ALBERTO DINELLI

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

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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

Ph.D. - Physique en Île de France

Laboratoire Matière et Systèmes Complexes, Université Paris Cité · Paris

Subject: Self-organization and morphogenesis of active mixtures

Supervisor: Julien Tailleur

Jul 2023

Oct 2022

• Visiting period at YITP, group of Prof. H. Hayakawa · Kyoto, JP

• Visiting period at MIT, group of Prof. J. Tailleur · Cambridge, US

Sep 2019 - Jul 2021

Master in Physics of Complex Systems (International Track)

Politecnico di Torino · Torino

Université Paris-Saclay, Sorbonne Université, Université de Paris · Paris SISSA, ICTP · Trieste

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 · Pisa

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

· Teaching assistant, *Photonics* (Bachelor, 2nd year) · IUT Pajol (*Paris*)

PUBLICATIONS

· <u>A. Dinelli</u>, 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.)

TALKS

Aug 2023	· Contributed talk at <i>STATPHYS</i> 28, (University of Tokyo, <i>Tokyo</i>)
Aug 2023	· Contributed talk at Frontiers in nonequilibrium physics: Active matter, topology and beyond, (YITP, Kyoto)
Jul 2023	· Seminar at YITP, Advanced Statistical Dynamics Group, (YITP, Kyoto)
Jun 2023	· Contributed talk at EDPIF Scientific Day, (Sorbonne University, Paris)
Mar 2023	· Seminar at Institut Curie, Theory Group (Institut Curie, Paris)
Jan 2023	· Flash talk at Journées de Physique Statistique 2023 (ENS, Paris)
Nov 2022	· Contributed talk at <i>Physics of Microbial Motility Workshop</i> (ESPCI, <i>Paris</i>)
Oct 2022	· Talk at <i>Greater Boston Area Statistical Mechanics Meeting</i> (UMass-Amherst, Amherst)
Oct 2022	· Seminar at MIT Physics of Living Systems (MIT, Cambridge)
Jul 2022	· Contributed talk at the CECAM Workshop: <i>New Fronteers in Liquid Matter</i> (Sorbonne Jussieu, <i>Paris</i>)
Jan 2022	· Flash talk at Journées de Physique Statistique 2022 (ENS, Paris)
Nov 2021	· Flash talk at <i>Multiscale integration in Biological Systems</i> (Insitut Curie, <i>Paris</i>)

POSTER PRESENTATIONS

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

COMPUTER SKILLS

Intermediate · Julia, Matlab, Mathematica

Advanced · Python, C, awk, bash, LATEX

OTHER INFORMATION

Awards

2023 · International Mobility Fellowship BDMI

2021 - 2024 · IdEX International PhD Fellowship (Link)

2020 - 2021 · Paris-Saclay International Master's Scolarship (Link)

Languages

Italian • Mothertongue

• Advanced C2 (Cambridge Proficiency Certificate in 2015)

French • Advanced