

1 Postdoctoral Researcher position

Theory of Electron Transport in Superconducting Devices at Autonomous University of Madrid

We are looking for **one Postdoctoral Researcher** to join the Department of Theoretical Condensed Matter Physics at the Autonomous University of Madrid. Candidates will work on theoretical problems related to **electronic transport in superconducting devices in order to design novel applications for quantum technologies**. The candidates will join the research group of Prof. Alfredo Levy Yeyati, Dr. Rafael Sánchez, and Dr. Pablo Burset, that specializes in both analytical and numerical computations to microscopically describe the novel quantum transport properties of advanced materials such as topological insulators, graphene, and quantum dots, and their interaction with superconductivity and magnetism in hybrid junctions.

The Autonomous University of Madrid is one of the main universities in the sunny capital of Spain. Our group belongs to both the Department of Theoretical Condensed Matter Physics and the Condensed Matter Physics Center IFIMAC. This position is funded by the Community of Madrid and the Spanish State Research Agency.

We welcome candidates who enjoy pen and paper calculations and a bit of coding, and have a broad understanding of electronic transport phenomena in solids. We further appreciate willingness to travel, teach and mentor, collaborate and communicate science. We encourage female researchers to apply.

Earliest starting date is September 2023.

- ★ **1 Postdoctoral researcher:** candidates must hold a PhD in Physics. Prior experience with superconducting hybrid junctions is a bonus. This position is for 2 years, with an annual salary of around 29 500€ before taxes.

How to apply:

Please e-mail your application directly to Dr. Pablo Burset (pablo.burset@uam.es). Applications must include the following attachments as one single PDF document in English:

1. A motivation letter, max. 2 pages.
2. CV including a list of publications.
3. Contact details of at least two referees or, if available, two letters of recommendation.

Candidates will be selected in a public, international, and equal-opportunity competition, keeping in mind that women and minorities are under-represented in Physics. The Autonomous University of Madrid reserves the right for justified reasons to leave the position open, extend the application period, and reopen the application process. Kindly contact us for additional information:

Prof. Alfredo Levy Yeyati (a.l.yeyati@uam.es)

Dr. Rafael Sánchez (rafael.sanchez@uam.es)

Dr. Pablo Burset (pablo.burset@uam.es)

Department of Theoretical Condensed Matter Physics
Universidad Autónoma de Madrid, 28049 Madrid, Spain

