Timothée Audinet

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CURRENT POSITION

Sorbonne Université, France *Sept. 2022 - Today*
Ph.D. Project: Development of relativistic methods 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, 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
· LCPQ, Université Paul Sabatier, Toulouse *May-July 2020*

One-dimensional model for Relativistic Quantum Chemistry Supervisor: Julien Toulouse
· LCT, Sorbonne Université, Paris *Feb.-July 2022*

SCIENTIFIC PUBLICATIONS

1. *Photoemission spectral functions from the three-body Green's function*, G. Riva, T. Audinet, M. Vladaj, P. Romaniello, and J. Arjan Berger, SciPost Phys., (2021)
2. *Effective quantum electrodynamics: One-dimensional model of the relativistic hydrogen-like atom*, T. Audinet and J. Toulouse, J. Chem. Phys., (2023)
3. *Vacuum polarization in a one-dimensional effective quantum-electrodynamics model*, T. Audinet, U. Morellini, A. Levitt and J. Toulouse, Submitted, (2024)