

PERSONAL INFORMATION Luigi Imperi

WORK EXPERIENCE

November 2013 – Ongoing

Ph.D. Student

Sapienza University of Rome – DIMA, Rome, Italy

- Numerical simulations of the Mercury Orbiter Radioscience Experiment (MORE) of the BepiColombo mission
- Estimation process for retrieving the gravity field and the rotational state of Mercury by means of radio-observables
- Software development for the MORE relativity experiment
- Fundamental physics tests with the BepiColombo mission

Business or sector Space Engineering

October 2012 – March 2013

Internship

European Space Operation Centre (ESOC) of the European Space Agency (ESA)

Robert-Bosch-Straße 5, 64293 Darmstadt, Germany

- Software development for close proximity operations between spacecraft
- Mission analysis for space debris removal

Business or sector Space Engineering

EDUCATION AND TRAINING

October 2010 – July 2013

Master 's Degree in Space Engineering

Sapienza University of Rome , Rome, Italy

gas-dynamics, space flight dynamics, telecommunication and remote sensing, space mission and system , space propulsion, space structures, structure dynamics, multi-body dynamics for space application, space environment and instrumentation, thermal and smart structures, hypersonic and high temperature gas-dynamics, ground stations, electronics, aerospace materials

Thesis: Close Proximity Operations for Space Debris Removal

Advisor: Prof. Luciano Iess

Co-advisor: Dott. Arnaud Boutonnet

Vote: 110/110 cum laude

October 2004 – April 2010

Bachelor 's Degree in Aerospace Engineering

Sapienza University of Rome , Rome, Italy

Thesis: Costellazioni di Satelliti in Orbita Molnya

Advisor: Prof. Guido Colasurdo

Vote: 110/110 cum laude

PERSONAL SKILLS

Mother tongue(s)

Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user
Common European Framework of Reference for Languages

Computer skills ▪ Excellent knowledge of FORTRAN, Matlab , python, shell/bash, SPICE/NAIF

Driving licence B

ADDITIONAL INFORMATION

Publications-Proceedings- Conferences-Workshops

Oral: *Testing general relativity during the cruise phase of the BepiColombo mission to Mercury*
L. Imperi and L. Iess

Proceedings of IEEE metrology for aerospace, 2015 (in press)

Oral: *On the determination of PN parameters with BepiColombo radio science experiment*

L. Imperi, G. Schettino and L. Iess

Proceedings of the Fourteenth Marcel Grossman Meeting, 2015 (in press)

Mercury Orbiter Radio science Experiment (MORE): global numerical full-cycle simulation

A. Milani, G. Schettino, L. Imperi, Stefano Cicalò and G. Tommei

MESSENGER-BepiColombo joint science meeting, Berlin, Germany, 16-18 June 2015

Oral: *Mercury Orbiter Radio science Experiment (MORE): benefits from an extended mission*

L. Imperi, M. Mariani and L. Iess

MESSENGER-BepiColombo joint science meeting, Berlin, Germany, 16-18 June 2015

PICO: *BepiColombo's geodesy and relativity experiment from an extended mission*

L. Imperi, M. Mariani and L. Iess

European Geosciences Union, General Assembly; Wien, Austria, 12-17 April 2015

07/08/2015