



## **PhD position in ab initio modelling of defects related electronic and vibrational properties**

### **Aix Marseille University**

Applications are invited for a PhD position under the supervision of Prof. E. Cannuccia in the laboratory “Physique des Interactions Ioniques et Moléculaires” at Aix-Marseille University, in the context of the French ANR project “NOTISPERF”.

The research topic is the theoretical investigation of defects in multilayer materials. We aim to solve some controversies related to the interpretation of defect related emission lines, with a special care for the study of the local vibrations at the origin of phonon replica.

In this project Prof. Alberto Zobelli from Laboratoire de Physique des Solides, Paris Saclay, is involved as an experimental partner and expert of defects in boron nitride.

The position is to last up to 3 years.

Person specification:

A successful candidate holds or is about to obtain a Master in Physics or Materials Science. We are seeking highly motivated students with a solid background in Physics and Condensed Matter theory. Proven knowledge of Density Functional Theory methods constitutes a clear advantage. Proficiency with standard programming language (Fortran/C/Python) is considered a plus.

How to apply:

Please send a CV, listing transcript of relevant exams, the name and contacts of at least two referees, any peer-reviewed publication, and attendance to international workshops or schools, together with a short description of scientific experience, interests, and expertise, to Prof. Elena Cannuccia ([elena.cannuccia@univ-amu.fr](mailto:elena.cannuccia@univ-amu.fr)).

The position is open till a suitable candidate is found. The expected starting date is 1<sup>st</sup> October 2021.