

Damien Minenna

PH.D. IN PHYSICS | MODELLING | SCIENTIFIC COMPUTING
ELECTRODYNAMICS | PLASMA PHYSICS | VACUUM ELECTRONICS TUBES
RESEARCH ENGINEER AT CEA, BRUYÈRES-LE-CHÂTEL, FRANCE



Experiences

Research Engineer (Postdoctoral fellow)

Since Jan. 2020

French Atomic Energy Commission CEA / DAM

[Bruyères-le-Châtel, France](#)

> CEA is a French public government-funded research organisation in nuclear applications

- Scientific research in laser-plasma interaction and applications for the Laser Mégajoule (LMJ)

Project management 

Fortran

High intensity lasers

Scientific Computing

Plasma physics

Simulation Modelling Engineer

Nov. 2019 – Dec. 2019

Thales Group AVS/MIS

[Vélizy-Villacoublay, France](#)

> Thales Group is a multinational company that builds electrical systems including aerospace components

- Design, optimization and validation of a code for the modelling of industrial Traveling-wave tubes (wave amplifiers for telecommunication satellites)

Fortran

Python

Industrial and space applications

Vacuum electronics tubes

Doctoral Researcher

Oct. 2016 – Nov. 2019

Centre National d'Études Spatiales CNES

[Marseille, France](#)

Cofunding: Thales AVS/MIS & PIIM laboratory, Aix-Marseille University-CNRS

(6 months internship before)

> CNES is the French government space agency

- Theoretical development of a wave-particle interaction model
- Modelling of Traveling-wave tubes

Project management 

Fortran

Parallelization

Scientific Computing

Matlab

Python

High-performance computing, HPC

Industrial and space applications

Vacuum electronics tubes

University Teacher

Oct. 2016 – Jul. 2019

Faculty of Sciences, Aix-Marseille University

[Marseille, France](#)

- Lecture courses, tutorials, and examinations in Mathematics to instrumentation Master2 (M.Sc. degree) students

Education

Ph.D. (Doctoral) degree in Physics

2016 – 2019

Subject: Many-body hamiltonian modeling of the momentum exchange within the nonlinear wave-particle interaction

[Aix-Marseille University, France](#)

🏆 2019 Thesis prize, from the Doctoral School "Physics and Sciences of the Matter"

M.Sc. (Master) degree in Physics

2015 – 2016

Science of Fusion and Plasmas

[Aix-Marseille University, France](#)

M.Sc. (Master) degree in Physics and Engineering

2013 – 2015

Cosmos, Fields and Particles

[Montpellier University, France](#)

Project management

Work method

- > Understanding a subject and its context
- > Perform theoretical models in physics and compare them
- > Create, optimize and validate adapted digital tools



Management

- > Manage different projects simultaneously
- > Find human and material resources
- > Comply with specifications and deadlines

Team work

- > Listen to its partners
- > Work remotely: international collaborations
- > Build its network
- > Supervision of young employees

Communication


- > Adapting one's speech
- > Synthesize its results: peer-reviewed publications  Google Scholar |  ResearchGate
- > Convince its audience: international conferences and seminars
- > Teacher in higher education
- > Software deposit

Skills

Programming

Fortran Matlab Python
Mathematica Maple C/C++
HTML5

Software

Microsoft Office (Word, Excel, PowerPoint)
iWork (Pages, Numbers, Keynote)
Libre Office (Writer, Calc, Impress) 
Adobe InDesign Inkscape Gimp

Language

French (Native)
English (Professional)