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DR. EMANUELA BIANCHI

Citizenship: Italian

Date of Birth: 1981, September the 18<sup>th</sup>

Place of Birth: Rome, Italy

Affiliation: Computational Physics, University of Vienna  
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ResearcherID: E-8288-2013

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## RESEARCH FIELD

Soft condensed matter with focus on neutral/charged colloidal and polymer-based systems. Coarse-graining procedures from first principles, modelling of the effective potentials between nano- or micro-scale units characterized by anisotropic interactions. Theoretical (mean field approaches) and numerical (Monte Carlo and Molecular Dynamics simulation techniques) investigation of the equilibrium properties and other collective behaviors: gelation phenomena, gas-liquid phase separation, crystallization and self-assembly. Design of units with heterogeneously patterned surfaces in order to steer the self-assembly of materials with well-defined architectures and tunable properties.

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## EDUCATION

- 10/04/2017 National (Italian) Scientific Qualification as Associate Professor in Theoretical Condensed Matter Physics (02/B2)
- 05/02/2009 Ph. D. graduation in Physics at the Physics Department of the University of Rome *La Sapienza* with a thesis on the *Equilibrium behavior of patchy particles: thermo-reversible gelation, phase separation and self-assembly*, under the supervision of Prof. Francesco Sciortino, Reg: n. 6343
- 03/2008-05/2008 Visiting Ph. D. student in the Department of Physics and Astronomy of the Utrecht University (The Netherlands) in the Soft Condensed Matter group of Prof. Marjolein Dijkstra
- 11/2005-11/2008 Ph. D. Fellowship for Physics at the University of Rome *La Sapienza* (Italy), under the supervision of Prof. Francesco Sciortino
- 14/07/2005 Degree in Physics, final mark 110/110 cum laude, at the Physics Department of the University of Rome *La Sapienza* with a thesis on the *Interplay between the gas-liquid phase separation and the slowing down of the dynamics in colloidal systems*, under the supervision of Prof. Francesco Sciortino, N. di protocollo 5062/76
- 17/07/2000 Scientific High School Diploma, final mark 100/100, at Liceo Scientifico Statale *Archimede*, Rome (Italy)
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## ACADEMIC APPOINTMENTS

- 10/2016-present Senior Postdoc in the group of Prof. Christos N. Likos, Computational Physics, University of Vienna, Vienna (Austria)
- 08/2012-10/2016 FWF (Fonds zur Förderung der Wissenschaftlichen Forschung) Elise Richter Fellowship at the Institut für Theoretische Physik, Technische Universität Wien (Austria), Project No. V249-N27

- 08/2010-07/2012 FWF (Fonds zur Förderung der Wissenschaftlichen Forschung) Lise Meitner Fellowship in collaboration with the Soft Matter Theory group of Prof. Gerhard Kahl, Institut für Theoretische Physik, Technische Universität Wien (Austria), Project No. M1170-N16
- 09/2009-07/2010 Alexander von Humboldt Fellowship in collaboration with the group of Prof. Christos N. Likos, Institut für Theoretische Physik II, Heinrich-Heine-Universität Düsseldorf (Germany), Project No. 3.3-ITA/1133706 STP
- 03/2009-08/2009 Erwin Schrödinger Fellowship in Mathematics and Mathematical Physics in collaboration with the Soft Matter Theory group of Prof. Gerhard Kahl, Institut für Theoretische Physik, Technische Universität Wien (Austria)
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## TRACK RECORD

From ResearcherID – 17 May 2017: h-index: 12, sum of the times cited: 1024, average citations per article: 44.52.

23 papers published in peer reviewed journals (11 as first author and 3 as last author), 1 editorial paper, 1 book chapter, 26 oral presentations at international conferences (among which 9 invited talks and 1 keynote lecture), 11 invited lectures at universities, research and cultural institutes, 16 posters at international conferences and workshops.

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## PUBLICATIONS (INCLUDING THE NUMBER OF CITATIONS – BASED ON RESEARCHERID, 17 MAY 2017)

1. “Limiting the valence: advancements and new perspectives on patchy colloids, soft functionalized nanoparticles and biomolecules” by Emanuela Bianchi, Barbara Capone, Ivan Coluzza, Lorenzo Rovigatti and Peter D.J. van Oostrum, submitted
2. “Modeling the effective interactions between heterogeneously charged colloids to design responsive self-assembled materials” by Emanuela Bianchi, invited chapter for the book “Design of Self-assembling Materials”, Springer, submitted
3. “Inverse patchy colloids: Synthesis, modeling and self-organization”, by Emanuela Bianchi, Peter D. J. van Oostrum, Christos N. Likos and G. Kahl, **Current Opinion in Colloid & Interface Science**, 30, 18 (2017)
4. “Hierarchical self-organization of soft patchy nanoparticles into morphologically diverse aggregates”, by Ioana C. Gârlea, Emanuela Bianchi, Barbara Capone, Lorenzo Rovigatti and Christos N. Likos, **Current Opinion in Colloid & Interface Science**, 30, 1 (2017)
5. “Spontaneous assembly of a hybrid crystal-liquid phase in inverse patchy colloid systems” by Silvano Ferrari, Emanuela Bianchi and Gerhard Kahl, **Nanoscale**, 9, 1956 (2017)
6. “Static and dynamic properties of inverse patchy colloids” by Gerhard Kahl, Emanuela Bianchi and Silvano Ferrari, Proceedings of the International School of Physics “Enrico Fermi”, Course 193 “Soft Matter Self-Assembly”, edited by C. N. Likos, F. Sciortino, E. Zaccarelli and P. Zihlerl (IOS, Amsterdam; SIF, Bologna), DOI:10.3254/978-1-61499-662-0-291 (2016)
7. “Generalized inverse patchy colloid model” by Monika Stipsitz, Gerhard Kahl and Emanuela Bianchi, **J. Chem. Phys.**, 142, 114905 (2015), (4 cit.)
8. “Inverse patchy colloids with small patches: fluid structure and dynamical slowing down” by Silvano Ferrari, Emanuela Bianchi, Yurii Kalyuzhnyi and Gerhard Kahl, **J. Phys.: Condens. Matter**, 27, 234104 (2015) (10 cit.)
9. “Patchy Particles” by Emanuela Bianchi, Gerhard Kahl, Christos N. Likos and Francesco Sciortino **J. Phys.: Condens. Matter**, 27, 230301 (2015) (1 cit.)

10. "Phase behaviour of inverse patchy colloids: effect of the model parameters" by Eva G. Noya and [Emanuela Bianchi](#), **J. Phys.: Condens. Matter**, 27, 234103 (2015) (8 cit.)
11. "Self-assembly of Janus particles under shear" by Arash Nikoubashman, [Emanuela Bianchi](#) and Athanassios Z. Panagiotopoulos, **Soft Matter**, 11, 3767 (2015), featured on the journal cover (11 cit.)
12. "Soft-patchy nanoparticles: modeling and self-organization" by [Emanuela Bianchi](#), Barbara Capone, Gerhard Kahl and Christos Likos, **Faraday Discussions**, 181, 123 (2015) (8 cit.)
13. "Theoretical and numerical investigations of inverse patchy colloids in the fluid phase" by Yurii Kalyuzhnyi, [Emanuela Bianchi](#), Silvano Ferrari and Gerhard Kahl, **J. Chem. Phys.**, 142, 114108 (2015) (6 cit.)
14. "Phase diagram of inverse patchy colloids assembling into an equilibrium laminar phase" by Eva G. Noya, Günther Doppelbauer, Ismene Kolovos, Gerhard Kahl and [Emanuela Bianchi](#), **Soft Matter**, 10, 8464 (2014) (12 cit.)
15. "Tunable assembly of heterogeneously charged colloids" by [Emanuela Bianchi](#), Christos N. Likos and Gerhard Kahl, **Nano Letters**, 14, 3412 (2014) (25 cit.)
16. "Self-assembly of heterogeneously charged particles under confinement" by [Emanuela Bianchi](#), Christos N. Likos and Gerhard Kahl, **ACS Nano**, 7, 4657 (2013) (23 cit.)
17. "Competing ordered structures formed by particles with a regular tetrahedral patch decoration" by Günther Doppelbauer, Eva G. Noya, [Emanuela Bianchi](#) and Gerhard Kahl, **J. Phys.: Condens. Matter**, 24, 284124 (2012), featured as news entry on the J. Phys. Condens. Matter webpage (9 cit.)
18. "Predicting patchy particle crystals: variable box shape simulations and evolutionary algorithms" by [Emanuela Bianchi](#), Günther Doppelbauer, Laura Filion, Marjolein Dijkstra and Gerhard Kahl, **J. Chem. Phys.**, 136, 214102 (2012) (26 cit.)
19. "Self-assembly scenarios of patchy colloidal particles" by Günther Doppelbauer, Eva G. Noya, [Emanuela Bianchi](#) and Gerhard Kahl, **Soft Matter**, 8, 7768 (2012) (22 cit.)
20. "Inverse patchy colloids: from microscopic description to mesoscopic coarse-graining" by [Emanuela Bianchi](#), Gerhard Kahl and Christos N. Likos, **Soft Matter**, 7, 8313 (2011) (28 cit.)
21. "Patchy colloids: state of the art and perspectives", by [Emanuela Bianchi](#), Ronald Blaak and Christos N. Likos, **Phys. Chem. Chem. Phys.**, **Perspective Article**, 13, 6397 (2011), featured on the journal cover (213 cit.)
22. "Self-assembly scenarios of patchy particles in two-dimensions" by Günther Doppelbauer, [Emanuela Bianchi](#) and Gerhard Kahl, **J. Phys.: Condens. Matter**, 22, 104105 (2010) (54 cit.)
23. "Theoretical and numerical estimate of the gas-liquid critical point of a primitive model for silica" by [Emanuela Bianchi](#), Piero Tartaglia and Francesco Sciortino, **J. Chem. Phys.**, 129, 224904 (2008) (6 cit.)
24. "Theoretical and numerical study of the phase diagram of patchy colloids: ordered and disordered patch arrangements" by [Emanuela Bianchi](#), Piero Tartaglia, Emanuela Zaccarelli and Francesco Sciortino, **J. Chem. Phys.**, 128, 144504 (2008) (85 cit.)
25. "Fully solvable equilibrium self-assembly process: fine-tuning the clusters size and the connectivity in patchy particle systems" by [Emanuela Bianchi](#), Piero Tartaglia, Emilia La Nave and Francesco Sciortino, **J. Phys. Chem. B.**, 111, 11765 (2007) (54 cit.)
26. "Self-assembly of patchy particles into polymer chains: a parameter-free comparison between Wertheim theory and Monte Carlo simulation" by Francesco Sciortino, [Emanuela Bianchi](#), Jack F. Douglas and Piero Tartaglia, **J. Chem Phys.**, 126, 194903 (2007) (123 cit.)
27. "Phase diagram of patchy colloids: towards empty liquids" by [Emanuela Bianchi](#), Julio Largo, Piero Tartaglia, Emanuela Zaccarelli and Francesco Sciortino, **Phys. Rev. Lett.**, 97, 168301 (2006), commented also in *Nature's Journal Club* by Pablo Debenedetti on 18/04/2007 (292 cit.)

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## TALKS

1. Talk at the Nanotrans Annual Meeting, 27-28 February 2017, Freie Universität, Berlin (Germany), *Heterogeneously charged colloids: from modeling to self-organization*
2. Invited seminar at the University of Vienna, 23 September 2016, Vienna (Austria), *Model systems with directional interactions for anisotropy-driven self-assembly*
3. Talk at the 30th Conference of the European Colloid and Interface Society (ECIS), 4-9 September 2016, Rome (Italy), *On the propensity of inverse patchy colloids to form lamellar structures*
4. Invited talk at the CECAM/DACAM workshop on "Interactions and Transport of Charged Species in Bulk and at Interfaces", 4-7 July 2016, Vienna (Austria), *Adding charges to conventional patchy colloids: layers formation in inverse patchy systems*
5. Invited seminar at Chemistry Department of the University of Rome *Torvergata*, 1 July 2015, Rome (Italy), *Anisotropy-driven assembly of nanoparticle model systems with directional interactions*
6. Invited contribution at the "XII International Symposium of University Professors", 25-27 June 2015, Pontifical Lateran University, Rome (Italy)
7. Keynote talk for the "Self- and Directed Assembly Session" at the "89th ACS Colloids and Surface Science Symposium", 15-17 June 2015, Carnegie Mellon University, Pittsburgh (Pennsylvania, USA), *Heterogeneously charged colloids under confinement and in bulk*
8. Invited seminar at Chemistry Department of the Technical University of Vienna, 20 May 2015, Vienna (Austria), *Self-assembly of heterogeneously charged particles under confinement and in the bulk*
9. Invited talk for the "Design, fabrication and self-assembly of anisotropic and patchy particles" symposium at the "E-MRS 2015 Spring Meeting", 11-12 May 2015, Grand Palais, Lille (France), *Adding charges to conventional patchy colloids: layers formation in inverse patchy systems*
10. Invited seminar at the Italian Institute of Technology (IIT), 11 May 2015, Genova (Italy), *Assembly of nano- and micro-scale colloids with directional interactions*
11. Invited talk at the "Nanoparticle Assembly and Synthesis Faraday Discussion", 20-22 April 2015, Argonne National Laboratory, Chicago (Illinois, USA), *Soft-patchy nanoparticles: modeling and self-organization*
12. Invited seminar at the University of Lisbon, 4 December 2014, Lisbon (Portugal), *Self-assembly of inverse patchy particles: adding charges to conventional patchy colloids*
13. Invited seminar at the Centre de Recherche Paul Pascal, University of Bordeaux, 26 November 2014, Bordeaux (France), *Self-assembly of inverse patchy particles: adding charges to conventional patchy colloids*
14. Talk at the DACAM workshop on the "Physics of colloidal particles with heterogeneously patterned surfaces", 24-27 September 2014, Vienna (Austria), *Soft-patchy nanoparticles: modeling and self-organization*
15. Talk at the "Italian Soft Days 2014", 17-18 September 2014, Rome (Italy), *Tunable assembly of inverse patchy colloids in the vicinity of a charged substrate*
16. Talk at the "Central European Statistical Mechanics Mini-Meeting", 12-13 June 2014, Budapest (Hungary), *Tunable assembly of inverse patchy colloids in the vicinity of a charged substrate*
17. Invited seminar at Chemical Engineering Department of Princeton University, 9 December 2013, Princeton (New Jersey, USA), *Inverse and Soft Patchy Colloids*
18. Invited Talk at the "2013 MRS Fall Meeting and Exhibit, Symposium E: Fundamentals of Gels and Self-Assembled Polymer Systems", 1-6 December 2013, Boston (Massachusetts, USA), *Effect of the Interplay between Attractive and Repulsive Anisotropic Interactions on the Self-Assembly of Heterogeneously Charged Units*

19. Invited seminar (in italian) at the "Istituto di Cultura Italiana" in Vienna, 18 November 2013, Vienna (Austria), *Colloidi come super atomi: come fabbricare nuovi materiali?*
20. Invited seminar at the Institute for Condensed Matter Physics NASU, 24 October 2013, Lviv (Ukraine), *Spot-like Patchy Particles: Thermo-reversible Gelation, Phase Separation and Self-Assembly*
21. Talk at the "International Soft Matter Conference 2013", 15-19 September 2013, Rome (Italy), *Self-assembly of heterogeneously charged particles under confinement*
22. Talk at the "246th ACS National Meeting and Exposition", 8-12 September 2013, Indianapolis (Indiana, USA), *Soft patchy colloids: the role of directional bonding, soft interactions and deformability on the self-assembly*
23. Invited talk at the "Physics of Complex Colloids" conference, 14-18 May 2013, Ljubljana (Slovenia), *Inverse patchy colloids: effect of the interplay between attractive and repulsive anisotropic interactions on the collective behaviors*
24. Talk at the ViCoM workshop, 4-5 April 2013, Vienna (Austria), *Self-assembly of heterogeneously charged particles under confinement*
25. Invited seminar at the University of Rome *La Sapienza*, Department of Physics, 9 November 2012, Rome (Italy), *Inverse patchy colloids: effect of the interplay between attractive and repulsive anisotropic interactions on the collective behavior*
26. Invited talk at the CECAM workshop on "Design of self-assembling materials", 4-7 September 2012, Vienna (Austria), *A mesoscopic, coarse-grained model for Inverse Patchy Colloids*
27. Invited talk at the CECAM workshop on "New Challenges in Electrostatics of Soft and Disordered Matter", 7-10 May 2012, Toulouse (France), *A mesoscopic, coarse-grained model for Inverse Patchy Colloids*
28. Invited talk at the CFCAM-RA workshop on "Coarse-Graining Strategies and Methodologies for Polymeric and Biomolecular Assemblies", 5-8 July 2011, Lyon (France), *A mesoscopic, coarse-grained model for Inverse Patchy Colloids*
29. Invited seminar at the University of Rome *La Sapienza*, Department of Physics, 11 March 2011, Rome (Italy), *Inverse Patchy Colloids: From Microscopic Description to Mesoscopic Coarse-Graining*
30. Talk at the "International Soft Matter Conference 2010", 5-8 July 2010, Granada (Spain), *Bridging the length scales for Inverse Patchy Colloids*
31. Talk at the "Network Meeting of the Alexander von Humboldt Foundation", 28-30 April 2010, Essen (Germany), *Bridging the length scales for Inverse Patchy Colloids*
32. Lecture for the Science College of CMS ( Center for Computational Materials Science ), 20 April 2009, Vienna (Austria), *Equilibrium Behavior of Patchy Particles: Thermo-reversible Gelation, Phase Separation and Self-Assembly*
33. Talk at the "Dynamical Arrest of Soft Matter and Colloids", 22-26 November 2008, Taormina (Italy), *Equilibrium behavior of patchy particles: thermo-reversible gelation, phase separation and self-assembly*
34. Talk at the Winter Discussion Workshop 2007 on "Dynamical Arrest of Soft Matter and Colloids", 20-24 January 2007, Bad Gastein (Austria), *Phase diagram of patchy particles: towards empty liquids*
35. Talk at the "Annual workshop CRS-SOFT", 17-19 November 2006, Camerino (Italy), *Phase diagram of patchy particles: towards empty liquids*
36. Talk at the workshop on "Patchy colloids, proteins and network forming liquids: analogies and new insights from computer simulations", 26-28 June 2006, Lyon (France), *Phase diagram of patchy particles: empty liquids and ideal gels*

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## POSTERS

1. *Soft patchy nanoparticles: modeling and self-organization* "4th International Soft Matter Conference", 12-16 September 2016, Grenoble (France)
2. *Heterogeneously Charged Colloids under confinement and in the bulk*, "Conference of the Middle European Cooperation in Statistical Physics (MECO)", 15-17 February 2016, Vienna (Austria)
3. *Functionalized nanoparticles: building blocks for novel materials*, "XII International Symposium of University Professors", 25-27 June 2015, Rome (Italy)
4. *Soft and flexible patchy colloids: the role of directional bonding, soft interactions and deformability on the self-assembly*, "9th Liquid Matter Conference", 21-25 July 2014, Lisbon (Portugal)
5. *Tunable aggregation of heterogeneously charged colloids*, "9th Liquid Matter Conference", 21-25 July 2014, Lisbon (Portugal)
6. *Soft patchy colloids: the role of directional bonding, soft interactions and deformability on the self-assembly*, "From Electrons to Phase Transitions (ViCoM)", 26-28 February 2014, Vienna (Austria)
7. *Soft patchy colloids: the role of directional bonding, soft interactions and deformability on the self-assembly*, "246th ACS National Meeting and Exposition", 8-12 September 2013, Indianapolis (Indiana, USA)
8. *Self-assembly of heterogeneously charged particles under confinement*, CECAM workshop on "The Role of Interfaces in Crystallization", 22-24 May 2013, Lausanne (Switzerland)
9. *Inverse Patchy Colloids: From Microscopic Description to Mesoscopic Coarse-Graining*, "GRC Colloidal, Macromolecular and Polyelectrolyte Solutions" Conference, 5-10 February 2012, Ventura (California, USA)
10. *Inverse Patchy Colloids: From Microscopic Description to Mesoscopic Coarse-Graining*, "8th Liquid Matter Conference 2011", 6-10 September 2011, Vienna (Austria)
11. *Self-assembly scenarios of patchy particles in two dimensions*, CECAM-HQ-EPFL workshop on "New Trends in Simulating Colloids: from Models to Applications", 15-18 July 2009, Lausanne (Switzerland)
12. *Self-assembly scenarios of patchy particles in two dimensions*, CECAM-HQ-EPFL workshop on "Computer Simulation Approaches to Study Self-Assembly: From Patchy Nano-Colloids to Virus Capsids", 13-15 July 2009, Lausanne (Switzerland)
13. *Equilibrium behavior of patchy particles: thermo-reversible gelation, phase separation and self-assembly*, "7th Liquid Matter Conference", 27 June-1 July 2008, Lund (Sweden)
14. *Patchy particles and thermo-reversible colloidal gelation*, "Soft, Complex and Biological Matter SOCOBIM" Conference, 15-19 July 2007, Città del Mare, Palermo (Italy)
15. *Patchy particles and thermo-reversible colloidal gelation*, "XXIII IUPAP International Conference on Statistical Physics Statphys23", 9-13 July 2007, Genova (Italy)
16. *Phase diagram of patchy colloids: stabilizing gel phase*, workshop on "Dynamical arrest of soft matter and colloids", 6-9 April 2006, Lugano (Switzerland)

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## ORGANIZED EVENTS

Mini-colloquium on "Design, synthesis and assembly of patchy particles" at the 15èmes Journées de la Matière Condensée (JMC15), 22-26 August 2016, Bordeaux (France)

CECAM workshop on "Physics of colloidal particles with heterogeneously patterned surfaces", 24-27 September 2014, Vienna (Austria).

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## FELLOWSHIPS & AWARDS

“Elise Richter” Postdoctoral Fellowship

“Lise Meitner” Postdoctoral Fellowship

“Alexander von Humboldt” Postdoctoral Fellowship

“Erwin Schrödinger” Junior Research Fellowship in Mathematics and Mathematical Physics

“Best talk” prize for Condensed Matter Physics a.y. 2007/2008, Scuola di dottorato “Vito Volterra”, University of Rome *La Sapienza*

“Best talk” prize for Condensed Matter Physics a.y. 2006/2007, Scuola di dottorato “Vito Volterra”, University of Rome *La Sapienza*

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## ACTIVITIES

Reviewer for *Physical Review Letters*, *Physical Review X*, *Nano Letters*, *ACS Nano*, *Nanoscale*, *Physical Chemistry Chemical Physics*, *Chemistry of Materials*, *Chemical Communications*, *Advances in Colloid and Interface Science*, *Soft Matter*, *Physical Review E*, the *Journal of Chemical Physics*, *Molecular Physics*, *RSC Advances* and *Comptes Rendus Chimie*.

Austrian partner of the OeAD Project UA 04/2013 together with Prof. Gerhard Kahl (Austria) and Yura Kalyuzhnyi (Ukraine).

Guest Editor of the special issue on Patchy Particles of the Journal of Physics: Condensed Matter (2015).

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## TEACHING AND ADVISING EXPERIENCE

Lecturer for the Praktikum of Scientific Computing (260126 PR Laboratory Scientific Computing (2017S)), University of Vienna, (a.y. 2017).

Teaching Assistant for the courses of general physics (thermodynamics, mechanics, electromagnetism) with Prof. Giulio D’Agostini, University of Rome *La Sapienza*, (a.y. 2007).

Teaching Assistant for the courses of general physics (thermodynamics, mechanics, electromagnetism) with Prof. Enrico Massaro, University of Rome *La Sapienza*, (a.y. 2007).

Teaching Assistant for the courses of general physics (thermodynamics, mechanics, electromagnetism) with Prof. Alessandro Melchiorri, University of Rome *La Sapienza*, (a.y. 2007).

Active role in supervision of two bachelor students, Ismene Kolovos (a.y. 2011 and 2012) and Monika Stipsitz (a.y. 2014), two master students, Ismene Kolovos (a.y. 2013) and Monika Stipsitz (a.y. 2015), and a Ph. D. student, Silvano Ferrari (a.y. 2013, 2014 and 2015).

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## SELECTED PRESS RELEASES (IN GERMAN AND ENGLISH)

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| 02/06/2014 | Nano World: Where towers construct themselves (UW, here; other sites: APA, Nanotechnology-Now, InnovationToronto, OmniFeed, ScienceDaily, Eurekalert) |
| 04/02/2014 | Physiker liefern Modell für maßgeschneiderte Strukturen aus Nanoteilchen (der Standard, here)   |
| 04/02/2014 | Patterns of particles generated by surface charges (TUAustria, here)  |
| 04/02/2014 | Teilchenmuster, erzeugt durch Oberflächenladung (TU Wien, here, other sites: Chemie, Analytik, InnovationSReport, MyScience, idw, Eurekalert)         |
| 04/02/2014 | Wie Ordnung aus Unordnung entsteht (ORE, here)  |

- 03/11/2012 Partikelchen formieren sich zu geordneten Strukturen (der Standard, [here](#))
- 29/10/2012 Der Molekül-Baukasten: Strukturen, die sich selbst zusammenbauen (TU Wien, [here](#))
- 28/07/2012 Strukturen von Kolloiden werden vorhersagbar (der Standard, [here](#))
- 11/07/2012 Ordnung aus dem Chaos (TU Wien, [here](#))
- 28/07/2011 Baukasten-System aus Mikropartikeln (TU Wien, [here](#))

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