## Curriculum Vitae

## Personal Information

**Stefano Angioletti-Uberti**
Date of birth: 14.05.1983
Nationality: Italian
Homepage:
@ Imperial College: `http://www.imperial.ac.uk/people/s.angioletti-uberti07`
@ BUCT: `http://en.baicsm.buct.edu.cn/people/pis/74670.htm`
ResearcherID: D-5823-2014
ORCID: orcid.org/0000-0003-2917-2415;
Google Scholar User ID: l17sXL0AAAAJ

## Education

2010 **PhD in Materials Science**
Imperial College London, UK. Supervisor: M. W. Finnis and P. D. Lee
Awarded with the Thomas Young Centre Prize
Doctoral degree conferred on 01.10.2010

2007 **Master in Materials Science**
University of Milano-Bicocca, Italy. Supervisor: M. Bernasconi
Mark: 110/110 cum laude

## Current Position

10.2016 - now: **Lecturer**, Department of Materials, Imperial College London, London, UK

09.2016 - now: **Adjunct Professor**, Beijing Advanced Innovation Centre for Soft Matter Science and Technology, Beijing University of Chemical Technology, Beijing, PR China

## Previous Positions

09.2015-09.2016: **Professor of Soft Matter**, Beijing University of Chemical Technology, PR China

05.2015-7.2015: **Staff Scientist**, Helmholtz Centre Berlin, Germany (with Prof. M.Ballauff)

1.2013-4.2013: **Alexander von Humboldt Postdoctoral Research Fellow**, Humboldt University Berlin, Germany (Prof. J.Dzubiella)

10.2012-1.2013: **Postdoctoral Research Assistant**, University of Cambridge, UK (Prof. D.Frenkel)

## Fellowships and Awards

- **Alexander von Humboldt Postdoctoral Research Fellowship**, 2013-2015
- CBSB14 Outstanding Young Researcher Award, May 2014
- Thomas Young Centre Award for PhD Thesis, April 2011
- Royal Academy of Engineering Travel Grant, Winter 2008
- EPSRC PhD Studentship, 2007-2010

## Teaching activities

Lecturer or co-lecturer of the following courses:
- **Biomaterials**, MSc in Materials Science, Imperial College London, present
- **Statistical Mechanics & Computer Simulations for Soft Matter**, MSc in Chemical Engi-

neering, Beijing University of Chemical Technology, 2015-present
- **Theory and Simulation of Soft Matter**, MSc in Physics, Humboldt University Berlin, 2013-2015

## Institutional responsibilities

2016-present **Faculty Member**, Imperial College London
2015-present **Faculty Member**, Beijing University of Chemical Technology
2015-present **Principal Investigator** Beijing Innovation Centre for Soft Matter Science and Engineering

## Commissions of trust

- Regularly reviewing for several journals, including Physical Review Letters, ACS Nano, Physical Review E, Soft Matter, Langmuir, Journal of Physical Chemistry (Letters and B), Journal of Alloys and Compounds, Scientific Reports
- PhD examiner for the University of Cambridge *(since 2016)*

## Community Service and Software Development

Co-developer of an open-source software for calculating interactions in DNA-coated colloids using our theoretical framework (available https://github.com/patvarilly/DNACC)

## Publications

For the most up-to-date information, please look at my Google Scholar profile here: `https://scholar.google.it/citations?user=l17sXL0AAAAJ&hl=en`

**Selected publications:**
Five highlight publications showcasing the breadth and creativity of my research are listed below (the first 3 related to this proposal, and **only the last publication** with my PhD advisor).

- Angioletti-Uberti, S., Mognetti, B.M. and Frenkel, D., 2012. "Re-entrant melting as a design principle for DNA-coated colloids". *Nature Materials*, 11(6), pp.518-522. [Citations: ISI-WoS:40, Google Scholar: 49]. *We apply our theoretical framework for ligand-receptor-mediated interactions to show how specific designs can enhance the self-assembly kinetics of DNACCs, an important bottleneck in their application*
- Angioletti-Uberti, S., Varilly, P., Mognetti, B.M., Tkachenko, A.V. and Frenkel, D., 2013. "Communication: A simple analytical formula for the free energy of ligandreceptor-mediated interactions". *The Journal of Chemical Physics*, 138(2), p.021102. [Citations: ISI-WoS:20, Google Scholar: 28]. *Statistical mechanics is used to derive a simple yet powerful formula describing ligand-receptor-mediated interactions*
- Angioletti-Uberti, S., Varilly, P., Mognetti, B.M. and Frenkel, D., 2014. "Mobile linkers on DNA-coated colloids: valency without patches". *Physical Review Letters*, 113(12), p.128303. [Citations: ISI-WoS:14, Google Scholar: 18]. *We show how the introduction of mobile ligands on DNACCs determines many-body interactions that break isotropicity*
- Angioletti-Uberti, S., Ballauff, M. and Dzubiella, J., 2014. "Dynamic density functional theory of protein adsorption on polymer-coated nanoparticles". *Soft Matter*, 10(40), pp.7932-7945. [Citations: ISI-WoS:4, Google Scholar: 6]. *We describe a generalised diffusion approach to correctly include the effects of different interactions in determining protein adsorption kinetics*
- Angioletti-Uberti, S., Ceriotti, M., Lee, P.D. and Finnis, M.W., 2010. Solid-liquid interface free energy through metadynamics simulations. Physical Review B, 81(12), p.125416. [Citations: ISI-WoS:35, Google Scholar: 39]. *We develop a novel algorithm based on biased sampling to*

*obtain the solid-liquid interfacial energy with unprecedented efficiency*

**Memberships of Scientific Societies**

- Alexander von Humboldt Foundation *(since 2013)*
- American Chemical Society *(since 2015)*