Europass Curriculum Vitae

Summary:

Since 2017 Orlando Luongo works as professor of Cosmology and Quantum Field Theory at the University of Camerino, Physics Division of the School of Science and Technology. He is also a post doc fellow at the Mathematics Department of the University of Pisa. Before his current employment, he worked as Assistant Professor in cosmology at the National Laboratories of Nuclear Physics (INFN) of Frascati. He gained his international PhD degree in Relativistic Astrophysics at the University of Rome "La Sapienza" in 2012. In 2015 he was awarded the Polvani national prize, from the Italian Society of Physics - SIF, for his high-impact researches in Astrophysics. In 2018 he received the National Scientific Qualification as Associate Professor of Theoretical Physics. He is regularly present in several local and international meetings, as speaker and chairman. He is editor for: International Journal for Geometric Methods in Modern Physics and for Licosia Edizioni. He is author of more than 90 scientific works, including research papers, chapters of books, proceedings, etc. His research activity is essentially based on theoretical physics and in particular on the interplay between cosmology and quantum information theory.

Personal information

Surname / First name

Address

Telephone

Personal Email

Nationality

Date of birth

Gender

Occupational field

Work experience

Dates

Occupation or position held Name and address of employer

Dates

Occupation or position held Name and address of employer

Dates

Occupation or position held Name and address of employer

Dates

Occupation or position held Name and address of employer Supervisor

> Dates Occupation or position held

Luongo, Orlando

(Work): Via Madonna delle Carceri, Camerino, Italy

orlando.luongo@unicam.it

Italian

02-11-1984 Current age: 36

Male

Assistant professor in theoretical physics

01/01/2017 - present

Adjunct Assistant Professor (Professore a contratto)

Physics Division, School of Science and Technology, University of Camerino, Camerino, Italy.

01/11/2020 - present Post Doc Fellow

University of Pisa, Mathematics Department, Pisa, Italy.

09/10/2017 - 30/09/2020

Assistant Professor in cosmology

National Institute of Nuclear Physics (INFN), Frascati, Italy.

01/03/2017 - 30/09/2017

Post Doc Fellowship

School of Science and Technology, University of Camerino, Camerino, Italy.

Prof. Stefano Mancini

01/01/2016 - 28/02/2017

Post Doc Fellowship

Name and address of employer Department of Physics "E. Pancini", University of Naples, Naples, Italy.

Supervisor Prof. Fedele Lizzi

Dates 01/07/2015 - 31/12/2015

Occupation or position held Post Doc Fellowship

Name and address of employer Department of Mathematics and Applied Mathematics, University of Cape Town, Cape

Town, South Africa.

Supervisor Prof. Peter K. S. Dunsby

Dates 01/03/2013 - 14/04/2015

Occupation or position held Fellowship awarded for the Km3NeT project

Name and address of employer National Institute of Nuclear Physics (INFN) and National South Laboratories (LNS), Cata-

nia, Italy.

Supervisor Dr. Pasquale Migliozzi

Dates 01/12/2011 - 31/10/2012

Occupation or position held Post Doc Fellowship

Name and address of employer Institute for Nuclear Science (ICN), Universidad National Autonoma de Mexico, (UNAM),

Mexico City, Mexico.

Supervisor Prof. Hernando Quevedo, Prof. Salvatore Capozziello

Summary of Total publications:

Total number of works: > 100. Total number of citations: > 1800. Book: 3. h-factor: 25.

Education and training

Dates 03/11/2008 - 29/03/2012

With thesis Geometrothermodynamics in General Relativity as a tool to describe the Universe dynam-

ics

Supervisor Prof. Hernando Quevedo

Dates 01/10/2006 - 16/07/2008

Title of qualification awarded Master Degree in Physics at University of Naples "Federico II"

With thesis L'approccio tomografico in Cosmologia Quantistica

Supervisors Prof. Salvatore Capozziello

Final vote 110/110 cum laude

Dates 01/10/2003 - 14/09/2006

Title of qualification awarded Bachelor's Degree in Physics at the University of Salerno

With thesis Fenomeni di coerenza in processi di interazione tra radiazione e materia

Supervisor Prof. Fabrizio Illuminati Final vote 110/110 cum laude

Dates 06/12/2014 - 29/09/2015

Title of qualification awarded Bachelor's Degree in Civil Engineering at the University of Naples "Pegaso"

With thesis Studio quantitativo delle facciate ventilate per il miglioramento dell'efficienza termica degli

edifici

Supervisor Prof. Paola lodice

Final vote 105/110

Personal skills and competences

Mother tongue | Italian

Other language(s)

Self-assessment

European level*

English Spanish French

Computer skills and competence in programming:

Awards	and
achieveme	nts:

Understanding Speaking		aking	Writing	
Listening	Reading	Spoken interaction	Spoken production	
Excellent	Excellent	Excellent	Excellent	Excellent
Excellent	Excellent	Excellent	Excellent	Excellent
Good	Good	Good	Good	Good

^(*) Common European Framework of Reference (CEF) level

Excellent competences in: Windows (All versions and packages), Linux (All versions and packages), MAC-OS (All versions and packages), Web site realizations and maintenance, Numerical calculus and programming; Wolfram Mathematica (All versions), Maple, MAT-LAB, CosmoMC, CAMB, Iraf, Python, R, SuperMongo, C/C++, Fortran, Office (All versions), GNUPLOT, Origin, LateX, Root, BAT, AutoCAD, BIM, CodeV, Planetary Ephemeris Program-PEP.

- 1. Awarded by World Scientific with Outstanding referee 2020, (2021).
- Awarded by "Società Italiana di Fisica" (SIF) with <u>Giovanni Polvani Prize</u> for scientific industriousness merits concerning young scientists for the period May 2008 - May 2015, Rome, Italy, September, (2015).
- 3. Awarded for *Progetto di Formazione Specialistica: Una Nuova Frontiera per la Ricerca: Gli Osservatori Sottomarini*, considered as a Master diploma in Physics, Catania, Laboratori Nazionali del Sud (INFN-LNS), Italy, (2015).
- 4. Prize gained for "high-impact science communication" gained from *Percorsi culturali di eccellenza: Sapere Aude*, awarded by Istituto di Istruzione Superiore "Leonardo Da Vinci", Salerno, Italy, (2013).
- 5. Language diplomas: BULATS certificate, Cambridge, English, Level C2 (2017) and Spanish, Level B2 (2018).
- 6. Computer diplomas: European Computer Driving License: E.C.D.L. Professional and E.C.D.L. Advanced and E.C.D.L. Core.
- 7. Specialisation course in: *Space Optics*, at ESTEC, Noordwijk, the Netherlands, (2017).

Qualification(s):

National Scientific Qualification (art.16 of the law 30 December 2010, n.240) as Full Professor in FIS/02 - Theoretical Physics.

Referee for:

Reports on Progress in Physics/ Physical Review D/ Physics Letter B/ Classical and Quantum Gravity/ General Relativity and Gravitation/ Physics Letter A/ International Journal of Modern Physics D/ International Journal of Geometric Methods in Modern Physics/ Physics of the Dark Universe/ The European Physical Journal C/ Astrophysics and Space Sciences/ Modern Physics Letter A/ Physica Scripta/ Optik/ Universe/ Entropy/ Galaxy/ Symmetry/ Mathematical and Computational Applications.

School(s) and conference(s):

Present in more than 30 international conferences

- Chairman for the sixteenth Marcel Grossmann Meeting MG16, University of Rome "La Sapienza", July 5-10, 2021, Rome, Italy;
- 2. Chairman for the fifteenth Marcel Grossmann Meeting MG15, University of Rome "La Sapienza", July 1-7, 2018, Rome, Italy;
- 3. Invited talk at the Physics Department of Nazarbayev University, Astana, Kazakhstan, December 1-8, 2018, Astana, Kazakhstan.
- 4. Invited talk at Spontaneous Workshop XIII, *Hot topics in Modern Cosmology*, 5-11 May 2019 IESC, Cargèse, France.

List of teaching experiences in Italy:

At the University of Camerino, Camerino, Italy:

- 1. Adjunct Assistant Professor for the courses of "Cosmology" (Cosmologia) at the University of Camerino, Camerino, Italy, 2018-present, 6 CFU.
- Adjunct Assistant Professor for the courses of "Quantum Field Theory" (Teoria Quantistica dei campi) at the University of Camerino, Camerino, Italy, 2017-present, 6 CFU.
- 3. Adjunct Assistant Professor for the courses of "Theoretical Physics" (Fisica Teorica) at the University of Camerino, Camerino, Italy, from October 2021 on, 6 CFU.
- 4. Teaching experience for the course of "Metodi Matematici per la Fisica" (Mathematical Methods for Physics) at the University of Camerino, Camerino, Italy, 2016-2017, in collaboration with Prof. S. Mancini.

Outside the University of Camerino.

- 1. Co.Co.Co. Professor for "Fisica" (Physics), "Fisica Generale" (General Physics), "Matematica 1" (Calculus) at the University of Benevento, Unisannio, 2014-2016. Teaching experience for "Metodi Matematici per la Fisica" (Mathematical Methods for Physics), "Fisica Generale" (General Physics), "Cosmologia" (Cosmology), "Astroparticle Physics" and for the PhD course "Constraining Cosmologies using CosmoMC and CAMB" at the University of Naples "Federico II", 2012-2014. Teaching support for the course "Theoretical physics" at the University of Rome "La Sapienza", Rome, Italy, 2009-2010.
- 2. Teaching experience for the PhD courses "General Relativity" and "Advanced Quantum field theory" at the UNAM University, Mexico City, in collaboration with Prof. H. Quevedo.

Students:

Tutor for more than 20 students (bachelor, master, phd, fellowships, etc.) inside and outside Unicam

Outreach at Unicam:

- 1. Tutor for the stage of students *Porte aperte in unicam Estate 2020*, during the period from July 8th to August 7th 2020 and Speaker on theoretical physics and cosmology at the *Open Day*, University of Camerino, physics division, Camerino, Italy.
- 2. Permanent member for study advisory at the University of Camerino, physics division, Camerino, Italy.
- 3. Speaker on theoretical physics and cosmology at the *Open Day*, University of Camerino, physics division, Camerino, Italy.

Collaborations in Unicam:

- 1. 2013 now, Collaboration with Prof. Stefano Mancini, School of Science and Technology, University of Camerino, Camerino, Italy.
- 2. 2016 now, Research associate to Quantum Optics and Quantum Information Group at the University of Camerino.
- 3. 2018 now, Collaboration with Prof. Roberto Giambò, School of Science and Technology, University of Camerino, Camerino, Italy.

Outside Unicam, more than 50 collaborators in several national and international Institutes and Universities mainly in Europe, America and Asia.

Editorial and activities:

Editor for the journal International Journal of Geometrical Methods in Modern Physics; Managing Editor for Publishing House: "Licosia Edizioni", Rome, Italy; Lead Guest Editor for the special issue: Model-Independent Techniques of Dark Energy Scenarios in Homogeneous and Inhomogeneous Cosmologies on Advances in High Energy Physics, Hindawi; Beyond the Standard Cosmological Model in the Multi-messanger Era on Symmetry, MDPI; Theories of Gravity: Alternatives to the Cosmological and Particle Standard Models on Universe, MDPI.