

FEBRUARY 9, 2024

ALBERTO DINELLI

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

email 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)

website adinelli.github.io

EDUCATION

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

TEACHING

2021 - 2024	· Teaching assistant, <i>Physics of Materials</i> (Bachelor, 1st year) · IUT Pajol (<i>Paris</i>) · Teaching assistant, <i>Photonics</i> (Bachelor, 2nd year) · IUT Pajol (<i>Paris</i>)
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PUBLICATIONS

1. [A. Dinelli](#), J. O’Byrne and J. Tailleur, “Fluctuating hydrodynamics of active particles interacting via chemotaxis and quorum sensing: static and dynamics”. [arXiv:2402.05072](#) (2024).
 2. [A. Dinelli](#), J. O’Byrne, A. Curatolo, Y. Zhao, P. Sollich, J. Tailleur, “Non-reciprocity across scales in active mixtures”. *Nature Communications* 14, 7035 (2023).
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TALKS

<i>Jan 2024</i>	· Flash talk at <i>Journées de Physique Statistique 2024</i> (ENS, Paris)
<i>Jan 2024</i>	· Seminar in M. Shelley’s group, (CCB, Flatiron Institute, New York)
<i>Oct 2023</i>	· Seminar in D. Nelson’s group, (Harvard University, Cambridge)
<i>Oct 2023</i>	· Seminar in P. Mehta and K. Korolov’s groups, (Boston University, Boston)
<i>Oct 2023</i>	· Seminar in M. Hagan’s group, (Brandeis University, Waltham)
<i>Aug 2023</i>	· Contributed talk at <i>STATPHYS28</i> , (University of Tokyo, Tokyo)
<i>Aug 2023</i>	· Contributed talk at <i>Frontiers in nonequilibrium physics: Active matter, topology and beyond</i> , (YITP, Kyoto)
<i>Jul 2023</i>	· <i>Seminar</i> at YITP, Advanced Statistical Dynamics Group, (YITP, Kyoto)
<i>Jun 2023</i>	· Contributed talk at <i>EDPIF Scientific Day</i> , (Sorbonne University, Paris)
<i>Mar 2023</i>	· Seminar at Institut Curie, Theory Group (Institut Curie, Paris)
<i>Jan 2023</i>	· Flash talk at <i>Journées de Physique Statistique 2023</i> (ENS, Paris)
<i>Nov 2022</i>	· Contributed talk at <i>Physics of Microbial Motility Workshop</i> (ESPCI, Paris)
<i>Oct 2022</i>	· Talk at <i>Greater Boston Area Statistical Mechanics Meeting</i> (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: <i>New Frontiers in Liquid Matter</i> (Sorbonne Jussieu, Paris)
<i>Jan 2022</i>	· Flash talk at <i>Journées de Physique Statistique 2022</i> (ENS, Paris)
<i>Nov 2021</i>	· Flash talk at <i>Multiscale integration in Biological Systems</i> (Institut Curie, Paris)

POSTER PRESENTATIONS

<i>Aug 2023</i>	· <i>Perspectives on Non-Equilibrium Statistical Mechanics</i> (YITP, Tokyo)
<i>Jun 2023</i>	· <i>Active matter at surfaces and in complex environments</i> (MPIPKS, Dresden)
<i>May 2023</i>	· <i>Workshop on Signatures of Nonequilibrium fluctuations in life</i> (ICTP, Trieste)
<i>Dec 2022</i>	· <i>Population dynamics: from rare events to evolution</i> (Université Grenoble Alpes, Grenoble)

COMPUTER SKILLS

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| <i>Intermediate</i> | · Julia, MATLAB, MATHEMATICA |
| <i>Advanced</i> | · Python, C, awk, bash, L ^A T _E X |
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OTHER INFORMATION

Awards

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

Languages

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