

Lorenzo Pirillo

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WORK EXPERIENCE

01/11/2022 – CURRENT Roma, Italy

PHD IN AERONAUTICAL AND SPACE ENGINEERING LA SAPIENZA UNIVERSITÀ DI ROMA

I actively took part in the accomplishment of the following activities:

- Support Activity for VEGA-E WTT tests.
- HTE project.
- Numerical support activity for FD1 launcher.
- CFD Sloshing analyses for VEGA-E Propellant tanks.
- Thermal analysis of VEGA-E instertage 2-3 (European space agency)
- Support Activities for the aerodynamic analyses VEGA-C New Fairing (January-March 2025)

I am Author of the following scientific papers:

- "Non-Linear Damping in Lateral Liquid Sloshing inside a Cylindrical Tank with a Ring Device". Journal: Non Linear Dynamics. Full author list: Matteo Cimini; Francesca Rossetti; Lorenzo Pirillo; Giacomo Della Posta; Fulvio Stella; Matteo Bernardini.
- "A New Concept of Direct Oil Cooling System for AFPM Machines, Numerical Analysis and Optimization". Journal: Applied Thermal Engineering. Full author list: Lorenzo Pirillo; Matteo Cimini; Fabio Nardecchia, Fabio Bisegna.
- "Numerical investigation on the liquid sloshing damping inside a tank with a flexible anti-sloshing device". Proceedings of ICAS 34th Conference: Full author list: F Rossetti, L Pirillo, M Cimini, M Bernardini, F Stella

EDUCATION AND TRAINING

2020 – 19/07/2022 Roma, Italy

MASTER DEGREE IN ENERGY ENGINEERING La Sapienza

Website <https://www.uniroma1.it/it/pagina-strutturale/home> | **Field of study** Engineering, manufacturing and construction

Final grade 110/110 Cum Laude | **Thesis** "A New Concept of Direct Oil Cooling System for AFPM Machines, Numerical Analysis and Optimization".

2017 – 2020 Roma, Italy

BACHELOR DEGREE IN ENERGY ENGINEERING La Sapienza

Website www.uniroma1.it/it/pagina-strutturale/home | **Final grade** 110/110 Cum Laude

2012 – 2017 Roma, Italy

SCIENTIFIC HIGH SCHOOL DIPLOMA Liceo Scientifico Statale Luis Pasteur

Final grade 100/100

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

CFD Software: CFD++, Pointwise, Fluen|t Ansys Mechanical (Advanced)| Ansys Workbench, Ansys Fluent, Ansys APD| Optimal knowledge of ANSYS Fluent| programming: Python, MATLAB and SQL| Python Language - Basic knowledge| Modelling (CATIA, 3DEXPERIENCE, SpaceClaim, etc.) Microsoft Office package: Microsoft Word, Excel, PowerPoint, Access