### YANN-EDWIN KETA

Doctoral student



November 24th, 1995



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yketa.xyz



github.com/yketa

# Education –

2016-2018

MSc. in Physics High honours École normale supérieure de Lyon Specialisation in computational physics, soft matter, and statistical physics.

2015-2016

High honours **BSc.** in Physics École normale supérieure de Lyon

2013-2015

#### Classes préparatoires aux grandes écoles (PCSI/PC\*)

Lycée Lakanal, Sceaux Ranked 59<sup>th</sup> in the École normale supérieure de Lyon entrance exam.

2018-2019 (Gap year)

**MA in Social sciences** 1<sup>st</sup> year École normale supérieure de Lyon 🛚 🖡

# Skills –

### **Programming**

Python

Bash • C/C++

SageMath

#### Languages

■ French – Native speaker English - Fluent

## Interests -

- Extreme music
- \* Free software culture
- \* Open knowledge initiatives

#### Research

Sep 2020 PhD: Collective dynamics in simple active matter

- Current Laboratoire Charles Coulomb, UMR 5221 CNRS,

Université de Montpellier

Simons Collaboration on Cracking the Glass Problem

**Supervisors:** Ludovic Berthier (Montpellier, Cambridge),

Robert L. Jack (Cambridge)

Oct 2019 Active work in systems of self-propelled particles

- July 2020 Department of Applied Mathematics and Theoretical Physics,

University of Cambridge **\*\*** 

Laboratoire Matière et Systèmes Complexes, UMR 7057 CNRS,

Université de Paris

Supervisors: Robert L. Jack, Michael E. Cates (Cambridge),

Frédéric van Wijland (Paris)

Jan 2018 Simple model of active particles

- Jul 2018 Stewart Blusson Quantum Matter Institute,

University of British Columbia

**Supervisor:** Jörg Rottler

May 2017 Numerical analysis of jamming criticality for spheroidal

- Jul 2017 particles

Institutionen för fysik, Umeå universitet 🏪

Supervisor: Peter Olsson

Jun 2016 Leidenfrost drop impacts on surfaces with micrometric

- Jul 2016 **defects** 

Institut Lumière Matière, UMR 5306 CNRS, Université Claude Bernard Lyon 1

Supervisors: Quentin Ehlinger, Christophe Ybert

### **Publications**

Y.-E. Keta, R. L. Jack, and L. Berthier, "Disordered collective motion in dense assemblies of persistent particles", (2022). 

arXiv:2201.04902

Y.-E. Keta, É. Fodor, F. van Wijland, M. E. Cates, and R. L. Jack, "Collective motion in large deviations of active particles", Physical Review E 103, 022603 (2021) [DOI:10.1103/PhysRevE.103.022603]. **•** arXiv:2009.07112

Y.-E. Keta and P. Olsson, "Translational and rotational velocities in sheardriven jamming of ellipsoidal particles", Physical Review E 102, 052905 (2020) [DOI:10.1103/PhysRevE.102.052905]. **•** arXiv:2006.05305

T. Marschall, Y.-E. Keta, P. Olsson, and S. Teitel, "Orientational Ordering in Athermally Sheared, Aspherical, Frictionless Particles", Physical Review Letters 122, 188002 (2019) 

Y.-E. Keta and J. Rottler, "Cooperative motion and shear strain correlations in dense 2D systems of self-propelled soft disks", EPL 125, 58004 (2019) [DOI:10.1209/0295-5075/125/58004].

## **Teaching**

2022 Python for sciences (undergraduates)

Université de Montpellier

2018/19 Oral interrogator (Physics, Chemistry, Mathematics)

2016/17 Lycée du Parc, Institution des Chartreux, Lycée La Martinière Diderot (Lyon)













