

# **Davide Bochicchio**

Fixed-term assistant professor

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# Education and training

#### 2014

# PhD in Physics (University of Genoa and University of Limoges)

Computational study of aggregation and crystallization in single component and binary colloidal systems

University of Genoa (IT) and University of Limoges (FR) - Genoa and Limoges

#### 2010

### Master's degree in Physics

Studio della struttura di nanoparticelle di argento-rame libere e su ossido di magnesio. - 103/110

University of Genoa - Genoa - IT

#### 2007

### **Bachelor's degree in Physics**

Problemi inversi in microscopia confocale determinazione risposta all'impulso e deconvoluzione per recupero di informazioni tridimensionali. -95/110

University of Genoa - Genoa - IT

#### 2003

### **Secondary School degree**

100/100

Liceo Scientifico Giordano Bruno - Albenga - IT

### Academic experience

#### **2019 - ONGOING**

#### Researcher

University of Genoa - Genoa - IT

Research teaching and student supervision.

#### 2016 - 2019

#### Post-doctoral fellow

University of Applied Sciences and Arts of Southern Switzerland - Lugano (CH) - CH

Research and student supervision.

#### 2014 - 2016

#### Post-doctoral fellow

University of Genoa - Genoa - IT Research and student supervision.

### Language skills

ItalianEnglishFrenchMother tongueProficientIndependent

## Teaching activity

My teaching activity started in 2014/2015 when i have been teacher assistant for a physics course (FISICA GENERALE, Cod. 72366) at the Engineering Department of the University of Genoa. In 2019/2020 I became responsible of the course of FISICA SPERIMENTALE (Cod. 25934) at the DISTAV Department of the University of Genoa. I also teached a part of the course of FISICA COMPUTAZIONALE (Cod. 101938) at the

## Postgraduate research and teaching activity

# Supervision of PhD students, residents and post-doctoral fellows

I directly supervised many Master and PhD students starting from the second year of my Phd:

- Aleena Maria Laganapan (University of Limoges)

Physics Department of the University of Genoa.

- André Tomilov (University of Limoges)
- Emanuele Panizon (University of Genoa)
- Federica Simonelli (Università di Genoa)
- Andrea Torchi (University of Genoa)

I also supervised two Phd students collaborating with the group of Prof. Giovanni M. Pavan: Anna Lucia de Marco (University of Genoa) e Pranav Madhikar (University of Eindhoven).

#### PhD committees membership

### Postgraduate (PhD) teaching activity

### Research interests

I am specialized in using advanced computational techniques to study systems and materials of different nature (synthetic and biologic). My research has always been at the boundary between different scientific fields, ranging from pure physics to chemistry and materials science. Throughout my career my research interests spanned a lot of different fields: study of structure and chemical ordering of metallic nanoparticles

and nanoalloys, study of the aggregation processes in ceramic colloidal suspensions, study of the interaction between polymers and biological membranes, study of the structure and dynamics properties of supramolecular polymers of different nature, study of stimuli-responsive supramolecular materials, study of the interaction between functionalized gold nanoparticles and lipid membranes.

I learned to use and master many different computational techniques. Among the main ones: global optimization, molecular dynamics, brownian dynamics, accelerated dynamics, metadynamics, umbrella sampling, NEB (nudged elastic band), SRD (Stochastic Rotation Dynamics), clustering algorithms.

### Editorial activity

# Assignments abroad

On 23 December 2015 I got a post-doctoral fellow position at the University of Applied Sciences and Arts of Italian Switzerland (SUPSI, Lugano, Switzerland), taking charge from 01/03/2016 and lasting two years. I obtained the aforementioned position by participating to a selection on a competitive basis. The contract was renewed for three more years starting from 01/03/2018. I interrupted the contract on 31/08/2019, having won a position as a reasearcher at the University of Genoa.