



Suzanne Lafon

PhD in Physics

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DIPLOMA

- **PhD in Physics**, Paris-Saclay University
- **Master of fundamental physics (ICFP)** "Soft matter and physics for biology", ENS Ulm, Paris
- **ENS diploma**
4 years study in Physics (major) and 72 additional ECTS in other domains (chemistry, biology, sociology, languages)
- **Bachelor in fundamental physics**
ENS Ulm, Paris
- **Classe Préparatoire (CPGE) PCSI-PC***
Lycée Joffre, Montpellier

AWARDS

- **PhD thesis award** from the Paris-Saclay Graduate School of Physics



LANGUAGES

French	Mother tongue
English	Fluent
Spanish	Intermediate

SKILLS

- Computing**
Python, Matlab, LAMMPS
- Experimental**
- *Scattering & Reflectivity techniques (X-rays and neutrons)*
 - *Microfluidics (on glass & PDMS)*
 - *Surface chemistry*
 - *Rheology*
 - *STRAFI NMR*

WORK EXPERIENCE

Mar 2027 Oct 2025	Postdoctorate LIPHY, CNRS · Grenoble, France  Quasi-elastic study of ionic liquids confined in a sheared polymer matrix with M. Plazanet (CNRS)
Sep 2025 Oct 2024	Postdoctorate LIPHY, CNRS · Grenoble, France  Chiral molecules separation by chiral cellulose derivatives - a MD study with B. Coasne (CNRS)
Sep 2024 Juin 2024	Postdoctorate PARIS-SACLAY UNIVERSITY · Orsay, France  Ion dynamics: development of a STRAFI-NMR set-up with M. Zeghal (Paris-Saclay University), P. Judeinstein (CNRS) and P. Wzietek (Paris-Saclay University).
Nov 2023 Oct 2020	PhD thesis PARIS-SACLAY UNIVERSITY · Orsay, France  <i>Founded by ENS Paris.</i> Liquid/solid interfacial rheology supervised by F. Restagno (CNRS) and A. Chennevière (CEA Saclay) in collaboration with L. Joly and S. Merabia (ILM, Lyon, France).
Nov 2023 Oct 2020	Teaching assistant PARIS-SACLAY UNIVERSITY · Orsay, France  Computer science (Python, L1), metrology (IUT S4) et material science (L3).
2023 2021	Non-permanents representative SOLID STATE PHYSICS LABORATORY · Orsay, France 
2021 2020	Organiser of the "Rencontre des Jeunes Physicien-ne-s" FRENCH PHYSICAL SOCIETY (SFP) · Paris, France 
Sep 2020 Sep 2016	Research internships MULTIPLES INSTITUTIONS · France & Allemagne  Spontaneous emulsification and spontaneous organisation at the oil/water interface , Gulliver Lab, ESPCI, Paris, France. Supervised by Teresa Lopez-Leon. 5 months. Photoresponsive liquid/liquid phase separation , CRPP, Pessac, France. Supervised by Nicolas Martin & Jean-Christophe Barret. 5 months. Topological defects in cellulose shells , Gulliver lab, ESPCI, Paris. Supervised by Teresa Lopez-Leon. 4 months. Effect of advection on pulse propagation in excitable media , MPIDS, Göttingen, Germany. Supervised by Jean-Daniel Julien & Karen Alim. 5 months. Short-times dynamics of capillary rise , PMMH, ESPCI, Paris. Supervised by Joachim Delannoy, Etienne Reyssat & David Quéré. 1 month.
2017	Head of the Sports Associaion ECOLE NORMALE SUPERIEURE DE PARIS · Paris, France 



FORMATIONS



PUBLICATIONS

2024	Machine learning with Python <i>MOOC of INRIA</i>
2023	Image processing (Python) <i>F. Boulogne</i> <i>(Paris-Saclay Univ.)</i>
2022	Graphical interfaces (Python) <i>G. Exil</i> <i>(CEA Saclay)</i>
2021	Methodology for an open and reproducible research <i>MOOC by C. Pouzat,</i> <i>A. Legrand and K. Hinsén (INRIA)</i>
2021	History of chemistry <i>J.-B. Baudin at ENS Ulm, Paris</i>



CONTACTS

● Postdoc Research Advisors

Benoit Coasne

benoit.coasne@univ-grenoble-alpes.fr

Marie Plazenet

marie.plazenet@univ-grenoble-alpes.fr

Patrick Judeinstein

patrick.judeinstein@cnrs.fr

● PhD Supervisors

Frédéric Restagno

frederic.restagno@universite-paris-saclay.fr

Alexis Chennevière

alexis.chenneviere@cea.fr

2025 | **NMR study of water diffusion in highly concentrated salt**

IN PREPARATION

S. Lafon, P. Wzietek, M. Zeghal, P. Judeinstein

2025 | **A new method to quantify liquid/solid friction using a rheometer**

IN PREPARATION

S. Lafon, D. Dudzinski, F. Restagno, A. Chennevière

2025 | **Near-Surface Concentration Profile of Sheared Semidilute Polymer Solutions**

LANGMUIR, **41**(3) & ARXIV

S. Lafon, T. Outerelo Corvo, M. Grzelka, A. Hélary, P. Gutfreund, L. Léger, A. Chennevière, F. Restagno

2025 | **Probing the colloidal behavior of a cell wall polysaccharides-degrading enzyme in a highly constrained model system**

J. COLL. INT. SCI., **694**(137685)

H. Voisin, E. Bonnin, M. Marquis, C. Alvarado, **S. Lafon**, T. Lopez-Leon, F. Jamme, I. Capron

2023 | **Giant slip length at a supercooled liquid-solid interface**

PRE, **107**(2) & ARXIV

S. Lafon, A. Chennevière, F. Restagno, S. Merabia, L. Joly

2023 | **Flow driven control of pulse width in excitable media**

PRE, **107**(5) & ARXIV

A. Misselwitz, **S. Lafon**, J.-D. Julien, K. Alim

2023 | **Interactions between proteins and cellulose in a liquid crystalline media: Design of a droplet based experimental platform**

INT. J. BIO. MACROMOL., **245**(125488)

H. Voisin, E. Bonnin, M. Marquis, C. Alvarado, **S. Lafon**, T. Lopez-Leon, F. Jamme, I. Capron

2022 | **Reversible photocontrol of DNA coacervation**

METHODS IN ENZYMOLOGY, **646** (329-351)

S. Lafon, N. Martin

2019 | **The dual role of viscosity in capillary rise**

SOFT MATTER, **15**(13)

J. Delannoy, **S. Lafon**, Y. Koga, E. Reyssat, D. Quéré



CONFERENCES

Jun 2025

Talk

Journées de la Diffusion Neutronique

Annecy, France

Jul 2023

Talk

International Congress on Rheology

Athènes, Greece

Oct 2022

Talk

Journées de la Diffusion Neutronique

Biarritz, France

Jul 2022

Poster

Soft Matter Summer School

Cargèse, France

Jul 2022

Poster

New frontiers in liquid matter - CECAM workshop

Paris, France

Sep 2021

Poster

ECIS

Athens, Greece

Nov 2019

Poster

Symposium "Synthetic and Systems Biology"

Bordeaux, France