinaro, "LTE for Vehicular Networking: A Survey", *IEEE Communications Magazine*, Automotive Networking Series, vol. 51, n. 5, pp. 148-157, May 2013.
- J21. C. Campolo, H. A. Cozzetti, A. Molinaro, R. Scopigno, "Augmenting Vehicle-to-Roadside Connectivity in Multi Channel Vehicular Ad Hoc Networks", *Elsevier Journal of Network and Computer Applications*, Special Issue on Vehicular Communications and Applications, vol. 36, no. 5, pp. 1275-1286, September 2013.
- J22. M. Amadeo, C. Campolo, A. Molinaro, "CRoWN: Content-Centric Networking in Vehicular Ad Hoc Networks", *IEEE Communications Letters*, vol. 16, no. 9, pp. 1380-1383, September 2012.
- J23. C. Campolo, A. Iera, L. Militano, A. Molinaro, "Scenario-adaptive and gain-aware content sharing policies for cooperative wireless environments", *Elsevier Computer Communications*, vol. 35, no. 1, pp. 1259-1271, June 2012.
- J24. M. Amadeo, C. Campolo, A. Molinaro, "Enhancing IEEE 802.11p/WAVE to provide Infotainment Applications in VANETs", *Elsevier Ad Hoc Networks*, Special Issue on Recent advances in analysis and deployment of IEEE 802.11e and IEEE 802.11p protocol families, vol. 10, no. 2, pp. 253-269, March 2012.
- J25. C. Campolo, A. Molinaro, A. Vinel, Y. Zhang, "Modelling Prioritized Broadcasting in Multi-channel Vehicular Networks", *IEEE Transactions on Vehicular Technology*, vol. 61, no. 2, pp. 687-701, February 2012.
- J26. C. Campolo, C. Casetti, C.-F. Chiasserini, A. Molinaro, "A Multirate MAC Protocol for Reliable Multicast in Multihop Wireless Networks," *Elsevier Computer Networks*, vol. 56, no. 5, 1554-1567, March 2012.
- J27. A. Vinel, C. Campolo, J. Petit, Y. Koucheryavy, "Trustworthy Broadcasting in IEEE 802.11p/WAVE Vehicular Networks: Delay Analysis", *IEEE Communications Letters*, vol. 15, no. 9, pp. 1010-1012, September 2011.

- J28. C. Campolo, A. Vinel, A. Molinaro, Y. Koucheryavy, "Modeling Broadcasting in IEEE 802.11p/WAVE Vehicular Networks", *IEEE Communications Letters*, vol. 15, no. 2, pp. 199-201, February 2011.
- J29. C. Campolo, H.A. Cozzetti, A. Molinaro, R. Scopigno, "Vehicular Connectivity in Urban Scenarios: Effectiveness and Potential of Roadside, Moving WAVE Providers and Hybrid Solutions", *EURASIP Journal on Wireless Communications and Networking*, Special Issue on Network Routing and Communication Algorithm for Intelligent Transportation Systems, 2011, 2011:146.
- J30. C. Campolo, A. Molinaro, "Cooperative Multichannel Management in IEEE 802.11p/WAVE Vehicular Ad Hoc Networks", *International Journal of Vehicle Information and Communication Systems*, Special Issue on the Communication Technologies for Vehicles, vol. 2, no. 3/4, pp.147-176, 2011.
- J31. A. Iera, A. Molinaro, C. Campolo, "New Concept Platforms For QoS Management In Future Telecommunication Scenarios", *International Journal of Wireless Information Networks*, ISSN: 1068-9605, vol. 14, no. 2, pp. 79-91, 2007.

Conferences and Workshops

- C1. V. Beschastny, V. Naumov, P. Scopelliti, I. Gudkova, C. Campolo; G. Araniti, K. Samouylov, "Discrete time bulk service queue for analyzing admission control in vehicle-to-vehicle networks", *International Conference on Next-Generation Wired/Wireless Advanced Network and System*, (NEW2AN) 2017, St. Petersburg, Russia.
- C2. C. Campolo, A. Molinaro, A. Berthet, "Full-Duplex Communications to Improve Platooning Control in Multi-Channel VANETs", *IEEE ICC 2017, Workshop on Full-Duplex Communications for Future Wireless Networks*, Paris, France.
- C3. C. Campolo, A. Molinaro, A. Vinel, "To Switch or Not to Switch: Service Discovery and Provisioning in Multi-radio V2R Communications", *Nets4Cars 2016*, Halmstad, Sweden.
- C4. M. Amadeo, C. Campolo, A. Molinaro, "Named Data Networking for Priority-based Content Dissemination in VANETs", *Workshop on Vehicular Networking and Intelligent Transportation systems (VENITS'16), IEEE PIMRC 2016*, Valencia, Spain.
- C5. C. Campolo, A. Molinaro, A. Berthet, "Improving CAMs Broadcasting in VANETs through Full-Duplex Radios", *IEEE PIMRC 2016*, Valencia, Spain.
- C6. C. Campolo, C. Sommer, F. Dressler, A. Molinaro, "On the Impact of Adjacent Channel Interference in Multi-Channel VANETs", *IEEE International Conference on Communications (ICC) 2016*, Kuala Lumpur, Malaysia.
- C7. G. Piro, A. Orsino, C. Campolo, G. Araniti, G. Boggia, A. Molinaro "D2D in LTE vehicular networking: system model and upper bound performance", *ICUMT 2015*, Brno, Czech Republic **(best paper award)**.
- C8. C. Campolo, A. Molinaro, A. Vinel, N. Lyamin, M. Jonsson, "Service Discovery and Access in Vehicle-to-Roadside Multi-Channel VANETs", *IEEE International Conference on Communications (ICC) 2015, Workshop on Dependable Vehicular Communications*, London, UK.
- C9. M. Amadeo, C. Campolo, A. Iera, A. Molinaro, "Information-Centric Networking in IoT scenarios: the case of a Smart Home", *IEEE International Conference on Communications (ICC) 2015*, London, UK.
- C10. C. Campolo, A. Molinaro, A. Vinel, "Understanding Adjacent Channel Interference in Multi-Channel VANETs", *IEEE Vehicular Networking Conference (VNC) 2014*, Paderborn, Germany.
- C11. M. Amadeo, C. Campolo, A. Molinaro, "Internet of Things via Named Data Networking: The Support of Push Traffic", *Network of the Future (NoF) conference 2014*, Paris, France.
- C12. A. Autolitano, M. Reineri, R.M. Scopigno, C. Campolo, A. Molinaro, "Understanding the Channel Busy Ratio Metrics for Decentralized Congestion Control in VANETs", *ICCVE 2014*, Vienna, Austria.
- C13. M. Amadeo, C. Campolo, A. Molinaro, "Multi-Source Data Retrieval in IoT via Named Data Networking", *ACM ICN 2014*, Paris, France.

- C14. O. Briante, M. Amadeo, C. Campolo, A. Molinaro, S.Y. Paratore, G. Ruggeri, “eDomus: User-Home Interactions through Facebook and Named Data Networking”, *IEEE SECON 2014*, Demo Session, Singapore.
- C15. M. Amadeo, C. Campolo, A. Iera, A. Molinaro, “Named Data Networking for IoT: An Architectural Perspective”, *EuCNC 2014*, Bologna, Italy.
- C16. R. Petrolo, T. Delot, N. Mitton, A. Molinaro, C. Campolo, “O-SPIN: an opportunistic routing protocol for Folk-enabled Information System in Least Developed Countries”, *13th International Conference on Ad-Hoc Networks and Wireless, AdHocNow 2014*, June 2014, Benidorm, Spain.
- C17. M. Amadeo, A. Molinaro, C. Campolo, M. Sifalakis, C. Tschudin, “Transport Layer Design for Named Data Wireless Networking”, *IEEE Name Oriented Mobility (NOM) Workshop, co-located with INFOCOM 2014*, April 2014, Toronto, Canada.
- C18. M. Amadeo, C. Campolo, A. Molinaro, N. Mitton, “Named Data Networking: a Natural Design for Data Collection in Wireless Sensor Networks”, *Wireless Days 2013*, November 2013, Valencia, Spain.
- C19. A. Autolitano, C. Campolo, A. Molinaro, R.M. Scopigno, A. Vesco, “An Insight into Decentralized Congestion Control Techniques for VANETs from ETSI TS 102 687 V1.1.1”, *Wireless Days 2013*, November 2013, Valencia, Spain.
- C20. J.P. Meiiers, M. Amadeo, C. Campolo, A. Molinaro, S.Y. Paratore, G. Ruggeri, M.J. Booyesen, A Two-Tier Content-Centric Architecture for Wireless Sensor Networks" IEEE ICNP 2013 poster session, October 2013, Gottingen, Germany.
- C21. C. Campolo, A. Molinaro, “Improving Multi-Channel Operations in VANETs by Leveraging Stopped Vehicles”, in IEEE PIMRC 2013, London, UK.
- C22. M. Amadeo, C. Campolo, A. Molinaro, “Design and Analysis of a Transport-Level Solution for Content-Centric VANETs,” IEEE ICC Workshop on Emerging Vehicular Networks: V2V/V2I and Railroad Communications, June 2013, Budapest, Hungary.
- C23. O. Briante, C. Campolo, A. Iera, A. Molinaro, S.Y. Paratore, G. Ruggeri, M. Booyesen, “ItsPhone: An Integrated Platform for Participatory ITS Data Collection and Opportunistic Transfer,” IEEE INFOCOM 2013, Demo session, Turin, Italy, April 2013.
- C24. C. Campolo, A. Iera, A. Molinaro, S.Y. Paratore, G. Ruggeri, “SMaRTCaR: an Integrated Smartphone-based platform to Support Traffic Management Applications”, in VTM Workshop, co-located with Wireless Days 2012, Dublin, Ireland, 20 Novembre 2012.
- C25. M. Amadeo, C. Campolo, A. Molinaro, “Content-Centric Vehicular Networking: an Evaluation Study”, in NoF 2012, Tunisia, 21 November 2012.
- C26. C. Campolo, A. Molinaro, “Design Challenges and Solutions for Multi-Channel Communications in Vehicular Ad Hoc Networks”, in AdHocNets 2012, Paris, 16-17 October 2012 (**invited paper**).
- C27. H.A. Cozzetti, C. Campolo, R. Scopigno, A. Molinaro, “Urban VANETs and Hidden Terminals: Evaluation through a Realistic Urban Grid Propagation Model”, in IEEE Conference on Vehicular Electronics and Safety, ICVES 2012, Istanbul, Turkey, 24-27 July.
- C28. M. Amadeo, C. Campolo, A. Molinaro, “Content-Centric Networking: is that a solution for Upcoming Vehicular Networks?”, in ACM VANET, The Ninth ACM International Workshop on Vehicular Inter-NETworking, Systems, and Applications, Low Wood Bay, Lake District, UK, 25 June 2012.
- C29. C. Campolo, H. A. Cozzetti, A. Molinaro, R. Scopigno, “Overhauling ns-2 PHY/MAC Simulations for IEEE 802.11p/WAVE Vehicular Networks”, in Intelligent Vehicular Networking: V2V/V2I Communications and Applications workshop, IEEE International Conference on Communications (ICC) 2012, Ottawa, Canada, 10-15 June 2012.
- C30. C. Campolo, A. Molinaro, “DREAM: IEEE 802.11p/WAVE Extended Access Mode in Drive-Thru Vehicular Scenarios”, in IEEE International Conference on Communications (ICC) 2012, Ottawa, Canada, 10-15 June 2012.
- C31. C. Campolo, A. Molinaro, A. Vinel, “Understanding the Performance of Short-Lived Control Broadcast Packets in IEEE 802.11p/WAVE Vehicular Networks”, in IEEE Vehicular Networking Conference (VNC) 2011, Amsterdam, The Netherlands, 14-16 November 2011.
- C32. C. Campolo, Y. Koucheryavy, A. Molinaro, A. Vinel, “Characterizing Broadcast Packet Losses in IEEE 802.11p/WAVE Vehicular Networks”, in IEEE Int. Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC) Toronto, Canada, 11-14 September 2011.

- C33. C. Campolo, H.A. Cozzetti, A. Molinaro, R. Scopigno, "Roadside and Moving WAVE Providers: Effectiveness and Potential of Hybrid Solutions in Urban Scenarios," in International Conference on Intelligent Transport Systems Telecommunications (ITST) 2011, St. Petersburg, Russia, 23-25 August 2011 (**best paper award**).
- C34. C. Campolo, H.A. Cozzetti, A. Molinaro, R. Scopigno, "Impact of Urban Radio Obstructions on the Effectiveness of Moving WAVE Providers" in International Wireless Communications and Mobile Computing Conference (IWCMC) 2011, Istanbul, Turkey, 5-8 July 2011.
- C35. C. Campolo, A. Molinaro, "Improving V2R Connectivity to Provide ITS Applications in IEEE 802.11p/WAVE VANETs" in 19th International Conference on Telecommunications (ICT) 2011, Ayia Napa, Cyprus, 8-11 May 2011.
- C36. C. Campolo, A. Molinaro, "On Vehicle-to-Roadside Communications in 802.11p/WAVE VANETs", in IEEE Wireless Communications and Networking Conference (WCNC) 2011, Cancun, Mexico, 28-31 March 2011.
- C37. C. Campolo, A. Molinaro, "Vehicle-to-Roadside Multihop Data Delivery in 802.11p/WAVE Vehicular Ad Hoc Networks", in IEEE GLOBECOM 2010, Miami, Florida, 6-10 December 2010.
- C38. C. Campolo, Y. Koucheryavy, A. Molinaro, A. Vinel, "On the Performance of Beaconing in 802.11p/WAVE Vehicular Ad Hoc Networks", in International Conference on Intelligent Transport Systems Telecommunications (ITST) 2010, Kyoto, Japan, 9-11 November 2010.
- C39. C. Campolo, A. Molinaro, "Data Rate Selection in WBSS-Based IEEE 802.11p/WAVE Vehicular Ad Hoc Networks", in Nets4Cars, workshop in IEEE/IET International Symposium on Communication Systems, Networks and Digital Signal Processing (CSNDSP) 2010, 21-23 July, Newcastle, UK.
- C40. C. Campolo, A. Cortese, A. Molinaro, "Cooperative Service Channel Reservation to Improve Performances of IEEE 802.11p/WAVE Networks", in IEEE Vehicular Networking Conference (VNC) 2009, Tokyo, Japan, 28-30 October 2009.
- C41. C. Campolo, A. Cortese, A. Molinaro, "CRaSCH: A Cooperative Scheme for Service Channel Reservation in 802.11p/WAVE Vehicular Ad Hoc Networks", Nets4Cars workshop in ICUMT (International Congress on Ultra Modern Telecommunications and Control Systems) 2009, St. Petersburg, Russia, 13-14 October 2009 (**best paper award**).
- C42. M. Amadeo, C. Campolo, A. Molinaro, G. Ruggeri, "A WAVE-compliant MAC protocol for vehicle-to-infrastructure Non-Safety Applications", in IEEE Vehi-Mobi 2009, workshop in IEEE International Conference on Communications (ICC) 2009, Dresden, Germany, 14-18 June 2009.
- C43. C. Campolo, S. Tarapiah, C. Casetti, C.-F. Chiasserini, "Performance of Network Coding for Ad Hoc Networks in Realistic Simulation Scenarios," in 16th International Conference on Telecommunications (ICT), Marrakech, Morocco, 25-27 May 2009.
- C44. C. Campolo, C. Casetti, C.F. Chiasserini, A. Molinaro, "An 802.11-based MAC Protocol For Reliable Multicast In Multihop Networks", in IEEE Vehicular Technology Conference, VTC2009-spring, Barcelona, Spain, 26-29 April 2009.
- C45. C. Campolo, A. Iera, L. Militano, A. Molinaro, "Dynamic Bargaining of Content Shares In Wireless Cooperative Systems", in IEEE Int. Symposium on Personal, Indoor And Mobile Radio Communications (PIMRC), Cannes, France, 15-18 September 2008.
- C46. A. Iera, A. Molinaro, C. Campolo, M. Amadeo, "An Access Network Selection Algorithm Dynamically Adapted To User Needs And Preferences", in IEEE Int. Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Helsinki, Finland, 11-14 September 2006.

Book Chapters

- B1. C. Campolo, H.A. Cozzetti, A. Molinaro, R. Scopigno, "PHY/MAC layer design in Vehicular Ad Hoc Networks: challenges, standard approaches, and alternative solutions", in "Wireless Technologies in Vehicular Ad Hoc Networks: Present and Future Challenges", Editor: R. Aquino Santos, A.E. Block, V. Rangel Licea, IGI GLOBAL, 2012.
- B2. A.M. Vegni, C. Campolo, A. Molinaro, T.D.C. Little, "Modeling of Intermittent Connectivity in Opportunistic Networks: the case of Vehicular Ad hoc NETWORKS", in "Routing in Opportunistic Networks", Editor: I. Woungang, S.K. Dhurandher, A. Anpalagan, T. Vasilakos, Springer-Verlag.

- B3. C. Campolo, A. Molinaro, R. Scopigno, S. Ozturk, J. Mistic, and V. B. Mistic, “The MAC Layer of VANETs”, Chapter 4 in “*Vehicular Ad Hoc Networks: Standard, Solutions, and Research*”, Springer-Verlag, June 2015.
- B4. C. Lottermann, M. Botsov, P. Fertl, R. Mullner, G. Araniti, C. Campolo, M. Condoluci, A. Iera, A. Molinaro, “LTE for Vehicular Communications”, Chapter 16 in “*Vehicular Ad Hoc Networks: Standard, Solutions, and Research*”, Springer-Verlag, June 2015.
- B5. P. TalebiFard, V. C.M. Leung, M. Amadeo, C. Campolo, A. Molinaro, “Information-Centric Networking for VANETs”, Chapter 17 in “*Vehicular Ad Hoc Networks: Standard, Solutions, and Research*”, Springer-Verlag, June 2015.

Other Publications and Contributions

- Contribution to RFC (Request for Comment) 7476, “Information-centric Networking: Baseline Scenarios”, ICNRG, March 2015, Available at <https://tools.ietf.org/html/rfc7476>.
- M. Amadeo, C. Campolo, A. Molinaro, “Content Centric Networking: a Natural Design for Data Collection in Wireless Sensor Networks”, CCNxCon 2013, CCNx Meeting, Palo Alto, CA, September 2013.
- M. Amadeo, C. Campolo, A. Molinaro, “Content-centric VANETs: routing and transport issues”, CCNxCon 2012, CCNx Meeting, Paris, 12-13 Sept. 2012.
- M. Amadeo, C. Campolo, A. Molinaro, “CCVN: A Paradigm Shift Towards Content-Centric Networking in VANETs”, GTTI Meeting, Gruppo Nazionale Telecomunicazioni e Teoria dell’Informazione, Cagliari, Italy, June 2012.
- “ItsPhone: An Integrated Platform for Participatory ITS Data Collection and Opportunistic Transfer” GTTI Meeting, Gruppo Nazionale Telecomunicazioni e Teoria dell’Informazione, Special Session on Smart Cities, Ancona, Italy, June 2013.
- M. Amadeo, C. Campolo, A. Molinaro, “Content-Centric Vehicular Networks: A Transport Analysis”, in NOMEN (International Workshop on Emerging Design Choices in Name-Oriented Networking), Poster session, co-located with IEEE INFOCOM, Turin, Italy, April 2013.
- PhD Thesis: “Vehicular Communications: Challenges and Solutions for the Upcoming IEEE 802.11p/WAVE Standards”, 2011.