

---

# CURRICULUM VITÆ – GIULIO SOLDATI

---

PhD Student at Sapienza University of Rome  
UniPd program “Dual career student-athlete”



## PERSONAL DATA

Place of birth: Udine, Italy  
Date of birth: 21 august 1997  
Place of residence: Padova, Italy  
Address: Via A. Angelieri 2, 35128  
E-mail: [giulio.soldati@uniroma1.it](mailto:giulio.soldati@uniroma1.it)

## EDUCATION

November 2022 - November 2025 (expected): PhD in Aeronautical and Space Engineering (38th cycle), at La Sapienza University of Rome. Fellowship title: *Multiscale modeling & engineering applications: Complex multiscale and multiphysics modeling for digital twin* Supervisor: Prof. Sergio Pirozzoli.

September 2020 - October 2022: Master (laurea magistrale) in Aerospace Engineering, space curriculum, at the University of Padova. Thesis title: *Numerical investigation of the parachute-capsule aerodynamics in a Mars atmosphere reentry*. Thesis advisor: Prof. Francesco Picano. Vote: 110/110 cum laude.

September 2016 - March 2020: Bachelor (laurea triennale) in Aerospace Engineering at the University of Padova. Thesis title: *Fluidodinamica del nuotatore*. Thesis advisor: Prof. Francesco Picano. Vote: 95/110.

September 2011 - July 2016: High School Diploma (maturità classica), “Liceo Classico Jacopo Stellini”, Udine. Thesis title: *La dimensione umana del mito*. Vote: 91/100.

## ACADEMIC PROFILE

Aerospace engineer specialized in the space field. Focus on: aerodynamics, supersonic flows, computational fluid dynamics. Main interests: compressible fluid dynamics for space missions.

## PROGRAMMING SKILLS

Fortran, Matlab (advanced); Python, OpenFoam, GMAT, Ansys Fluent, SolidWorks (intermediate).

## LANGUAGES

Italian (mother tongue); English (advanced); German (beginner).

## RESEARCH WORKS AND PROJECTS

In-depth study of compressible boundary layer; Design and simulation of a sounding rocket; Design and simulation of a mission around Lagrangian point L2: study of the launch, analysis and propagation of the trajectories (parking LEO, low delta-v transfer orbit, Lyapunov orbit); Attitude determination of a CubeSat in a dawn-dusk helio-synchronous orbit: selection and positioning of the sensors, analysis of uncertainty.

## PUBLICATIONS AND CONFERENCES

[1] F. Picano, G. Soldati, L. Placco, M. Bernardini, A. Aboudan, F. Ferri, S. Debei. *On the interaction between a rigid parachute and the supersonic wake behind a probe during the descent phase on Mars*. 75th Annual Meeting of the APS Division of Fluid Dynamics, November 20-22, 2022, Indianapolis.

## OTHER ACTIVITIES

Italia Triathlon National Team from 2013 until 2021.  
7th place at the Youth Olympic Games 2014; 2nd place at the Youth Olympic Games Relay 2014; 3rd place at the U23 European Championships Relay 2017; 7th place at the FISU World University Championships 2018; Competing at European Championships (3 times) and European Cups. As middle distance runner: Veneto Regional Champion in the 10km road race (2018); Personal bests 14'47"8 in the 5000m (2019), 8'33"9 in the 3000m (2020).

## REFERENCES

Professors Sergio Pirozzoli [sergio.pirozzoli@uniroma1.it](mailto:sergio.pirozzoli@uniroma1.it), Francesco Picano [francesco.picano@unipd.it](mailto:francesco.picano@unipd.it).