# Clémentine Dominé

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## Education

2016-Present: Master of Physics with Theoretical Physics, The University of Manchester, Manchester (UK). First 85%.

2018-2019:  UC Education Abroad (3$^{rd}$ Year), The University of California Los Angeles (UCLA), Los Angeles CA (USA).

Volunteered to do additional research:

Supervised research at UCLA with Pr. R. Bruinsma. Study of a method of quantum state manipulation, inspired from the spin echo, which can reduce the time uncertainty error for quantum computer applications.

Supervised research at UCLA with Pr. K. Arisaka. Study of the depth visual information encoding by the theta phase using reaction time in Virtual reality (FOVE, Emotive EEG, Arduino, MATLAB).

2014-2016:  French Baccalaureat ("Mention Très Bien" with "Félicitations du jury").
Options:  European english and music. Specialization: Informatics.
Lycée Madame de Staël, St Julien en Genevois (France). Grade: 18.5/20

2013-2014:  10th Grade, Lycée International de Boston, Cambridge MA (USA).

## Experiences

2018-2019:  Volunteered to do an additional study of the E-kick procedure optimization using MATLAB PIC code simulation for non-neutral plasma with the ALPHA experiment at CERN continuing as a master's project.

Summer internship at the EPFL Blue Brain Project with Dr. Rajnish Ranjan, Section Manager of the Membrane Systems Group in the Simulation Neuroscience Division (Lausanne, Switzerland).
My main duties consist in redesigning and upgrading the existing ion channel model fitting with Hodgkin-Huxley and Markov model formulation.

French Tutor for A-level students.

2017-2018:  Summer internship at CERN in the ALPHA Experiment (11 weeks).
Further develop my computing and electronic skills working on a project of the electronic circuit on security valve of the cryostat for the future Alpha-G experiment which aims at measuring the gravity constant with anti-matter.

Helped with the day-to-day running of the experiment.
Assisted Summer Student lectures. Certified guide inside the AD facility.

Peer-assisted Study Sessions (PASS), The University of Manchester. Weekly Tutoring first year student in Physics.

Member of the committee of the Red-Cross on Campus at the University of Manchester (Health Consultant).

Physics and Mathematics Tutor for A-level students.

2016-2017:    Summer internship at CERN in the ALPHA Experiment (6 weeks).
The ALPHA experiment is working with trapped anti-hydrogen atoms and aims at studying fundamental symmetries between matter and antimatter. I could develop my computing and electronic skills by working on a project around a "push-pull" Mosfet circuit for the apparatus.

## Informatics and Computing Skills

2016-Present:  Programing in Python and C++.
Latex, MATLAB, LTSPICE, Mathematica, Arduino.

2015-2016:     Specialization: ISN ( Informatique et Sciences du Numérique).

2014-2015:     Programing languages : PHP, Python.

## Language Skills

French:        Native language.

English:       TOEFL: 106/120 (12 December 2015).

Deutsch:       Silver AATG (American Association of Teachers of German).
Certification level A2/B1 (Deutsches Sprachdiplom).

## Interest and Activities

Music:         Guitar, certificate of musical theory, singing, piano, ukulele.

Sports:        Rock-climbing, skiing, snowboard, running.

Other:         Blog around the subject of Art and Sciences (@artlovessciences)

## References

References are available upon request.