

# Andrea Di Biagio



## Research

### **Stable Facts, Relative Facts**

ADB, C. Rovelli, [arXiv:2006.15543](https://arxiv.org/abs/2006.15543) (to appear in Foundations of Physics)

### **An experiment to test the discreteness of time**

M. Christodoulou, ADB, P. Martin-Dussaud, [arXiv:2007.08431](https://arxiv.org/abs/2007.08431)

### **Quantum information and the arrow of time**

ADB, P. Donà, C. Rovelli. [arXiv:2010.05734](https://arxiv.org/abs/2010.05734)

## Education

2018-Current **La Sapienza University of Rome**

### **PhD Physics**

- Thesis: *What can low energy quantum systems teach us about space and time?*
  - Supervisors: **Prof Carlo Rovelli**, **Prof Giovanni Montani**

2014 - 2016 **Imperial College London**

### **MSc Applied Mathematics**

- Distinction 72%
- Project: *Asymptotic Self Similarity in the Mandelbrot Set*
  - Supervisor: **Dr Trevor Clarke**

2010 - 2013 **Imperial College London**

### **MSci Physics with Theoretical Physics**

- First Class Honours 83.5%
- Project: *Spacetime from Causal Structure*
  - Supervisor: **Prof Fay Dowker**; collaborator: **Jack Jelfs**.
- Prizes for academic excellence:
  - 2013 [Ken Allen Prize](#)
  - 2011 [Gloucester Research Ltd Prize](#)

2009 - 2010 **King's College London**

### **BSc Physics** (Year 1)

- Year average 89%
- Prizes for academic excellence:
  - Dillon prize for best grade in the first year Physics examinations.
  - Wilkins prize for best grade in the first year laboratories.

1997 - 2009: **Lycée Chateaubriand de Rome**

### **Baccalauréat Général Scientifique**

## Languages

### Human

**Italian**  
native

**English**  
native

**French**  
native

**Spanish**  
intermediate

**Finnish**  
beginner

### Scientific Computation

2019 **NAND to Tetris part I Online Course**

2017 **Stanford University Machine Learning Online Course**

2017 **Udacity Deep Learning NanoDegree**

**Python's numerical suite** NumPy, pandas, Jupyter notebooks, TensorFlow.  
fluent

**Mathematica**  
fluent

**GNU Octave, MATLAB**  
intermediate

**C/C++**  
Intermediate

### Text and Typeset

**LaTeX**  
fluent

**Markdown**  
fluent

**Office Packages**  
fluent (Apple&Microsoft)

**HTML, CSS**  
basics

## Teamwork

2014- 2015 **Imperial College Environmental Society**

### Vice President

Coordinated activities and negotiated with university administration.

2012-2013 **Imperial College Project Nepal**

### Senior Team member

Responsible for younger team members in our expedition in rural Nepal, taught English as a second language to 8th grade students

Fall 2012 **Research Interfaces**

### Team member

Compiled financial plan for tech startup, delivered elevator pitch for funding.

## Other

### Diving

- PADI Open Water certification at 12, Advanced Open Water at 14,
- PADI Rescue Diver certification in 2018,
- Underwater photography and filmmaking.

### Activities

- Rock climbing, analog photography, plant-based cooking, gardening

### Interests

- logic and foundations of mathematics; history of science and mathematics; religion and philosophy; science communication and science fiction.