



# Francesco Ambrogi

## Curriculum Vitae

*"Considerate la vostra semenza:  
fatti non foste a viver come bruti,  
ma per seguir virtute e canoscenza"*  
**Dante Alighieri - Divine Comedy**

### Education

- 2019–now **PhD Student in Mechanical Engineering**, *Queen's University*, Kingston, Ontario.
- Research: the main focus of my research is understanding the physics of turbulence through computer modelling and numerical simulations. Turbulence is one of the biggest unresolved problem in classical physics, and the fascinating thing about turbulence is that: it is all around us, even in deep space.
- 2016–2018 **MSc Student in Energy and Nuclear Engineering**, *Alma Mater Studiorum University of Bologna*, Bologna, Italy.
- Thesis: Tritium Transport and In-Core Absorption in the Fluoride-salt-cooled High-temperature Reactor (FHR)
- 2011–2015 **Bachelor's Degree in Mechanical Engineering**, *University of Modena and Reggio Emilia - "Enzo Ferrari" department*, Modena, Italy.
- Thesis: "Identification, analysis and experimental validation of predictive models to calculate injection molding machine's energy consumption."
- 2006–2011 **High School - Classical Education**, *Liceo Ginnasio Cornelio Tacito*, Terni, Italy.

### Experiences

- Feb 2020 **Teaching Assistant**, *How to Change the World*, Kingston, ON.  
On February 2020 I have been selected from Queen's University to participate in the How to Change the World program as a Teaching Assistant. During the program hundreds of students from all over the world had the chance of working together in Teams to tackle the United Nations development challenges.
- Sept 2019 - Present **Graduate Research Assistant**, *Queen's University*, Kingston, ON.

- Sept 2019 - **Teaching Assistant**, *Queen's University*, Kingston, ON.  
 Present Since I started my PhD at Queen's I have been assigned as teaching assistant for several courses such as:
- MECH398 Mechanical Engineering Laboratory I
  - MECH241 Fluid Mechanics I
- 18-22 June **Intensive Course**, *Nuclear Energy Agency (NEA)*, Paris.  
 2018 Corse held by Prof. Barry D. Ganapol, University of Arizona.
- Jan - May **University Internship**, *Montecuccolino Nuclear Engineering Laboratory*, Bologna, Italy.  
 2018
- Learning the Monte Carlo Code FLUKA
- Nov 2017 **Marawas 2017**, *University of Hasselt*, Hasselt, Belgium.  
 ○ Intensive course on Management of Radioactive Waste.
- June - July **Intensive English Course**, *Margate High School*, Margate, United Kingdom.  
 2015 ○ Achieved International Cambridge Certification (FIRST - Level B2)
- 2013-2015 **Waiter**, *GruppoTre srl*, Modena, Italy.  
 ○ Waiter for High Level Catering Service

## Computer Skills

- Basic FORTRAN90, C++  
 Good MATLAB, PYTHON, ZOOM  
 Advanced UNIX, LATEX, MICROSOFT OFFICE, TEAMS

## Languages

- Italian **Mothertongue**  
 English **Advanced** *Fluent in speaking, very good in listening and good in writing*

## Volunteering and Association

- August 2020 **Royal Astronomical Society of Canada (RASC)**, *Kingston Center*, Member, Kingston, Ontario.  
 ○ I joined the RASC club of Kingston Center due to my passion for astronomy and my deep interest in scientific communication.  
 ○ Within RASC, I am also member of the Education and Public Outreach (EPO) committee.
- 2016 - 2019 **Rotaract Club**, *Secretary*, Member, Modena, Italy.  
 ○ I joined the Rotaract Club of Castelvetro di Modena Terra dei Rangoni on 2016, and I have been the secretary of the club for 2 years.