JULY 20, 2023

ALBERTO DINELLI

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

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UMR 7057 · Université de Paris

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75205 Paris CEDEX 13 (France)

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, group of Prof. Julien 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

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 <i>Journées de Physique Statistique</i> 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 <i>Journées de Physique Statistique</i> 2022 (ENS, Paris)
Nov 2021	• Flash talk at <i>Multiscale integration in Biological Systems</i> (Insitut Curie, <i>Paris</i>)

POSTER PRESENTATIONS

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, Trueste)
Dec 2022	Self-organization of bacterial mixtures interacting via quorum-sensing at <i>Population dynamics: from rare events to evolution</i> (Université Grenoble Alpes, <i>Grenoble</i>)

COMPUTER SKILLS

Intermediate	 Iulia, Matlab, Mathematica
miermeume	• IUIIa. MATLAB. MATHEMATICA

Advanced • Python, C, awk, bash, LATEX

OTHER INFORMATION

Awards

• International Mobility Fellowship BDMI

2021 - 2024 • IdEX International PhD Fellowship (Link)

• 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

Jun 2023 • Active matter at surfaces and in complex environments (MPIPKS, Dresden)

May 2023 • Workshop on Signatures of Nonequilibrium fluctuations in life (ICTP, Trieste)

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)

Iul 2022 • CECAM Workshop: New Fronteers in Liquid Matter (Sorbonne Jussieu, Paris)

• 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 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)

• 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