Institute of Science and Technology Austria (ISTA)
Am Campus 1 | 3400 Klosterneuburg | Austria
www.ista.ac.at

Postdoc position in Experimental Condensed Matter Physics: investigating correlated electronic phenomena in 2D materials

- Location: Klosterneuburg (Vienna), Austria
- Salary: starting from € 61.026* gross/year
- Application Deadline: (Open until filled; flexible start date)
- Field of Research: Experimental condensed matter physics, 2D materials, graphene.

About The Institute of Science and Technology Austria (ISTA): ISTA is a growing international institute for conducting frontier research in mathematics, computer science, and the life and physical sciences. We recruit passionate professionals from all over the world and from all fields who support our goals of excellence in research and science management. **The working language of ISTA is English.** Located on a beautiful campus on the outskirts of Vienna, we offer numerous opportunities for personal growth in a stable working environment. Get an insight!

About the Polshyn group at ISTA: the group is investigating emergent electronic phenomena in 2D materials. The group uses advanced nanofabrication techniques in conjunction with graphene and other van der Waals materials to create devices that host clean and tunable 2D electronic systems. When cooled down to millikelvin temperatures, these 2D systems host a plentitude of interaction-driven electronic phases that manifest fascinating properties. The group uses electronic transport measurements and other experimental probes to reveal the nature of these emergent electronic states and search for the states with exotic topological properties. More details can be found on the group website https://polshynlab.com

Your responsibilities

- Carry out experiments to investigate correlated electrons in moire graphene heterostructures.
- Use nanofabrication facilities at ISTA to create novel devices of van der Waals (vdW) heterostructures.
- Conduct electronic transport measurements of vdW devices at millikelvin temperatures and high magnetic fields.

Requirements:

- PhD in Physics with a focus in Experimental Condensed Matter is required.
- Experience in nanofabrication and micro-characterization techniques is required.
- Experience in low-temperature measurements and operating a dilution refrigerator is strongly desired
- Experience in 2D materials is strongly desired.
- Strong motivation and the ability to communicate efficiently in English are required.

Application documents: cover letter, CV, publication list, references.

To submit your application please email: hryhoriy.polshyn@ist.ac.at

Your benefits

- Multiple health insurance offers
- Pension insurance
- Childcare
- Free shuttle bus

* This position comes with possible overpayment depending on education, qualification and work experience. ISTA processes your personal data in accordance with the law. For more information, please refer to www.ista.ac.at/data-protection.