

PERSONAL INFORMATION

Daniele Rossi

y

EDUCATION AND TRAINING

2021 – ongoing studies

Dottorato in Ingegneria Aeronautica e Spaziale

EQF level 8

Sapienza Università di Roma

Doctor of Philosophy (Ph.D.)

Main research interests: Computational Fluid Dynamics, Numerical simulations of Multiphase Flows.

Scientific publications:

- **Navier-Stokes simulations of vertical sloshing with time-periodic excitation**, Daniele Rossi, Davide Ubaldini, Simone Di Giorgio, Sergio Pirozzoli, *International Journal of Multiphase Flow*, 2023, 167:104505. DOI:<https://doi.org/10.1016/j.ijmultiphaseflow.2023.104505>
- **Simulations of vertical sloshing in a partially filled rectangular tank subjected to time-periodic excitation**, Daniele Rossi, *Material Research Proceedings*, Vol.33, pp 269-276, 2023. DOI: https://doi.org/10.21741/9781644902677_39

Conferences attended:

- **3rd Aerospace PhD-Days 2023- International congress of PhD students in aerospace science and engineering**, April 16-19, 2023, Bertinoro (FC), Italy;
- **International Conference on Numerical Methods in Multiphase Flows – 5 (ICNMMF-5)**, June 26-28, 2024, Reykjavik, Iceland.

Courses attended:

- **Open Access delle pubblicazioni e dei dati della ricerca**, November 16, 2021, Sapienza University of Rome, Italy;
- **Banche dati e strumenti digitali a supporto della Ricerca disponibili in Sapienza: Funding institutional, Scival, Scopus, JCR (Clarivate), Research Gate**, November 23, 2021, Sapienza University of Rome, Italy;
- **Introduction to Parallel Computing with MPI and OpenMP**, March 07, 2022, Cineca Academy;
- **Debugging and Optimization of Scientific Applications**, March 14, 2022, Cineca Academy;
- **Introduction to Fortran for Scientific Computing**, March 22, 2022, Cineca Academy;
- **S.G.I. CFD Summer School (School on Computational Fluid Dynamics & SuperComputing - CFD parschool)**, July 17-22, 2022, Gran Sasso Science Institute (GSSI), L'Aquila, Italy;
- **Introduction to high-performance computing**, April, 2023, Sapienza University of Rome, Italy;
- **Risk theory in aerospace engineering**, April, 2023, Sapienza University of Rome, Italy;

- **Introduction to Python programming**, April, 2023, Sapienza University of Rome, Italy;
- **Computer Vision**, June, 2023, Sapienza University of Rome, Italy;
- **Liquid Interfaces, Drops and Sprays (LIDESP)**, June 26-30, 2023, International Centre for Mechanical Sciences (CISM), Udine, Italy.

2017 - 2021 **Laurea Magistrale in Ingegneria Aeronautica** EQF level 7

Sapienza Università di Roma – Faculty of Civil and Industrial Engineering

2nd level-cycle degree/Master of Science (2 years)

Thesis title: Direct Numerical Simulation of non-circular jets

Final degree mark: **110/110 cum laude**

Graduation date: 25/10/2021

Principal subjects covered during the course:

- **Fluid dynamics:** Gas dynamics, Aircraft Aerodynamics and Design, Computational Fluid Dynamics, Aeroacoustics
- **Aeronautical Propulsion:** Design of Aircraft Engines, Environmental Impact of Aircraft Engines
- **Aerospace Structures:** Aeronautical constructions, Vibration and Noise control
- **Telecommunications:** Air Traffic Control

2014 - 2017 **Laurea in Ingegneria Aerospaziale** EQF level 6

Sapienza Università di Roma – Faculty of Civil and Industrial Engineering

1st level-cycle degree/Bachelor (3 years)

Final degree mark: **110/110**

Graduation date: 14/12/2017

Pre-university studies

Secondary school diploma: Scientific High School

INNOCENZO XII, ANZIO (RM)

School-leaving examination mark: **100/100**

School-leaving examination taken in (year): 2014

Italian secondary school diploma

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2 - Independent	B2 - Independent	B2 - Independent	B2 - Independent	B2 - Independent
English: Cambridge English Qualification (Level B2 First) – University of Cambridge (UK), 2018 – European Level: B2					

Digital Competences **ECDL:** AICA Digital Academy 2013

Computer skills**OFFICE AUTOMATION****Office suite:** Microsoft Office, LibreOffice | **Spreadsheets:** Microsoft Excel**Word processors:** Microsoft Word, LaTeX**APPLICATION SOFTWARE****CAD – Assisted Design:** Solid Edge, Solid Works, OpenSCAD (Intermediate)**Dynamical Systems Design:** Simulink (Intermediate)**CFD toolbox:** OpenFOAM (Intermediate), Ansys Fluent (Intermediate)**COMPUTER PROGRAMMING****Programming Languages:** MATLAB, Fortran, Wolfram Language (Intermediate)ADDITIONAL COMPETENCES
AND TRAINING

2017 - 2019

FORMULA SAE (student design competition organized by SAE international): Member of the 'mechanics and aerodynamics' department of Fast Charge, the Formula Student Electric team of Sapienza Università di Roma, that works on the design, building and testing of a prototype of a Formula-style electric race car, based on a series of rules, whose purpose is both ensuring on-track safety and promoting clever problem solving.**Used softwares:** MATLAB, Solid Works (CAD – Assisted Design), Ansys Fluent (Fluid Simulation Software)

Driving licence B