

Ciro Taranto

Theoretical Physicist, transitioning to Data Science.

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Carreer

2015 - now

Postdoc.

Max Planck Institute for Solid State research, Stuttgart, Germany.

2014 - 2015

Postdoc.

Vienna University of Technology, Vienna. Austria.

2010 - 2014

PhD, (cum laude), Vienna University of Technology, Vienna, Austria.

- Research area: computational condensed matter.
- Presentation of results: written & oral form.
- Mathematical modeling & novel methods.
- Numerical simulations:
 - Code developement.
 - o Data analysis.
- Mentoring/daily superivision of:
 - o a PhD student (2015 now),
 - o a Master student (2012 2013).
- Teaching experience.

Education

2008 – 2010 Master in Theoretical physics, University of Bari, Bari, 110/110, (cum laude).

2005 – 2008 Bachelor in Physics, University of Bari, Bari, 110/110, (cum laude).

2000 - 2005 High School, Liceo Scientifico O. Tedone, Ruvo di Puglia, 100/100.

Personal Skills & Character Highlights

- Approaching Machine Learning.
- Excellent mathematical and analytical skills.
- Very good team worker...
- ...ready to play a lead role.

- Quick and independent learner.
- Very intuitive.
- Exceptional communication skills.
- Very social personality.

Computer Skills

Python
C++
Fortran
Mathematica
Git
Linux & iOS

Later A. Office

My ideal working tool. I use numpy, matplotlib and, recently, pandas and scikit.

My last two projects are implemented in C++ with heavy use of boost and openMP.

My first steps in programmin were in Fortran. I used llapack and MPI parallelization.

I used Mathematica during my masters, and still enjoy it.

I use git for version control.

I like GUIs but command line is my way.

...and whatever else I might need to get the job done.

Language Skills

		speaking	listening	writing	reading
Italian Mothertongue					
3					
English Proficient profice	ency				
German Independent spe	aker				
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Spanish Independent spe	aker				

Scientific results

- Coauthor of 8 peer reviewed publications.
- Active collaborations with more than 30 scientists from Europe, Russia, Japan and US.
- Referee for Physical Review since 2012.
- Awarded best physics student of the *University of Bari* for the academic year 2009/10.

Selected publications

- arXiv:1708.03539 This project, which I lead during the last year, is numerically and technically involved.
- arXiv:1307.3475 Combining two existing theories to propose a new method for correlated quantum systems. I started the implementation of the code in a two-weeks visit to Ekatrinburg.
- arXiv:1112.5003 (editor suggestion) Comparing model and experiment to reveal hidden properties of some systems .

Interests

- Travelling, visited countries count: 37.
- Sport: Marathon runner (personal best 3h 1m), climbing & bouldering, soccer.
- Reading, mostly fictional.
- Photography.

References

Available upon request.