



Mateo Rodríguez

· 01/03/2002 · 🌐 Oviedo, Spain · ✉ mateorsuarez@gmail.com · 📄 · More about me: 🌐 mateo.github.io ·

EDUCATION

UNIVERSITY OF OVIEDO 2020-2025

Bachelor of Science - Physics (240 ECTS)

Bachelor Thesis: *Connecting theory and experiment: study of molecules on surfaces through STM and simulations.*

VCQ SUMMER SCHOOL: INTERFACING
GRAVITY AND QUANTUM PHYSICS 09/2024

25.5h course, organized by Vienna Center for Quantum Science and Technology. [Certificate](#) [Link](#)

DUTCH SUMMER SCHOOL OF THEORETICAL
PHYSICS 08/2024

1.5 ECTS course on Theoretical Physics.
Utrecht Summer School. [Certificate](#) [Link](#)

XII GEFENOL SUMMER SCHOOL ON
STATISTICAL PHYSICS OF COMPLEX SYSTEMS
07/2024

International 60h course on Complex Systems, applied Artificial Intelligence (AI) and Data Modeling. URJC Madrid. [Certificate](#) [Link](#)

SATURDAYS AI ASTURIAS 02-06/2024

160h AI course with Python in which a project with social impact is developed. [Certificate](#) [Link](#)

TECHNICAL SKILLS

PYTHON
FORTRAN

COMPUTATIONAL PHYSICS
MOLECULAR DYNAMICS

DATA SCIENCE/ANALYSIS
ML/ AI

LANGUAGES

SPANISH

Native

ENGLISH

Fluent

WORK EXPERIENCE/PROJECTS

RESEARCH INTERNSHIP: MOLECULAR &
COMPUTATIONAL PHYSICS 02-05/2025

I am working for three months on the project IFF-01 at the Fundamental Physics Institute (IFF), thanks to a [JAE Intro ICU competitive grant](#) funded by the Spanish National Research Council (CSIC).
Molecular Dynamics with Fortran and LAMMPS.

RESEARCH INTERNSHIP: SURFACE SCIENCE
2024-2025

Working on Surface & Molecular Physics at [SumoLab](#), a surface science research group which is part of the Nanomaterials and Nanotechnology Research Center (CINN).
Main experience: operating a Low Temperature Scanning Tunneling Microscope (LT STM) under conditions of low temperature ($T \approx 4K$) and ultra-high vacuum ($P \sim 10^{-11}mbar$).

RESEARCH INTERNSHIP: DATA SCIENCE
09-12/2024

Project [SV-24-GIJON-1-15](#) with a **competitive grant** funded by [IUTA](#). We created a Machine Learning (ML) model able to predict faults and performance of a marine diesel engine.

APPLICATIONS OF ML TO THE STUDY OF
BRAIN METASTASES 04-06/2024

Developed inside the context of Saturdays AI Asturias.
[Github link](#) [Code link](#)

ABOUT MYSELF

I am interested in science, I like writing and I love football. Japanese art and culture fascinate me. I come from a family in which hard work and empathy are critical values.

CERTIFICATIONS

OXFORD JUNIOR PROGRAMMES 07/2018

45 Hour English Course, Edinburgh. [Certificate](#)

CAMBRIDGE FIRST CERTIFICATE 2017

Council of Europe Level B2. [Certificate](#)