

A post-doc position in the area of the computational condensed-matter physics is open in the Laboratoire des Solides Irradiés (LSI), École Polytechnique, Palaiseau, France.

The project aims to understand, via *ab initio* calculations and modeling, the properties of thermal and electronic transport in thin films, in the presence of a substrate. Numerical simulations will be performed with the QUANTUM ESPRESSO package, within Density Functional Perturbation Theory and Boltzmann transport equation. A part of code development and numerical implementation is to be expected. The obtained numerical results will be compared to experimental data obtained in parallel by our collaborators.

The post-doc will last one year, starting at the beginning of 2020. The post-doc is funded by CEA (Commissariat à l'Énergie Atomique et aux Énergies Alternatives) via the ANCRE program¹.

The post-doc researcher will work in collaboration with theoreticians Jelena Sjakste and Nathalie Vast (LSI), as well as with Lorenzo Paulatto (IMPMC, Paris). A collaboration with two experimental groups in Paris is also part of the project.

The ideal candidate has a doctoral degree in physics, deep understanding and strong research motivation in condensed matter physics and *ab initio* simulations within DFT. The experience in code development is required. Some experience in transport calculations with Boltzmann transport equation will be a plus.

For further information about the project, please contact Jelena Sjakste (jelena.sjakste@polytechnique.edu) or Nathalie Vast (nathalie.vast@polytechnique.edu).

To apply for this position, please send your CV, list of publications and motivation letter to Jelena Sjakste or Nathalie Vast. Please mention the contact details of three reference persons in your application.

Please note that this “junior post-doc” position is subject to special eligibility criteria: the candidate must have less than two years of post-PhD research experience. The age limit is 30 years old.

The deadline for application: open until a suitable candidate is found.

¹ <https://www.allianceenergie.fr/category/ancre/>