#### Curriculum vitae of Prof. Paolo Gaudenzi

Born in Rome, Italy, on 19.3.1961. Full Professor of Costruzioni e Strutture Aerospaziali Coordinator of the PhD course in Aerospace Technologies Director of the Master in Satellites and orbital platforms Università di Roma La Sapienza Facoltà di Ingegneria Civile e Industriale Dipartimento di Ingegneria Meccanica e Aerospaziale, Via Eudossiana 16, 00136 Roma, Italia Tel: +39-06-44585304 Fax: +39-06-44585670 *e-mail* paolo.gaudenzi@uniroma1.it *web sites* www.smart-lab.it www.mastersatelliti.it

Laurea in Civil Engineering cum laude, Università di Roma La Sapienza (1984). Dottore di ricerca (PhD) in Aerospace Engineering, Università di Roma La Sapienza (1989).

Visiting Scientist at Massachusetts Institute of Technology (USA) (1991-1992). Ricercatore (Assistant Professor) at la Sapienza since 1990, Associate professor since 1998, Full professor since 2000. Since 2002 Director of the Master in Satellites of La Sapienza.

Author of more than 100 papers 44 of which published on international refereed journals, more than 400 citations, h index 13. Author of the research book *Smart structures*, J. Wiley 2009.

Research topics: aerospace structures and constructions, laminated and composite structures, active materials and intelligent structures, finite element modelling, satellites systems, cost engineering. Lecturer in different graduate and PhD regular courses of the Università di Roma La Sapienza, in some special courses for companies (Alenia Spazio and CSM-Tecnopolo) and in international courses (ASI-NATO).

Responsible of research projects funded by the Italian Ministry for Research, the National Research Council, the Italian Space Agency, the European Space Agency and private companies.

Expert in the evaluation of research projects for the Italian Ministry for Education, University and Reserch, the Italian Ministry for Industrial development, The European Research Council, the regions Lazio, Toscana, Veneto, Piemonte, Puglia. Chairman of the selection board for ENEA (National research body in the field of energy and power).

Advisor of ESA-ESRIN Vega Project team for the critical reviews of the Vega launcher Programme.

Editor of "Aerotecnica, misili e spazio", the Journal of aerospace science, technology and systems. Associate editor of the Int. Journal of Intelligent Material Systems and Structures (2000-2010). Associate editor of the IEEE Trans on Aerospace and Electronic systems(2008-2010) Member of the International board of the CEAS Space Journal and CEAS Aeronautical Journal. Member of the international editorial board of the Journal Computers and Structures. Member of the international editorial board of the Journal Composite Structures. Member of the international scientific committee of the conferences: SECESA- Esa System and concurrent engineering for space ICAST-International Conferences on Adaptive Structures and Technologies; ICCST International Conference on Composite Structures MIT conference on Computational Fluid and Solids mechanics European conf. on spacecraft structures, materials and mechanical testing (ESA,CNES, DLR). CEAS air and space conference for the Space systems panel

Promoter of the European Union/La Sapienza stage program EUROSPACESTAGES. La Sapienza representative for the PEGASUS Consortium among European aerospace universities. Member of the Council for International Relationships of La Sapienza.

# **Luciano Iess** Curriculum Vitae and Publication List

Last update: 6 June 2017

# **General Information**

Full Name	Luciano Iess	N 27
Citizenship	Italian	A STATE OF ST
Office Phone Number	+39 06 44585336	
E-mail	luciano.iess@uniromal.it	A A A A A A A A A A A A A A A A A A A
Interests	Geology, canyoning, trekking	

# Education

1976-1980	Alumnus,	Collegio	Ghislieri,	Pavia,	Italy	
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1981 *Laurea* in physics, with honors, University of Pavia, Italy

# Academic and Research Appointments

1982-1992	Research scientist at Istituto di Fisica dello Spazio Interplanetario, Consiglio Nazionale delle Ricerche (CNR, Italian National Research Council), Frascati, Italy
1992-2015	Associate professor of Aerospace Engineering, Sapienza Università di Roma,
	Rome, Italy
1993	Visiting Research Scientist, European Space and Technology Centre (ESTEC),
	European Space Agency, Noordwijk, The Netherlands (4 months)
1995-1996	Visiting Scientist, California Institute of Technology, Jet Propulsion Laboratory,
	Pasadena, Ca., USA (12 month, supported by a National Science Foundation grant)
1997	Visiting Scientist, California Institute of Technology, Jet Propulsion Laboratory
	(supported by a short term fellowship from the Italian National Research Council)
2015	Professor of Aerospace Engineering, Sapienza Università di Roma, Rome, Italy



**Dr. Pierfrancesco Lombardo** graduated in July 1991 at the University of Rome "La Sapienza", Italy. After serving at the Official Test Center of the Italian Air Force, he was associate at Birmingham University (UK) and at Defense Research Agency in Malvern. He received his Ph.D in November 1995 and in 1996 was research associate at Syracuse University (NY-USA). In 1996 he joined the University of Rome "La Sapienza", where he is presently Full Professor. Dr. Lombardo is associate Editor for Radar Systems for the IEEE Transactions on Aerospace and Electronic Systems (AES) since June 2001 and Editor for radar System since January 2016. He is co-recipient of the best paper award, entitled to Mr. B. Carlton, of IEEE Trans. on AES for the year 2001 and of the best paper award for the IEEE Trans. on Geoscience and Remote Sensing for the year 2003. He is member of IEEE AES Radar System Panel, and the Editorial board of IET Proceedings on Radar Sonar and Navigation.

Dr. Lombardo is involved in, and coordinates, scientific research projects funded by the European Union Framework Programs, Italian Space Agency, the Italian Ministry of Research and the national Industry. He leads a group of researchers working at the radio-positioning laboratory at the University of Rome "La Sapienza" on radar, remote sensing and navigation. His main interests are in radar adaptive signal processing, radar clutter modelling, radar coherent detection, SAR processing and radio-localization systems.

Dr. Lombardo's research has been reported in over 230 publications in international technical journals and conferences. He served in the technical committee of many international conferences on radar systems and signal processing. He was Chairman of Technical Committee of the IEEE/ISPRS Joint Workshop on Remote Sensing and Data Fusion over Urban Areas URBAN'2001, Rome, Italy, URBAN'2003, Berlin, Germany, and URBAN'2005, Tempe, Arizona (US). He was also Technical Chairman of the IEEE Radar Conference 2008.

### Fabrizio Piergentili



Fabrizio Piergentili

#### **Present Position**

• Assistant Professor in Space Systems, since October 2006.

#### **Research interests**

- Space surveillance, particularly with regard to space debris
- Design and realization of microsatellites
- Determination of the trajectories of ballistic objects
- Space Robotics

#### **Professional Activity**

- Chairman of the IADC (Inter-Agency Space Debris Co-ordination Committee), for Working Group 1, Measurements, since 2012
- Member of the International Programme Committee of the International Astronautical Federation
- Member of the Space Debris Committee of the International Academy of Astronautics
- Chairman at the International Astronautical Congress of the International Astronautical Federation, Space Debris Symposium
- Member of the ASI (Italian Space Agency) delegation at the IADC (Inter-Agency Space Debris Co-ordination Committee), for Working Group 1, Measurements, since 2004.
- Involved in 12 National and International research programs, in the field of space systems and Astrodynamics.
- **Consultant** for Aerospace companies, research centers and the Italian Air Force in the field of space systems and Astrodynamics.

Author of approximately 90 papers published in International and National journals or presented to conferences in the field of space systems and Astrodynamics, <u>H-Index Scopus: 9</u>

#### **Teaching Activity**

- "Avionics and Space Instrumentation" Course given at Faculty of Engineering, University of Bologna "Alma Mater Studiorum", since 2006.
- "Orbital dynamics and control" Course given Faculty of Engineering, University of Bologna "Alma Mater Studiorum", since 2009.
- "Space Debris and Space surveillance" Short Course Given at The University of Rome "La Sapienza", 2012
- Tutor for 1 Phd Thesis and 14 Master and Bachelor thesis
- Coordinator of Group of Space Robotics, II Faculty of Engineering, University of Bologna "ALMA MATER STUDIORUM"
- "Microsatellite attitude control systems" Lecturer, Master in "Satellites and orbiting platforms", School of Aerospace Engineering, University of Rome "La Sapienza", academic years 2006-2007 and 2007-2008.
- Lecturer in the course of "Astrodynamics", School of Aerospace Engineering, University of Rome "La Sapienza", academic years 2006-2007 and 2007-2008.
- Lecturer in the course of "Aerospace Systems", Faculty of Engineering, University of Rome "La Sapienza", academic years 2002-2003 and 2003-2004.

#### Patents and Spin off

- Proposer and partner of University of Rome "La Sapienza" spin off "Roboptics Ltd.", the spin-off is active in the field of optics and robotics space applications.
- Fabrizio Piergentili, *A passive system for LEO microsatellite deorbiting*. patent n°RM2005A000471, Italian patent office, September 15th, 2005.
- Fabrizio Piergentili, Gian Paolo Candini, *Integrated photovoltaic module and production method*, patent n°RM2008A000198, Italian patent office, April 15th, 2008.

# Curriculum vitae for Prof. Paolo Gasbarri

# Academic Position and Education

Associate Professor in Aerospace Structures at the Mechanics and Aerospace Engineering Department, University of Rome La Sapienza.

1989 Laurea Degree in Aeronautical Engineering at University of Rome "La Sapienza"

1989 National license to practice engineering

1992 PhD in Aerospace Engineering

1993-1996 System Engineerat Alenia Space

1996-2004 Assistant Professor in AerospaceStructuresat Università degli Studi di Roma "La Sapienza"

1997 Visiting Professor at the DeutschenZentrum fur Luft-und Raumfahrt (DLR) (Germany)

2005 Associate Professor in Design of Aerospace Structures at "La Sapienza".

2011 Visiting Professor at UNISINOS, Applied Mathematics Department

2015 Visiting Professor ITA, Istituto Tecnòlogico de Aeronatica

# Past activites

Before joining the University of Rome, Dr. Paolo Gasbarri was a Research Fellow in AleniaSpazio (now Thales Alenia Space), one of the leading Italian aerospace industries where he was involved in several research areas concerning Space Technology:

1) Design and Analysis of Space Systems;

2) Attitude Control Design;

3) Aerothermodynamics Analysis of Space Reentry Vehicles;

4) Vibration control of Space Structures.

He was also responsible for the following projects:

1)Aerothermodynamic analysis of Italian Reentry Unmanned Capsule, CARINA;

2)Influence of liquid sloshing and structural elastic frequencies on attitude dynamics of ARTEMIS satellite;

3)PICS project (Integrated Platform for Control Systems): The objective of this research was to develop an autonomous spacecraft simulator and test-bed; later the simulator was used in Alenia for the development and validation of control algorithms as well as various hardware elements necessary for satellite attitude control design. The work was successfully implemented on the Italian Army satellite called SICRAL.

4)Experimental qualification tests of the orbital attitude control system of the scientific ESA satellite ARTEMIS

# Research

The research activities carried out by Paolo Gasbarri deal with two basic themes:

- Composite structures and aeroelastic optimization of composite wings

- Dynamic behavior of the structures in space environment, and multi-body dynamics

Since 1996 Paolo Gasbarri has carried out many researches in collaboration with aerospace industries and Italian research centers and he was theCoordinator and PI of several national and university research projects on space structures, aeroelasticity of composite wings, structural optimizations, adaptive vibration control, aeroelasticity and robotic spacecraft guidance navigation and control space systems. Consultant for FIAT AVIO in the Italian launcher development "VEGA" (2001). Consultant for the Italian Ministry of Defense for the on orbit tests on the attitude of SICRAL I (2002).