

JULY 21, 2023

# ALBERTO DINELLI

*Born in* Lucca (Italia), 07/10/1997  
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 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
Jul 2023	<ul style="list-style-type: none"> <li>Visiting period at YITP, group of Prof. H. Hayakawa · <i>Kyoto, JP</i></li> </ul>
Oct 2022	<ul style="list-style-type: none"> <li>Visiting period at MIT, group of Prof. J. Tailleur · <i>Cambridge, US</i></li> </ul>
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](#) (currently under revision at Nat. Comm.)
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## TALKS

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|-----------------|---|
| <i>Jun 2023</i> | • Contributed talk at EDPIF Scientific Day, (Sorbonne University, <i>Paris</i> )                                  |
| <i>Mar 2023</i> | • Seminar at Institut Curie, Theory Group (Institut Curie, <i>Paris</i> )   |
| <i>Jan 2023</i> | • Flash talk at <i>Journées de Physique Statistique 2023</i> (ENS, <i>Paris</i> )                                 |
| <i>Nov 2022</i> | • Contributed talk at <i>Physics of Microbial Motility Workshop</i> (ESPCI, <i>Paris</i> )                        |
| <i>Oct 2022</i> | • Talk at <i>Greater Boston Area Statistical Mechanics Meeting</i> (UMass-Amherst, <i>Amherst</i> )               |
| <i>Oct 2022</i> | • Seminar at MIT Physics of Living Systems (MIT, <i>Cambridge</i> )   |
| <i>Jul 2022</i> | • Contributed talk at the CECAM Workshop: <i>New Fronteers in Liquid Matter</i> (Sorbonne Jussieu, <i>Paris</i> ) |
| <i>Jan 2022</i> | • Flash talk at <i>Journées de Physique Statistique 2022</i> (ENS, <i>Paris</i> )                                 |
| <i>Nov 2021</i> | • Flash talk at <i>Multiscale integration in Biological Systems</i> (Insitut Curie, <i>Paris</i> )                |
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## POSTER PRESENTATIONS

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|-----------------|---|
| <i>Jun 2023</i> | • <i>Non-reciprocity across scales in active mixtures</i><br>at <i>Active matter at surfaces and in complex environments</i> (MPIPKS, <i>Dresden</i> )  |
| <i>May 2023</i> | • <i>Self-organization of bacterial mixtures interacting via quorum-sensing</i><br>at <i>Workshop on Signatures of Nonequilibrium fluctuations in life</i> (ICTP, <i>Trieste</i> )            |
| <i>Dec 2022</i> | • <i>Self-organization of bacterial mixtures interacting via quorum-sensing</i><br>at <i>Population dynamics: from rare events to evolution</i> (Université Grenoble Alpes, <i>Grenoble</i> ) |
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## COMPUTER SKILLS

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

### Awards

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|-------------|--|
| 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> ) |

### Attendance to conferences

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|----------|---|
| Jun 2023 | • <a href="#">Active matter at surfaces and in complex environments</a> (MPIPKS, Dresden)                       |
| May 2023 | • <a href="#">Workshop on Signatures of Nonequilibrium fluctuations in life</a> (ICTP, Trieste)                 |
| Jan 2023 | • <a href="#">Journées de Physique Statistique 2023</a> (ENS, Paris)  |
| Dec 2022 | • <a href="#">Population dynamics: from rare events to evolution</a> (Université Grenoble Alpes, Grenoble)      |
| Nov 2022 | • <a href="#">Physics of Microbial Motility Workshop</a> (ESPCI, Paris)   |
| Oct 2022 | • <a href="#">Greater Boston Area Statistical Mechanics Meeting</a> (UMass-Amherst, Amherst)                    |
| Aug 2022 | • <a href="#">Active Matter: The Next 25 Years 2022</a> (Lorentz Center, Leiden)                                |
| Jul 2022 | • CECAM Workshop: <a href="#">New Fronteers in Liquid Matter</a> (Sorbonne Jussieu, Paris)                      |
| Jun 2022 | • Summer school on <a href="#">Disorder in Complex Systems</a> (Institut Pascal, Orsay)                         |
| Jan 2022 | • <a href="#">Journées de Physique Statistique 2022</a> (ENS, Paris)  |
| Nov 2021 | • <a href="#">Multiscale integration in Biological Systems</a> (Institut Curie, Paris)                          |
| Jun 2021 | • <a href="#">Beg Rohu Summer School</a> on Statistical Physics and Emergent Phenomena in Biology               |
| Mar 2021 | • <a href="#">Spring College</a> on the Physics of Complex Systems (ICTP, SISSA, Trieste)                       |
| Jan 2021 | • <a href="#">IRS 2021</a> Inhomogeneous Random Systems 2021  |
| Aug 2019 | • <a href="#">ICPS</a> International Conference of Physics Students (Köln)                                      |
| Nov 2018 | • <a href="#">GIPE</a> German-Italian Physics Exchange (Trieste)  |
| Sep 2015 | • University orientation course held by Scuola Normale Superiore di Pisa ( <a href="#">Link</a> ) (San Miniato) |

### Languages

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|---------|---|
| ITALIAN | • Mother tongue   |
| ENGLISH | • Advanced C2 (Cambridge Proficiency Certificate in 2015) |
| FRENCH  | • Advanced  |