September 12, 2024

ALBERTO DINELLI

Born in	Lucca (Italia), 07/10/1997
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address	Département de biochimie · Université de Genève Quai Ernest-Ansermet 30 CH-1211 Genève (*Suisse*)
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EDUCATION

2024-09 – Present

Postdoc
Département de biochimie · Université de Genève · *Geneva*

Advisor: Karsten Kruse.

2021-10 – 2024-08

Ph.D. - Physique en Île de France
Laboratoire Matière et Systèmes Complexes, Université Paris Cité · *Paris*

Thesis: Scalar Active Matter across scales · **Supervisor:** Julien Tailleur.

2023-10 – 2023-11 · Visiting period at MIT, group of Prof. J. Tailleur · *Cambridge*, US

2023-07 · Visiting period at YITP, group of Prof. H. Hayakawa · *Kyoto*, JP

2022-10 · Visiting period at MIT, group of Prof. J. Tailleur · *Cambridge*, US

2019-09 – 2021-07

Master in Physics of Complex Systems - International track
Politecnico di Torino · *Torino*
Université Paris-Saclay · *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.

2016-09 – 2019-07

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 - 2024

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

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

PUBLICATIONS

1. A. Dinelli, J. O'Byrne and J. Tailleur, "Fluctuating hydrodynamics of active particles interacting via chemotaxis and quorum sensing: static and dynamics". J. Phys. A 57, 395002 (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).

TALKS

2024-04 · Seminar in K. Kruse's group, (Université de Genève, *Geneva*)
2024-02 · Seminar at *Spring College of Physics of Complex Systems 2024* (ICTP, *Trieste*)
2024-01 · Flash talk at *Journées de Physique Statistique 2024* (ENS, *Paris*)
2024-01 · Seminar in M. Shelley's group, (CCB, Flatiron Institute, *New York*)
2023-10 · Seminar in D. Nelson's group, (Harvard University, *Cambridge*)
2023-10 · Seminar in P. Mehta and K. Koroloev's groups, (Boston University, *Boston*)
2023-10 · Seminar in M. Hagan's group, (Brandeis University, *Waltham*)
2023-08 · Contributed talk at *STATPHYS28*, (University of Tokyo, *Tokyo*)
2023-08 · Contributed talk at *Frontiers in nonequilibrium physics: Active matter, topology and beyond*, (YITP, *Kyoto*)
2023-07 · *Seminar* at YITP, Advanced Statistical Dynamics Group, (YITP, *Kyoto*)
2023-06 · Contributed talk at *EDPIF Scientific Day*, (Sorbonne University, *Paris*)
2023-03 · Seminar at Institut Curie, Theory Group (Institut Curie, *Paris*)
2023-01 · Flash talk at *Journées de Physique Statistique 2023* (ENS, *Paris*)
2022-11 · Contributed talk at *Physics of Microbial Motility Workshop* (ESPCI, *Paris*)
2022-10 · Talk at *Greater Boston Area Statistical Mechanics Meeting* (UMass-Amherst, *Amherst*)
2022-10 · Seminar at MIT Physics of Living Systems (MIT, *Cambridge*)
2022-06 · Contributed talk at the CECAM Workshop: *New Fronteers in Liquid Matter* (Sorbonne Jussieu, *Paris*)
2022-01 · Flash talk at *Journées de Physique Statistique 2022* (ENS, *Paris*)
2021-11 · Flash talk at *Multiscale integration in Biological Systems* (Insitut Curie, *Paris*)

POSTER PRESENTATIONS

2023-08 · *Perspectives on Non-Equilibrium Statistical Mechanics* (YITP, *Tokyo*)
2023-06 · *Active matter at surfaces and in complex environments* (MPIPKS, *Dresden*)
2023-05 · *Workshop on Signatures of Nonequilibrium fluctuations in life* (ICTP, *Trieste*)
2022-12 · *Population dynamics: from rare events to evolution* (Université Grenoble Alpes, *Grenoble*)

OTHER INFORMATION

Awards

2023 · International Mobility Fellowship
2021 - 2024 · IdEX International PhD Fellowship
2020 - 2021 · Paris-Saclay International Master's Scolarship