

CURRICULUM VITAE

Luca Poti

Head of Research with CNIT (Consorzio Nazionale Interuniversitario per le Telecomunicazioni)
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Birth date: June, 01 1971
Birth place: Parma (Italy)
Marital state: Unmarried
Nationality: Italian

1. PROFESSIONAL EXPERIENCE

Apr. 1997 – He graduated as Electronic Engineer with a specialization in Telecommunication at the University of Parma (Italy) with a thesis entitled: “Simulation and experimental measurements of joint effect of chromatic dispersion and Kerr nonlinearities in optical WDM systems”. The thesis work was carried out in the optical communications laboratory at the University of Parma.

Feb. 1998 – Qualification for engineering profession.

1997 – 1998 Marconi Communications grant on the topic: “WDM communication systems on optical fibre” at the Marconi Laboratory of Parma University. Involved in the contract with Marconi at Parma University on ‘*Nonlinear effects due to fibers and EDFAs in WDM systems*’.

1998 – 1999 Post lauream grant at the University of Parma. Involved in the EU project DAWRON (Design of Advanced Routed Optical Networks) with UCL-London and IIT on degradations due to linear and nonlinear effects.

Nov. 1998 – Visiting researcher at the Laval University, Quebec, Canada working on to the realization of a recirculating optical loop for long haul transmission.

2000 – 2001 CNIT researcher at the optical communications laboratory of the University of Parma.

June 2001 – Senior researcher with CNIT at the Photonics Networks National Laboratory in Pisa.

Oct. 2002 – Visiting researcher at the ‘Communication Research Laboratory’ - Tokyo- Japan, working on ultra-fast phase comparison for 160 GHz signals.

2005 – He is Head of Research with CNIT (Consorzio Nazionale Interuniversitario per le Telecomunicazioni) managing **Ultrafast All-optical Subsystems** research area.

Jan. 2006 he founded **PhoTrix S.r.L.**, together with two CNIT researchers and CNIT, a new Company producing optical instruments.

2008 - Visiting researcher at the Tsinghua University in Beijing

2. RESEARCH PROJECTS AND CONTRACTS (Coordination activity)

PERIOD	TITLE	FUNDING	ROLE	PARTNERS
1999-2001	Ultra high speed OTDM systems and techniques	MURST (Ministero dell'Università e della Ricerca Scientifica e Tecnologica)	WP Coordinator	Univeristà di Padova Politecnico di Milano Università Tor Vergata di Roma Università di Parma
2000	Centre for Communication Network Engineering (COFINLab 2000)	MURST (Ministero dell'Università e della Ricerca Scientifica e Tecnologica)	WP Coordinator	Scuola Superiore Sant'Anna di Pisa
2000-2002	Large Optical Bandwidth by amplifier Systems based on Tellurite fibres doped with Rare earths (LOBSTER)	EU - FP5	Scientific Coordinator	Università di Parma (Italia) CSELT (Centro Studi E Laboratori Telecomunicazioni - Italia) University of Southampton (Regno Unito) Friedrich-Schiller-University of Jena (Germania)
2001-2003	Ultrahigh bit rate OTDM transmission systems	MURST (Ministero dell'Università e della Ricerca Scientifica e Tecnologica)	WP Coordinator	Univeristà di Padova Politecnico di Milano Politecnico di Torino Università Tor Vergata di Roma Università di Parma
2004-2005	CNIT-ISCOM 2004	ISCOM Istituto Superiore delle Comunicazioni	WP Coordinator	Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT) Istituto Superiore delle Comunicazioni (ISCOM)
2004-2006	Future optical communication networks beyond 160 Gbit/s based on Optical Time Division Multiplexing (OTDM) involving ultrafast photonic devices	MAE Ministero per gli Affari Esteri	Scientific Coordinator	Scuola Superiore Sant'Anna - Pisa, Italy Korea Institute of Science & Technology (KIST) - Seoul, Corea
2004-2006	Optical Networks: Towards Bandwidth Manageability and Cost Efficiency	EU - FP6	WP Coordinator	>40 European Institutions
2005-2007	Optical Transmission Systems with Coherent Detection	MIUR (Ministero dell'Università e della Ricerca)	Experimental Activity Coordinator	Univeristà di Parma Politecnico di Torino Scuola Superiore Sant'Anna di Pisa
2006-2008	Enabling technologies for the design and implementation of next generation optical internet prototype based on optical packet switching	MAE Ministero per gli Affari Esteri	Scientific Coordinator	Scuola Superiore Sant'Anna - Pisa, Italy Indian Institute of Technology - Kharagpur, India

2006-2008	Optical Networks: Towards Bandwidth Manageability and Cost Efficiency	EU - FP6	WP Coordinator	>40 European Institutions
2006-2007	CNIT-ISCTI 2006	ISCTI Istituto Superiore delle Comunicazioni e delle Tecnologie dell'Informazione	WP Coordinator	Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT) Istituto Superiore delle Comunicazioni e delle Tecnologie dell'Informazione (ISCTI)
2007-2009	Design and implementation of a 2.5 Tbit/s Optical Time Division Multiplexing (OTDM) system	MAE Ministero per gli Affari Esteri	Scientific Coordinator	Scuola Superiore Sant'Anna - Pisa, Italy Korea Institute of Science & Technology (KIST) - Seoul, Corea
2007-2009	Laboratory for PhOtonic switching nETworks (POET)	FIRB - MIUR (Ministero dell'Università e della Ricerca)	Scientific Coordinator	Scuola Superiore Sant'Anna - Pisa, Italy Indian Institute of Technology - Kharagpur, India
2007-2009	Photonic Enabling Devices for Regeneration and Optical Switching (PEDROS)	FIRB - MIUR (Ministero dell'Università e della Ricerca)	Scientific Coordinator and Italian delegate for Scuola Superiore Sant'Anna	Scuola Superiore Sant'Anna - Pisa, Italy Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT) - Pisa, Italy Institut National de la Recherche Scientifique (INRS) - Montreal, Canada
2008-2009	Semiconductor-based photonic Circuits Operation for Optical Packet Switching (SCOOPS)	MAE Ministero per gli Affari Esteri	Italian Coordinator	Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT) - Pisa, Italy National Institute of Information and Communications Technology (NICT) - Tokyo, Giappone
2008-2009	High-resolution near-infrared optical tomograph for bidimensional heart imaging through pulsed fibre lasers	CEIIC	Coordinator	Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT) - Pisa, Italy Scuola Superiore Sant'Anna - Pisa, Italy
2008-2010	Integrated subsystems for optical fibre communications fabricated through ion implantation of erbium-doped waveguides (LUNCH)	MIUR (Ministero dell'Università e della Ricerca)	Scientific Coordinator	Scuola Superiore Sant'Anna - Pisa, Italy Istituto per la Microelettronica e i Microsistemi CNR - Bologna, Italy
2009-2010	Signal processing for virtual and increased reality in design and sensors for robot systems and haptic interfaces	CEIIC	Coordinator	Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT) - Pisa, Italy Scuola Superiore Sant'Anna - Pisa, Italy

3. RESEARCH PROJECTS AND CONTRACTS (Research activity)

PERIOD	TITLE	FUNDING	ROLE	PARTNERS
1996-1998	Design of Advanced Wavelength Routed Optical Networks (DAWRON)	EU INCO-DC	Research activity	Università di Parma, Italy University College London, UK Indian Institute of Technology - Kharagpur, India
1998-1999	Nonlinear effects due to fibre and EDFA in WDM systems	Marconi Communications	Research activity	Università di Parma, Italy
2000-2001	PMD compensation	Marconi Communications	Research activity	Scuola Superiore Sant'Anna - Pisa, Italy
2003	Design and analysis of ASE Re-circulating Ring (ARR) networks for steady-state operation.	Marconi Communications	Research activity	Scuola Superiore Sant'Anna - Pisa, Italy
2004	Theoretical and numerical analysis of ASE Re-circulating Ring (ARR) networks for steady-state operation, breakage, and restoration	Marconi Communications	Research activity	Scuola Superiore Sant'Anna - Pisa, Italy
2004-2005	Ultrashort optical sources prototyping	Fondazione Cassa di Risparmio di Pisa	Research activity	Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT), Italy
2006	Feasibility study for 100 Gb/s Ethernet transport	Ericsson	Research activity	Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT), Italy
2008-2010	Governing the Speed of Light (GOSPEL)	EU FP-7	Research activity	Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT), Italy Technion - Israel Institute of Technology, Israel Ecole Polytechnique Fédérale de Lausanne, Switzerland Universidad Politécnica de Valencia, Spain Technical University of Denmark, Denmark Universität Kassel, Germany Thales S.A., France Yonsei University-Seoul, Korea
2008-2010	Pan-European Photonics Task Force: Integrating Europe's Expertise on Photonic Subsystems (EUROFOS)	EU FP-7	Research activity	

2008-2010	Building the Future Optical Network in Europe (BONE)	EU FP-7	Research activity	
2009-2010	Integrated time domain optical interleaver for photonic-based full-digital radar receiver within Advanced Components Cooperation for Optoelectronics Research and Development (ACCORD)	EU FP-7	Research activity	Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT), Italy Pirelli, Italy
2009-2012	PHOtonic-based full DIgital	European Research Council Starting Grant	Research activity	Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT), Italy
2009-2011	ACTive PLASmoNics and lossless metamaterials (ACEPLAN)	European Consortium NanoSci-ERA	Research activity	Consorzio Nazionale Interuniversitario per le Telecomunicazioni (CNIT), Italy

4. REVISION, DISSEMINATION, AND EVENT ORGANIZATION

From 2007 Member of the IEEE Photonics in Switching technical committee

2008 Member of the organizing committee of 2008 Korea-Italy Bilateral Workshop on Photonics for Communication and Sensing, October 22-23, 2008, Seoul, Korea.

2004 Member of the organizing committee of the international conference IFIP OpNeTec 2004 (Optical Networks & Technologies), October 18-20, 2004 Pisa.

From 2004 reviewer of IEEE/OSA Journal of Lightwave Technology, IEEE Journal of Selected Topics in Quantum Electronics, IEEE Photonics Technology Letters, IEE Electronics Letters, OSA Optics Express, Elsevier Optics Communications.

From 1998 co-author of 1 book, 6 book's chapters, 38 international patents with Marconi Ericsson, 3 invited manuscripts published on international journals, 56 regular manuscripts published on international journals, 16 invited talks at international conferences, and 125 papers presented at international conferences.

5. TEACHING ACTIVITIES

2005-2010 **Lecturer** within the International Master on Communication Networks Engineering organized by Scuola Superiore Sant'Anna, in Pisa Italy.

October 2005 **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.

2003-2007 **Contract Professor** within the project "Optical Fiber Communications" at ISIS Mattei Institute, Rosignano Italy.

1999- 2001 **Contract Professor** within the "Optical Communications" course at Parma University.

From 2000 **Tutor** for more than 20 degree theses in Electronic Engineering and Telecommunication Engineering of Parma University and Pisa University, Italy.

6. PUBLICATIONS

6. 1: Monography

- [1] Bogoni A., and Potì L., "Elementi di Comunicazioni Ottiche", Pitagora Editrice, Bologna – Italy, 2003

6. 2: Book's Chapter

- [1] Bogoni A., Ghelfi P., Lazzeri E., Potì L., Scaffardi M., and Fresi F. - Optical Fibre, New Developments, "*Fibre Based Schemes for Ultrafast Subsystems: Nonlinear Optical Loop Mirrors Traditional Design and Novel Applications.*", I-Tech Education and Publishing KG, Austria - Vienna, 2009
- [2] Porzi C., Guina M., Calabretta N., Bogoni A., and Potì L. - Semiconductor Technologies, "*Applications of saturable absorption-based nonlinear vertical-cavity semiconductor devices for all-optical signal processing* ", I-Tech Education and Publishing KG, Austria - Vienna, 2009
- [3] Bogoni A., Berrettini G., Ghelfi P., Malacarne A., Meloni G., Potì L., and Wang J. - Semiconductor Technologies, "*All-optical flip-flops based on semiconductor technologies*", In-Tech, Austria - Vienna, 2009
- [4] Berrettini G., Bogoni A., Fresi F., Meloni G., and Potì L. - Advances in Lasers and Electro optics, "*Evolution of Optical Digital Sampling*", I-Tech Education and Publishing KG , Austria - Vienna, 2009
- [5] Berrettini G., Bogoni A., Lazzeri E., Meloni G., Porzi C., Potì L., and Scaffardi M. - Semiconductor Technologies, "*All-optical digital processing through semiconductor optical amplifiers: state of the art and perspectives*", IN-TECH, Austria - Vienna, 2009
- [6] Malacarne A., Thomas S., Fresi F., Potì L., Bogoni A., and Azaña J. - Advances in Lasers and Electro optics, "*Programmable All-Fiber Optical Pulse Shaping*", I-Tech Education and Publishing KG, Austria - Vienna, 2009

6. 3: Journal Papers

- [1] Porzi C., Scaffardi M., Potì L., and Bogoni A. "*Optical Digital Signal Processing in a Single SOA without Assist Probe Light*", IEEE J. of Select. Topics in Quantum Electron., 16, 5, - , September-October 2010.
- [2] Berrettini G., Giorgi L., Ponzini F., Cavaliere F., Ghiggino P., Potì L., and Bogoni A. "*Testbed for Experimental Analysis on Seamless Evolution Architectures from GPON to High Capacity WDM-PON*", International Journal of Communication Networks and Distributed Systems, 5, 1/2, 1-16, 2010.
- [3] Wu X., Bogoni A., Scaffardi M., Berrettini G., Ghelfi P., Potì L., Meloni G., and Willner A. "*Multiplexing Two 40-Gb/s WDM Signals into an 80-Gb/s Signal Using XPM in a 0.8-meter Bi-HNLF*", Electron. Letters , 45, 5, 281-282, February 26 2009.
- [4] Scaffardi M., Lazzeri E., Furukawa H., Wada N., Miyazaki T., Potì L., and Bogoni A. "*160 Gb/s/port 2x2 OPS node test-bed performing 50 Gchip/s all-optical active label processing with contention detection*", IEEE J. of Lightwave Technol., to be published, x, x-x, x 2009.
- [5] Porzi C., Nguyen A., Potì L., and Bogoni A. "*Binary-to-Quaternary ASK Encoding in the Optical Domain With Semiconductor Optical Amplifiers*", IEEE Photon. Technol. Lett., 21, 10, 654-656, May 2009.
- [6] Fresi F., Porzi C., Guina M., Orsila L., Potì L., and Bogoni A. "*Wavelength Transparency of All-Optical Packet Envelope Detection Circuit for RZ-Format Optical Packet Switching Applications*", IEEE Photon. Technol. Lett., 21, 20, 1565-1567, Oct.15, 2009 2009.
- [7] Berrettini G., Meloni G., Giorgi L., Ponzini F., Cavaliere F., Ghiggino P., Potì L., and Bogoni A. "*Colorless WDM-PON Architecture for Rayleigh Backscattering and Path-Loss Degradation Mitigation*", IEEE Photon. Technol. Lett., 21, 7, 453-455, April 1 2009.
- [8] Scaffardi M., Lazzeri E., Fresi F., Potì L., and Bogoni A. "*Analog-to-Digital Conversion based on modular blocks exploiting Cross Gain Modulation in Semiconductor Optical Amplifiers*", IEEE Photon. Technol. Lett., 21, 8, 540-542, April 2009.
- [9] Andriolli N., Scaffardi M., Das Barman A., Castoldi P., Potì L., and Bogoni A. "*All-Optical Packet Switched Interconnection Network based on Modular Photonic Digital Processing*", IET Communications, 3, 3, 477-486, Mar. 2009.
- [10] Das Barman A., Scaffardi M., Debnath S., Potì L., and Bogoni A. "*Design tool and its experimental validation for photonic bit comparator based on SOAs*", Optical Fiber Technology, Materials, Devices and Systems, Academic Press, 15, 1, 39-49, Jan 2009.
- [11] Wang J., Meloni G., Berrettini G., Potì L., and Bogoni A. "*All-Optical Binary Counter Based on SOAs* ", Optics Letters, 34, 22, 1-3, November 2009.

- [12] Malacarne A., Thomas S., Fresi F., Potì L., Bogoni A., and Azaña J. "Programmable Fiber-Based Picosecond Optical Pulse Shaper Using Time-Domain Binary Phase-Only Linear Filtering ", *Optics Letters*, ?, ?, ?-?, ? 2009.
- [13] Potì L., Lazzeri E., Meloni G., Bogoni A., and Prati G. "All-Optical Processing by means of Cross Phase Modulation based PM-NOLM Interconnected Structures", *IEEE J. of Select. Topics in Quantum Electron.*, 14, 3, 580-586, May/June 2008.
- [14] Malacarne A., Wang J., Zhang Y., Das Barman A., Berrettini G., Potì L., and Bogoni A. "20 ps-Transition Time All-Optical SOA-based Flip-Flop used for Photonic 10 Gb/s Switching Operation without any Bit Loss", *IEEE J. of Select. Topics in Quantum Electron.*, 14, 3, 808-815, May/June 2008.
- [15] Scaffardi M., Ghelfi P., Lazzeri E., Potì L., and Bogoni A. "Photonic processing for digital comparison and full addition based on semiconductor optical amplifiers", *IEEE J. of Select. Topics in Quantum Electron.*, 14, 3, 826-833, May/June 2008.
- [16] Porzi C., Fresi F., Potì L., Bogoni A., Guina M., Orsila L., Okhotnikov O.G., and Calabretta N. "All-Optical Packet Envelope Detection using a Slow Semiconductor Saturable Absorber Gate and a Semiconductor Optical Amplifier", *IEEE J. of Select. Topics in Quantum Electron.*, 14, 3, 834-840, May/June 2008.
- [17] Porzi C., Guina M., Bogoni A., and Potì L. "All-Optical NAND/NOR Logic Gates based on Semiconductor Saturable Absorber Etalons", *IEEE J. of Select. Topics in Quantum Electron.*, 14, 3, 927-937, May/June 2008.
- [18] Potì L. "Erbium-Based Photonic Flip-Flop memories: Model and Experimental Validation", *IEEE Journal of Quantum Electronics*, 44, 5, 473-479, May 2008.
- [19] Wang J., Zhang Y., Malacarne A., Yao M., Potì L., and Bogoni A. "SOA Fiber Ring Laser-Based Three-State Optical Memory", *IEEE Photon. Technol. Lett.*, 20, 20, 1697-1699, October 15 2008.
- [20] Porzi C., Guina M., Orsila L., Bogoni A., and Potì L. "Simultaneous Dual Wavelength Conversion with Multi-Resonant Saturable Absorption Vertical-Cavity Semiconductor Gate", *IEEE Photon. Technol. Lett.*, 20, 7, 499-501, April 2008.
- [21] Bentini G. G., Chiarini M., Bianconi M., Bergamini F., Castaldini D., Montanari G. B., Bogoni A., Potì L., Sugliani S., Nubile A., De Nicola P., Gallerani L., Pennestrì G., and Petrini S. "Waveguide formation by ion implantation in Er doped optical materials", *NIMB*, 266, 12-13, 3120-3124, June 2008.
- [22] Ghelfi P., Secondini M., Scaffardi M., Fresi F., Bogoni A., and Potì L. "Impact of an Additional All-Optical Decision Element in Band-Limited Receivers for RZ Systems", *IEEE J. of Lightwave Technol.*, 25, 7, to be published, July 2007.
- [23] Han Y.G., Lee J.H., Lee J.H., Potì L., and Bogoni A. "Novel Multiwavelength Erbium-Doped Fiber and Raman Fiber Ring Lasers With Continuous Wavelength Spacing Tunability at Room Temperature", *IEEE J. of Lightwave Technol.*, 25, 8, 2219-2225, August 2007.
- [24] Porzi C., Calabretta N., Guina M., Okhotnikov O.G., Bogoni A., and Potì L. "All-Optical Processing for Pulse Position Coded Header in Packet Switched Optical Networks Using Vertical Cavity Semiconductor Gates", *IEEE J. of Select. Topics in Quantum Electron.*, 13, 5, -, September/October 2007.
- [25] Scaffardi M., Andriolli N., Meloni G., Berrettini G., Fresi F., Castoldi P., Potì L., and Bogoni A. "Photonic combinatorial network for contention management in 160 Gb/s interconnection networks based on all-optical 2x2 switching elements ", *IEEE J. of Select. Topics in Quantum Electron.*, 13, 5, 1531-1539, September/October 2007.
- [26] Malacarne A., Bogoni A., and Potì L. "Erbium-Ytterbium Doped Fiber-based Optical Flip-Flop", *IEEE Photon. Technol. Lett.*, 19, 12, 904-906, June 2007.
- [27] Asimakis S., Meloni G., Leong J. Y. Y., Poletti F., Moore R. C., Frampton K. E., Feng X., Loh W. H., Bogoni A., Potì L., Richardson D. J., and Petropoulos P. "Low Walk-Off Kerr-Shutter Using a Dispersion-Shifted Lead Silicate Holey Fiber", *IEEE Photon. Technol. Lett.*, 19, 15, 1112-1114, August 2007.
- [28] Bogoni A., Potì L., Ghelfi P., Scaffardi M., Porzi C., Ponzini F., Meloni G., Berrettini G., Malacarne A., and Prati G. "OTDM-based optical communications networks at 160 Gbit/s and beyond", *Optical Fiber Technology, Materials, Devices and Systems*, Academic Press, 13, 1, 1-12, January, 2007 2007.
- [29] Han Y.G., Fresi F., Potì L., Lee J.H., and Dong X. "Continuously spacing-tunable multiwavelength semiconductor-optical-amplifier-based fiber ring laser incorporating a superimposed chirped fiber Bragg grating", *Optics Letters*, 32, 9, 1032-1034, April 2007.
- [30] Bogoni A., Potì L., Ponzini F., and Ghelfi P. "Electrical Equivalent Model for an optical VCO in a PLL synchronization scheme for ultra-short optical pulse sources", *IEEE J. of Lightwave Technol.*, 24, 1, -?-, January 2006.
- [31] Berrettini G., Meloni G., Bogoni A., and Potì L. "All-optical 2x2 switch based on Kerr effect in highly nonlinear fiber for ultra-fast applications", *IEEE Photon. Technol. Lett.*, 18, 23, 2439-2441, December 2006.

- [32] Bogoni A., Ghelfi P., Scaffardi M., Porzi C., Ponzini F., and Potì L. "Demonstration of feasibility of a complete 160 Gbit/s OTDM system including all-optical 3R", *Optics Communications*, 260, 1, 136-139, April 2006 2006.
- [33] Scaffardi M., Fresi F., Meloni G., Bogoni A., Potì L., Calabretta N., and Guglielmucci M. "Ultra-fast 160:10 Gbit/s Time Demultiplexing by Four Wave Mixing in 1-Meter-Long B2O3-Based Fiber", *Optics Communications*, 268, 1, 38-41, November 2006.
- [34] Berrettini G., Simi A., Malacarne A., Bogoni A., and Potì L. "Ultrafast Integrable and Reconfigurable XNOR, AND, NOR, and NOT Photonic Logic Gate", *Photonics Technology Letters*, 18, 8, 917-919, April 2006.
- [35] Meloni G., Berrettini G., Scaffardi M., Bogoni A., Potì L., and Guglielmucci M. "250-times repetition frequency multiplication for 2.5 THz clock signal generation", *Electron. Letters*, 41, 23, 1294-1295, November 2005.
- [36] Bogoni A., Potì L., Proietti R., Meloni G., Ponzini F., and Ghelfi P. "Regenerative and Reconfigurable All-Optical Logic Gates for Ultra-Fast Applications", *Electron. Letters*, 41, 7, 435-436, March 2005.
- [37] Meloni G., Scaffardi M., Ghelfi P., Bogoni A., Potì L., and Calabretta N. "Ultra-fast all-optical ADD/DROP Multiplexer Based on 1-Meter-Long Bismuth Oxide-Based Highly-Nonlinear Fiber", *IEEE Photon. Technol. Lett.*, 17, 12, 2661-2663, December 2005.
- [38] Porzi C., Bogoni A., Potì L., and Contestabile G. "Polarization and wavelength-independent time-division demultiplexing based on copolarized-pumps FWM in an SOA", *IEEE Photon. Technol. Lett.*, 17, 3, 633-635, mar 2005.
- [39] Bogoni A., Ponzini F., Scaffardi M., Ghelfi P., and Potì L. "New Optical Sampler Based on TOAD and Data Post-Processing with Sub-Picosecond Resolution", *IEEE J. of Select. Topics in Quantum Electron.*, 10, 1, 186-191, Jan.-Feb. 2004.
- [40] Bogoni A., Potì L., Porzi C., Scaffardi M., Ghelfi P., and Ponzini F. "Modelling and Measurement of Noisy SOA Dynamics for Ultra-Fast Applications", *IEEE J. of Select. Topics in Quantum Electron.*, 10, 1, 197-205, Jan.-Feb. 2004.
- [41] Bogoni A., and Potì L. "Effective Channel Allocation to Reduce in-band FWM Crosstalk in DWDM Transmission Systems", *IEEE J. of Select. Topics in Quantum Electron.*, 10, 2, 387-392, Mar.-Apr. 2004.
- [42] Bogoni A., Scaffardi M., Ghelfi P., and Potì L. "Nonlinear Optical Loop Mirrors: investigation solution and experimental validation for undesirable counter-propagating effects in all-optical signal processing", *IEEE J. of Select. Topics in Quantum Electron.*, 10, 5, 1115-1123, Sept.-Oct. 2004.
- [43] Bogoni A., Ghelfi P., Scaffardi M., and Potì L. "All-Optical Regeneration and Demultiplexing for 160 Gbit/s Transmission Systems Using a NOLM-Based 3-Stage Scheme", *IEEE Photon. Technol. Lett.*, 10, 1, 192-196, Jan.-Feb. 2004.
- [44] Scaffardi M., Bogoni A., Ponzini F., and Potì L. "Effectiveness of a New Interferometric Scheme for Pulse Compression in Ultra-Fast Optical Systems", *Optics Communications*, 239, 1-3, 199-203, Sept. 2004.
- [45] Prati G., Luise M., and Potì L. "Ultra-Fast Optical Clock Recovery: a System Perspective", *IEE Proc. - Circuit, Devices and Systems*, 150, 6, 506-511, Dec. 2003.
- [46] Ghelfi P., Bogoni A., and Potì L. "Numerical model of the dynamic absorption variation in QW-EAM for ultrafast all optical signal processing", *IEE Proc. - Circuit, Devices and Systems*, 150, 6, 512-515, Dec. 2003.
- [47] Bogoni A., Potì L., and Bizzi A. "Effective model for the design of ultra-fast all-optical signal processors based on semiconductor optical amplifiers", *IEEE Photon. Technol. Lett.*, 15, 11, 1576-1578, Nov. 2003.
- [48] Bogoni A., Potì L., and Bononi A. "Accurate Measurement of in-band FWM Power in DWDM Systems over Non-zero Dispersion Fibers", *IEEE Photon. Technol. Lett.*, 15, 2, 260-262, Feb. 2003.
- [49] Bogoni A., Bizzi A., Potì L., and Ghelfi P. "Impact evaluation of the SOA spontaneous emission in ultrafast all-optical processing schemes", *IEEE Photon. Technol. Lett.*, 15, 6, 548-551, Dec. 2003.
- [50] Bogoni A., Potì L., Bizzi A., Scaffardi M., and Reale A. "Novel extended SOAs model for application in very high-speed systems and its experimental validation", *IEEE Photon. Technol. Lett.*, 14, 7, 905-907, July 2002.
- [51] Bogoni A., Orlandini A., and Potì L. "A deterministic emulator for the statistical reproduction of a real fiber with accurate PMD statistics up to the third order", *IEEE Photon. Technol. Lett.*, 18, 8, 1085-1087, Aug. 2002.
- [52] Potì L., Bogoni A., and Ghelfi P. "Experimental validation of an extended ABCD model for actively mode-locked fiber lasers", *IEEE Photon. Technol. Lett.*, 13, 6, 562-564, June 2001.
- [53] Potì L., and Bogoni A. "Experimental demonstration of a PMD compensator with a step control algorithm", *IEEE Photon. Technol. Lett.*, 13, 12, 1367-1369, Dec. 2001.
- [54] Prati G., Potì L., Bogoni A., and Ferguson S. "All optical time division multiplexing transmission systems", *Alta Frequenza*, 12, 3, 17-28, July-Sept. 2000.
- [55] Potì L., Bononi A., and Oriente N. "Impulse Response Measurement Of Balanced Chains Of Edfas In A Recirculating Loop", *IEEE Photon. Technol. Lett.*, 11, 11, 1384-1386, Nov. 1999.

- [56] Bogoni A., Potì L., Francia C., and Bononi A. "Experimental measurement of signal-to-FWM ratio in nonzero dispersion fibers", Proc. SPIE, 3666, 76B, 76-81, April 1999.

6. 4: Conference Papers

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