

OCTOBER 5, 2023

## ALBERTO DINELLI

*Born in* Lucca (Italia), 07/10/1997

*email* [alberto.dinelli@u-paris.fr](mailto:alberto.dinelli@u-paris.fr)

*address* Laboratoire Matière et Systèmes Complexes  
UMR 7057 · Université de Paris  
10 rue Alice Domon et Léonie Duquet  
75205 Paris CEDEX 13 (France)

## EDUCATION

Oct 2021 - Present	<b>Ph.D. - Physique en Île de France</b> Laboratoire Matière et Systèmes Complexes, Université Paris Cité · <i>Paris</i>  <b>Subject:</b> Self-organization and morphogenesis of active mixtures <b>Supervisor:</b> Julien Tailleur
Oct 2023 - Nov 2023	· Visiting period at MIT, group of Prof. J. Tailleur · <i>Cambridge, US</i>
Jul 2023	· Visiting period at YITP, group of Prof. H. Hayakawa · <i>Kyoto, JP</i>
Oct 2022	· Visiting period at MIT, group of Prof. J. Tailleur · <i>Cambridge, US</i>
Sep 2019 - Jul 2021	<b>Master in Physics of Complex Systems (International Track)</b> Politecnico di Torino · <i>Torino</i> Université Paris-Saclay, Sorbonne Université, Université de Paris · <i>Paris</i> SISSA, ICTP · <i>Trieste</i>  <b>Italian degree mark:</b> 110/110 cum laude <b>French M2 mark:</b> 18/20 <b>Thesis:</b> Self-organization of active mixtures. · <b>Supervisor:</b> Julien Tailleur.
Sep 2016 - Jul 2019	<b>Bachelor degree in Physics</b> Università di Pisa · <i>Pisa</i>  <b>Degree mark:</b> 110/110 cum laude <b>Thesis:</b> Rayleigh Taylor instability on a thin layer of fluid accelerated by the radiation pressure. · <b>Supervisor:</b> Francesco Pegoraro.

## TEACHING

- 2021 - 2023
- Teaching assistant, *Physics of Materials* (Bachelor, 1st year) · IUT Pajol (*Paris*)
  - Teaching assistant, *Photonics* (Bachelor, 2nd year) · IUT Pajol (*Paris*)

## PUBLICATIONS

- [A. Dinelli](#), J. O'Byrne, A. Curatolo, Y. Zhao, P. Sollich, J. Tailleur, *Non-reciprocity across scales in active mixtures*, [arXiv:2203.07757](#) (In press at Nature Communications)
- 

## TALKS

- |                 |   |
|-----------------|---|
| <i>Aug 2023</i> | · Contributed talk at <a href="#">STATPHYS28</a> , (University of Tokyo, Tokyo)   |
| <i>Aug 2023</i> | · Contributed talk at <a href="#">Frontiers in nonequilibrium physics: Active matter, topology and beyond</a> , (YITP, Kyoto) |
| <i>Jul 2023</i> | · <a href="#">Seminar</a> at YITP, Advanced Statistical Dynamics Group, (YITP, Kyoto)   |
| <i>Jun 2023</i> | · Contributed talk at <a href="#">EDPIF Scientific Day</a> , (Sorbonne University, Paris)                                     |
| <i>Mar 2023</i> | · Seminar at Institut Curie, Theory Group (Institut Curie, Paris)   |
| <i>Jan 2023</i> | · Flash talk at <a href="#">Journées de Physique Statistique 2023</a> (ENS, Paris)  |
| <i>Nov 2022</i> | · Contributed talk at <a href="#">Physics of Microbial Motility Workshop</a> (ESPCI, Paris)                                   |
| <i>Oct 2022</i> | · Talk at <a href="#">Greater Boston Area Statistical Mechanics Meeting</a> (UMass-Amherst, Amherst)                          |
| <i>Oct 2022</i> | · Seminar at MIT Physics of Living Systems (MIT, Cambridge)   |
| <i>Jul 2022</i> | · Contributed talk at the CECAM Workshop: <a href="#">New Fronteers in Liquid Matter</a> (Sorbonne Jussieu, Paris)            |
| <i>Jan 2022</i> | · Flash talk at <a href="#">Journées de Physique Statistique 2022</a> (ENS, Paris)  |
| <i>Nov 2021</i> | · Flash talk at <a href="#">Multiscale integration in Biological Systems</a> (Insitut Curie, Paris)                           |
- 

## POSTER PRESENTATIONS

- |                 |  |
|-----------------|--|
| <i>Aug 2023</i> | · <i>Non-reciprocity across scales in active mixtures</i><br>at <a href="#">Perspectives on Non-Equilibrium Statistical Mechanics</a> (YITP, Tokyo)  |
| <i>Jun 2023</i> | · <i>Non-reciprocity across scales in active mixtures</i><br>at <a href="#">Active matter at surfaces and in complex environments</a> (MPIPKS, Dresden)  |
| <i>May 2023</i> | · <i>Self-organization of bacterial mixtures interacting via quorum-sensing</i><br>at <a href="#">Workshop on Signatures of Nonequilibrium fluctuations in life</a> (ICTP, Trieste)            |
| <i>Dec 2022</i> | · <i>Self-organization of bacterial mixtures interacting via quorum-sensing</i><br>at <a href="#">Population dynamics: from rare events to evolution</a> (Université Grenoble Alpes, Grenoble) |
- 

## COMPUTER SKILLS

- |                     |   |
|---------------------|---|
| <i>Intermediate</i> | · Julia, MATLAB, MATHEMATICA                            |
| <i>Advanced</i>     | · Python, C, awk, bash, L <sup>A</sup> T <sub>E</sub> X |

---

## OTHER INFORMATION

### Awards

- |             |  |
|-------------|--|
| 2023        | · International Mobility Fellowship <a href="#">BDMI</a>                   |
| 2021 - 2024 | · IdEX International PhD Fellowship ( <a href="#">Link</a> )               |
| 2020 - 2021 | · Paris-Saclay International Master's Scholarship ( <a href="#">Link</a> ) |

### Languages

- |                |   |
|----------------|---|
| <i>Italian</i> | · Mother tongue   |
| <i>English</i> | · Advanced C2 (Cambridge Proficiency Certificate in 2015) |
| <i>French</i>  | · Advanced  |