Francesco Deangelis

Curriculum Vitae

Education

11/2020– present	**PhD in Mathematics**, *Gran Sasso Science Institute*, L'Aquila, Italy. Advisor: Prof. Camillo De Lellis (IAS, Princeton).
10/2023– 11/2023	**Short Term Visitor**, *Institute for Advanced Study*, Princeton, NJ, USA. I was a visitor of IAS from 1/10/2023 to 30/11/2023.
10/2017– 3/2020	**MSc Pure and Applied Mathematics**, *University of Rome Tor Vergata*, Rome. 110/110 cum laude, GPA: 29.46/30. I was awarded a 2000€ prize for my master's thesis. Classes taken:

- Basics of Algebra (Abstract Algebra): 28/30
- Introduction to Functional Analysis: 30/30 cum laude
- Laboratory - Calculus (Numerical Methods for PDEs): 30/30
- Basics of Geometry and Analysis (General Topology and Lebesgue integration): 28/30
- Measure Theory: 30/30 cum laude
- Statistical and Quantum Mechanics: 30/30
- Differential Equations (PDEs): 28/30
- Geometry 5 (Algebraic Topology): 30/30
- Statistical Learning and High Dimensional Data: 30/30 cum laude
- Machine Learning: 30/30 cum laude
- Sobolev Spaces and Weak Solutions: 30/30 cum laude
- Advanced Probability (with Measure Theory and Martingales): 30/30 cum laude

10/2014– 7/2017	**BEng Mechanical Engineering**, *University of Rome Tor Vergata*, Rome. 110/110 cum laude. Some grades:

- Mathematical Analysis 1 (12 ECTS)
  written: 33, oral: 30/30 cum laude
- Mathematical Analysis 2 (9 ECTS)
  written: 30/30, oral: 30/30 cum laude
- Geometry 1 (6 ECTS)
  written: 30/30, oral: 30/30 cum laude
- Geometry 2 (Differential Geometry of Curves and Surfaces) (6 ECTS)
  oral: 30/30
- Physics 1 (12 ECTS)
  written: 30/30, oral: 30/30 cum laude
- Physics 2 (9 ECTS)
  written: 30/30, oral: 30/30
- Chemistry (6 ECTS)
  written: 30/30, oral: 30/30 cum laude

2013-2014 **BSc Economics and Industrial Organization**, *The University of Warwick*, Coventry (UK).

I dropped out before the end of first year (April) because it was not challenging enough.

2008–2013 **Diploma di Maturità Classica**, *Liceo Classico Ugo Foscolo*, Albano Laziale (Rome), Italy.

100/100 cum laude
Top 0.7% of all Italian students, included in "Albo Nazionale Delle Eccellenze"(i.e. National Register of Excellent Students), published by Ministero dell'Istruzione e della Ricerca(i.e. Italian Ministry of Education, University and Research) (http://www.indire.it/eccellenze/).

Experience

2018-2019 **Tutor - Mathematical Analysis 1**, *University of Rome Tor Vergata*, Rome.

I was the tutor for the course 'Mathematical Analysis 1' of the undergraduate degree in Mathematics.

Computer skills

Basic Office

Web programming PHP, MySQL, AJAX, CodeIgniter, JQuery, JavaScript, HTML, CSS, Bootstrap, Python, Django, Jekyll

Mobile programming Flutter

Scientific programming MATLAB, Python, C

Languages

Italian Mothertongue
English TOEFL iBT: 115/120

Publications

Roberto Benzi, Michiel Bertsch, and Francesco Deangelis. A free boundary problem for binary fluids. *Interfaces Free Bound.*, 23(4):485–506, 2021. URL: `https://ems.press/journals/ifb/articles/3324283`, doi:10.4171/IFB/462.