

PERSONAL INFORMATION

Antonella Bogoni

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CURRENT POSITION

Associate Professor at Sant'Anna School of Advanced Studies (SSSA)- Institute of Communication Information and Perception Technologies (TECIP) in Pisa, Italy

QUALIFICATION

PhD degree from the Parma University in Information Technology

PROFESSIONAL EXPERIENCES

2020-current **Technical responsible of the Integrated Photonic Technologies Center-INPHOTEC**

Coordination at technical-strategic and administrative level of a photonic foundry for fabrication and packaging of photonic chips. Fabrication platform based on silicon photonics, glass on silicon and hybrid integration and a automatic packaging line. The foundry includes more than 10 employees.

2019-current **Director of the National Laboratory of Photonic Networks and Technologies (PNTLab)- Inter-University National Consortium for Telecommunications (CNIT) in Pisa-Italy**

Acquired capability, proven by objective elements, in coordinating a research laboratory with more than 40 employees at a financial, administrative and technical-strategic level.

Experimental activity in the field of photonic networks and technologies, design of integrated photonic components and photonics for microwaves and biophotonics

2015-current **Associate Professor at SSSA**

Proven ability to manage teaching activities, specific research projects at international level, proven ability to coordinate a team of researchers (>15), proven ability to achieve progress in the specific area of research.

Responsible of "digital & microwave photonics" area

2001-2015 **Responsible of "digital & microwave photonics" area" at PNTLab-CNIT**

- 2001 - 2006 as Researcher
- 2006 - 2011 as Head of research
- 2011 - 2015 as Head of research area

Research in the field of optical communications, photonics for microwaves and photonics for sensors. In particular, she developed the first photonics-based radar demonstrator

2015 **Visiting researcher at INATEL (National Institute of Communications of Brazil) - Brazil**

- Activity within the joint project "SWaP constrained photonic-assisted RF transceiver for aerospace, cognitive radio and remote sensing applications"

Research in microwave photonics field

- 2006-2011 **President and CEO of Photrix S.r.l.**
- Spin-off co-founder
 - Management and coordination of entrepreneurial activity
 - From 2007 to 2011 CEO of Photrix
- 2008-2010 **Design and production of optical instrumentation**
Visiting researcher at University of Southern California, Los Angeles, CA
In 2008, Fulbright advanced research scholarship winner
- Research in the field of optical communications. She developed the first all-optical regenerator prototype for 640Gb/s signals and optical logic gates for 640Gb/s signals
- 2000-2001 **Senior researcher of CNIT at the optical communications laboratory of the University of Parma.**
She collaborated in research activities that require suitable professional skills and specific expertise in techniques and analysis of procedures, in the supervision and control of research procedures. In particular, she had collaborative tasks in research and teaching programs, including the preparation of operational and/or organizational schemes.
Research in the optical communication field

- 1997-1999 **Marconi Communications grant on the topic: "WDM communication systems on optical fibre" at the Marconi Laboratory of Parma University.**
Industrial research

Research in the optical communication field

EDUCATION AND TRAINING

- 1997 Degree in Electronic Engineering (Telecommunications) from University of Parma with a thesis entitled:
"Measurement and compensation of the FM behaviour of DFB laser for coherent communication systems applications".
- 1998 Qualification for engineering profession
- 2004 She received the PhD degree from University of Parma in Information Technology, with the thesis: "Analysis, design and implementation of a 160 Gbit/s OTDM system"
- 2013 National qualification for Associate Professor position
- 2017 National qualification for Full Professor position

PERSONAL SKILLSI

Native language Italian

Other languages	LISTENING		SPEAKING		WRITING
	Listening	Reading	Interaction	Oral production	
English	C1	C1	C1	C1	C1
Sostituire con il nome del certificato di lingua acquisito. Inserire il livello, se conosciuto					

Other languages	LISTENING		SPEAKING		WRITING
	Listening	Reading	Interaction	Oral production	
French	C1	C1	C1	C1	C1
Sostituire con il nome del certificato di lingua acquisito. Inserire il livello, se conosciuto					

Communication skills Excellent communication skills acquired during the experience as speaker in national and

international conferences and educational activity

Organizational and management skills

Leadership. Coordination of research group of researchers (> 15), PhD students (> 20), and Master's degree thesis (> 30) tutoring. Directorate of the PNTLab of the CNIT, Coordination of the macro-area of Telecommunications of the TeCIP Institute of the Scuola Superiore Sant'Anna. Local organizer of the international conference "European Conference on Optical Communications" (ECOC) 2018, as a technical programme co-chair.

Driving license

B

Main Achievements

Since 2004 **Coordinator for CNIT-PNTLab and TECIP** of more than 20 International projects, 13 National projects and 6 industrial projects (Principal Investigator of the project in 20 of them)

Since 2004 She raised research **funds exceeding 10 M€**

She has been **co-author of 9 books and chapters, 54 international patents, 20 invited manuscripts published on international journals, 149 regular manuscripts published on international journals, 4 plenaries and 75 tutorials/invited talks at international conferences respectively, and 24 and 288 regular papers presented at national and international conferences respectively.**

Total H-index = 32 (from Google Scholar), 28 (from Scopus), 25 (from ISI-web of knowledge)

2014 **Publication on NATURE** "A fully photonics-based coherent radar system", Nature, Vol. 507, pp. 341–345, 20 March 2014.

Since 2010 Two **Best paper awards** and 5 **Best student paper awards at international conferences**

Since 2004 **Member of >5 editorial boards, >20 technical committees** of International Conferences, **> 10 Board of reviewers** of International Journals and Books, as Wiley Editor, Nature and Nature Photonics and **>10 project revision platforms** as H2020, Fare (Italia), ICREA (Spagna)

Since 2014 **Technical Co-Chair at ECOC** (European Conference on Optical Communication) 2018, Rome, Italy Spet 2018

Since 2014 **Topical Editor di Optics Letters, ISSN: 0146-9592, 2013, Impact Factor: 3.179**

2009-2010 **Fulbright advanced research scholarship** for the project "Design and implementation of a 640 Gb/s OTDM system" at University of Southern California, Los Angeles, CA, USA

Main Coordinated Projects

2020-2022 "SPACEBEAM: SPACE SAR system with reconfigurable integrated photonic BEAMforming" H2020 (3.003M€)

2019-2021 "PIOTS: Packaged integrated photonics-based RF/optical hybrid transceiver key-elements for sensing and communication" European Space Agency (1.197M€).

2015-2018 "ROAM: Revolutionising optical fibre transmission and networking using the Orbital Angular Momentum of light" H2020 (3.37M€)

2015-2016 European Research Council Proof of Concept Grant for the project "PETRA: Photonic Environment moniToring & Risk Assessment"(150k€)

2012 European Research Council Proof of Concept Grant for the project "PREPaRE: PRE-industrial Photonic-based Radar dEsign"(150k€)

2009-2013 European Research Council Starting Grant for the project: "PHODIR: PHOtonic-based

full Digital Radar" (1.6M€)

Awards and significant achievements	Year	Description
	2017	Best student paper award in International Conference on Radar Systems 2017 for "High Precision Displacement Measurements in presence of Multiple Scatterers using a Photonics-based Dual-band Radar"
	2017	IEEE Charles Kao Award for best optical communications & networking paper with the JOCN paper "Sliceable Transponder Architecture Including Multiwavelength Source"
	2016	Honorable Mention for the paper: S. Melo, S. Pinna, F. Laghezza, F. Scotti, I. F. da Costa, D. H. Spadoti, Arismar Cerqueira S. Jr. and A. Bogoni "Photonics-based dual-use Transceiver based on a single dual-band Antenna Array", XXXIV Simpósio Brasileiro De Telecomunicações, September, 2016.
	2016	National Grant for " PHOOD: Novel PHotonics-based RADAR/LIDAR cOmbined coherent sensor for aDvanced precision agriculture "
	2015-2017	Special visiting professor scholarship within the Brazilian programme: "PROGRAMA CIÊNCIA SEM FRONTEIRAS – BOLSAS NO PAÍS- MODALIDADE PESQUISADOR VISITANTE ESPECIAL – PVE-2014" , funded by CAPES, Brazil
	2015	Best paper award for the most significant advance in radar state of-the art at EuRAD 2015, Paris , for "Coherent Radar/Lidar Integrated Architecture"
	2015	European Research Council Proof of Concept Grant for the project " PETRA: Photonic Environment moniToring & Risk Assessment "
	2014	Publication on NATURE "A fully photonics-based coherent radar system"
	2014	Selection for paper review in "research news&views" session of NATURE for the paper "A fully photonics-based coherent radar system", by J.D. McKinney, US Naval Research Laboratory, USA
	2014	2014 Elettronica Prize , "Optical RF scanner"
	2009-2013	European Research Council Starting Grant for the project: " PHODIR: PHOTonic-based full Digital Radar "
	2009-2010	Fulbright advanced research scholarship for the project "Design and implementation of a 640 Gb/s OTDM system" at University Southern California, Los Angeles, CA, USA
	2013	"Isabella D'Este" Italian Award for Scientific Research , by Colline Moreniche Association Italy, September 2013.
	2014	Best student paper award in International Radar Symposium 2014 for "Field trial of the first Photonic-Based Radar for Maritime Border Security and Harbor Protection"
	2013	Best student paper award in IEEE Photonics in Switching 2013 Conference for "Laser Spectral-Purity Impact in Optical Processing of QPSK Signals in PPLN Waveguide"
	2012	Best paper award selection in International Conference on Radar System for

"Photonic generation of microwave phase coded radar signal"

- 2012 **Keynote speech selection** within **OPTRO 2012 – 5th International Symposium on Optronics in Defense and Security for “Flexible Photonic Generation of Low-Phase-Noise Phase-Coded Radar Pulses”**
- 2010 **Best paper award** in **IEEE ICC 2010 - Optical Networks and Systems Symposium** for “Optical Bistability in a Nonlinear Resonator With Saturable Losses and Intensity-Dependent Refractive Index”

**Research project and contracts
(coordination activities)**

- 2020-2022 Coordinator of the project "**SPACEBEAM: SPACE SAR system with reconfigurable integrated photonic BEAmforming**" funded by European Commission (H2020)
- 2019-2021 Scientific person in charge for CNIT of the project "**TeraSlice: Terahertz Analogue-to-Digital Conversion Using Soliton Frequency Combs and Massively Parallel Spectrally Sliced Detection**" funded by European Commission (H2020)
- 2019-2022 Scientific person in charge for CNIT of the project "**PICTURE : Photonic Integrated CircuiTs for mUltiband RF transceiver in arrayed systEms**" funded by European Defence Agency .
- 2019-2020 Coordinator of "**MULTIRADAR-PIC: Photonic-based multiband radar transceiver on chip**" funded by Italian Defence.
- 2019-2020 Coordinator of "**DISTURB: Development of a photonics-aSsisTed UltRa-wide Band (0.5-40GHz) RF jammer**" funded by Italian Defence.
- 2019-2021 Coordinator of "**PIOTS: Packaged integrated photonics-based RF/optical hybrid transceiver key-elements for sensing and communication**" funded by the European Space Agency
- 2018-2020 Scientific responsible in charge for "**The BeeTag: an IoT Backscattering and Battery-free Sensor for Precision Agriculture Applications**" funded by the Bank Fondation of Cassa di Risparmio di Pistoia e Pescia
- 2018-2020 Principal Investigator of "**Label-free PoC device based on 3D photonic Bottlemicroresonators for real-time high-Sensitive measurement of disease relevant biomolecules**" funded by Tuscany Region
- 2018-2020 Principal Investigator of "**SCORPIUS: Development on chip of a multifrequency optical oscillator for radars in space**" funded by the Italian Space Agency ASI
- 2018-2021 She is person in charge for Sant'Anna School of Advanced Studies of the project "**LIRAS: LiDar and RAdar in Space**" funded by Ministry of Education, Universities and Research
- 2017-2021 She is scientific person in charge for CNIT of the project "**EUIMWP European Network for High Performance Integrated Microwave Photonics**" funded by European COST Program.
- 2017 Coordinator of private contracts on "**PAI-PL Automatic protection systems for railway level crossing**" funded by the National railway society RFI
- 2017-2020 Principal Investigator of "**SOLE: multiStatic & multiband cOherent radar fLleet for border sECurity**", funded by NATO within the Science for Peace and Security Programme (SPS)
- 2017-2019 Principal Investigator of "**RODI: Rf/Optical combined coherent transceiver for Radar/Lidar and RF/optical communications in space**" funded by the Italian Space Agency ASI

- 2017-2019 Principal Investigator of "POINTING: Photonics-based frequency-agile RF transceiver with High Precision Optical Beamforming for satellite rad/com systems" funded by the Italian Space Agency ASI
- 2017-2020 Principal Investigator of "PREVENTION: Photonics-based advanced environment monitoring system for an enhanced pREVENTION of landslide and structural failure risks", within the India-Italy Significant Bilateral Projects, funded by Ministry of Foreign Affair.
- 2017-2020 Scientific person in charge for CNIT of the project "ROBORDER: autonomous swarm of heterogeneous Robots for BORDER surveillance" funded by European Commission (H2020)
- 2017-2020 Coordinator of the National project PRIN (Progetti di Ricerca di Interesse Nazionale) "PHOOD: Novel PHotonics-based RADAR/LIDAR cOmbined coherent sensor for aDvanced precision agriculture" funded by the Ministry of Education, Universities and Research
- 2016-2017 Scientific person in charge for CNIT of the project "FUTURE : Radio FreqUency phoTonic technologies for eUropean militaRy systEms" funded by European Defence Agency .
- 2015-2016 Coordinator of the project "Optical beamforming transceiver for 5G", funded by Ericsson.
- 2015-2017 Coordinator of the project "ROAM: Revolutionising optical fibre transmission and networking using the Orbital Angular Momentum of light" funded by European Commission (H2020)
- 2015-2018 Scientific person in charge for CNIT of the project "FIWIN5G: FIber-Wireless Integrated Networks for 5th Generation delivery" funded by European Commission (H2020).
- 2015-2017 Italian coordinator of the Brazil-Italy project "SWaP constrained photonic-assisted RF transceiver for aerospace, cognitive radio and remote sensing applications", funded by the Brazilian Agency CAPES.
- 2014-2017 Supervision of the private contract "Design of the RF spectrum scanner prototype based on discrete components"
Funded by Elettronica SpA.
- 2014-2015 Principal Investigator of "PETRA: Photonic Environment moniToring Risk Assessment" within the European Research Council Starting Grant "Proof of concept".
- 2014-2016 Scientific person in charge for CNIT of the project "RAPIDO: Revolutionary Advances in Photonics Integration Being Applied for Optical Communication" funded by European Commission (FP 7).
- 2014-2015 Principal Investigator of "COMBINE: Multi-layer interconnection network based on optical angular momentum multiplexing & wavelength division multiplexing switching", within the U.S.-Italy Significant Bilateral Projects, funded by Ministry of Foreign Affair.
- 2013-2014 Principal Investigator of "PREPaRE: PRE-industrial Photonic-based Radar dEsign" within the European Research Council Starting Grant "Proof of concept".
- 2012-2014 Scientific person in charge for Photonic Networks National Laboratory-CNIT of the project "SOPHIA: Software-defined multicarrier wideband transceiver based on photonic technologies for TLC wireless applications" funded by Italian Defense Ministry.
- 2009-2013 Principal Investigator of "PHODIR: PHOtonic-based full Digital Radar" within the European Research Council Starting Grant.
- 2011-2012 Scientific person in charge of the project "INSIDE: toward Integrated photoNic-

aSsisted fully-digital raDar transceiver." within the European program Nexpresso, "Network for EXchange and PRototype Evaluation of photonicS componentS and Optical systems".

- 2009 Scientific person in charge of the project "Nanophotonics for ultra-fast processing of moving." funded by **Fondazione Silvio Tronchetti Provera**.
- 2009-2012 Scientific person in charge of the project "ACEPLAN "ACtivE PLAsmoNics and lossless metamaterials" funded by European Consortium NanoSci-ERA.
- 2008-2010 Scientific person in charge for Photonic Networks National Laboratory-CNIT of the project "GOSPEL "Governing the Speed of Light" by the European Commission (FP 7).
- 2008 Scientific person in charge for CNIT of the project "Integrated time domain optical interleaver for photonic-based full-digital radar receiver" within the European program ACCORD "Advanced Components Cooperation for Optoelectronics Research and Development".
- 2006-2007 Co-coordinator of "All-optical technologies" group within the **project between CNIT and Istituto Superiore delle Comunicazioni e delle Tecnologie dell'Informazione (ISCTI)**.
- 2006 Co-coordinator of the project "Feasibility study for 100 Gb/s Ethernet transport" funded by Ericsson.
- 2004-2005 Co-coordinator of "All-optical technologies" group within the **project between CNIT and Istituto Superiore delle Comunicazioni (ISCOM)**.
- 2004-2005 Scientific person in charge of the project: "Realization of prototypes of ultra-short pulse optical source" supported by Fondazione Cassa di Risparmio di Pisa – Italy.
- 2003-2004 Scientific person in charge of the research lines "Reliable optical sources at bit rate higher than 100 Gbit/s" e "all-optical modulation and time domain multiplexing" within the **MIUR project for the realization of an Excellence Center on communication networks** with Scuola Superiore Sant'Anna in Pisa, funded by the Ministry of University and of the Scientific and Technologic Research.

Research project and contracts (participation)

- 2013-2016 MIUR project "MINOS: Micro- and Nano-structured photonic devices based on strained silicon for ultrafast Switching in datacom applications", FIRB, funded by the Ministry of Education, University and Research
- 2012-2015 "ARNO: Integrated optical packet networks for access and transport" funded by Tuscany Region
- 2008-2010 MIUR Project "Integrated subsystems for optical fibre communications fabricated through ion implantation of erbium-doped waveguides." funded by the Ministry of University and of the Scientific and Technologic Research.
- 2008-2012 EUROFOS Project "Pan-European Photonics Task Force: Integrating Europe's Expertise on Photonic Subsystems" (Network of Excellence) funded by European Commission (FP 7).
- 2008-2010 BONE project, "Building the Future Optical Network in Europe" funded by European Commission (FP 7).
- 2007-2009 MIUR project "Photonic Enabling Devices for Regeneration and Optical Switching (PEDROS)", funded by the Ministry of University and of the Scientific and Technologic

Research, for the international bilateral cooperation with Canada.

- 2007-2009 **MIUR project “Laboratory for PhOtonic switching nETworks (POET)”**, funded by the Ministry of University and of the Scientific and Technologic Research, for the international bilateral cooperation with India.
- 2006-2008 **MAE Indian-Italian Science and Technologic Collaboration, “Enabling technologies for the design and implementation of next generation optical internet prototype based on optical packet switching”** with Department of Electronics and Electrical Communication Engineering, Indian Institute of Technology, Kharagpur, India; funded by the Ministry of Foreign Affair.
- 2006-2008 **Progetto e-Photon/One+, "Optical Networks: Towards Bandwidth Manageability and Cost Efficiency"** by European Commission (FP 6).
- 2005-2007 **MIUR project “Optical Transmission Systems with Coherent Detection”**, funded by the Ministry of University and of the Scientific and Technologic Research.
- 2004-2006 **Progetto e-Photon/ONe, "Optical Networks: Towards Bandwidth Manageability and Cost Efficiency" project** by European Commission (FP 6).
- 2004-2006 **MAE Korean-Italian Science and Technologic Collaboration, “Future optical communication networks beyond 160 Gbit/s based on Optical Time Division Multiplexing (OTDM) involving ultrafast photonic devices”** with Institute of Science & Technology (KIST) Seoul, Korea; funded by the Ministry of Foreign Affair.
- 2003-2004 **DWDM ring networks:** Design and implementation of DWDM EDFA-based ring networks in collaboration with Marconi Communications.
- 2002-2004 **MAE Indian-Italian Science and Technologic Collaboration, “Design of packet switched re-configurable DWDM network with wavelength conversion for multimedia”** with Department of Electronics and Electrical Communication Engineering, Indian Institute of Technology, Kharagpur, India; funded by the Ministry of Foreign Affair.
- 2002-2004 **MIUR project “CENTRE FOR COMMUNICATION NETWORKS ENGINEERING”**. Funded by the Ministry of University and of the Scientific and Technologic Research. She was **group leader** for the workpackage 5, research line 1 "*Reliable optical source at more than 100 Gbit/s*" and research line 2 "*Modulating and multiplexing in the optical domain*".
- 2001-2003 **MIUR project "Transmission on very-high bit rate OTDM systems"** funded by the Ministry of University and of the Scientific and Technologic Research.
- 2000-2002 **LOBSTER project “Large Optical Bandwidth by amplifier Systems based on Tellurite fibres doped with Rare earths”** funded by the European Commission (FP 5).
- 2000-2001 **PMD COMPENSATION project:** Fabrication of a heterodyne receiver for the frequency measurement of the Stokes parameter in a PMD compensator scheme for high bit-rate communication systems, funded by Marconi Communications.
- 1999-2001 **MIUR project “Subsystems and techniques for very-high-bit-rate OTDM”** funded by the Ministry of University and of the Scientific and Technologic Research.
- 1998-1999 **“Nonlinear effects in WDM systems”** funded by Marconi Communications.
- 1997-1999 **Projects ODIN in collaboration with Marconi-Telecom Italia.**
- 1996-1998 **DAWRON Project "Desing of Advanced Routed Optical Networks"** funded by European Commission INCO-DC

Revision, dissemination and event organization	From 2019 She is Italian representative in the European Management Committee (EMC) of ECOC (European Conference on Optical Communication) the largest European conference on optical communication.
	From 2019 She is member of the Fare-Cineca (Italia), and "Ministry of Education and Science of the Russian Federation" (Russia) research project evaluation platforms
	2019 Member of the technical committee of the International Conference on Information Optics and Photonics (CIOP)
	2018 Co-program Chair at ECOC (European Conference on Optical Communication) 2018, Rome, Italy Sept 2018
	2018 Workshop organization: "What will be the role of microwave photonics in 5G and beyond?" at ECOC 2018
	From 2018 She is member of the Fare-Cineca (Italia), and "Ministry of Education and Science of the Russian Federation" (Russia) research project evaluation platforms
	2017 Co-chair of the Special Issue "Optical Signal Processing: Advances and Perspectives" , of Applied Sciences, ISSN 2076-3417
	2017 Co-chair of the Special Session "mmW radars" , at the International Radar Symposium, Prague, Czech Republic, June 2017
	2017 Member of the technical committee of International Radar Symposium (IRS)
	2016 Co-chair of the Special Session "Photonics for 5G and beyond" within the Tyrrhenian International Workshop on Digital Communications, Livorno, September 2016
	2017 Guest Editor of the Special Issue "Optical Networks for Communications", by MPDI (Multidisciplinary Digital Publishing Institute) photonics ISSN 2304-6732
	2016 Co-chair of the Special Issue "Ultrashort Optical Pulse" Applied Sciences (ISSN 2076-3417; IF: 1.484), 2016
	2016 Co-chair of the Workshop on "Fiber-Wireless Network Technologies and Architectures towards 5G and Beyond" within ICTON 2016 (18th International Conference on Transparent Optical Networks), Trento, Italy July 2016
	2016 Co-chair of the Special Issue on European Conference on Optical Communication on IEEE Journal of Lightwave Technology , Vol. 34, n. 5, 2016
	2015 Workshop organization "Microwave photonics" at ECOC 2015, Spain
	2015 Sub-committee Chair at ECOC (European Conference on Optical Communication) 2015, Valencia, Spain, Sept. 20115
	From 2015 She is member of ICREA e INPHINIT (Spain) research project evaluation platforms
	From 2015 Member of the technical committee of IEEE ICC (International Conference on Communications) 2015 Selected Areas in Communications Symposium on Millimeter-wave communications IMOC (International Microwave and Optoelectronic Conference) 2015
2014-20120	Topical Editor for Optics Letters, ISSN: 0146-9592, 2013 Impact Factor: 3.416
2014	General co-Chairman of IEEE Photonics in Switching 2014 , July 2014, San Diego, California
2014	Co-Guest Editor of the Special Issue "All Optical Networks for Communications", by MPDI photonics ISSN 2304-6732
2014	workshop organization: "Photonics for RADAR systems", within the European Radar

Conference (EURAD) 2014, October, Rome, Italy

- From 2014 **Editorial board member of Frontiers of Optoelectronics** (ISSN: 2095-2759)
- From 2014 **Member of the technical committee** of European Conference on Optical Communication (ECOC)
- Member of the technical committee** of Photonics and Optoelectronics Meetings (**POEM**), The Tenth Advanced International Conference on Telecommunications (**AICT**), The 13th International Conference on Optical Communications and Networks (**ICOCN**)
- 2013-2014 **Member of the technical committee of Conference on Electronics, Telecommunications and Computers**, December 2013, Lisbon, Portugal
- 2013 **Editorial board member of Chinese Journal of Engineering**
- 2013 **Plenary session speaker at International workshop on telecommunications 2013**, Santa Rita do Sapucaí, Brazil
- 2013 **Technical Chairman of Photonics in Switching 2013**, July 2013, Osaka, Japan.
- 2013 Evaluator in the framework of the Joint call **ERAfrica**
- 2012-2014 **Editorial board member of Photonics** (ISSN 2304-6732)
- 2012 **Member of the technical and organizing committee of IEEE International Conference on Computers and Devices for Communication**, December 2012, Kolkata, India and for **International Workshop on Telecommunications**, Santa Rita do Sapucaí, Brazil
- From 2012 **Member of the technical committee of Photoptics, CETC** (Conference on Electronics, Telecommunications and Computers).
- 2011 **Editorial board member of Hindawi**
- 2009-2015 **Member of the technical committee of IEEE Photonics in Switching**
- From 2009 **Member of the organizing committee of IEEE Photonics in Switching**
- 2009 **Member of the technical committee of Fotonica 2009**, May 27-29, 2009, Pisa, Italy.
- 2008 Tutorial “**Ultrahigh-speed sampling optical techniques**” within the international conference **SPIE APOC 2008** (Asia-Pacific Optical Communications) 26-30 Ottobre 2008 Hangzhou, Cina.
- 2008 **Workshop organization “All-optical memories and flip-flops”** within the international conference IEEE Photonics in Switching, August 4, 2008, Sapporo, Japan.
- From 2007 She is **member of the IEEE Photonics in Switching technical committee**
- From 2007 She is **member of the European Commission within FP7 and H2020, Semaphore (France/Belgium), Archimedes and Thalis (Greece) research project evaluation platforms**
- 2007 **Workshop organization “Digital photonics for signal processing in broad-band all-optical communication”** within the international conference IEEE Photonics in Switching, Agust 19, 2007, San Francisco, USA
- 2007 **Member of the organizing committee of 2007 Japan-Italy Bilateral Workshop on Photonics for Communication**, july 4-6, 2007, Osaka, Japan.
- 2006 **Member of the organizing committee of 2006 China-Italy Bilateral Workshop on Photonics for Communication and Sensing**, October 22-23, 2006, Xi'an, China.
- 2004-2007 She is **member of the OAA (Optical Amplifiers and their Applications) technical committee**
- 2004 **Member of the organizing committee** of the international conference **IFIP OpNeTec**

2004 (Optical Networks & Technologies), October 18-20, 2004 Pisa.

From 2004 She is in the **Board of reviewers** of , Wiley Editor, Nature Photonics, IEEE/OSA Journal of Lightwave Technology, IEEE Journal of Selected Topics in Quantum Electronics, IEEE Journal of Quantum Electronics, IEEE Photonics Technology Letters, IEEE Photonics Journal, IEE Electronics Letters, OSA Optics Express, OSA Optics Letters, Elsevier Optics Communications, Chinese Optics Letters Optics and Laser Technology, Optical Fiber Technology.

- Teaching activities**
- From 2016 **Professor** of the additional course "Photonics Laboratory for Telecommunications", at Scuola Superiore Sant'Anna, in Pisa Italy
- 2017 **Lecturer** of "Photonics functionalities for 5G and beyond", Ljubljana Winter school within the H2020 Project "FIWIN5G: FIber-Wireless Integrated Networks for 5th Generation delivery"
- 2016 **Lecturer** of "Photonics for Communications" within the 96° orientation course organized by the Scuola Normale Superiore, San Miniato-Pisa, Italy, July 2016
- From 2015 **Professor** of "Microwave photonics", and "photonics in switching" courses at Scuola Superiore Sant'Anna, in Pisa Italy.
- 2013-2014 She is **contract professor** within the International Master "Smart Solutions- smart community" of Scuola superiore Sant'Anna, sponsored by Telecom, for the course "Digital and microwave photonics"
- 2008-2015 She is **lecturer** within the International Master on Communication Networks Engineering organized by Scuola Superiore Sant'Anna, in Pisa Italy.
- 2009 **Lecturer** within the Summer School of Information Engineering, Bressanone, Italy, October 2005. She has been **lecturer** in the Training Course on "Fibre optics for optical fibre communications", in Cape Coast, Ghana
- 2004-2006 **Contract Professor** within the "Optical Communications" course at Pisa University in Pisa Italy.
- 2004 **Contract Professor** within the "Calculator networks" corse at Engineering Faculty of University of Pavia in Mantova.
- 2003-2007 **Contract Professor** within the project "Optical Fiber Communications" at ISIS Mattei Institute, Rosignano Italy.
- 1999- 2001 She was involved in teaching activity within the "Optical Communications" course at Parma University.
- 1998 **External member of the committee** for school-leaving exam at Istituto Tecnico ITIS-ST A. Berenini in Fidenza, Parma.

- Tutoring activity**
- From 2000 **Tutor of >30 master students**
- From 2000 **Tutor of >20 PhD students**
- From 2000 **Tutor of >25 Researchers**
- From 20015 **Thesis external examiner** in UK (2), Ireland, Germany, The Netherland, France, Australia

FURTHER INFORMATION

- Publications** Although only a few single-name works appear among the publications, it should be noted that due to

the type of work experience, co-authors often represent students and researchers coordinated by Antonella Bogoni. In fact, after just over a year from the start of work, she already held a supervisory and organizing role for a group of people first at the University of Parma and then at Pisa at the PNTLab and the TeCIP.

It should also be highlighted the regular journal work [45] published on NATURE in 2014 (impact factor of 43.07), regarding the results obtained within an ERC StG project of which Bogoni Antonella was Principal Investigator

1: Books

- [1] Ghelfi, P, Laghezza F., **Bogoni A.**, "Photonics for Radar Networks and Electronic Warfare Systems" Editors: IET SciTech Book Series: Radar, Antennas and Electromagnetics, 2019, ISBN: 9781785613760
- [2] **Bogoni A.**, and Poti L., "Elementi di Comunicazioni Ottiche", Pitagora Editrice, Bologna – Italy, 2003

2: Book chapters

- [1] Fernández E.A., Cárdenas Soto A.M., Guerrero Gonzalez N., Serafino G., Ghelfi P., and **Bogoni A.**, "Machine Learning Techniques to Mitigate Nonlinear Phase Noise in Moderate Baud Rate Optical Communication Systems", Intelligent System and Computing, IntechOpen. 2019, DOI: 10.5772/intechopen.88871
- [2] **Bogoni A.**, Willner A.E., "All-optical signal processing", chap. "Photonic signal processing for logic and computation" Springer Publishers, 2014, Chapter DOI: 10.1007/978-3-319-14992-9_6
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4: Conferences

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Personal Data

Autorizzo il trattamento dei miei dati personali ai sensi del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali".



