Lucas Teinturier

lucas.teinturier@hotmail.fr | www.linkedin.com/in/lucas-teinturier-9ba149152 | Tel :+ 33 6 32 40 65 47

EDUCATION

LESIA- Observatoire de Paris — Meudon, France
PhD student: 3D atmospheric modeling and characterization of exoplanets — *October 2021-September 2024*
and brown dwarfs.
Supervised by Dr. Charnay, Dr. Bézard and Dr. Spiga.

Observatoire de Paris — Paris, France
Online diploma in Planetary Sciences — *October 2020- June 2021*

Ecole CentraleSupelec - Universite Paris-Saclay — Metz, France
Master of Science in Photonics and NanoSystem Engineering — *September 2020-August 2021*

Universite de Lorraine — Metz, France
Master of Science in Optics and Photonics — *September 2020- August 2021*

Ecole Centrale de Lyon — Lyon, France
Bachelor and Master of Science in Engineering — *September 2017- August 2021*

EXPERIENCE

Research Intern — April 2021 – October 2021
Institut d'Astrophysique de Paris — *Paris, France*
- Worked under the supervision of Dr. Beaulieu and Dr. Drossart,
- Used low resolution infrared spectra from ground and space based telescope.
- Characterized the atmosphere of 4 brown dwarfs spanning the L/T transition, using a bayesian retrieval framework.

Graduate Research Trainee — February 2020 – August 2020
McGill Space Institute — *Montreal, Canada*
- Worked under the supervision of Dr. Cowan.
- Developed an algorithm to map the surface of cloudy exoplanets.

Research Intern — October 2019 – January 2020
LATMOS Laboratory, CNRS/CNES — *Guyancourt, France*
- Worked under the supervision of Dr. Montmessin.
- Analyzed data from the ACS spectrometers, currently orbiting Mars onboard the TGO satellite.
- Improved the wavelength calibration used in the data analysis pipeline.

Research Intern — May 2019 – September 2019
LATMOS Laboratory, CNRS/CNES — *Paris, France*
- Worked under the supervision of Dr. Määttänen.
- Contributed to the development of a General Climate Model for planet Mars.
- Focused on the numerical simulation of CO_2 ice clouds during the Martian winter at the poles of Mars.
- Developed tools for post-processing analysis.

LIST OF PUBLICATIONS

- **Teinturier et al.** (2022): Mapping the Surface of Partially Cloudy Exoplanets is Hard, Monthly Notices of the Royal Astronomical Society, Volume 511, Issue 1, March 2022, Pages 440–447, https://doi.org/10.1093/mnras/stac030

- A. Määttänen, C. Mathé, ..., **L. Teinturier**, ...(2022): Troposphere-to-mesosphere microphysics of carbon dioxide ice clouds in a Mars Global Climate Model,Icarus, Volume 385, 115098, https://doi.org/10.1016/j.icarus.2022.115098.

Teaching and Outreach

Teaching Assistantship   January 2022-Now
Sorbonne Universite   *Paris, France*

- Taught the "Mathematics for Science II" lectures to 1st year of BSc students.
- Taught the "Programming Skills in Python" lectures to 1st year of BSc students.
- Taught the "Programming Skills in C" lectures to 1st year of BSc students.

Public Outreach

- Invited public talk for La Nuit des étoiles (Mars) - August 2022
- Invited public talk for Les Rencontres Jeuns Physiciens (Paris) - November 2022

Skills ans Miscellaneous

Programming Languages: Python, C/C++, Fortran, R, Go, IDL, Matlab.
Languages: French (Mother tongue), English (TOEFL : 109/120, C1-C2), Spanish (Beginner), Chinese (Notions).
Associative Work: Community manager of Cheer Up! Lyon, a charity that aims to help children diagnosed with cancer.
Associative Work: President of the Elbereth association: Organization of a conference for astronomy PhD students of Ile-de-France.