

## Curriculum Vitae et Studiorum

### Personal information

Nationality Italian  
Place of birth Tagliacozzo, L'Aquila, Italy  
Personal homepage <https://argiarubeo.github.io/>

### Positions

2020 HPC specialist and developer at Cineca, Bologna  
Clusters management, scheduler, Linux system administration. Data analysis and optimisation of users usage of computational resources  
2018 - 2019 Postdoctoral Research Fellow at Plymouth University  
Analytical and numerical computations, Monte Carlo simulations, development of libraries for data analysis succesfully cross-checked

### Education

2019 **Ph.D.** as winner of the "Hamilton Scholar" at Trinity College Dublin, Ireland  
Title *On the Symanzik improvement of gradient flow observables*  
Supervisor Prof. Stefan Sint  
2013 **Master degree (Laurea Magistrale)** in Particle Physics from "Sapienza", University of Rome (110/110)  
Title *Numerical study of the  $q\bar{q}$  static potential in the temporal gauge*  
Supervisor Prof. Massimo Testa

### Teaching

2017 Teaching assistant for the undergraduate course of *Quantum Mechanics II*.  
Degree program in Physics, Trinity College Dublin (TCD), Ireland. (One semester)  
2016 Teaching assistant for the undergraduate course of *Quantum Mechanics*.  
Degree program in Physics, Trinity College Dublin (TCD), Ireland. (One semester)  
2015 Tutorials in Linear Algebra for Science students at TCD, (10 hours);  
Tutorials in Quantum Mechanics for Physics students at TCD, (10 hours)

### Programming Skills

Languages Python ❤, Shell Scripting, C, C++, SQL  
Python libraries Pandas, NumPy, SciPy, Scikit-learn, Matplotlib, Plotly, Seaborn, Jupyter, SQLite  
Machine Learning Regression, Classification, Clustering, Neural Network  
Others Octave, MATLAB, MPI, OpenMP, Mathematica  
Operating systems Linux, Mac OSX and MS Windows

### Languages

Italian Native language  
English Proficient level

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## Talks and Posters

- 2018 Seminar at University of Plymouth
- 2018 Contribute Talk at the conference "High Performance Computing in Life sciences, Engineering, And Physics (HPC-LEAP)", Cambridge University (<http://www.damtp.cam.ac.uk/research/hep/conferences/hpcleapjuly18/>)
- 2018 Contribute Talk at the conference "Irish Quantum Foundations 2018 ", All Hallows Campus, Dublin City University (<https://www.dcu.ie/node/98866>)
- 2018 Contribute Talk at the workshop "Scattering from the lattice: applications to phenomenology and beyond", Trinity College Dublin (<https://indico.cern.ch/event/690702/>)
- 2018 Internal Transfer Talk 2018, Trinity College Dublin
- 2017 Internal Transfer Talk 2017, Trinity College Dublin
- 2016 Internal Transfer Talk 2016, Trinity College Dublin
- 2016 Poster at the conference "34th International Symposium on Lattice Field Theory", Southampton 2016 (<http://www.southampton.ac.uk/lattice2016/>)
- 2014 Talk at the conference "New Frontiers in Theoretical Physics", Cortona 2014 (<https://agenda.infn.it/conferenceDisplay.py?confId=7371>)

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## Conferences, Workshops and Schools

- 2020 *Python in HPC course*  
Trinity College , Dublin, Ireland -remote  
*Parallel Computing School*  
Cineca supercomputing centre, Bologna, Italy -remote
- 2017 *9th Odense Winter School on Theoretical Physics: Cracks and Blind Spots in the Standard Model*  
Centre for Cosmology and Particle Physics Phenomenology (CP3-Origins), Odense, Denmark
- 2016 *Lectures on the Theory of Fundamental Interactions*  
Galileo Galilei Institute for Theoretical Physics, Arcetri (Florence), Italy  
*Irish Quantum Foundations 2016*. Maynooth University, Ireland
- 2015 *Lattice Practices 2015*  
Jülich Supercomputing Centre (JSC), Forschungszentrum Jülich, Germany  
*Irish Quantum Foundations 2015*  
Dublin Institute for Advanced Studies (DIAS), Dublin, Ireland  
*Scientific Challenges and Big Computing*  
Higgs Centre for Theoretical Physics, Edinburgh, UK

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## Scientific dissemination

- 2018 Interviews at the IQF conference to *Prof. Duncan Haldane (Nobel Laureate in Physics 2016)* and *Dr. Sabine Hossenfelder* about their scientific experiences and thoughts.
- 2017 Interview for for the Italian journal "OggiScienza" (<https://oggiscienza.it/2017/11/20/nuova-fisica-andare-oltre-modello-standard/>) as a researcher working abroad.
- 2017 Organizer of a particle Physics CERN masterclass at Trinity College Dublin together with Dr. M. Krstic Marinkovic .
- 2017 Videoconference with a Serbian city to explain my research together with my colleagues Dr. M. Krstic Marinkovic and Dr. D. Wilson in the context of Researchers' Night.
- 2016 Co-author of the chapter "Nanofisica e fisica delle particelle elementari" ("Nanophysics and Particle Physics") related to Particle Physics, in the book for highschool students "Fisica e realtà.blu 3" ("Physics and reality.blu 3") and revisor of the exercises of volume 1 and 2. Publishing company "Zanichelli"
- 2015 As a winner applicant for the Thesis-in-3 event, I have presented my PhD project, in the context of "*Discover Research Dublin, Sept 25th 2015*".  
I participated in a particle Physics masterclass event for secondary school students, explaining and helping students in a data-analysis exercise organized by CERN.
- 2010 Among the founders of the magazine "*accastampato*", a journal of scientific divulgation currently distributed in free prints to high schools in Italy ([www.accastampato.it](http://www.accastampato.it)).  
Collaborator of "*Frascati Scienza*" for "*European Researchers' Night 2010*"
- 2009 I collaborated as a scientific advisor in the organization of the Science Festival "*Il Cielo di Argoli* ", Tagliacozzo (AQ)