

TIMOTHÉE AUDINET DE PIEUCHON

DATE OF BIRTH: 04/17/1998 \diamond PHD SUPERVISOR: [Julien Toulouse](#)

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CURRENT POSITION

Sorbonne Université, France

Sept. 2022 - Today

PH.D. PROJECT: Development of a relativistic DFT based on effective QED

PH.D. SUPERVISOR: [Julien Toulouse](#)

EDUCATION

École Normale Supérieure de Lyon, France

2019 - 2020 and 2021-2022

Master degree, Molecular Simulation in Physics and Chemistry, *AtoSim*

Average grade: 16.2/20

Department of Matter Sciences

École Normale Supérieure de Lyon, France

2020 - 2021

Preparation to the *agrégation* exam

Received 2/38

École Normale Supérieure de Lyon, France

2018 - 2019

Degree in Chemistry

Average grade: 14.6/20

Department of Matter Sciences

Blaise Pascal High School, Clermont-Ferrand, France

2015 - 2018

Preparatory Classes for the Grandes Écoles

COURSES FOLLOWED

Quantum Physics, Statistical Thermodynamics, Green's functions, Group theory, Spectroscopy, Quantum field theory, Theoretical chemistry (HF and DFT), Quantum Monte Carlo.

TECHNICAL STRENGTHS

Mathematical Tools

Complex Analysis, Fock spaces, Green functions...

Modeling and Analysis

Bash, Python, Mathematica

Software

Latex, Linux, ssh

Languages

Native French, English C1

WORK EXPERIENCE

Spectral function and three-body Green functions

Supervisor: Arjan Berger

- Three months internship at the LCPQ at Toulouse where I studied the development of the spectral function thanks to the three-body Green-function.

May-July 2020

One-dimensional model for Relativistic Quantum Chemistry

Supervisor: Julien Toulouse

- Six months internship at the LCT at Paris where I studied the development of the Dirac equation with delta interactions over a one-dimensional model.

Feb.-July 2022

SCIENTIFIC PUBLICATIONS

1. *Photoemission spectral functions from the three-body Green's function*, Gabriele Riva, Timothée Audinet, Matthieu Vladař, Pina Romaniello, and J. Arjan Berger, [SciPost Physics](#) (accepted), (2021)