Clément TIFFON

PhD student : Turbulence Drag & Drag Reduction

Contact

10/12/1998 (26 years old)

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33290 Ludon-Médoc, France

Skills

Scientific Communication

(Lab work, internships and the FPT)

Scientific scheme

Vector drawing software enables me to create diagrams and illustrations in a scientific context.

English proficiency: B2

Languages

Raw data processing, integration, filtering, Regression and image analysis, Representation visual representation of data, Advance Use of classes Some module and package creation skills.
Reference documentation and ability to work with API documentation for numerous packages. (Numpy, Matplotlib, Scypy, Pandas, AstroPy, OpenCV, Scikit Image, Seaborn)

LaTeX
Reports **redaction**, **formulas**, **Plugins** & **Templates** use

Softwares

Git: Collaborative work and tracking changes in files
Affinity: vectorial drawing & layout
Microsoft Office
astroImagJ and Fidji: image analysis
Zotero: References management

Work Experiance

Now 2023 | **Physics Thesis: Turbulence Drag and Drag Reduction**
CNRS - LOMA - University of Bordeaux, Talence, France

Experimental thesis on the relationship between turbulent drag and the turbulent spectrum. Study of the impact of polymers on the dynamics of two-dimensional flows. Use of an innovative setup based on soap films. Characterization through PIV, LDV, and PTV to analyze flow dynamics, quantify frictional forces, and energy transfers.

Education

2023 2020 | **MS in Fundamental Physics Particles, Plasmas & Universe**
University of Bordeaux, 33400 Talence, France

2st year specialization:	Interferometry and application to radio astronomy High energy astronomy, GRB study Visible astronomy and study of exoplanet transit Stellar structure
1st year option:	Cosmology and stellar physics Lasers and optical instrumentation Soft matter physics

2020 2016 | **Bachelor's degree of Science in Physics**
University of Bordeaux, 33400 Talence, France

Internships and projects

March-June 2023 | **Experiments on collective behavior of self-propelled robots and analogies with gases**

Supervisors: Hamid Kellay & *Jean-François* **Boudet**,
Laboratoire Ondes et Matière d'Aquitaine (LOMA), 33400 Talence, France.
Use of self-propelled Robots to analyse emerging collective behaviour of
active particles. Use of torsion spring as an experimental probe. Statistical
analysis of fluctuations in pendulum oscillations.

April-June 2022 | **Optofluidic: Experimental measures of optical stress induced by a laser on a drop**

Supervisors: Ulysse Delabre & *Jean-Pierre* Delville,
LOMA
Trapping of drops with the inversed levitation method.
Characterisation of local optical stress induced by a laser on a drop using
image analysis of its deformations.

2018 2019 2020 | **French Physicists' Tournament**

Member of the Bordeaux team for three years
cf: france.iptnet.info