Dichiarazione sostitutiva atto notorietà
(art. 47 DPR 445 DEL 28.12.2000)
ai sensi dell'art. 15, comma 1, lett. c), D.Lgs 33/2013 e
ai sensi dell'art. 20 comma 5, del D. Lgs. 8 aprile 2013 n. 39

Il/La sottoscritto/a VIRGINIA D'AURIA CF. DRA VGN 79L50B 963P

nato a CASERTA Prov (CE) il 10/7/1979

consapevole delle sanzioni penali, nel caso di dichiarazione non veritiere, di formazione o uso di atti falsi, richiamate dall'art. 76 del DPR n. 445 del 28.12.2000

DICHIARA

ai sensi dell'art. 15, c. 1, lett. c) del D.Lgs 33/2013 e ai sensi dell'art. 20, c. 5 del D.Lgs 39/2013

in relazione al conferimento dell'incarico di : _____

_____

a) ☒ di non svolgere incarichi e di non essere titolare di cariche in Enti di diritto privato regolati o finanziati dalla Pubblica Amministrazione conferente;

ovvero

☐ di svolgere i seguenti incarichi o di essere titolare delle seguenti cariche in Enti di diritto privato regolati o finanziati dalla Pubblica Amministrazione conferente:

1) _____

2) _____

3) _____

b) ☒ di non svolgere attività professionali in Enti di diritto privato regolati o finanziati dalla Pubblica Amministrazione conferente;

ovvero

☐ di svolgere le seguenti attività professionali in Enti di diritto privato regolati o finanziati dalla Pubblica Amministrazione conferente:

1) _____

2) _____

3) _____

c) di non trovarsi in alcuna delle situazioni di inconferibilità di cui al D.Lgs n. 39/2013.

INFORMATIVA RIGUARDO AL TRATTAMENTO DEI DATI PERSONALI (ART. 13 REG.UE 2016/679)

Il/La sottoscritto/a prende atto che il trattamento dei propri dati personali e sensibili avverrà secondo le modalità stabilite dal Regolamento UE 2016/679 (GDPR) relativo alla protezione delle persone fisiche con riguardo al trattamento dei dati personali, al solo fine di assolvere gli adempimenti di natura obbligatoria posti in capo al LENS.

Il/La sottoscritto/a prende altresì atto che il curriculum vitae et studiorum e le dichiarazioni rese per le quali, ai sensi della normativa vigente, è prevista l'ottemperanza ad obblighi di trasparenza, verranno pubblicati sul sito web dell'Amministrazione in apposita sezione di "Amministrazione Trasparente", all'indirizzo https://www.lens.unifi.it, dove è presente una pagina dedicata alla tematica della protezione dei dati personali contenente anche l'informativa per il trattamento dei dati personali dei collaboratori esterni.

Il/La sottoscritto/a si impegna a comunicare eventuali cause di incompatibilità che intercorrano nel corso dello svolgimento dell'incarico.

Firenze, 18/6/2019

IL /LA DICHIARANTE (firma leggibile per esteso)

CURRICULUM VITAE:

Name: Virginia D'Auria;
Date of birth: 10/7/1979 (39 yrs)
Nationality: Italian
Married with two daughters (5 years-old and 1 year-old)

Occupational status: assistant professor at Université Nice Sophia Antipolis (UNS); member of Institut de Physique de Nice UMR7010 CNRS-UNS

TECHNICAL SKILLS:

Quantum optics, Quantum Information and communication, Non-linear optics, Guided-wave optics.

EDUCATION and DIPLOMAS:

- June 2017*:* **Habilitation à Diriger des Recherches** (qualification to conduct self-contained university teaching and researches) at the University Nice Sophia Antipolis.
Thesis title (in French): "Quantum optics and communications: from continuous to discrete variables".

-Nov. 2002 - Dec. 2005: **PhD in Fundamental and Applied Physics** at the University of Naples "Federico II" (Italy), supervised by prof. S. Solimeno and prof. M.G.A. Paris: PhD thesis on continuous variables quantum optics (theory and experiments).
Thesis Title: "Dynamics and Behaviour of Triply Resonant OPOs below the threshold".
PhD degree obtained with top marks on the 13th December 2005.

-Sept 1997 - Oct. 2002: **Undergraduates studies in Physics** at the University of Naples "Federico II"
(4 years: course +1 year: project). Master degree thesis (in Italian) supervised by profs. S.Solimeno, E.Santamato on experimental quantum optics.
Thesis Title: "Study of a cryptographic protocol realized by means of Quantum Optics resources".
Master degree obtained with top marks (110/110 cum laude) on the 30 October 2002.

CAREER:

- Since Sep. 2010: **Assistant professor** (Maître de Conférences) at the University Nice Sophia Antipolis (France), assigned to the Institut de Physique de Nice (CNRS-UNS UMR 7010), member of the group "Quantum Photonics and Information" led by Sébastien Tanzilli.

- June 2008 - August 2010: **Marie Curie IEF Post-doc fellowship** c/o the Quantum Optics group coordinated by C. Fabre at the Laboratoire Kastler Brossel (France).

- Sept. 2007 – June 2008: **CNR-INFM post-doc fellowship** c/o the Quantum Optics group coordinated by S.Solimeno at the University Federico II (Italy).

- Sept.2006 - Aug.2007: **Post-doc fellowship**, "Bourse the recherche pour l'accueil de chercheurs étrangers" from the "Ville de Paris" after competitive selection c/o the Quantum Optics group coordinated by C. Fabre at the Laboratoire Kastler Brossel.

-Mar. 2006 - Sept. 2006: **Post-doc fellowship** of the University of Naples Federico II after competitive selection c/o the Quantum Optics group coordinated by S.Solimeno.

RESEARCH LEADING ACTIVITY and FUNDINGS:

Hired in September 2010, already in 2011 I started leading, in the context of the activities of the "Quantum Photonics and Information" (QPI) group an ambitious project on entangled photon sources synchronization for quantum networking and communication. In 2015, in the context of a collaboration with the Nation Institute of Optics of Florence (IT), I developed at INPHYNI an original research line on continuous variable quantum

communication exploiting guided-wave optics. In 2018, I started a new research line on hybrid entanglement between photon- and wave-like optical qubits.
A detail of my research leading activity, including the young scientists I supervised in the frame of each project, is provided below.

Starting on January 2018: **Principal Investigator of a research line on light hybrid entanglement**:
Aim of the project is to investigate fundamental aspects and capabilities of hybrid entanglement between particle-like and wave-like optical qubits. Possible applications of hybrid-entangled state to quantum information science will also be studied. The project opens a *new* research line in the context of the activity of the "Quantum Photonics and Information" group.

- 2018-2022: The project is funded by ANR-appel à projet overt, défi de tous les savoirs, project "Hy-Light" for "Hybrid Quantum Light" – **Project Leader: Virginia D'Auria**; fundings to INPHYNI: *248 k€.*
- The project is conducted in collaboration with the group of Julien Laurat at Laboratoire Kastler Brossel and, for the theoretical aspects, with that of Pérola Milmann and Thomas Coudreau at Laboratoire Matériaux et Phénomènes Quantiques.

2011-2017: **Principal Investigator of a research line on ultra-fast and long-distance quantum communication based on entanglement-swapping:**
Aim of the project is to demonstrate the potentiality and the feasibility of an original synchronization scheme allowing implementing quantum networks based on entanglement swapping in single-photon regime. The project is part of the "Quantum Photonics and Information" group activity on long-distance quantum communication; within this frame, it allowed developing a research line on entanglement swapping in ultra-fast regime.
This project received multiple fundings:

- 2011-2014, ANR emergence "Conneqt" for "distributed clock synChrONization for future loNg distancE Quantum cryptography" – **Project Leader: Virginia D'Auria**; *260 k€.*
  2011-2013, Région PACA –volet exploratoire – **Project Leader: Virginia D'Auria**; *111 k€.*
  2011-2013, PEPS of CNRS-INSIS – **Project Leader: Virginia D'Auria**; *25 k€.*
  2015-2016, Crédits Scientifiques incitatifs UNS – **Project Leader: Virginia D'Auria**; *11 k€, cofunded by INPHYNI with a* Bonus Qualité Recherche (BQR, *10 k€*)
- The project benefitted of technological support from two industrial partners: IdQuantique and Prysmyan. In this context, I precise that both are leaders of their respective market sector: IdQuantique is world leader for commercial quantum cryptography; the Prysmyan group is world leader for optical fibres.
- The project has been conducted in collaboration with the partner France Innovation Scientifique et Transfert (FIST SA) that was in charge of the result valorisation. With their assistance and in collaboration with Osha Liang LLP (Intellectual Property Lawyers), the synchronization scheme at the hearth of the project has been secured by 1 international patent (CNRS patent N. FR11/58857 du 30/09/2011 already delivered in Europe, in USA and Japan, pending in China)
- In total 2 PhD students and 1 Post-doctoral fellow have been hired on this project.

Since 2015: **Principal investigator of a research line on continuous variable quantum communication based on guide-wave and integrated optics:**
Aim of this research line is to exploit the capabilities of guided-wave and integrated optics to miniaturize continuous variable quantum optics experiments in view of their application to future out-of-the-laboratory quantum communication. This project has opened a *new* research line in the context of the activity of the "Quantum Photonics and Information" group.

- The project benefits from the collaboration with Alessandro Zavatta from the National Institut of Optics (INO) of Florence (IT). In this context, Virginia D'Auria obtained two CNRS invited researched grant (2015 and 2018) and two UNS invited professor grants (2016 and 2017) for A. Zavatta. The project also received a one-month staying allowance from Italian CNR (2016).
- The project exploits, for all the "on chip" implementations, the competencies and the facilities on Lithium Niobate technology of the QPI and of the Non-linear Integrated Optics groups at INPHYNI.
- 2 PhD students (one for the theoretical aspects, funded by a École Normale Superieure (ENS) PhD fellowship, and the other for the experimental aspects, funded by a High Education Ministry PhD fellowship) are working on this project.

- Starting on Spring 2019, a new research line on continuous variable **multipartite frequency entanglement in $\chi^{(3)}$ media** has been opened in collaboration with Giuseppe Patera, from the University of Lille (FR). The aim is to investigate the possibility of generating cluster-state with micro-ring cavities on Silicium.

2008-2010: **Principal investigator of the project "QuantManip" on "Conditional preparation of quantum states", funded by a Marie Curie IEF post-doctoral fellowship**. Aim of the project was the study of novel techniques and tools for quantum state engineering.

Involvement in other research projects (last 5 years):

Since 2018: Participation to the project "Quantum@UCA", aiming at demonstrating a quantum cryptographic link connecting three sites of Nice region, space by approximately 30 km. The project has been funded by the French government through "Investments for the Future" of Université Côte d'Azur UCA-JEDI project. It benefits from the collaboration of multiple industrial partners, including Orange and IdQuantique (http://univ-cotedazur.fr/contenus-riches/actualites/fr/universite-cote-d2019azur-et-orange-collaborent-pour-la-mise-en-place-d2019une-experimentation-en-matiere-de-cryptographie-quantique#.XOsW8aZS_fY)).

Since 2016: Participation to a project on "Multipartite entanglement generation in silicon micro-ring". Aim of the project is to model and experimentally demonstrate the generation of multipartite and multicolour entanglement at the output of an on-chip silicon micro-ring. The project is developed in collaboration with National Institute of Optics (INO) of Florence (IT) and with the Institut National de la Recherche Scientifique de Varennes (Quebec, Canada).

2014-2017: Participation to the project "SPOCQ" for "Synchronized Pulses in Optical Cavities for Quantum optics and quantum information systems" funded by ANR-appel à projet overt, défi de tous les savoirs. Aim of the project is to investigate and exploit synchronous optical cavities operated in the pulsed regime as new tools for quantum optics and quantum information system.

2013-2017: Participation to the project "PICQUE" for "Photonic Integrated Compound Quantum Encoding" funded as FP7 European ITN project. Aim of the project is to investigate the capabilities and prove the feasibility of quantum architectures integrated on a single optical chip.

PhD thesis supervision:

2018-2021: F. Brunel: "Hybrid variable quantum optics as a novel approach to quantum communication" – INPHYNI (PhD supervisor).
2016-2019: E. Gouzien: "Optical systems for quantum technologies" – INPHYNI (co-supervisor with Sébastien Tanzilli).
2016-2019: F. Mondain: "Quantum state engineering and manipulation for continuous variable quantum information" – INPHYNI (co-supervisor with Sébastien Tanzilli).
2014-2017: B.Fedrici: "All optical synchronization for future long distance quantum cryptography" - INPHYNI (co-supervisor with Sébastien Tanzilli) –Defended on the 13/12/2017.
2011-2015: L.A.Ngah: "All optical synchronization for quantum networks" – INPHYNI (co-supervisor with Sébastien Tanzilli) –Defended on the 11/12/2015.
Jan-March 2009: N.Lee visiting PhD-student from Tokyo University on "Quantum decoherence of single photon counters" – Laboratoire Kastler Brossel.
2007-2008: S.Fornaro on "Full Characterization of Gaussian Bipartite Entangled States by a Single Homodyne Detector"– Université de Naples Federico II, Italy".

INTERNATIONAL PUBLICATIONS and CONFERENCE PROCEEDINGS:

- 25 international peer-reviewed articles and 1 book chapter + 2 in preparation
- 30 international peer-reviewed conference proceedings

NATIONAL AND INTERNATIONAL RENOWN:

Scientific distinctions:
-2016-2020: "**Prime d'encadrement doctoral et de recherche**" (Ph.D. and Research Supervision bonus, PEDR, campagne 2016) for outstanding researchers.
- 2008-2010: **Marie Curie IEF Post-doc fellowship** Marie Curie fellowship.

Collective responsibilities:
Since 2015: Member of the Electronics Department board of the University Nice Sophia Antipolis. The department gathers around 20 permanent members including professors and assistant professors.
Since 2012: Member of the committee for the "validation of acquired experience" (VAE) for the Master-pro Génie Bio Medical (department of electronics). The VAE committee evaluates professional competences acquired outside the education systems and allow establishing a possible equivalence with the skills (or part of the skills) acquired with a given academic diploma.
Autumn 2018: Volunteer for the redaction of Quantum Mechanics question in the context of the national program UniSciel providing on-line science learning resources.
2012-2017: Member of the committee for the "validation of acquired experience" for the licence-pro Dosimetrie et Radioprotection (department of electronics).

Invitation to foreign universities:
Autumn 2017: PhD thesis examiner (external referee) at the University of Naples "Federico II", Naples, IT.
July 2016: PhD thesis examiner (external referee) at the Linacre College, Oxford, UK.
Sept. 2011: Invited member of the committee evaluating the graduation internships for the licence degree (laurea) in physics at the University of Milan, IT.
Sept-Oct. 2008: Invited course "High-resolution techniques in Optics: from Near-field Optics to Quantum Systems" for PhD students at the University of Naples "Federico II" (18 hours), IT, showing the applications of light quantum properties to high-resolution techniques in optics.
2010: Invited seminar to the University of Florence "Experimental characterization of optical detectors for single photon subtraction".

Participation to international conferences:
- 59 international conferences with oral presentations.
- Oral presentations as invited speaker:
  -"Chip-based compact squeezing experiment at a telecom wavelength", Transparent Optical Networks, ICTON, 21st International Conference on, Angers, France, 2019;
  - "A plug-and-play synchronization scheme for practical quantum networks", Bristol Quantum Information Technologies Workshop, Bristol, United Kingdom, 2019;
  - "On chip squeezing generation and detection", International Conference on Integrated Quantum Photonics, Paris, France, 2018;
  - "DV and CV quantum optics for future quantum networks", Quantum Information, communication and computing: advances in theory and implementations, Quant2018 Workshop, Cergy-Pontoise, France, 2018;
  - "A plug-and-play synchronisation scheme for quantum networks", 20th International Conference on Transparent Optical Networks (ICTON 2018), Bucharest, Romania, 2018;
  -"All-optical synchronization for quantum communication networks", 19th International Conference on Transparent Optical Networks (ICTON 2017), Gerona, Spain, 2017;
  -"Ultra-fast quantum communication exploiting classical telecom technology", Colloque sur les Lasers et l'Optique Quantique de la Société Française d'Optique, COLOQ'14 - Rennes, France, 2015;
  -"Ultrafast quantum optics based on telecommunication technologies", 7th Italian Quantum Information Science Conference 2014, IQIS2014 - Salerne, Italy, 2014;
  -"Ultrafast quantum optics based on telecommunication technologies", conference of the French Optical Society, PAMO-JSM2014 - Reims, France, 2014 (plenary session);
  -"Ultrafast heralded single photon source based on telecommunication technologies", 6th Italian Quantum Information Science Conference 2013, IQIS2013 - Come, Italy, 2013;

-"Integrated non-linear optics for Quantum Communication", 5th Italian Quantum Information Science Conference 2012, IQIS2012 - Padova, Italy, 2012;
-"Quantum communication based on integrated nonlinear optics", International Workshop on Quantum Manipulation of Atoms and Photons, QMAP2011 - Shanghai, China, 2011;
-"Enabling quantum communication using integrated nonlinear optics", SPIE conference on Optical Complex Systems, OCS'2011 - Marseille, France, 2011.

Participation to scientific committees and Responsibilities as referee:

Since 2019: Member of the Steering committee for program "Matière, Lumière, Interactions" of the university of excellence University Côte d'Azur (Idex UCA Jedi, http://univ-cotedazur.fr/en/idex/programmes-structurants-ucajedi/matiere-lumiere-interactions)

Since 2019: Member of the scientific board for the formation EUR DS4H, Digital Science for Human (academic master) of the university of excellence University Côte d'Azur (Idex UCA Jedi).

Since 2016: Member of the head of the scientific board and Expert for the section "photonics" for the academy 1 of the university of excellence University Côte d'Azur (Idex UCA Jedi). The scientific board promotes exchanges and collaboration between the different laboratories of the UCA, launches dedicated calls for projects and evaluate and class the project funding requests.

Since spring 2018: (Recurrent) External expert and project referee for the SIRTEQ: réseau francilien pour les technologies quantiques (French Network for Quantum Technologies)

Since 2017: Scientific expert for the Italian Minister of Education, University and Research (Ministero dell'istruzione, dell'università e della ricerca)

Oct. 2018: Scientific expert for the Italian Minister of Education, University and Research (Ministero dell'istruzione, dell'università e della ricerca) for the research program "PRIN, Progetti di Rilevante Interesse Nazionale"

Spring 2019: Member of the committee for the recruitment of an associated professor (permanent position) at the University Nice Sophia Antipolis.

Sept. 2018: Scientific expert for the Italian Minister of Education, University and Research (Ministero dell'istruzione, dell'università e della ricerca) for the young researcher program "Rita Levi Montalcini" (two projects reviewed)

Spring 2018: Member of the committee for the recruitment of an associated professor (permanent position) at the University Nice Sophia Antipolis.

Apr. 2019: PhD thesis examiner (external referee) at the Université Paris Diderot, Paris (France)

Apr. 2019: PhD thesis examiner (external referee) at the TelecomParisTech, Paris (France)

Sept. 2018: PhD thesis examiner (external referee) at the Université Sorbonne, Paris (France)

Spring 2018: Member of the scientific committee for the international conference QCrypt 2018, held in Shanghai, China, August 2018.

Spring 2018: Member of the committee for the recruitment of an associated professor (permanent position) at the University Nice Sophia Antipolis.

Autumn 2016: External expert and project referee for the university of excellence Grenoble Alps.

Avr. 2015: Member of the committee for the recruitment of an associated professor (permanent position) at the University Paris Sud, Paris, FR.

May 2013: Member of the committee for the recruitment of a laboratory technician (permanent position) at the department of electronics of the University Nice Sophia Antipolis, Nice, FR.

Since 2007: (Regular) Referee for Physical Review Letters, Physical Review X, Physical Review A, Optics Letters, European Physics Letters, European Journal of Physics D, Applied Physics B, Optics Express, Nature Photonics, Scientific Reports, Journal of the Optical Society of America B, Photonics, Science Advances, Optica, Photonics, Science Advances.

Science dissemination:

July 2019: Co-organizer of the panel "Quantum Communication" and Member of the scientific committee for the international conference ICTON 2019, held in Angers, France, July 2019.

Spring 2019: Invited dissemination paper "Time-tagging single photons" for the Journal of the French Optical Society (Société Française d'Optique), "Photoniques", p. 54-60, March-April 2019.

Autumn 2018: Invited talk “DV and CV quantum optics for future quantum networks” to the workshop “Quantum Information, communication and computing: advances in theory and implementations” organized by the University of Cergy-Pontoise, FR.
Spring 2018: Invited dissemination paper “Comprendre le comptage de photons corrélés en temps” for the Journal of the French Optical Society (Société Française d'Optique), “Photoniques”, p. 38-42, May-June 2018.
Sept. 2017: Organizer of the course “Quantum optics with continuous variables” for master degree students in Physics, held by A. Zavatta (Univ. of Florence, IT) at the University Nice Sophia Antipolis, Nice, FR.
June 2017: Member of the organization board for the workshop “Quantum simulation, processing and communication” held in Nice, FR (http ://www.ucnlab.eu/qspc17). The event gathered scientists from quantum physics, photonics, computer science and telecommunications. About 40 people discussed the state of the art and perspectives for quantum technologies in the areas of computing, simulation and secured communications.
Feb. 2017: Member of the organization board for the winter school “Picque Scientific School” held in Nice (https ://picque-nice-17.sciencesconf.org/). The courses revised the fundamentals of quantum information and related them to specific implementations in photonics. It aimed at keeping the fellows on the state of the art of quantum photonics, with emphasis on the added value of reconfigurable devices.
Sept.2016: Organizer of the course “Quantum optics with continuous variables” for PhD students, held by A. Zavatta (Univ. of Florence, IT) at the University Nice Sophia Antipolis, Nice, FR.

Scientific dissemination to broad audience:

Mai 2019: Radio interview at RadioNizza.fr, sponsored by “Nice Matin”, the most important local journal in the Alpes maritimes.
November 2019: Dissemination seminar organized by the association SciencePourTous06, Grasse, FR “What is quantum communication?”
July 2019: Invited dissemination seminar organized by the association SciencePourTous06, Grasse, FR “What is quantum communication?” (see: http://www.bmvr.nice.fr/EXPLOITATION/doc/AGENDA/2873/la-revolution-des-technologies-quantiques-de-l-information)
June 2019: Invited dissemination seminar organized by the association A.M.I.C. (Académie Méditerranéenne Interdisciplinaire des Connaissances), Nice, FR “The quantum information technology revolution”
Mai 2019: Radio Interview at “Radio Nizza” on the Quantum Technologies.
February 2019: Collaboration with the Youtube chain “ScienceEtonnante” for a video on quantum communication technologies (in French) (see: https://www.youtube.com/watch?v=kJFfleuDHrU)
Since Autumn 2018: Volunteer speaker and member of the association “Sciences pour tous” active in the dissemination of science in the villages of the department of the Maritimes Alps, FR.
Spring 2018: Dissemination of science to pre-primary and primary school pupils, Nice, FR “Experiment on waves and sounds” (see: http://univ-cotedazur.fr/contenus-riches/actualites/fr/les-eleves-de-lecole-von-derviews-experimentent-la-physique#.WyoH_akaTjB).
Spring 2017: Dissemination of science to pre-primary and primary school pupils, Nice, FR “Experiment on phase change in water”.
Since 2015: (Regular, 4 editions) Participation to the national event “Women in Engineering and Science”: round-table with high school female students on the role of women in science, Nice, FR.
Since 2015: (Regular, 4 editions) Participation to the national event “Girls’ days, boys’ day”, round-table with secondary school female students on the role of women in science, Nice, FR.
2015 to 2018: (Regular) Dissemination on the quantum optics and quantum information to high school students, Nice and Cannes, FR.
June 2016: Mentor at the round-table with young scientists “Climbing the Ladder: Insights from Leaders in Photonics” on the role of women in science organized at the conference CLEO2016, Saint José, CA, USA.
Sep. 2015: Invited dissemination seminar on Quantum Communication at the CNRS delegation 20, Valbonne, FR
Mar. 2015: Invited dissemination seminar on Quantum Communication at the pedagogical workshop “Nice Physics Camp” aiming at presenting to licence degree students the research activity in physics performed in the Nice region, FR
Jan. 2012: Organizer of the round-table on laser applications in medicine with S. Simuhin, responsible for the laser division of the company Bernas lasers, and the master degree students of the “Master Genie Bio Medical” of the University Nice Sophia Antipolis, Nice, FR.

OTHER RELEVANT INFORMATION:

Foreign languages (written and spoken): Italian (mother tongue), Fluent English, Fluent French, Good level Spanish.

List of publications:

1. François Mondain, Tommaso Lunghi, Alessandro Zavatta, Élie Gouzien, Florent Doutre, Marc De Micheli, Sébastien Tanzilli, Virginia D'Auria, «Chip-based squeezing at a telecom wavelength », Photonics Res., 2019, to appear.

2. David Barral, Kamel Bencheikh, Virginia D'Auria, Sébastien Tanzilli, Nadia Belabas, and Juan Ariel Levenson, « Minimum resources for versatile continuous-variable entanglement in integrated nonlinear waveguides », Phys. Rev. A, 98, 023857 (2018).

3. Elie Gouzien, Bruno Fedrici, Alessandro Zavatta, Sébastien Tanzilli, Virginia D'Auria, « Quantum description of timing jitter for single-photon ON-OFF detectors », Phys. Rev. A, 98, 013833 (2018).

4. David Barral, Nadia Belabas, Lorenzo M. Procopio, Virginia D'Auria, Sébastien Tanzilli, Kamel Bencheikh, and Juan Ariel Levenson, « Continuous-variable entanglement of two bright coherent states that never interacted », Phys. Rev. A, Phys. Rev. A 96, 053822 (2017).

5. O. Alibart, V. D'Auria, M. De Micheli, F. Doutre, F. Kaiser, L. Labonté, T. Lunghi, E. Picholle and S. Tanzilli, « Quantum photonics at telecom wavelengths based on lithium niobate waveguides », Jour. Opt., 18, 104001 (2016) – invited review paper.

6. F. Kaiser, B. Fedrici, A. Zavatta, V. D'Auria, and S. Tanzilli, « A fully guided-wave squeezing experiment for fiber quantum networks », Optica, 3, 362-365 (2016).
   Selected for the magazine « Optics and Photonics News » of The Optical Society (OSA).

7. L. A. Ngah, O. Alibart, Laurent Labonté, V. D'Auria and S. Tanzilli, « Ultra-fast heralded single photon source based on telecom technology », Laser & Photon. Rev., 9, L1–L5 (2015).
   Selected for « actualité scientifique » of the Institut de Physique of the Centre National de la Recherche Scientifique (INP-CNRS)

8. F. Kaiser, L. A. Ngah, A. Issautier, T. Delord, D. Aktas, V. D'Auria, M. P. De Micheli, A. Kastberg, L. Labonté, O. Alibart, A. Martin, S. Tanzilli, « Polarization entangled photon-pair source based on quantum nonlinear photonics and interferometry », Opt. Comm., 327, pp.7-16 (2014).

9. Morin, J.-D. Bancal, M. Ho, P. Sekatski, V. D'Auria, N. Gisin, J. Laurat, N. Sangouard, « Witnessing trustworthy single-photon entanglement with local homodyne measurements », Phys. Rev. Lett., 110, 130401 (2013).

10. O. Morin, V. D'Auria, J. Laurat, C. Fabre, « Effect of the heralding detector properties on the conditional generation of single-photon states », EJPD, 66, p.249 (2012).
    European Journal of Physics Highlighted Paper

11. O. Morin, V. D'Auria, J. Laurat, C. Fabre, « A high-fidelity single-photon source based on a type-II optical parametric oscillator », Optics Letters, 37, pp. 3738-3740 (2012).

12. V. D'Auria, N. Lee, T. Amri, J. Laurat, C. Fabre, « Quantum Decoherence of Single-Photon Counters », Phys. Rev. Lett., 107, 050504 (2011).
    Editors' Suggestion
    Selected for the magazine « Physics » of the American Physical Society (APS) Journal Collection

13. D. Buono, G. Nocerino, V. D'Auria, A. Porzio, S. Solimeno, S. Olivares, M. G. A. Paris, « Quantum characterization of bipartite Gaussian states », J. Opt. Soc. Am. B, 27, A110 (2010)

14. V. D'Auria, S. Fornaro, A. Porzio, S. Solimeno, S. Olivares and M. G. A. Paris, « Characterization of bipartite Gaussian states from OPO », Phys. Scr. T, 140, 014018 (2010).

15. V. D'Auria, C. De Lisio, A. Porzio, S. Solimeno, J. Anwar, M. G. A. Paris, « Non-Gaussian states produced by close-to-threshold optical parametric oscillators: role of classical and quantum fluctuations », Phys. Rev. A, 81, 033846 (2010).

16. J. Rehacek, S. Olivares, D. Mogilevtsev, Z. Hradil, M. G. A. Paris, S. Fornaro, V. D'Auria, A. Porzio, S. Solimeno, « An effective method to estimate multidimensional Gaussian states » Phys Rev A, 79, 032111 (2009).

17. V. D'Auria, S. Fornaro, A. Porzio, S. Solimeno, S. Olivares, M. G. A. Paris, « Full characterization of Gaussian bipartite entangled states by a single homodyne detector » Phys. Rev. Lett., 102, 020502 (2009).

18. G. Keller, V. D'Auria, N. Treps, T. Coudreau, J. Laurat, C. Fabre, « Experimental Generation of Frequency-Degenerate Bright EPR Beams with a Self-Locked Optical Parametric Oscillator » Optics Express, 16, 9351 (2008).

19. V. D'Auria, S. Fornaro, A. Porzio, E. A. Sete and S. Solimeno, « Fine tuning of a triply resonant OPO for generating frequency degenerate CV entangled beams at low pump powers », Appl. Phys. B, 91, 309 (2008).

20. A. Porzio, V. D'Auria, S. Solimeno, S. Olivares and M. G. A. Paris, « Homodyne Characterization of continuous variable bipartite states », Int. J. Quant. Inf., 5, 63 (2007).

21. A. Porzio, P. Aniello, A. Chiummo, V. D'Auria, S. Solimeno and M. G. A. Paris, « Secure communication using bright twin-beam and polarization encoding », Opt. Las. Engin., 45, 463, (2007).

22. G. Cella, A. Di Virgilio, P. La Penna, V. D'Auria, A. Porzio, I. Ricciardi, and S. Solimeno, « Optical response of a misaligned and suspended Fabry-Perot cavity », Phys. Rev. A, 74, 013814 (2006).

23. V. D'Auria, C. de Lisio, A.Porzio, S.Solimeno and M. G. A. Paris, « Transmittivity measurements by means of squeezed vacuum light », J. Phys. B: At. Mol. Opt. Phys., 39, 1187–1198 (2006).

24. V. D'Auria, A. Porzio, S. Solimeno, S Olivares and M. G A Paris, « Characterization of bipartite states using a single homodyne detector », J. Opt. B: Quantum Semiclass. Opt., 7, S750–S753 (2005).

25. V. D'Auria, A. Chiummo, M. De Laurentis, A. Porzio, S. Solimeno, and M. G. A. Paris, « Tomographic characterization of OPO sources close to threshold », Optics Express, 13, 948, (2005).

Book chapters:
V. D'Auria, A. Porzio, S. Solimeno « Sensing by squeezed state of light », in « An introduction to Optoelectronic sensors », pp. 358-377, Ed. G. Righini, A. Tafani, A. Cutolo, Published by Fulsland Offset Printing (S), Pte Ltd, Singapore (2009)

Papers published in Proceedings and Broad Audience papers

1. Invited dissemination paper "Time-tagging single photons" for the Journal of the French Optical Society (Société Française d'Optique), "Photoniques", p. 54-60, March-April 2019.

2. Invited dissemination paper "Comprendre le comptage de photons corrélés en temps" for the Journal of the French Optical Society (Société Française d'Optique), "Photoniques", p. 38-42, May-June 2018.

ORAL presentations:
(The talk labelled as "invited" are those for which VDA was personally invited to give a talk. The speaker is underlined)

1. François Mondain, Tommaso Lunghi, Alessandro Zavatta, Élie Gouzien, Florent Doutre, Marc de Micheli, Sébastien Tanzilli, and Virginia D'Auria,"Chip-based compact squeezing experiment at a telecom wavelength", Transparent Optical Networks, ICTON, 21st International Conference on (Angers, France, 2019, invited talk)
2. François Mondain, Tommaso Lunghi, Alessandro Zavatta, Élie Gouzien, Florent Doutre, Marc de Micheli, Sébastien Tanzilli, and Virginia D'Auria, "Plug-and-Play generation and manipulation of squeezing on chip", Lasers and Electro-Optics Europe, CLEO EUROPE/IQEC, 2019 Conference on and International Quantum Electronics Conference (Munich, Germany, 2019).
3. Élie Gouzien, Floriane Brunel, Sébastien Tanzilli, and Virginia D'Auria "Hybrid entanglement with time-bin encoding", Quantum 2019: From Foundations of Quantum Mechanics to Quantum Information and Quantum Metrology & Sensing (Turin, Italy, 2019).
4. François Mondain, Tommaso Lunghi, Alessandro Zavatta, Elie Gouzien, Florent Doutre, Marc de Micheli, Sébastien Tanzilli, and Virginia D'Auria, "Plug-and-Play squeezing experiment on chip at telecom wavelength", Conference on Lasers and Electro-Optics, CLEO 2019 (San Jose, CA, US, May 2019)
5. Élie Gouzien, Bruno Fedrici, Alessandro Zavatta, Sébastien Tanzilli, and Virginia D'Auria "Single Photon Detectors's Timing-Jitter Quantum Description", Conference on Lasers and Electro-Optics, CLEO 2019 (San Jose, CA, US, May 2019)
6. François Mondain, Tommaso Lunghi, Alessandro Zavatta, Elie Gouzien, Florent Doutre, Marc de Micheli, Sébastien Tanzilli, and Virginia D'Auria, "Chip-based squeezing at a telecom wavelength", Quantum Information and Measurement 2019, QIM 2019 (Rome, Italy, 2019).
7. Virginia D'Auria, Bruno Fedrici, Florian Kaiser, Laurent Labonté, Olivier Alibart, and Sébastien Tanzilli, "Synchronizing remote quantum network stations using an all-optical method", Quantum Information and Measurement 2019, QIM 2019 (Rome, Italy, 2019).
8. B. Fedrici, L. A. Ngah, F. Kaiser, L. Labonté, O. Alibart, V. D'Auria, S. Tanzilli, "A plug-and-play synchronization scheme for practical quantum networks", Bristol Quantum Information Technologies Workshop, (Bristol, United Kingdom, 2019, Invited Talk)
9. F. Mondain, T. Lunghi, J. Aktas, A. Zavatta, F. Doutre, M. De Micheli, V. D'Auria, S. Tanzilli, « On chip squeezing generation and detection », International Conference on Integrated Quantum Photonics (Paris, France, 2018, invited talk)
10. O. Alibart, V. D'Auria, D. Aktas, M. De Micheli, F. Doutre, B. Fedrici, X. Hua, F. Kaiser, L. Labonté, T. Lunghi, F. Mazeas, F. Mondain, P. Vergyris, and Sébastien Tanzilli, "Quantum photonics on chip", Int. Symp. on Q Technologies, ECNU Shanghai (Shanghai, China, 2018, invited talk).
11. O. Alibart, V. D'Auria, L. Labonté, E. Kerstel, and Sébastien Tanzilli, "Protecting satellite constellation ground-stations by quantum cryptography links", Workshop on QKD for Space Systems, Thales Alenia Space (Rome, Italy, 2018)
12. D. Aktas, O. Alibart, V. D'Auria, M. De Micheli, F. Doutre, B. Fedrici, X. Hua, F. Kaiser, L. Labonté, T. Lunghi, F. Mazeas, F. Mondain, P. Vergyris, and Sébastien Tanzilli, "Q Photonics at telecom wavelength, from communication to optical material characterization", Int. Topical Meeting on Microwave Photonics, MWP'18 (Toulouse, France, 2018)
13. V. D'Auria, "DV and CV quantum optics for future quantum networks", Quantum Information, communication and computing: advances in theory and implementations, Quant2018 Workshop (Cergy-Pontoise, France, 2018, invited talk)
14. B. Fedrici, L. A. Ngah, F. Kaiser, L. Labonté, O. Alibart, V. D'Auria, S. Tanzilli, "A plug-and-play synchronisation scheme for quantum networks", Transparent Optical Networks, ICTON, 20th International Conference on (Bucharest, Romania, 2018, invited talk).
15. N. Belabas, D. Barral, K. Bencheikh, L. Procopio, J.-M. Moison, C. Minot, A. Levenson, V. D'Auria, T. Lunghi, S. Tanzilli, ≪Intrication dans des guides couplés: variations avec un coupleur directionnel non-linéaire", OPTIQUE-Journées Nationales d'Optique Guidée 2018, JNOG2018 (Toulouse, France, 2018)
16. D. Aktas, O. Alibart, V. D'Auria, M. De Micheli, F. Doutre, B. Fedrici, X. Hua, F. Kaiser, L. Labonté, T. Lunghi, F. Mazeas, F. Mondain, P. Vergyris, and Sébastien Tanzilli, "Q photonics at telecom

wavelengths for sensing & communication applications – an overview", Photonic, Quantum & Nonlinear Optics Workshop (Nice, France, 2018).

17. D. Aktas, O. Alibart, V. D'Auria, M. De Micheli, F. Doutre, B. Fedrici, X. Hua, F. Kaiser, L. Labonté, T. Lunghi, F. Mazeas, F. Mondain, P. Vergyris, and Sébastien Tanzilli, "Photonics Q technologies, from communication to optical material characterization", 16emes Journées Nano, Micro & Optoélectronique, JNMO (Agay, France, 2018).
18. B. Fedrici, L. A. Ngah, F. Kaiser, L. Labonté, O. Alibart, V. D'Auria, S. Tanzilli, "All-optical synchronization for quantum networks", SPIE Photonics Europe (Strasbourg, France, 2018)
19. B. Fedrici, L. A. Ngah, F. Kaiser, L. Labonté, O. Alibart, V. D'Auria, S. Tanzilli, "All-optical synchronization for quantum networks", Colloque du GDR Ingénierie Quantique, des Aspects Fondamentaux aux Applications (Nice, France, 2017).
20. B. Fedrici, L. A. Ngah, F. Kaiser, O. Alibart, L. Labonté, V. D'Auria, and Sébastien Tanzilli, "All-optical synchronization for quantum networks based on photonic entanglement", DIADEMS & SIRTEQ Quantum Technologies Workshop (Palaiseau, France, 2017).
21. B. Fedrici, L.A. Ngah, O. Alibart, F. Kaiser, L. Labonté, V. D'Auria, and S. Tanzilli, "All-optical synchronization for quantum networks", Transparent Optical Networks, ICTON, 19th International Conference on (Girona, Spain, 2017)
22. B. Fedrici, L. A. Ngah, F. Kaiser, L. Labonté, O. Alibart, V. D'Auria, S. Tanzilli, "All-optical synchronization for quantum networks", CLEO/Europe-EQEC 2017 (Munich, Germany, 2017).
23. B. Fedrici, L. A. Ngah, F. Kaiser, L. Labonté, O. Alibart, V. D'Auria, S. Tanzilli, "All-optical synchronization for quantum networks", Quantum Information and Measurement (Paris, France, 2017).
24. B. Fedrici, L. A. Ngah, F. Kaiser, L. Labonté, O. Alibart, V. D'Auria, S. Tanzilli, "All-optical synchronization for quantum networks", Frontiers in Optics, FIO (Rochester, New York, US, 2016).
25. B. Fedrici, F. Kaiser, A. Zavatta, V. D'Auria, S Tanzilli, "Une approche entièrement guidée pour l'optique quantique en régime de variables continues", 36ème édition des Journées Nationales d'Optique Guidée, JNOG'36 (Bordeaux, France, 2016).
26. F. Kaiser, B. Fedrici, A. Zavatta, V. D'Auria, S. Tanzilli, "A fully guided-wave approach to the generation and detection of squeezing at a telecom wavelength", Conference on Lasers and Electro-Optics, CLEO 2016 (San Jose, CA, US, 2016).
27. B. Fedrici, L. A. Ngah, O. Alibart, L. Labonté, V. D'Auria, S. Tanzilli, "An ultra-fast heralded single photon source for quantum relay operation", International Conference for Young Quantum Information Scientists, YQIS (Palaiseau, France, 2015).
28. L. A. Ngah, O. Alibart, L. Labonté, V. D'Auria, S. Tanzilli, "Ultra-fast heralded single photon source based on telecom technology and non-linear optics", Conference on Lasers and Electro-Optics, CLEO 2015 (San Jose, California, US 2015).
29. L. A. Ngah, B. Fedrici, O. Alibart, L. Labonté, V. D'Auria, S. Tanzilli, "An ultra-fast heralded single photon source for quantum communication", Single Photon Workshop 2015, SPW2015 (Genève, Switzerland, 2015).
30. L. A. Ngah, O. Alibart, B. Fedrici, L. Labonté, V. D'Auria, S. Tanzilli, "Communications quantiques à haut débit basées sur la technologie télécom classique", Colloque sur les Lasers et l'Optique Quantique de la Société Française d'Optique, COLOQ'14 (Rennes, France, 2015 - invited talk).
31. L. A. Ngah, V. D'Auria, L. Labonté, O. Alibart, S. Tanzilli, "Ultra-fast photon pair sources for long-distance quantum communication", Quantum Information and Measurement 2014, QIM2014 (Berlin, Germany, 2014).
32. L. A. Ngah, V. D'Auria, L. Labonté, O. Alibart, and Sébastien Tanzilli, "Towards high repetition rate operational quantum relay at telecom wavelength", 16th Int. Conf. on Transparent Optical Networks, ICTON'14 (Graz, Austria, 2014).
33. L. A. Ngah, V. D'Auria, L. Labonté, O. Alibart, S. Tanzilli, "Ultrafast Photon Pair Sources for Quantum Networking", 17th Eur. Conf. on Integrated Optics, ECIO'14 (Nice, France, 2014).
34. L. A. Ngah, O. Alibart, L. Labonté, V. D'Auria, S. Tanzilli, "Ultrafast quantum optics based on telecommunication technologies", 7th Italian Quantum Information Science Conference 2014, IQIS2014 (Salerno, Italy, 2014 - invited talk).
35. L. A. Ngah, O. Alibart, L. Labonté, V. D'Auria, S. Tanzilli, "Ultrafast quantum optics based on telecommunication technologies", conférence de la division de Physique Atomique et Moléculaire et

Optique de la Société Française de Physique, PAMO-JSM2014, (Reims, France, 2014 – plenary invited talk).

36. L. A. Ngah, O. Alibart, L. Labonté, V. D'Auria, S. Tanzilli, "Ultrafast heralded single photon source based on telecommunication technologies", 6th Italian Quantum Information Science Conference 2013, IQIS2013 (Como, Italy, 2013 - invited talk).
37. O. Morin, V. D'Auria, C. Fabre, J. Laurat, J.-D. Bancal, M. Ho, P. Sekatski, N. Gisin, N. Sangouard, "Optical hybrid quantum information: Example of a continuous-variable trustworthy witness for single-photon entanglement", Lasers and Electro-Optics, CLEO, 2013 Conference on (San Jose, California, US, 2013).
38. O. Morin, V. D'Auria, C. Fabre, J. Laurat, J.-D. Bancal, M. Ho, P. Sekatski, N. Gisin, N. Sangouard, "Witnessing trustworthy single-photon entanglement with local homodyne measurements", Lasers and Electro-Optics Europe, CLEO EUROPE/IQEC, 2013 Conference on and International Quantum Electronics Conference (Munich, Germany, 2013).
39. V. D'Auria, F. Kaiser, L. A. Ngah, L. Labonté, O. Alibart, S. Tanzilli, "Integrated nonlinear optics for Quantum Communication", 5th Italian Quantum Information Science Conference 2012, IQIS2012, (Padova, Italy, 2012 - invited talk).
40. O. Morin, V. D'Auria, J. Liu, K. Huang, C. Fabre and J. Laurat, "A source of High fidelity heralded single-photons and a novel hybrid witness for single-photon entanglement", 3ème Colloque du GDR Quantum Information, Fondations, Applications (Grenoble, France, 2012).
41. O. Alibart, V. D'Auria, L. Labonté, F. Doutre, M. De Micheli, A. Martin, F. Kaiser, L. A. Ngah, A. Issautier, A. Kastberg, D. B. Ostrowsky, S. Tanzilli, "L'information quantique photonique: le point de vue de l'expérimentateur", Nice Physics Days (Valbonne Sophia-Antipolis, France, 2012).
42. V. D'Auria, F. Kaiser, A. Martin, L. Labonté, M. P. De Micheli, D. B. Ostrowsky, O. Alibart, S. Tanzilli, "Quantum communication based on integrated nonlinear optics", International Workshop on Quantum Manipulation of Atoms and Photons, QMAP2011 (Shanghai, China, 2011 - invited talk).
43. V. D'Auria, F. Kaiser, A. Martin, L. Labonté, M. P. De Micheli, D. B. Ostrowsky, O. Alibart, S. Tanzilli, "Enabling quantum communication using integrated nonlinear optics", SPIE conference on Optical Complex Systems, OCS'2011 (Marseille, France, 2011 - invited talk).
44. F. Kaiser, A. Martin, A. Issautier, L. Labonté, V. D'Auria, O. Alibart, S. Tanzilli, "Narrowband polar. entanglement sources based on IO for quantum appl. at telecom wavelength", IEEE Photonics Society, Summer Topicals on Entanglement Distribution in Quantum Communication and Beyond, SUM'2011 (Montreal, Canada, 2011).
45. A. Martin, J.-L. Smirr, F. Kaiser, V. D'Auria, R. Frey, O. Alibart, I. Zaquine, S. Tanzilli, "Analysis of elliptically polarized, maximally entangled states", 20th International Laser Physics Workshop, LPHYS'11 (Sarajevo, Bosnia Herzegovina, 2011).
46. F. Kaiser, A. Martin, L. Labonté, V. D'Auria, M. P. De Micheli, O. Alibart, S. Tanzilli, "Source de paires de photons intriqués en polar. émis en bande étroite aux longueurs d'ondes des télécoms", 12ème Colloque sur les Lasers et l'Optique Quantique, COLOQ'12, (Marseille, France, 2011).
47. F. Kaiser, A. Martin, V. D'Auria, M.P. De Micheli, O. Alibart, S. Tanzilli, "Fully fibred polar. entangled photon pair source at a telecom wavelength for quantum networking", Transparent Optical Networks, ICTON, 13rd International Conference on (Stockholm, Sweden, 2011).
48. V. D'Auria, N. Lee, T. Amri, J. Laurat, C. Fabre, "Experimental characterization of optical detectors for single photon subtraction", Lasers and Electro-Optics, CLEO, Quantum Electronics and Laser Science Conference, QELS (San Jose, California, US, 2010).
49. V. D'Auria, S. Fornaro, A. Porzio, S. Solimeno, S. Olivares, "Full characterization of bipartite entangled states by means of a single homodyne detector", European Quantum Electronics Conference, CLEO/Europe (Munich, Germany, 2009).
50. V. D'Auria, S. Fornaro, A. Porzio, S. Solimeno, S. Olivares, M. G. A. Paris "Characterization of bipartite states: from theory to experiment", 11th International Conference on Squeezed States and Uncertainty Relations and 4th Feynman Festival, ICSSUR11 (Olomouch, Czech Republic, 2009).
51. A. Porzio, V. D'Auria, S. Fornaro, S. Solimeno, "Complete bi-partite CV entanglement characterization via covariance matrix measurement", SPIE meeting on Photon Counting Applications, Quantum Optics, Quantum Information Transfer and Processing II (Prague, Czech Republic, 2009).

52. V. D'Auria, G. Keller, J. Laurat, N. Treps, T. Amri, T. Coudreau, C. Fabre, "Levels of Quantum Correlations in the Continuous Variable Regime: Review and Experimental Illustrations with OPOs", Quantum Communication, Measurement and Computing, QCMC (Calgary, Canada, 2008).
53. G. Keller, V. D'Auria, N. Treps, T. Coudreau, J. Laurat, C. Fabre, "Experimental generation of frequency degenerate bright EPR beams with a self-locked optical parametric oscillator", International Conference on Quantum Information (ICQI) (Boston, Massachusetts, US, 2008).
54. A. Porzio, V. D'Auria, S Fornaro, S. Solimeno, S Olivares, M. G. A. Paris, "Efficient generation of CV entanglement by triply resonant non-degenerate OPA", SPIE Meeting on Photon Counting Applications, Quantum Optics, Quantum Cryptography (Prague, Czech Republic, 2007).
55. A. Porzio, V. D'Auria, S. Solimeno, M. G. Paris, "Pattern-function quantum tomography: a tool for experimentally investigating the real state of radiation fields", SPIE Meeting on Quantum Communications and Quantum Imaging III (San Diego, California, US, 2005).
56. V. D'Auria, A. Porzio, S. Solimeno, S. Olivares, M. G. A. Paris, "Deviations from a Gaussian state for the output of a degenerate below threshold OPO", International Conference in Squeezed States and Uncertainty Relations, ICSSUR05 (Besançon, France, 2005).
57. A. Porzio, A. Chiummo, V. D'Auria, S. Solimeno, M. G. A. Paris, "Deviations from a Gaussian state for the output of a degenerate below threshold OPO", 1st Meeting of the Coherentia Young Researchers, (Naples, Italy, 2005).
58. A. Porzio, A. Chiummo, V. D'Auria, S. Solimeno, M. G. A. Paris, "Quantum Tomography of squeezed vacuum for measuring the transmittivity of materials in the dark", SPIE Annual Meeting 2004: Quantum Communication and Quantum Imaging II (Denver, Colorado, US, 2004).
59. A. Porzio, P. Aniello, A. Chiummo, V. D'Auria, M. de Laurentis, S. Solimeno, M. G. A. Paris, "A novel quantum cryptographic scheme based on bright twin—beam", 8th International Conference on Squeezed States and Uncertainty Relations, ICSSUR8 (Puebla, Mexico, 2003).

List of peer-reviewed conference papers

1. François Mondain, Tommaso Lunghi, Alessandro Zavatta, Élie Gouzien, Florent Doutre, Marc de Micheli, Sébastien Tanzilli, and Virginia D'Auria, "Plug-and-Play generation and manipulation of squeezing on chip", Lasers and Electro-Optics Europe, CLEO EUROPE/IQEC, 2019 Conference on and International Quantum Electronics Conference (Munich, Germany, 2019).

2. F. Mondain, T. Lunghi, A. Zavatta, E. Gouzien, F. Doutre, M. de Micheli, S. Tanzilli, and V. D'Auria, "Plug-and-Play squeezing experiment on chip at telecom wavelength," in Conference on Lasers and Electro-Optics, OSA Technical Digest (Optical Society of America, 2019), paper FTh4D.2. Confernece: Conference on Lasers and Electro-Optics, CLEO 2019 (San Jose, CA, US, May 2019)

3. É. Gouzien, B. Fedrici, A. Zavatta, S. Tanzilli, and V. D'Auria, "Quantum Description of Single Photon Detectors Including Timing-Jitter Effects," in Quantum Information and Measurement (QIM) V: Quantum Technologies, OSA Technical Digest (Optical Society of America, 2019), paper T5A.38. Conference: Conference on Lasers and Electro-Optics, CLEO 2019 (San Jose, CA, US, May 2019)

4. F. Mondain, T. Lunghi, A. Zavatta, E. Gouzien, F. Doutre, M. de Micheli, S. Tanzilli, and V. D'Auria, "Chip-based squeezing at a telecom wavelength," in Quantum Information and Measurement (QIM) V: Quantum Technologies, OSA Technical Digest (Optical Society of America, 2019), paper F4A.4. Conference: Quantum Information and Measurement 2019, QIM 2019, Rome, Italy, 2019.

5. É. Gouzien, B. Fedrici, A. Zavatta, S. Tanzilli, and V. D'Auria, "Quantum Description of Single Photon Detectors Including Timing-Jitter Effects," in Quantum Information and Measurement (QIM) V: Quantum Technologies, OSA Technical Digest (Optical Society of America, 2019), paper T5A.38. Conference: Quantum Information and Measurement 2019, QIM 2019, Rome, Italy, 2019.

6. V. D'Auria, B. Fedrici, F. Kaiser, L. Labonté, O. Alibart, and S. Tanzilli, "Synchronizing remote quantum network stations using an all-optical method," in Quantum Information and Measurement (QIM) V:

Quantum Technologies, OSA Technical Digest (Optical Society of America, 2019), paper F4A.1.
Conference: Quantum Information and Measurement 2019, QIM 2019, Rome, Italy, 2019.

7. B. Fedrici, L. A. Ngah, O. Alibart, F. Kaiser, L. Labonté, V. D'Auria, S. Tanzilli, « All-optical synchronization for quantum networking », Proc. SPIE 10674, Quantum Technologies 2018, 1067412 (21 May 2018);
   Conference: SPIE Photonics Europe, Strasbourg, France 2018.

8. B Fedrici, LA Ngah, O Alibart, F Kaiser, L Labonté, V D'Auria, S Tanzilli, « All-optical synchronization for quantum communication networks » in 2017 17th International Conference on Transparent Optical Networks (ICTON), IEEE Conference Publications, pp. 1-3 (2017) ISSN: 2161-2064.
   Conference: Transparent Optical Networks (ICTON), 2017 19th International Conference on, Giroan, Spain, 2017

9. B. Fedrici, L. A. Ngah, O. Alibart, F. Kaiser, L. Labonté, V. D'Auria, and S. Tanzilli, "All-optical synchronization for quantum communication networks," in 2017 European Conference on Lasers and Electro-Optics and European Quantum Electronics Conference, (Optical Society of America, 2017), paper EB_1_2.
   Conference: Conference on Lasers and Electro-Optics Europe & European Quantum Electronics (CLEO/Europe-EQEC), Munich, Germany, 2017

10. B. Fedrici, L. Arif Ngah, O. Alibart, F. Kaiser, L. Labonté, V. D'Auria, S. Tanzilli, « All-optical synchronization for quantum networking » in Quantum Information and Measurement 2017, OSA Technical Digest (online) (Optical Society of America, 2017), paper QF3B. 5
    Conference: Quantum Information and Measurement (QIM) 2017, Paris, France, 2017

11. B. Fedrici, L. Arif Ngah, O. Alibart, F. Kaiser, L. Labonté, V. D'Auria, S. Tanzilli, « All-optical synchronization for quantum networking » in Frontiers in Optics, OSA Technical Digest (online) (Optical Society of America, 2017), paper FW3B. 3
    Conférence: Frontiers in Optics 2016, Rochester, New York, United States, 2016

12. F. Kaiser, B. Fedrici, A. Zavatta, V. D'Auria, and S. Tanzilli, « A fully guided-wave approach to the generation and detection of squeezing at a telecom wavelength » in Conference on Lasers and Electro-Optics, OSA Technical Digest (online) (Optical Society of America, 2016), paper FF2C.2.
    Conference: CLEO: QELS Fundamental Science 2016, San Jose, Californie, États Units, 2016.

13. \item L. A. Ngah, O. Alibart, L. Labonté, V. D'Auria, S. Tanzilli, « Ultra-fast heralded single photon source based on telecom technology and non-linear optics », in CLEO: 2015, OSA Technical Digest (online) (Optical Society of America, 2015), paper FM2A.8
    Conference: CLEO: QELS Fundamental Science 2015, San Jose, Californie, États Units, 2015.

14. L. A. Ngah, V. D'Auria, L. Labonté, O. Alibart, and S. Tanzilli, « Ultra-fast photon pair sources for long-distance quantum communication » in Research in Optical Sciences, OSA Technical Digest (online) (Optical Society of America, 2014), paper JW2A.34.
    Conference: Quantum Information and Measurement 2014, Messe Berlin, Berlin, Allemagne, 2014.

15. L. A. Ngah, V. D'Auria, L. Labonté, O. Alibart and S. Tanzilli, « Towards high repetition rate operational quantum relay at telecom wavelength », in 2014 16th International Conference on Transparent Optical Networks (ICTON), IEEE Conference Publications, pp. 1-3 (2014). ISSN= 2162-7339.
    Conference: Transparent Optical Networks (ICTON), 2014 16th International Conference on, Graz, Autriche, 2014.

16. O. Morin, V. D'Auria, C. Fabre, J. Laurat, J.-D. Bancal, M. Ho, P. Sekatski, N. Gisin, N. Sangouard, « Optical hybrid quantum information: Example of a continuous-variable trustworthy witness for single-

photon entanglement », in CLEO: 2013, IEEE Conference Publications, pp. 1-2 (2013). ISSN= 2160-8989.
Conference: Lasers and Electro-Optics (CLEO), 2013 Conference on, San Jose, Californie, États Units, 2013.

17. O. Morin, V. D'Auria, C. Fabre, J. Laurat, J.-D. Bancal, M. Ho, P. Sekatski, N. Gisin, N. Sangouard, « Witnessing trustworthy single-photon entanglement with local homodyne measurements », in CLEO: 2013, OSA Technical Digest (online) (Optical Society of America, 2013), paper QM1C.4.
Conference: Lasers and Electro-Optics Europe (CLEO EUROPE/IQEC), 2013 Conference on and International Quantum Electronics Conference, Munich, Allemagne, 2013.

18. F. Kaiser, A. Martin, V. D'Auria, M. P. De Micheli, O. Alibart, S. Tanzilli, « Fully fibred polarization entangled photon pair source at a telecom wavelength for long distance quantum networking », in 2011 13th International Conference on Transparent Optical Networks, IEEE Conference Publications, pp. 1- 4, ISSN= 2162-7339 (2011).
Conference: Transparent Optical Networks (ICTON), 2011 13th International Conference on, Stockholm, Suède, 2011.

19. \item F. Kaiser, A. Martin, A. Issautier, L. Labonté, V. D'Auria, M. De Micheli, D. B. Ostrowsky, O. Alibart, S. Tanzilli, « Narrowband polarization entanglement sources based on integrated optics for quantum applications at telecom wavelength », in 2011 IEEE Photonics Society Summer Topical Meeting Series, IEEE Conference Publications, pp. 6- 7, ISSN= 1099-4742 (2011).
Conference: Photonics Society Summer Topical Meeting Series, 2011, Monreal, Canada, 2011.

20. \item V. D'Auria, F. Kaiser, A. Martin, L. Labonté, M. P. De Micheli, D. B. Ostrowsky, O. Alibart, S. Tanzilli « Enabling quantum communication using integrated nonlinear optics » Proceedings of SPIE Vol. 8172, Optical Complex Systems: OCS11, 81720M (2011).
Conference: Optical Complex Systems: OCS11, Marseille, France, 2011.

21. V. D'Auria, N. Lee, T. Amri, J. Laurat, C. Fabre « Experimental characterization of optical detectors for single photon subtraction » in Conference on Lasers and Electro-Optics 2010, OSA Technical Digest (CD) (Optical Society of America, 2010), paper QThD6.
Conference: CLEO: QELS Fundamental Science 2010, San Jose, Californie, États Units, 2010.

22. V. D'Auria, S. Fornaro, A. Porzio, S. Solimeno, S. Olivares, « Full characterization of bipartite entangled states by means of a single homodyne detector », CLEO/Europe and EQEC 2009 Conference Digest, (Optical Society of America, 2009), paper EA P6.
Conference: CLEO/Europe: European Quantum Electronics Conference, Munich, Allemagne, 2009.

23. V. D'Auria, S. Fornaro, A. Porzio, S. Solimeno, S. Olivares, M. G. A. Paris « Characterization of bipartite states: from theory to experiment » in Book of abstracts - 11th International Conference on Squeezed States and Uncertainty Relations and 4th Feynman Festival p. 157, Eds. O. Haderka and J. Perina Jr. (2009).
Conference: 11th International Conference on Squeezed States and Uncertainty Relations and 4th Feynman Festival, Olomouch, République Tchèque, 2009.

24. A. Porzio, V. D'Auria, S. Fornaro, S. Solimeno « Complete bi-partite CV entanglement characterization via covariance matrix measurement » in Proceedings of SPIE Vol. 7355, Photon Counting Applications, Quantum Optics, Quantum Information Transfer and Processing II, 73550B, Eds. Ivan Prochazka; Roman Sobolewski; Miloslav Dusek (2009).
Conference: SPIE meeting on Photon Counting Applications, Quantum Optics, Quantum Information Transfer and Processing II, Prague, République Tchèque, 2009.

25. V. D'Auria, G. Keller, J. Laurat, N. Treps, T. Amri, T. Coudreau, C. Fabre « Levels of Quantum Correlations in the Continuous Variable Regime: Review and Experimental Illustrations with OPOs » in AIP Conf. Proc. 1110, p. 185, Ed. Alexander Lvovsky (2009).
Conference: Quantum Communication, Measurement and Computing, Calgary, Canada, 2008.

26. V. D'Auria, G. Keller, N. Treps, T. Coudreau, J. Laurat, C. Fabre, « Experimental Generation of Frequency-Degenerate Bright EPR Beams with a Self-Locked Optical Parametric Oscillator », in International Conference on Quantum Information, (Optical Society of America, 2008), paper QMA5.
Conference: International Conference on Quantum Information 2008, Boston, Massachusetts, États Units, 2008.

27. A. Porzio, V. D'Auria, S Fornaro, S. Solimeno, S Olivares, M. G. A. Paris « Efficient generation of CV entanglement by triply resonant non-degenerate OPA », in Proceedings of SPIE Vol. 6583, Photon Counting Applications, Quantum Optics, Quantum Cryptography, 65830R, Eds Ivan Prochazka; Alan L. Migdall; Alexandre Pauchard; Miloslav Dusek; Mark S. Hillery; Wolfgang P. Schleich (2007).
Conference: SPIE Meeting on Photon Counting Applications, Quantum Optics, Quantum Cryptography, Prague, République Tchèque, 2007.

28. A. Porzio, V. D'Auria, S. Solimeno, M. G. Paris, « Pattern-function quantum tomography: a tool for experimentally investigating the real state of radiation fields », in Proceeding of SPIE Vol. 5893, pp. 42-51, Quantum Communications and Quantum Imaging III; Eds. Ronald E. Meyers, Yanhua Shih (2005).
Conference: SPIE Meeting on Quantum Communications and Quantum Imaging III, San Diego, Californie, États Units, 2005.

29. A. Porzio, A. Chiummo, V. D'Auria, S. Solimeno, M. G. Paris « Quantum tomography of squeezed-vacuum for measuring the transmittivity of materials in the dark », in Proceedings of SPIE Vol. 5551, pp.7-14, Quantum Communications and Quantum Imaging II, Eds. Ronald E. Meyers, Yanhua Shih (2004).
Conference: SPIE Meeting on Quantum Communications and Quantum Imaging II, Denver, Colorado, États Units, 2004.

30. Porzio, P. Aniello, A. Chiummo, V. D'Auria, M. de Laurentis, S. Solimeno, M. G. A. Paris « A novel quantum cryptographic scheme based on bright twin—beam » in Proceedings of the 8th International Conference on Squeezed States and Uncertainty Relations, pp. 328-335, Rinton Press (2003).
Conference: 8th International Conference on Squeezed States and Uncertainty Relations, Puebla, Mexique, 2003.