

PERSONAL INFORMATION

Pamela Cambianica



 INAF-Osservatorio Astronomico di Padova, Vicolo dell'Osservatorio, 5, 35122 Padova PD

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Sex Female

Date and place of birth 01/07/1988, Trescore Balneario (Bg), Italy

Nationality Italy

EDUCATION AND TRAINING

15/02/2020 – present

Post-doctoral researcher

National Institute for Astrophysics –Astronomical Observatory of Padova – Padova - Italy

Thermal analysis of planetary and small bodies' surface.
Theoretical studies of planetary and small bodies' surfaces.
Ground-based observation of small bodies.

Planetary Surface Processes and Analysis, Geomorphology, Thermal Analysis and Simulation, Fragmentation Analysis, Statistical Analysis

01/10/2016 - 30/10/2019

PhD in Space Sciences, Technologies and Measurements

Centre for Studies and Activities for Space "Giuseppe Colombo" (CISAS), University of Padova, Italy

Curriculum: "Sciences and Technology for Aeronautics and Satellite Application (STASA)"

Project Topic: **Analysis of OSIRIS data, the imaging system onboard Rosetta**

In cooperation with the National Institute for Astrophysics (INAF)

Supervisor: Prof. Giampiero Naletto (University of Padova)

Co-Supervisor: Dr. Gabriele Cremonese (National Institute for Astrophysics)

Planetary Surface Processes and Analysis, Geomorphology, Thermal Analysis and Simulation, Fragmentation Analysis, Statistical Analysis

01/04/2019 - 30/06/2019

Visiting PhD Student

DLR, Deutsches Zentrum für Luft- und Raumfahrt, Berlin

Thermal analysis, Finite Element Method Simulation, Planetary Analysis, under the supervision of Mottola, Dr Stefano

01/10/2014 – 14/09/2016

Master Degree in Astronomy – 100 *cum laude* (out of 100)

Department of Physics and Astronomy – University of Padova, Italy

Solar System, Astrophysics, Astronomy, Physics, Mathematics, Chemistry, Informatics

Topic of Dissertation: **Correlation between insolation model and boulder deposits on comet 67P/Churyumov-Gerasimenko**

Supervisor: Prof. Francesco Marzari (University of Padova)

Co-Supervisor: Dr. Gabriele Cremonese (National Institute for Astrophysics)

01/10/2008 – 16/03/2014 **Bachelor Degree in Astronomy**

Department of Physics and Astronomy – University of Padova, Italy

Solar System, Astrophysics, Astronomy, Physics, Mathematics, Chemistry, Informatics

Topic of Dissertation: **Planetary Transits of the Inner Solar System Seen by Asteroids**

Supervisor: Dr. Lazzarin Monica (University of Padova)

Co-Supervisor: Dr. Simone Zaggia (National Institute for Astrophysics)

12/09/2003 – 20/07/2008 **Scientific and Linguistic Certificate, Italian Secondary School Diploma – 83 (out of 100)**

Lorenzo Federici High School - Trescore Balneario, Bergamo (Bg), Italy

SPACE MISSION INVOLVEMENT

2014 – Present **Associate Scientist:** ESA /Rosetta OSIRIS camera , PI: Dr. Holger Sierks (Max Plank Institute, Goettingen, Germany)

2020 - Present **Associate Scientist:** ESA/BepiColombo SIMBIO-SYS Camera, PI: Cremonese, Dr. Gabriele (INAF-Astronomical Observatory of Padova, Italy).

INTERNATIONAL INVOLVEMENT

01/04/2019 - 30/06/2019 **Visiting PhD Student** - DLR, Deutsches Zentrum für Luft- und Raumfahrt, Berlin

Thermal analysis, Finite Element Method Simulation, Planetary Analysis, under the supervision of Mottola, Dr Stefano

2019 - Present **Co-Investigator**, TNG/A40DDT2 - Observation of the first interstellar comet: 2I/Borisov. PI: Gabriele Cremonese, INAF, Osservatorio Astronomico di Padova

2020 - Present **Co-Investigator**, TNG/A41DDT3 - Observation of comet C2020/F3 Neowise PI: Gabriele Cremonese, INAF, Osservatorio Astronomico di Padova

GRANT, SCHOOL AND WORKSHOP PARTECIPATION

- 26/11/2018 - 30/10/2018 Post Alpbach Summer School - ESA Academy's Training and Learning Facility at ESEC-Galaxia in Belgium.
Design of the Calathus Mission to Occator Crater at Ceres
- 16/07/2018 – 27/07/2018 Summer School Alpbach 2018, **Sample Return Mission from a Small Body of the Solar System**, Alpbach/Tyrol – Austria.
Awarded a financial support for participating to the Alpbach Summer School from ASI, Italian Space Agency
- 09/05/2018 **COMSOL Day** - how to model your thermal flux with COMSOL Multiphysics® software
- 28/08/2017 – 02-09-2017 Summer School SDSM 2017, **“Satellite Dynamics and Space Mission”**, San Martino al Cimino, Viterbo, Italy
- 03/04/2017 – 07/04/2017 VII International Course: **“Detectors and Electronics for High Energy Physics, Astrophysics, Space Application and Medical Physics”**, INFN, Legnaro, Italy

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
German	A2	A2	A2	A2	A2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
Common European Framework of Reference for Languages

Computer skills

C++, Matlab-Octave, NAIF, ENVI, Arcgis 10, Excel, Access, Word, LaTeX, Powerpoint, Internet Explorer, Managing Files, COMSOL Multiphysics, European Computer Driving Licence (ECDL)
Operating systems: Windows, Unix, MacOSX
Photo editing software (Photoshop, Gimp)
Open Concurrent Design Tool - software package developed under a European Space Agency (ESA) contract to enable efficient multi-disciplinary concurrent engineering of space systems in the early life cycle phases

Driving licence

European driving licence B (vehicles)

Social and Organizational skills and Competences

Good team spirit, problem solving, and organization skills learned in the six years as shop assistant and manager of employee schedules, receiving/shipping goods, selection and training of personnel. Working in a team during the PhD has allowed to apply these skills to my studies.

ADDITIONAL INFORMATION

International Diving Licence Open Water Diver
Scuba Schools International (SSI).

ATTENDANCE AT
CONFERENCES and PUBLIC
OUREACH

From Giotto to Rosetta: 30 years of Cometary Science from Space and Ground
Padova, October 27th – 29th, 2016
LXI Congresso della Società Astronomica Italiana
Padova, September 12th-15th, 2017
Congresso Nazionale di Scienze Planetarie
Bormio, February 5th – 9th, 2018
European Planetary Science (EPSC)
Berlin, September 2018
XVI Congresso Nazionale di Scienze Planetarie
Padova, February 3th-7th, 2020
European Planetary Science (EPSC)
Virtual meeting, September 21th – October 8th, 2020

Seminars

“**Impactful Speeches**” Dr. Luigi Salmaso
“**How to disseminate scientific knowledge**”, Dr. Massimo Polidoro
“**Electro Magnetic Formation Flying (EMFF)**”
“**The SPHERES micro-satellites system**”
“**Sparse Aperture Synthesis**”
“**Reconfigurable Constellation**”, Prof. David Miller
“**Optical design of the Wide Angle Camera for the Rosetta mission: on-ground realization and in-flight results**”, Prof.ssa Da Deppo Vania
“**Vehicle Mechanics**” Prof. Franceschini Giordano
“**Gravitational Waves and Quantum astrophysics**”, Prof Barbieri Cesare
“**L'ASI, la Ricerca di Base e la Ricerca Applicata: tematiche e possibili sinergie**”, Lectio Magistralis del Prof. Roberto Battiston

Courses

Preparation of a research proposal (Prof. Giampiero Naletto UNIPD)
Space optics and detectors (Prof. Giampiero Naletto, Prof. Maria Guglielmina Pelizzo UNIPD)
Space system and their control (Prof. Enrico Lorenzini, Prof. Alessandro Francesconi UNIPD)
Exploring the Solar System and its environment (Prof. Gabriele Cremonese, Prof. Francesco Marzari UNIPD)
Mechanical and thermal properties of material for aerospace constructions (Prof. Ugo Galvanetto, Prof. Mirco Zaccariotto UNIPD)
Aerospace Propulsion (Prof. Daniele Pavarin, Dr. Marco Manente UNIPD)

PUBLIC OUTREACH and
INTERVIEWS, EDUCATIONAL
ACTIVITIES

2015, The night of researchers, Laboratory : “A piedi nudi su Marte” at the Astronomical Observatory of Padova, Italy
<http://venetonight.it/>

2015, Laboratory : “A piedi nudi su Marte”, BergamoScienza, Bergamo, Italy
<https://www.bergamoscienza.it/it/storico/1477/a-piedi-nudi-su-marte-realta-virtuale-e-planetologia>

2016, The night of researchers, Laboratory: “Viaggio 3D tra pianeti e comete” at the Astronomical Observatory of Padova, Italy

2016, Laboratory : “Viaggio 3D tra pianeti e comete”, BergamoScienza, Bergamo, Italy

2017, The night of researchers, Laboratory: “BepiRobot” at the Astronomical Observatory of Padova, Italy

2017, Laboratory: “BepiRobot”, BergamoScienza, Bergamo, Italy

2019, Universo Misterioso, le ultime scoperte - Bignami - FOCUS TV

2019, Laboratory: “Viaggio multisensoriale su Marte”, BergamoScienza, Bergamo, Italy
<http://www.bergamoscienza.it/it/calendario/53664/viaggio-multisensoriale-su-marte>

In compliance with the GDPR and Italian Legislative Decree no. 196 dated 30/06/2003, I hereby authorize the recipient of this document to use and process my personal details for the purpose of recruiting and selecting staff and I confirm to be informed of my rights in accordance to art. 7 of the above mentioned Decree

Curriculum Vitae updated in January 2021