

Francesco Serafini

Experience

2021 - 2022 **Tutor, Course in Geometry, Mechanical Engineering**, "Sapienza" University of Rome.

Research and Publications

09/2022 **Drag reduction in turbulent wall-bounded flows of realistic polymer solutions**, *Phys. Rev. Lett.* 129, 104502.

2022 **Beyond FENE-P: Drag reduction and Turbulence dynamics in dilute solutions of high Weissenberg polymers**, *To be submitted to Journal of Fluid Mechanics*.

05/2022 **Drag reduction in turbulent pipe flows of realistic polymer solutions**, *Oral presentation at the 6th International conference on Turbulence and Interactions*, Procchio, Italy, 15-20 May 2022.

04/2022 **Drag reduction in turbulent pipe flows of realistic polymer solutions**, *Oral presentation at the 14th European Fluid Mechanics Conference*, Athens, 13-16 September 2022.

10/2021 **Hybrid Eulerian-Lagrangian simulations of drag reducing polymers at high Weissenberg**, *Presented at poster Session at Multiscale simulations of complex materials*, CECAM, 27/10/2022.

Education

2020 – **PhD in Theoretical and Applied Mechanics**, "Sapienza" University of Rome, Research project: Turbulent flows of dilute polymer solutions.

2018 - 2020 **Master in Aeronautical Engineering**, "Sapienza" University of Rome, Graduation date: 26/10/20, Final result: 110/110 cum laude, Thesis title: Turbulent flows of dilute polymer solutions.

2015 - 2018 **Bachelor in Aerospace Engineering**, "Sapienza" University of Rome, Graduation date: 07/11/20, Final result: 110/110 cum laude, Thesis title: Optimization of the front wing for an open wheel car.

2010 - 2015 **Secondary School Diploma**, *Liceo Scientifico "Louis Pasteur"*, Rome, Final result: 100/100.

— Languages

Native Italian
Level C1 English

CAE: Certificate in Advanced English (2014)