

INSTITUT NEEL Grenoble

Post-doctoral position

Theory of topological matter (FET-OPEN SCHINES)

Context :

The Condensed matter theory group in Grenoble, France invites applications for a postdoctoral position in the theory of topological states of matter. The successful applicant will work under the supervision of Adolfo G. Grushin on topological transport in the context of the European FET-OPEN project SCHINES. (<https://schines.cnrs.fr/>)

Objectives and means available :

The successful applicant is expected to conduct and disseminate leading research contributing to reach the project objectives with a large degree of independency and initiative. They are expected to actively engage in the following activities:

- Conduct and disseminate research to reach the project milestones and deliverables of the project SCHINES in collaboration with Adolfo Grushin's team at Néel Institute and the members of the SCHINES consortium, including researchers at IBM Zurich and the Max Planck Institute in Dresden.
- Develop theoretical modeling of ongoing experiments and devices in topological metals and insulators within the collaboration.
- Propose and develop theoretically potentially new interesting devices/measurements related to chiral filtering.
- Attend and contribute to regular meetings with members of the SCHINES consortium.
- Contribute in mentoring PhD students and engage in activities with the theory group including seminars, group meetings or journal clubs.

Possible collaboration and networking :

The research will be carried out at the Néel Institute, UPR 2940 of CNRS, benefiting from a large pool of local research and with existing international collaborations. Close contact with experiment is expected within the consortium of the project which includes leading researchers at IBM Zurich and the Max-Planck institute for chemical physics of solids (CPfS) in Dresden. The successful applicant will benefit and expected to contribute to the lively atmosphere of the group as well as partially mentor PhD students.

Required profile :

The successful applicant is expected to have a strong background on one or several of the following aspects: topological phases of matter, high-energy physics methods applied to condensed matter and theoretical modelling of electrical and thermal transport.

All qualified applicants will receive consideration for employment without regard to race, national origin, religion, sexual orientation, gender, gender identity, age, physical disability, or length of time spent unemployed. We especially encourage applications from women, minorities and other groups that are currently underrepresented in science and technology.

Foreseen start for the position : Early 2022

Salary : Between 2663 € and 3783 € according to experience

Duration : 12 months with a possible 12 month extension.

Application: Please submit your application through the official announcement:

<https://emploi.cnrs.fr/Offres/CDD/UPR2940-LAUBOY-003/Default.aspx?Lang=EN>

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More information: <https://grushingroup.cnrs.fr/>