

# Ciro Taranto

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# Theoretical Physicist, transitioning to Data Science

#### Carreer

2015–now **Postdoc**.

Max Planck Institute for solid state research,

Stuttgart

2014-2015 **Postdoc**,

Vienna University of Technology,

Vienna

2010-2014 **PhD**, (cum laude),

Vienna University of Technology,

Vienna

• Research in computational condensed matter.

Scientifical writing.

Presentation of scientific results.

International collaborations.

• Mathematical modeling and novel methods.

o Development of codes for numerical simulations.

• Data analys of numerical simulations.

Managing different projects.

o Daily supervision of a PhD student (2015-now).

o Daily supervision of a Master student (2012–2013).

Teaching experiences.

#### Education

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

2005–2008 Bachelor in Physics, University di Bari, Bari, 110/110 cum laude.

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

# Personal Skills & Character Highlights

Currently studying Machine Learning.

• Excellent mathematical and analytical skills.

Fast and independent learner.

 $\circ$  Very good team worker...

Objective driven.

Very intuitive.

Social and communicative.

• ...ready to play a lead role.

### Computer Skills

Python

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

C++

My last two projects are written in C++ using boost and openMP.

Fortran

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

Mathematica

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

git

I share work with my colleagues using git.

Linux & iOS

Command line is the way.

LTEX, Office

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

# Language Skills

Italian Mothertongue

English Proficient proficency
German Independent speaker
Spanish Independent speaker

#### Scientific results

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

#### Selected publications

- arXiv:1708.03539 I particularly enjoy this work since I lead and coordinated the hard work of the PhD student I supervise and of myself to the realization of the hard task suggested by my superior.
- o arXiv:1307.3475 I combine 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.
- o arXiv:1112.5003 (editor suggestion) We compare model and experiment to reveal hidden properties of a system.

## Interests

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

#### Personal Details

DOB 20th of February, 1987

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Driving B class

licence

References available upon request.