Last Updated on 23rd February 2023

Guillaume Le Goc

g.legoc@posteo.org legoc.fr +33(0) 6 45 76 47 39

Education

SORBONNE UNIVERSITÉ

PH. D.

2017–2021 Paris, France

- Neuroscience
- Animal experiments
- Statistical data analysis

MSC IN PHYSICS

2015–2017 Paris, France

- General physics – Light, matter and interactions
- Quantum mechanics, statistical physics, microscopy, biophysics, plasmonics
- With honors

BSC IN PHYSICS

2012–2015 Paris, France

- Physique and interfaces
- With honors

Links

ORCID **0000-0002-6946-1142**
Codeberg **guilg**
Gitlab **GuillaumeLeGoc**

Skills

COMPUTER

MATLAB ●●●●●
Python ●●●○○
LaTeX ●●●●○
Linux ●●●○○
Git ●●○○○

LANGUAGES

French (native) ●●●●●
English (C1) ●●●●●○
Spanish (basics) ●●○○○

MISC.

Driving licence

Teaching

MATLAB (2nd year university)
Physics (1st year university)

Experience

GRADUATE STUDENT

LABORATOIRE JEAN PERRIN, CNRS/SU

Oct 2017 – Dec 2021 Sorbonne Université, Paris
Calcium imaging and behaviour of larval zebrafish G. Debrégeas

- Exploration of larval zebrafish internal states using temperature.
- Design and building of behaviour and calcium imaging experiments, data acquisition, processing and analysis. microscopy image processing data analysis statistics electronics scientific writing

INTERN

LABORATOIRE JEAN PERRIN, CNRS/SU

Mar 2017–Juil 2017 Sorbonne Université, Paris
Calcium imaging and behaviour of larval zebrafish. G. Debrégeas

- Study of heat sensation in zebrafish larva. Development, calibration and use of an experiment to stimulate a zebrafish larva with controlled hot water pulses while performing whole-brain imaging using a lightsheet microscope.

INTERN

SCHOOL OF PHYSICS AND ASTRONOMY

Avr 2016 – Aou 2016 University of St Andrews, Scotland
Cold Atoms Group D. Cassettari

- Holography for cold atoms. Set up of an experiment to obtain arbitrary light intensity and phase profiles from a laser beam, using a phase-only spatial light modulator (SLM) and a digital micromirror device (DMD). optics image processing

INTERN

LABORATOIRE JEAN PERRIN, CNRS/SU

Jun 2015 – Jul 2015 Sorbonne Université, Paris
Biophysics of micro-organisms N. Henry

- Study of the effect of mechanical constraints on bacterial biofilm growth. Definition of quantitative descriptors of the biofilm initiation in a flow based on timelapse movies. microscopy image processing bacterial culture

INTERN

INSTITUT DES NANOSCIENCES DE PARIS, CNRS/SU

Jan 2015 Sorbonne Université, Paris
Nanometric Thin Films : Formation, Interfaces, Defects J.L. Cantin

- Study of magnetic properties of materials with electron paramagnetic resonance (EPR) for spintronics. Help on SurfER project (SURFace Electronic Resonance), a sample holder under ultravoid (10^{-10} mbar).

INTERN

INSTITUT PASTEUR

Juin 2014 Paris
NMR of biomolécules I. Guijarro

- Expression, purification and analysis of hydrophobic protein RodC from pathogenic opportunist fungus *Aspergillus fumigatus*. Introduction to nuclear magnetic resonance (NMR) for 3D structure resolution of proteins. NMR bacterial culture purification