MARCH 19, 2023

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)

phone (+33) 0749908957



EDUCATION

Oct 2021 - Oct 2024

Ph.D. - Physique en Île de France

Laboratoire Matière et Systèmes Complexes, Université de Paris · Paris

Subject: Self-organization and morphogenesis of active mixtures

Supervisor: Julien Tailleur

Oct 2022

• Visiting period at MIT · 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

· 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.)

TALKS

| Mar 2023 | • Seminar at Institut Curie, Theory Group (Institut Curie, <i>Paris</i>) |
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| 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, <i>Amherst</i>) |
| 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>) |
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POSTER PRESENTATIONS

Dec 2022

• Self-organization of bacterial mixtures interacting via quorum-sensing at Population dynamics: from rare events to evolution (Université Grenoble Alpes, Grenoble)

COMPUTER SKILLS

Intermediate • Julia, Matlab, Mathematica

Advanced • Python, C, awk, bash, LATEX

OTHER INFORMATION

Awards

• International Mobility Fellowship for visiting period at MIT (Link) 2023

• IdEX International PhD Fellowship (Link) 2021 - 2024

2020 - 2021

• Paris-Saclay International Master's Scolarship (Link)

Achievements

Feb 2021

• 1st position in the French ranking of the Physics of Complex Systems master

Jun 2019

• 1st position in the admission test to Physics of Complex Systems master

Attendance to conferences

Jan 2023

• Journées de Physique Statistique 2023 (ENS, Paris)

Dec 2022

• Population dynamics: from rare events to evolution (Université Grenoble Alpes, Grenoble)

Nov 2022

• Physics of Microbial Motility Workshop (ESPCI, Paris)

Oct 2022

• Greater Boston Area Statistical Mechanics Meeting (UMass-Amherst, Amherst)

Aug 2022

• Active Matter: The Next 25 Years 2022 (Lorentz Center, Leiden)

Jul 2022

• CECAM Workshop: New Fronteers in Liquid Matter (Sorbonne Jussieu, Paris)

Jun 2022

• Summer school on *Disorder in Complex Systems* (Institut Pascal, *Orsay*)

Jan 2022

• Journées de Physique Statistique 2022 (ENS, Paris)

Nov 2021

• Multiscale integration in Biological Systems (Institut Curie, Paris)

Jun 2021

 Beg Rohu Summer School 2021 on Statistical Physics and Emergent Phenomena in Biology

Mar 2021

Spring College on the Physics of Complex Systems (ICTP, SISSA, Trieste)

Jan 2021

IRS 2021 Inhomogeneours Random Systems 2021

Aug 2019

• ICPS International Conference of Physics Students (Köln)

Nov 2018

• GIPE German-Italian Physics Exchange (*Trieste*)

Sep 2015

• University orientation course held by Scuola Normale Superiore di Pisa (Link) (San Miniato)

Languages

ITALIAN

Mothertongue

English

• Advanced C2 (Cambridge Proficiency Certificate in 2015)

French

Advanced