
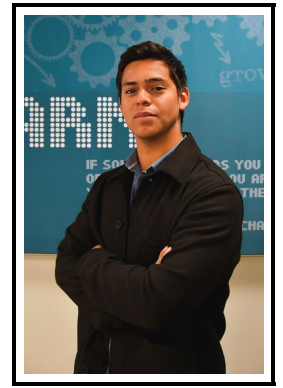


Gabriel Mauricio Flores Alfaro

MRT department
Luxembourg Institute of Science and Technology
✉ gabriel.floresalfaro@list.lu
in [Linkedin](#)  [ORCID](#)



Education

- 2022–present **PhD candidate**, *Luxembourg Institute of Science and Technology*, Luxembourg.
2020–2022 **Master de Sciences et Technologies mention Physique**, *Aix-Marseille Université*, France.
2014–2018 **Bachelor in Physics with a Major in Applied Physics**, *Universidad De La Serena*, Chile.

Publications

Journal Article (Accepted)

- 2024 **Gabriel M. Flores Alfaro, Mikhail N. Shneider, and Alexandros Gerakis**, Analysis of an induced Langmuir wave by ponderomotive forces and its applicability for plasma diagnostics, *Physics of Plasmas*.

In Conference Proceedings

- Atulya U. Kumar**, Stefan Karatodorov, Gabriel M. Flores Alfaro, and Alexandros Gerakis. Towards multi-point thermodynamic flow characterization using single shot coherent rayleigh brillouin scattering. In *AIAA SCITECH 2023 Forum*.

Master's internship

Thesis Measurement of transition probabilities in a plasma produced by laser ablation.

Abstract Time-resolved optical emission spectroscopy was carried out for plasmas produced by laser ablation of sapphire and Ti-sapphire crystals. For each sample, the time evolution of the plasma dynamics, electronic temperature and density were determined. The sapphire spectra recorded with a time delay of 2000 ns between the laser pulse and the detector gate was selected to determine the Einstein coefficients.

Supervisor Dr. Hermann Jörg

Laboratory LP3 - Lasers, plasmas et procédés photoniques.

Computer skills

Basic FORTRAN, GNU OCTAVE, CAD, LABVIEW.

Intermediate PYTHON, L^AT_EX, Linux, Microsoft Windows.