

2 postdoctoral positions in many-body/quantum computing/quantum nanoelectronics theory with X. Waintal, CEA Grenoble, France.

The theory group of Pheligs/ CEA Grenoble has two openings for postdoctoral positions in the field of quantum nanoelectronics theory. Possible projects will involve time dependent quantum transport, many-body correlations and/or quantum computing with noisy quantum devices using a combination of analytical and numerical techniques. Relevant recent works of the group include the learning of Feynman diagrams using tensor networks (<https://arxiv.org/abs/2207.06135> to appear in PRX) and simulations of quantum computers (<https://journals.aps.org/prx/abstract/10.1103/PhysRevX.10.041038>). Preference will be given to candidates with a strong background in theoretical physics, applied mathematics and/or numerical techniques. Some expertise in many-body techniques such as quantum Monte-Carlo or tensor networks would be very welcomed. The positions are for two years and are funded by the French quantum initiative and the French National Research Agency.

Grenoble offers a great research environment with a number of strong theoretical and experimental groups. The postdoctoral work will be supervised by Xavier Waintal (<http://inac.cea.fr/Pisp/xavier.waintal/>) and Christoph Groth at IRIG/PHELIQS, CEA Grenoble. The group has a background in developing open source software for quantum problems such as the Kwant library (<http://kwant-project.org> , <http://tkwant.kwant-project.org>).

Applicants should send a CV including a publication list and a brief summary of research interests by email to xavier.waintal@cea.fr. Selected preprints or reprints may also be included. Electronic submission in a single pdf file is strongly preferred. In addition, each applicant should arrange for two letters of recommendation to be sent directly to X. Waintal.

For full consideration please apply before January 31, 2019 – though later applications are possible until the positions are filled.