

CURRICULUM VITAE COSIMO PALAZZO

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ScopusID

24479068900

EDUCATION

PhD

- Date (from – to)
- Name of educational organization
- Main subjects / occupational skills covered
- Title of the thesis
 - Advisor
 - Topics
- Title of qualification awarded

01/07/2004 – 29/09/2007

University of Salento, via Monteroni, 73100 Lecce, Italy

Information Engineering – Computer Science – Computer Networks

An algorithm for improving TCP performance in Wireless MAN IEEE 802.16e

Prof. Mario De Blasi

The object was the ARQ protocol defined in IEEE 802.16e. In this context, the main research activity was the optimization of packet size depending on the mobility scenario (rural or urban). The defined scheme is based on an analytical model of the efficiency of an IEEE 802.16e wireless network; the efficiency is evaluated by assuming that channel is affected by Rayleigh fading. The performance of the scheme was evaluated by simulation, using NS2 (<http://www.isi.edu/nsnam/ns/>) and Matlab.

Other research activities dealt with: dynamic bandwidth management in satellite networks; improving TCP performance in satellite networks adopting data encryption based on IPSec; resource network management and power saving in IEEE 802.11e wireless networks.

For some of these activities, Cosimo Palazzo collaborated with Alenia Spazio (Rome, Italy) and ST Microelectronics (Lecce, Italy).

PhD level in Information Engineering

MASTER'S DEGREE

- Date (from – to)
- Name of educational organization
- Main subjects / occupational skills covered
- Title of the thesis
 - Advisor
 - Topics
- Title of qualification awarded

01/09/1998 – 18/12/2003

University of Salento, via Monteroni, 73100 Lecce, Italy

Computer Science – Computer Networks – Telecommunications – Data Processing Systems – Control Systems – Information Systems – Database – Electronics – Numerical Computing

Wireless MAN IEEE802.16E: definition of a model for the channel

Prof. Mario De Blasi

The object was the modeling of the communication channel of an IEEE 802.16e wireless network. The modulation and the coding schemes specified by the standard were analyzed by simulation, using Matlab.

Master's degree in Computer Engineering cum laude

AWARD

- Date
- Name of educational organization
- Title

16/02/2004

University of Salento, via Monteroni, 73100 Lecce, Italy

Best graduate of the year 2003 for the Faculty of Engineering

RESEARCH ACTIVITIES

- Date (from – to)

16/07/2012 – 31/08/2013 as Post Doc for the TESSA project

07/10/2012 – 31/12/2013 as Junior Scientist for the TESSA project

10/04/2014 – 31/08/2014 as Post Doc for the OFIDIA project

16/12/2014 – 30/04/2015 as Post Doc for the OFIDIA project

03/08/2015 – 31/10/2015 as Junior Scientist for the OFIDIA project

03/11/2015 – 31/12/2015 as Junior Scientist for the EUBrazilCC project

07/03/2016 – 31/05/2016 as Junior Scientist

	15/06/2016 – 31/08/2016 as Junior Scientist
	05/10/2016 – 31/12/2016 as Junior Scientist
	07/02/2017 – 30/04/2017 as Junior Scientist
	10/05/2017 – 31/08/2017 as Junior Scientist for the EUBra-BIGSEA project
	02/10/2017 – 30/11/2017 as Junior Scientist
	15/02/2018 – 30/04/2018 as Junior Scientist for the ESiWACE project
	01/06/2018 – 31/08/2018 as Junior Scientist for the ESiWACE project
	19/10/2018 – 31/12/2018 as Junior Scientist for the NEXTDATA project
• Place	Euro-Mediterranean Centre on Climate Change (CMCC) Vat and Tax code no. 03873750750, via Augusto Imperatore 16, 73100 Lecce, Italy
• Position	Post Doc and Junior Scientist
• Main activities and responsibilities	Design and development of software solutions for scientific data analysis in the context of climate change, with particular emphasis on NetCDF data files.
• Projects	TESSA – Development of technologies for the "Situational Sea Awareness" (http://www.cmcc.it/research/research-projects/tessa-sviluppo-di-tecnologie-per-la-situational-sea-awareness) powered by PON "Ricerca e Competitività" 2007-2013. OFIDIA – Operational Fire Danger prevention platform (http://www.ofidia.eu/) powered by European Territorial Cooperation Programme Greece-Italy. EUBrazilCC – Europe - Brazil Cloud Connect (http://www.eubrazilcloudconnect.eu/) powered by European Commission - FP7. EUBra-BIGSEA – Europe - Brazil collaboration of BIG data Scientific Research through cloud-centric Applications (http://www.eubra-bigsea.eu/) powered by the European Commission. ESiWACE – Centre of Excellence in Simulation of Weather And Climate in Europe (https://www.esiwace.eu/) powered by European Commission - Horizon 2020. NEXTDATA – Sistema nazionale per la raccolta, conservazione, accessibilità e diffusione dei dati ambientali e climatici in aree montane e marine (http://www.nextdataproject.it/) powered by PNR 2011-2013.
• Research papers	S. Fiore, A. D'Anca, D. Elia, A. Mariello, C. Palazzo, L. Conte, G. Aloisio, "Array-based primitives in Ophidia v2.0", CMCC Research Paper No. 237, December 2014. S. Fiore, A. D'Anca, D. Elia, A. Mariello, C. Palazzo, L. Conte, G. Aloisio, "Data and Metadata Operators in Ophidia v2.0", CMCC Research Paper No. 236, December 2014. S. Fiore, A. D'Anca, D. Elia, A. Mariello, C. Palazzo, P. Nassisi, G. Aloisio, "Oph-Terminal: a client interface to the Ophidia parallel data analysis service", CMCC Research Paper No. 235, December 2014. S. Fiore, A. D'Anca, D. Elia, A. Mariello, C. Palazzo, P. Nassisi, G. Aloisio, "Ophidia v2.0 installation and configuration manual", CMCC Research Paper No. 234, December 2014. S. Fiore, C. Palazzo, A. D'Anca, G. Aloisio, "Support for 'bit' data type in the Ophidia framework", CMCC Research Paper No. 193, December 2013. S. Fiore, A. D'Anca, C. Palazzo, G. Aloisio, "Data flow in the Ophidia system", CMCC Research Paper No. 149, December 2012. S. Fiore, A. D'Anca, C. Palazzo, G. Aloisio, "MySQL extensions for Scientific Data Management", CMCC Research Paper No. 148, December 2012.
• Date (from – to)	01/02/2008 – 31/03/2012
• Place	Computer Network Laboratory at the Department of Innovation Engineering of the University of Salento, via Monteroni, 73100 Lecce, Italy
• Position	Research assistant
• Main activities and responsibilities	The research topic was the "Study of the problem of wide-band communications in high dynamic environments like highways and urban scenarios". The main research activities concerned the definition and performance evaluation of: <ul style="list-style-type: none"> • schemes for smart broadcasting of safety messages in vehicular networks; • routing protocols for vehicular networks; • schemes that exploit vehicular communications in order to optimize energy management in hybrid vehicles. In the context of broadcasting, he collaborated with ST Microelectronics (Lecce, Italy). Another activity was the design, development and testing of safety applications based on vehicular communications: Intersection Collision Warning, Traffic Signal Violation Warning, Overtaking Assistance, Approaching Emerging Vehicle Warning, etc. He participated in the project entitled "Integrated Road Safety based on the Co-operation

Vehicle- Infrastructure”, partners Nardò Technical Center (Nardò, Lecce, Italy), Centro Ricerche FIAT (Torino, Italy) and the University of Salento (Lecce, Italy). The objectives of the project were the design, development and setup of a track for testing ICT solutions enabling road safety.

In this period, he was also co-advisor and tutor of several dissertations for MS and BS degrees in Computer Engineering in the context of computer networks.

- Date (from – to) 02/04/2007 – 30/09/2007
- Place NATO Consultation, Command and Control Agency (NC3A), Oude Waalsdorperweg 61, 2597AK Den Haag, The Netherlands.
- Position
- Main activities and responsibilities **Internship**
The topic was the design and setup of an ad hoc wireless network based on IEEE 802.11g to be adopted as testbed for experimental measurements of TCP performance and for stability analysis of some routing protocol having security support (secure routing). The network was employed at Combined Endeavor 2007 (Baumholder, Germany).
- Technical reports M. Winkler, M. Bartolozzi, A. van der Zanden, C. Palazzo, “Infrastructure-free Information Exchange at Combined Endeavor 2007”, TN-1297 of NC3A, Settembre 2007, Den Haag, The Netherlands.
M. Winkler, P. Copeland, D. Stamatelos, M. Bartolozzi, A. van der Zanden, K.-D. Tuchs, C. Palazzo, “Ad-Hoc Networking for NATO – Operational Benefits”, TN-1331 of NC3A, December 2007, Den Haag, The Netherlands.

TEACHING

- Date (from – to) 01/09/2016 – now
- Place Istituto Comprensivo of Porto Cesareo, via Piccinni, 73010 Porto Cesareo (LE), Italy
- Name of the module “**Tecnologia**”, within the national plan for middle school education
- Date (from – to) 01/09/2013 – 31/08/2016
- Place Istituto Comprensivo “Aldo Moro”, via Alfieri 14, 74021 Carosino (TA), Italy
- Name of the module “**Tecnologia**”, within the national plan for middle school education
- Date (from – to) 28/03/2011 – 30/04/2013
- Place University del Salento, via Monteroni, 73100 Lecce, Italy
- Name of the module “**Fundamentals for the analysis and design of computer networks**”, within the BS degree course in Information Engineering (27 hours)
- Topics Stochastic processes, Markov chains, queuing systems
- Date (from – to) 01/01/2006 – 02/07/2011
- Place University del Salento, via Monteroni, 73100 Lecce, Italy
- Position Teaching assistant as “Expert on the subject of Computer Networks” within the scope of specific BS degree courses in Information Engineering and MS degree courses in Computer Engineering

PUBLICATIONS

- 1 G. Ciccicarese, M. De Blasi, S. Elia, C. Palazzo, L. Patrono – “TCP Performance over Wireless MAN IEEE 802.16e” – in Proceedings of the International Conference on Software Telecommunications and Computer Networks (SoftCOM 2005) – 15-17 September 2005, Split, Croatia.
- 2* G. Ciccicarese, M. De Blasi, C. Palazzo, L. Patrono, G. Tomasicchio – “A MAC Scheduling Mechanism in SkyplexNet Satellite Networks” - in Proceedings of the 23rd AIAA International Communications Satellite Systems Conference (ICSS 2005) – 25-28 September 2005, Rome.
- 3 G. Ciccicarese, G. Convertino, M. De Blasi, S. Elia, C. Palazzo, L. Patrono – “A Novel APSD Scheduler for WLAN IEEE 802.11e” – in Proceedings of the 5th International Symposium, Communication Systems, Networks and Digital Signal Processing (CSNDSP 2006) – pp. 144-148, 19-21 July 2006, Patras, Greece, ISBN 960-89282-0-6, [online](#).
- 4 G. Ciccicarese, M. De Blasi, S. Elia, C. Palazzo, L. Patrono – “LIFT: a Local IPSec-aware Freezing Protocol to improve TCP Performance in Satellite Networks” – Journal of Communication Software and Systems (JCOMSS), vol. 2, n. 4, pp. 347-355, December 2006, ISSN 1845-6421.

- 5 G. Ciccarese, M. De Blasi, P. Marra, C. Palazzo, L. Patrono – “An Adaptive ARQ Protocol for IEEE 802.16e” – in Proceedings of IEEE Symposium on Computers and Communications (ISCC 2007) – pp. 1043-1050, 1-4 July 2007, Aveiro, Portugal, DOI [10.1109/ISCC.2007.4381569](https://doi.org/10.1109/ISCC.2007.4381569), ISSN 1530-1346, ISBN 978-1-4244-1520-5.
- 6* M. Winkler, C. Palazzo, M. Bartolozzi – “TCP Throughput Measurements and Analysis in Wireless Multi-hop Networks” – in Proceedings of IEEE Symposium Communications and Vehicular Technology (SCVT 2007) – 15 November 2007, Delft, The Netherlands, DOI [10.1109/SCVT.2007.4436260](https://doi.org/10.1109/SCVT.2007.4436260), ISBN 978-1-4244-1369-0.
- 7 G. Ciccarese, M. De Blasi, P. Marra, C. Palazzo, L. Patrono – “A packet size control algorithm for IEEE 802.16e” – in Proceedings of IEEE Wireless Communications & Networking Conference (WCNC 2008) – pp. 1420-1425, 31 March 2008, Las Vegas, USA, DOI [10.1109/WCNC.2008.255](https://doi.org/10.1109/WCNC.2008.255), ISSN 1525-3511, ISBN 978-1-4244-1997-5.
- 8* G. Ciccarese, M. De Blasi, P. Marra, C. Palazzo, L. Patrono – “On the use of control packets for intelligent flooding in VANETs” – in Proceedings of IEEE Wireless Communications & Networking Conference (WCNC 2009) – 5-8 April 2009, Budapest, Hungary, DOI [10.1109/WCNC.2009.4917863](https://doi.org/10.1109/WCNC.2009.4917863), ISSN 1525-3511, ISBN 978-1-4244-2947-9.
- 9 G. Ciccarese, M. De Blasi, P. Marra, V. Mighali, C. Palazzo, L. Patrono, M. Stefanizzi – “Vertical Handover Algorithm for Heterogeneous Wireless Networks” – in Proceedings of the 5th International Joint Conference on INC, IMS and IDC (NCM 2009) – pp.1948-1954, 25-27 August 2009, Seoul, Korea, DOI [10.1109/NCM.2009.173](https://doi.org/10.1109/NCM.2009.173), ISBN 978-1-4244-5209-5.
- 10 L. Anchorà, L. Casone, G. Ciccarese, M. De Blasi, P. Marra, C. Palazzo – “An optimal setting for the parameters of an intelligent flooding scheme in VANETs” – in Proceedings of European Wireless (EW 2010) – pp. 332-338, 12-15 April 2010, Lucca, Italy, DOI [10.1109/EW.2010.5483439](https://doi.org/10.1109/EW.2010.5483439), ISBN 978-1-4244-5999-5.
- 11* G. Ciccarese, T. Donato, P. Marra, D. Pacella, C. Palazzo – “On the use of Vehicular Communications for Efficient Energy Management of Hybrid Electric Vehicles” – in Proceedings of FISITA 2010 – F2010E047, 30 May-4 June 2010, Budapest, Hungary, ISBN 978-963-9058-28-6 ([online](#)).
- 12 G. Ciccarese, T. Donato, P. Marra, D. Pacella, C. Palazzo – “On-Board Simulation of the Traffic Scenario for the Sustainable Mobility” – in Proceedings of the 4th International Conference on Sustainable Energy & Environmental Protection (SEEP 2010) – vol. 2, pp. 286-292, 29 June-2 July 2010, Bari, Italy, ISBN 978-88-905185-4-6.
- 13* G. Ciccarese, M. De Blasi, P. Marra, C. Palazzo – “A timer-based intelligent flooding scheme for VANETs” – in Proceedings of the 2nd International Workshop on Communication Technologies for Vehicles (Nets4Cars) within the International Symposium, Communication Systems, Networks and Digital Signal Processing (CSNDSP 2010) – pp. 425-429, 21-23 July 2010, Newcastle, Great Britain, ISBN 978-1-4244-8858-2.
- 14 G. Ciccarese, M. De Blasi, P. Marra, C. Palazzo, L. Patrono – “An Algorithm for Controlling Packet Size in IEEE 802.16e Networks” – Computer Networks, vol. 55, n. 13, pp. 2873-2885, September 2011, DOI [10.1016/j.comnet.2011.06.010](https://doi.org/10.1016/j.comnet.2011.06.010), ISSN 1389-1286.
- 15 G. Ciccarese, M. De Blasi, P. Marra, C. Palazzo – “A timer-based intelligent flooding scheme for VANETs” – International Journal of Vehicle Information and Communication Systems (IJVICS), vol. 2, n. 3/4, pp. 177-192, 2011, DOI [10.1504/IJVICS.2011.044261](https://doi.org/10.1504/IJVICS.2011.044261), ISSN 1471-0242.
- 16 G. Ciccarese, T. Donato, C. Palazzo – “On-Board Prediction of Future Speed Profile for Energy Management of Hybrid Electric Vehicles” – International Journal of Automotive Technology and Management (IJATM), vol. 12, n. 3, pp. 232-251, 2012, DOI [10.1504/IJATM.2012.050357](https://doi.org/10.1504/IJATM.2012.050357), ISSN 1470-9511.
- 17 S. Fiore, A. D’Anca, C. Palazzo, I. Foster, D. N. Williams, G. Aloisio – “Ophidia: toward big data analytics for eScience” – Procedia Computer Science, vol. 18, pp. 2376-2385, DOI [10.1016/j.procs.2013.05.409](https://doi.org/10.1016/j.procs.2013.05.409), ISSN 1877-0509.
- 18 S. Fiore, A. C. Palazzo, A. D’Anca, I. Foster, D. N. Williams, G. Aloisio – “A big data analytics framework for scientific data management” – in Proceedings of IEEE BigData 2013, 6-9 October 2013, Santa Clara, CA, USA, DOI [10.1109/BigData.2013.6691720](https://doi.org/10.1109/BigData.2013.6691720).
- 19 S. Fiore, A. D’Anca, D. Elia, C. Palazzo, I. Foster, D. N. Williams, G. Aloisio – “Ophidia: a full software stack for scientific data analytics” – in Proceedings of the 2014 International Conference on High Performance Computing & Simulation (HPCS 2014), pp. 1-8, 21-25 July 2014, Bologna, Italy.
- 20 S. Fiore, A. D’Anca, D. Elia, C. Palazzo, A. Mariello, P. Nassisi, G. Aloisio – “The Ophidia framework: toward big data analytics for climate change” – in Proceedings of the 2nd Annual Conference SISC, 29-30 September 2014, Venice, Italy.

- 21 S. Fiore, A. D'Anca, C. Palazzo, D. Elia, A. Mariello, P. Nassisi, G. Aloisio – “Big data analytics workflow management for eScience” – in Proceedings of European Geosciences Union General Assembly 2015, April 12-17, 2015, Wien, Austria ([online](#)).
- 22 S. Fiore, A. D'Anca, D. Elia, M. Mancini, A. Mariello, M. Mirto, C. Palazzo, G. Aloisio – “The Ophidia framework: toward cloud-based data analytics for climate change” – poster shown in European Geosciences Union General Assembly 2015, April 12-17, 2015, Wien, Austria ([online](#)).
- 23 R. Lecci, G. Coppini, S. Creti, G. Turrisi, A. D'Anca, C. Palazzo, G. Aloisio, S. Fiore, A. Bonaduce, G. Mannarini, Y. Kumkar, S. Angela Ciliberti, I. Federico, P. Agostini, R. Bonarelli, S. Martinelli, P. Marra, M. Scalas, L. Tedesco, D. Rollo, A. Cavallo, A. Tumolo, T. Monacizzo, M. Spagnulo, N. Pinardi, L. Fazioli, A. Olita, A. Cucco, R. Sorgente, M. Tonani, M. Drudi – “SeaConditions: present and future sea conditions for safer navigation” – in Proceeding of the MTS/IEEE Oceans 15, May 18-21, 2015, Genoa, Italy, DOI [10.1109/OCEANS-Genova.2015.7271764](#).
- 24 S. Fiore, M. Mancini, D. Elia, P. Nassisi, F. V. Brasileiro, I. Blanquer, I. A. A. Rufino, A. C. Seijmonsbergen, C. de Oliveira Galvao, V. Perez Canhos, A. Mariello, C. Palazzo, A. Nuzzo, A. D'Anca, G. Aloisio – “Big data analytics for climate change and biodiversity in the EUBrazilCC federated cloud infrastructure” – in Proceedings of the 12th ACM International Conference on Computing Frontiers, May 18-21, 2015, Ischia, Italy, DOI [10.1145/2742854.2747282](#).
- 25 C. Palazzo, A. Mariello, S. Fiore, A. D'Anca, D. Elia, D. N. Williams, G. Aloisio – “A Workflow-Enabled Big Data Analytics Software Stack for eScience” – in Proceedings of the 2nd International Symposium on Big Data Principles, Architectures & Applications (BDAA 2015) within the International Conference on High Performance Computing & Simulation (HPCS 2015), pp. 545-552, July 20-24, 2015, Amsterdam, The Netherlands, DOI [10.1109/HPCSim.2015.7237088](#).
- 26 A. D'Anca, L. Conte, C. Palazzo, S. Fiore, G. Aloisio – “A big data approach for climate change indicators processing in the CLIP-C project” – poster shown in European Geosciences Union General Assembly 2016, April 17-22, 2016, Wien, Austria ([online](#)).
- 27 D. Elia, S. Fiore, A. D'Anca, C. Palazzo, I. Foster, D.N. Williams, G. Aloisio – “An In-Memory based Framework for Scientific Data Analytics” – in Proceedings of the 13th ACM International Conference on Computing Frontiers 2016 pp. 424-429, May 16-19, 2016, Como, Italy, DOI [10.1145/2903150.2911719](#).
- 28 S. Fiore, M. Plóciennik, C. Doutriaux, C. Palazzo, J. Boutte, T. Žok, D. Elia, M. Owsiak, A. D'Anca, Z. Shaheen, R. Bruno, M Fargetta, M. Caballer, G. Moltó, I. Blanquer, R. Barbera, M. David, G. Donvito, D. N. Williams, V. Anantharaj, D. Salomoni, G. Aloisio – “Distributed and cloud-based multi-model analytics experiments on large volumes of climate change data in the Earth System Grid Federation eco-system” – in Proceedings of Workshop “Big Data Challenges, Research, and Technologies in the Earth and Planetary Sciences” within the 2016 IEEE International Big Data Conference, pp. 2911-2918, December 5-8, 2016, Washington D.C., USA ([online](#)).
- 29 A. D'Anca, L. Conte, P. Nassisi, C. Palazzo, R. Lecci, S. Creti, M. Mancini, A. Nuzzo, M. Mirto, G. Mannarini, G. Coppini, S. Fiore, G. Aloisio – “A multi-service data management platform for scientific oceanographic products” – Natural Hazards and Earth System Sciences, special issue “Situational sea awareness technologies for maritime safety and marine environment protection”, February 13, 2017, DOI [10.5194/nhess-2016-177](#).
- 30 G. Coppini, P. Marra, R. Lecci, N. Pinardi, S. Creti, M. Scalas, L. Tedesco, A. D'Anca, L. Fazioli, A. Olita, G. Turrisi, C. Palazzo, G. Aloisio, S. Fiore, A. Bonaduce, Y. Kumkar, S. A. Ciliberti, I. Federico, G. Mannarini, P. Agostini, R. Bonarelli, S. Martinelli, G. Verri, L. Lusito, D. Rollo, A. Cavallo, A. Tumolo, T. Monacizzo, M. Spagnulo, R. Sorgente, A. Cucco, G. Quattrocchi, M. Tonani, M. Drudi, L. Panzera, A. Navarra, G. Negro – “SeaConditions: a web and mobile service for safer professional and recreational activities in the Mediterranean Sea” – Natural Hazards and Earth System Sciences, special issue “Situational sea awareness technologies for maritime safety and marine environment protection”, pp. 1035-1043, April 13, 2017, DOI [10.5194/nhess-2016-176](#).
- 31 A. D'Anca, C. Palazzo, D. Elia, S. Fiore, I. Bistinas, K. Böttcher, V. Bennett, G. Aloisio, “On the Use of In-Memory Analytics Workflows to Compute eScience Indicators from Large Climate Datasets” – in Proceedings of 1st Workshop on the Integration of Extreme Scale Computing and Big Data Management and Analytics (EBDMA 2017) within the International IEEE/ACM Conference CCGrid 2017 Madrid, Spain, May 14-17, 2017, DOI [10.1109/CCGRID.2017.132](#).
- 32 S. Fiore, C. Palazzo, A. D'Anca, D. Elia, E. Londero, C. Knapic, S. Monna, N. M. Marcucci, F. Aguilar, M. Plóciennik, J. E. M. De Lucas, G. Aloisio – “Big Data Analytics on Large-Scale Scientific Datasets in the INDIGO-DataCloud Project” – in Proceedings of Workshop Big Data

Analytics (BigDAW 2017) within the 14th ACM International Conference on Computing Frontiers 2017 pp. 343-348, May 15-17, 2017, Siena, Italy, ISBN 978-1-4503-4487-6, DOI [10.1145/3075564.3078884](https://doi.org/10.1145/3075564.3078884).

- 33 S. Fiore, A. D'Anca, D. Elia, C. Palazzo, A. Nuzzo, T. Weigel, S. Bendoukha, G. Aloisio – “ECASLab: a user-friendly, integrated environment for scientific data analytics and visualization in the European Open Science Cloud landscape” – poster to be shown in European Geosciences Union General Assembly 2018, April 8-13, 2018, Wien, Austria ([online](#)).
- 34 D. Salomoni, I. Campos, L. Gaido, J. Marco de Lucas, P. Solagna, J. Gomes, L. Matyska, P. Fuhrman, M. Hardt, G. Donvito, L. Dutka, M. Plociennik, R. Barbera, I. Blanquer, A. Ceccanti, E. Cetinic, M. David, C. Duma, A. López-García, G. Moltó, P. Orviz, Z. Sustr, M. Viljoen, F. Aguilar, L. Alves, M. Antonacci, L. A. Antonelli, S. Bagnasco, A. M. J. J. Bonvin, R. Bruno, Y. Chen, A. Costa, D. Davidovic, B. Ertl, M. Fargetta, S. Fiore, S. Gallozzi, Z. Kurkcuoglu, L. Lloret, J. Martins, A. Nuzzo, P. Nassisi, C. Palazzo, J. Pina, E. Sciacca, D. Spiga, M. Tangaro, M. Urbaniak, S. Vallerio, B. Wegh, V. Zaccolo, F. Zambelli, T. Zok – “INDIGO-DataCloud: a Platform to Facilitate Seamless Access to E-Infrastructures” – Journal of Grid Computing 2018, Springer, print ISSN 1570-7873, online ISSN 1572-9184, DOI [10.1007/s10723-018-9453-3](https://doi.org/10.1007/s10723-018-9453-3).
- 35 S. Fiore, D. Elia, C. Palazzo, A. D'Anca, F. Antonio, G. Aloisio – Towards an Open (Data) Science Analytics-Hub for Reproducible multi-model Climate Analysis at Scale – in Proceedings of Workshop Open Science in Big Data (OSBD) within the 2018 IEEE International Big Data Conference, December 10-13, 2018, Seattle, WA, USA ([online](#)).
- 36 S. Fiore, D. Elia, A. D'Anca, C. Palazzo, F. Antonio, G. Aloisio – Towards the Convergence of Big Data and High Performance Computing for Extreme-Scale Scientific Data(Cube) Analysis – Future Generation Computer Systems (submitted).
- 37 D. Elia, S. Fiore, A D'Anca, C. Palazzo, G. Aloisio – “Enabling efficient data access patterns for High Performance Data Analytics scenarios through dynamic and flexible data layout and partitioning” – 45th International Conference on Very Large Data Bases, August 26-30, 2019 (submitted).

(* paper presented by Cosimo Palazzo at the related conference)

REVIEW

Cosimo Palazzo has been the reviewer of the research papers submitted to the following journals or international conferences (<http://www.reviewerpage.com/Cosimo-Palazzo>):
Conference – “Euro-Par 2013”, 26-30 August 2013, Aachen, Germany ([online](#)).
Journal – “Future Generation Computer Systems”, Elsevier, 2016, ISSN 0167-739X ([online](#)).

TECHNICAL SKILLS AND COMPETENCES

Cosimo Palazzo acquired experience in the following R&D activities.

The **research activities** include the definition and performance evaluation of communication protocols for wireless networks based on IEEE 802.11e/p, IEEE 802.16e and IEEE 1609 standards. Some activities concerned the study of efficient communication networks based on protocols, schemes and mechanisms which consider the strict requirements of security of the applications (e.g. for military purposes) or simply the employment of traditional security systems (based on SSL or IPsec). He also focused on architectures and protocols for wireless ad hoc networks to be adopted in vehicular and underwater scenarios.

The **development activities** include the design, implementation and testing of applications based on vehicular communications. He mainly considered road safety applications, but he also dealt with systems enabling mobile nodes to access Internet based on recent technologies such as Mobile IP, Fast Handover and Network Mobility (NEMO).

For these activities, Cosimo Palazzo has largely exploited simulation and emulation tools (NS2, NS3 and Matlab).

Recently, he has been dealing with tools for the management and publishing of scientific data regarding the observation, analysis and forecasting of environmental parameters.