



Dr. Emmanuel Giner

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Dr. Emmanuel Giner  
Laboratoire de Chimie Theorique,  
4 place Jussieu,  
75005 Paris  
Email: [eginer@lct.jussieu.fr](mailto:eginer@lct.jussieu.fr)

To whom it may concern,

I am writing this letter of recommendation in support of Barthélémy Pradines with whom I collaborated for 16 months during his post-doctoral position at the LCT from 2018 to 2019. Barthélémy was hired on a LABEX contract to work in the field of theoretical chemistry, a field connected to its PhD thesis (done in theoretical solid state physics). The precise subject of his work was to develop new hybrid theoretical methods and numerical tools in order to improve the description of the electronic structure of atoms and molecules.

This work involved many aspects typical from research in theoretical physics : i) the understanding of theories with very different mathematical formalisms (such as density functional theory and wave function theory) and a new state-of-the-art framework which coupled these aspects, ii) the mastering of different computational languages such as Fortran, bash or Python iii) developing in an open source quantum chemistry software (the Quantum Package) made of several hundred of lines of codes and involving a strong collaborative work through Github, iv) coding new algorithms within high performance computing standard including parallel computing, v) handling large amounts of data and organizing them in concise and precise manuscripts. Also, Barthélémy gave a series of seminar at the laboratory, exposing in a very pedagogical way the results of his work.

From my work experience with Barthélémy, I could appreciate that he is very organized, passionate by science in many aspects, hard worker, reliable, creative and also a very nice person to work with. Therefore, I think that he could fit in any research team involved in theoretical developments.

Sincerely,

Dr. Emmanuel Giner