Enrico Lattuada

Curriculum Vitae

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Date of birth: April 28th, 1990 Place of birth: Milano, Italy

Citizenship: Italian

My profile on scientific databases: Scopus, ResearcherID, Google Scholar

H-index (Scopus, 14/09/2022): 4 Total citations (Scopus, 14/09/2022): 47

Current address

Faculty of Physics University of Vienna Boltzmanngasse, 5 1090, Vienna, Austria

	Education and career
Mar 2022 – present	Lise Meitner post-doctoral research fellow , <i>University of Vienna</i> , with Prof. Roberto Cerbino.
Dec 2018 – Feb 2022	Post-doctoral research fellow , <i>La Sapienza Universitá di Roma</i> , Roma (Italy), with Prof. Francesco Sciortino.
Nov 2015 – Feb 2019	Dottorato di Ricerca (Ph.D.) in Industrial Chemistry and Chemical Engineering, <i>Politecnico di Milano</i> , under the supervision of Prof. Roberto Piazza), <i>cum laude</i> .
Jun 2015 – Oct 2015	Junior research fellow intern at Soft Matter Lab , <i>Politecnico di Milano</i> , under the supervision of Prof. Roberto Piazza.
Oct 2012 – Apr 2015	Laurea specialistica (Master of Science) in Nuclear Engineering, $Politecnico\ di\ Milano,\ 110/110\ cum\ laude.$
Sep 2009 – Sep 2012	Laurea triennale (Bachelor of Science) in Energy Engineering, $Politecnico\ di\ Milano,\ 103/110.$

Schools

10-14/07/2017	1st Summer School on Complex Fluid Flows in Microfluidics, Univer-
	sidade do Porto, Porto – Portugal.
20-28/06/2022	15th Bombannes Summer School on scattering applied to soft con-
	densed matter, Carcans-Maubuisson – France.
11-22/07/2022	"Machine Learning for Materials Hard and Soft" ESI-DCAFM-TACO-

VDSP Summer School, *Erwin Schrödinger Institute*, Vienna – Austria.

Fellowships, grants & awards

- 2022 FWF (Austria Science Fund) Lise Meitner Post-doctoral Fellowship, (177,980.00 €).
- 2018 Best poster award, Italian Soft Days 3rd edition, Padova (Italy).
- 2017 **Second best communication award**, 103rd National Congress of the Italian Physical Society, Trento (Italy).
- 2015 MIUR (Italian Ministry of Education, University and Research) doctoral scholarship.

Research interests

- Sedimentation
- Fluid dynamics
- Self-assembly and phase separation in complex colloidal suspensions
- Structure and dynamics of colloidal gels
- o Optical techniques applied to soft matter

Publications

- 2022 Interpenetrating gels in binary suspensions of DNA nanostars, <u>E Lattuada</u>, T Pietrangeli, F Sciortino, *J. Chem. Phys.* (2022, in press).
- 2022 Treatment of kidney clear cell carcinoma, lung adenocarcinoma and glioblastoma cell lines with hydrogels made of DNA nanostars, M Leo, E Lattuada, D Caprara, L Salvatori, A Vecchione, F Sciortino, P Filetici, A Stoppacciaro, Biomater. Sci. 10 (2022), 1304.
- 2021 **Spatially uniform dynamics in equilibrium colloidal gels**, <u>E Lattuada</u>, D Caprara, R Piazza, F Sciortino, *Sci. Adv.* **7** (2021), eabk2360.
- 2020 Hyperbranched DNA clusters, <u>E Lattuada</u>, D Caprara, V Lamberti, F Sciortino, *Nanoscale* 12 (2020), 23003.
 - **DNA-GEL**, novel nanomaterial for biomedical applications and delivery of bioactive molecules, <u>E Lattuada</u>, M Leo, D Caprara, L Salvatori, A Stoppacciaro, F Sciortino, P Filetici, *Front. Pharmacol.* **11** (2020), 1345.
- Thermophoresis in self-associating systems: Probing poloxamer micellization by opto-thermal excitation, <u>E Lattuada</u>, S Buzzaccaro, R Piazza, *Soft Matter* **15** (2019), 2140.
 - Compressive yield stress of depletion gels with variable interaction strength, <u>E Lattuada</u>, *Il Nuovo Cimento C* **42** (2019), 226.
- 2018 Compressive yield stress of depletion gels from stationary centrifugation profiles, <u>E Lattuada</u>, S Buzzaccaro, R Piazza, *J. Phys.: Condens. Matter* 30 (2018), 044005.

- 2017 Use of RAFT macro-surfmers for the synthesis of transparent aqueous colloids with tunable interactions, U Capasso Palmiero, A Agostini, E Lattuada, S Gatti, J Singh, CT Canova, S Buzzaccaro, D Moscatelli, Soft Matter 13 (2017), 6439.
- 2016 Colloidal Swarms Can Settle Faster than Isolated Particles: Enhanced Sedimentation near Phase Separation, <u>E Lattuada</u>, S Buzzaccaro, R Piazza, *Phys. Rev. Lett.* 116 (2016), 038301.

Conference talks and posters

- 2022 Spatially uniform dynamics in equilibrium colloidal gels, presentation, E Lattuada, D Caprara, R Piazza, F Sciortino, Polymer networks group international workshop. Roma, Italy
- 2021 **Homogeneous dynamics in DNA equilibrium gels**, *presentation*, <u>E Lattuada</u>, D Caprara, R Piazza, F Sciortino, 35th ECIS Congress. Athens, Greece
- 2020 Hyperbranched DNA clusters, presentation, <u>E Lattuada</u>, D Caprara, V Lamberti, F Sciortino, Italian Soft Days, 4th edition.
 Bari, Italy
- 2018 Compressive yield stress of depletion gels from stationary centrifugation profiles, presentation, <u>E Lattuada</u>, S Buzzaccaro, R Piazza, Italian Soft Days, 3rd edition.
 Padova, Italy

Glancing at sedimenting invisible particles: a Ghost Particle Velocimetry setup, poster, <u>E Lattuada</u>, A Orlandini, S Buzzaccaro, R Piazza, Italian Soft Days, 3rd edition.
Padova, Italy

2017 Non-equilibrium equation of state of a nanoparticle gel, communication, <u>E Lattuada</u>, S Buzzaccaro, R Piazza, 103o Congresso Nazionale della Società Italiana di Fisica.
Trento, Italy

Can colloidal swarms settle faster than isolated particles?, presentation, E Lattuada, S Buzzaccaro, R Piazza, 10th Liquid Matter Conference.

tion, <u>E Lattuada</u>, S Buzzaccaro, R Piazza, 10th Liquid Matter Conference. Ljubljana, Slovenia

2016 Can colloidal swarms settle faster than isolated particles?, presentation, <u>E Lattuada</u>, S Buzzaccaro, R Piazza, Italian Soft Days, 2nd edition. Milano, Italy

Can colloidal swarms settle faster than isolated particles?, presentation, <u>E Lattuada</u>, S Buzzaccaro, R Piazza, 3rd Workshop of the Complex Systems Group.

Milano, Italy

Students supervision and co-supervision

- 2021 **Tommaso Pietrangeli, Master candidate in Physics**, *Department of Physics*, *Sapienza Università di Roma*, with Prof. Francesco Sciortino.
- 2020 **Vincenzo Lamberti, Master candidate in Physics**, *Department of Physics*, *Sapienza Università di Roma*, with Prof. Francesco Sciortino.
- 2019 Andrea Alessandrini, Master candidate in Nuclear Engineering, Department of Chemistry, Materials Science, and Chemical Engineering, Politecnico di Milano, with Prof. Roberto Piazza.
- 2018 Massimo Stefanoni, Master candidate in Nuclear Engineering, Department of Chemistry, Materials Science, and Chemical Engineering, Politecnico di Milano, with Dr. Stefano Buzzaccaro.
- 2018 Francesco Marafelli, Master candidate in Engineering Physics, Department of Chemistry, Materials Science, and Chemical Engineering, Politecnico di Milano, with Dr. Stefano Buzzaccaro.
- 2018 Andrea Orlandini, Master candidate in Chemical Engineering, Department of Chemistry, Materials Science, and Chemical Engineering, Politecnico di Milano, with Prof. Roberto Piazza.
- 2018 Andrea Francesco Mollame, Master candidate in Chemical Engineering, Department of Chemistry, Materials Science, and Chemical Engineering, Politecnico di Milano, with Dr. Stefano Buzzaccaro.
- 2018 Tommaso Botta, Batchelor of Science candidate in Engineering Physics, Department of Chemistry, Materials Science, and Chemical Engineering, Politecnico di Milano, with Dr. Stefano Buzzaccaro.
- 2017 **Zeno Filiberti, Master candidate in Nuclear Engineering**, Department of Chemistry, Materials Science, and Chemical Engineering, Politecnico di Milano, with Prof. Roberto Piazza.
- 2017 Alessandro Carbonaro, Master candidate in Engineering Physics, Department of Chemistry, Materials Science, and Chemical Engineering, Politecnico di Milano, with Prof. Roberto Piazza.
- 2016 Christopher Thomas Canova, "Roberto Rocca" Fellow visiting student from MIT (Dept. of Chemical Engineering), Department of Chemistry, Materials Science, and Chemical Engineering, Politecnico di Milano, with Prof. Roberto Piazza.
- 2016 Roberto Pioli, Master candidate in Chemical Engineering, Department of Chemistry, Materials Science, and Chemical Engineering, Politecnico di Milano, with Dr. Stefano Buzzaccaro.
- 2016 Valentino Lepro, Master candidate in Biomedical Engineering, Department of Chemistry, Materials Science, and Chemical Engineering, Politecnico di Milano, with Prof. Roberto Piazza.

Languages

Italian (native) and English (proficient).

Other activities

Reviewer for *Journal of Physics: Condensed Matter, Soft Matter,* and *Papers in Physics.*