Dear Colleagues,

A postdoctoral position is available in the Ultrafast Science of Quantum Materials group at IMDEA Nanoscience in Madrid, Spain. The two-year position is focused on studying speed limits in light-induced phase transitions using novel few-femtosecond soliton fibre sources and ultrafast pulse characterization methods. Candidates must have experience in experimental ultrafast optics, ideally in spectroscopy of quantum materials and/or metrology of ultrafast pulses. Experience in data analysis and hardware control with python or similar, scientific writing, and student supervision are also valuable.

We especially invite applications from underrepresented groups in physics. Please include a CV and two references, and contact the group leader Dr. Allan Johnson at allan.johnson@imdea.org. Informal queries are also appreciated.

About the group: The Ultrafast Science of Quantum Materials group at IMDEA Nanoscience in Madrid, Spain studies light-driven phenomena in quantum materials, particularly phase transitions and out-of-equilibrium phases using a variety of laboratory and facility-based experiments. Travel opportunities to Japan, Korea, Switzerland and Germany are expected for all projects in the USQM group. Based in the north of Madrid at the Campus of International Excellence UAM+CSIC, IMDEA Nanoscience is dedicated to the exploration of nanoscience and the development of applications of nanotechnology in connection with innovative industries.

Relevant recent publications

1. A.S. Johnson et al., Nature Physics 19 (2), 215-220 (2023)
2. A.S. Johnson et al., Science Advances 7 (33), eabf1386 (2021)
3. D Perez-Salinas, AS Johnson, D Prabhakaran, S Wall. Nature Comms. 13, 1-8 (2022)
4. A.S. Johnson et al., Physical Review Letters 129 (25), 255701 (2022)
5. GA de la Peña Muñoz et al., Nature Physics (2023)

All the best,

Allan