

Araceli Navarro Fernandez

Curriculum Vitae

Date of Birth: 13th February 1995 **Nationality:** Spanish.

📍 Ballaufstrasse 35, Munich, Germany

✉ n.f.araceli@gmail.com

☎ +34 674 150 245

SUMMARY

PhD in experimental physics. Skilled in managing complex data analysis in a variety of programming languages (Python, Matlab, C++, Fortran). Experience using GitHub, GitLab. Good presentation and communication skills, with the ability of presenting complicated quantitative results in a comprehensive manner. Currently undertaking courses on data-science fields of relevance (Machine learning techniques, SQL, etc.)

EXPERIENCE

- **Nov 2022 – Present:** Postdoctoral Researcher

Max Planck Institut für Plasmaphysik (IPP Garching bei München)

Beam physicist in the Neutral Beam Injection group. ITER Technology and Diagnostics.

- **Sept 2019 – Oct 2022:** Doctoral Student Program

CERN, Beam Instrumentation group, Geneva, Switzerland.

Understanding Secondary Emission processes and beam matter interactions for the optimization of Diagnostic Wire Grid systems in Particle Accelerators.

Thermal modeling for beam power limits calculations.

- **Feb 2018 – Sept 2019:** Research Assistant

Polytechnic University of Catalonia (Barcelona)

BRIKEN measurements of half-lives for Ce to Nd nuclei relevant for the formation of the r-process rare-earth peak ($A \sim 160$)

- **Sept 2017 – Feb 2018:** Research Assistant

Polytechnic University of Catalonia, Barcelona.

Genetic Algorithm code for administration and optimization of nuclear waste extraction at ASCO's nuclear power plant.

- **Sept 2016 – Sept 2017:** Technical Student Program.

CERN, Beam Instrumentation group, Geneva, Switzerland.

Characterization and optimization of the CERN Secondary Emission Monitors (SEM) used for beam diagnostics.

- Dec 2015 - Aug 2016 Research Assistant.

Polytechnic University of Catalonia, Barcelona.

Conceptual development of fast neutron spectrometer by using Monte Carlo simulation and deconvolution algorithms.

EDUCATION

- Sept 2019 – Oct 2022: Doctoral Student Program.
- Sept 2018 – Sept 2019: Master's in Nuclear Physics.
- Sept 2013 – Feb 2018: Bachelor's degree in Engineering Physics
- Sept 2011 – May 2013 High School, Scientific Branch.

ACHIEVEMENTS AND HONORS

- March 2022: . Graduated with the highest honors from Doctoral student program.
- March 2021: Prize to the best poster presentation. Physics department, UPC.
- August 2019: Award for extraordinary academical achievements during master studies.
- Sept 2018 - Aug 2019: Scholarship for full coverage of Master studies. (Spanish Nuclear Society)
- Sept 2017 – Feb 2018: Scholarship for young researchers.
- Sept 2013 - Sept 2018: Scholarship for full coverage of university expenses. (AGAUR)
- Sept 2013: Award for extraordinary academical achievements during highs school.

LANGUAGES

- | | |
|----------------------------|------------------------|
| • Spanish: Native. | • Italian: B1, Casual |
| • Catalan: C1, Fluent | • Japanese: N4, Casual |
| • English: C1, Fluent | • German: A2, Begginer |
| • French: B2, Professional | |