



There are two postdoctoral research associate positions available in the research group of Prof Robert-Jan Slager at the University of Manchester. We are an active research group with past year contributions on topics that range from multi-gap topologies, topological tensor networks as well as quantum geometrical studies of excitons and optical phenomena to magnetic topological phases, bilayer quantum Hall systems, dualities, and out-of-equilibrium phases, [see our google scholar](#). Applicants will also be actively involved in collaborations with part of the group that is still based at the University of Cambridge, [see the webpage for more details](#). Although the candidate will by and large be concerned with theoretical studies, underpinned by many global collaborations, applicants will furthermore profit from an ambitious ongoing collaborative effort with the experimental groups in 2D physics and beyond at the University of Manchester. In addition, we are actively working together with the Monserrat group in the Department of Materials Science at Cambridge.

The positions will be initially for 2 years but extensions are possible provided satisfactory performance. Similarly, there is funding for travel and other expenses.

The aim of the role is to explore theoretical quantum physics broadly defined but with an emphasis on topological phases of matter. In particular, we will be keen on exploring the role of the quantum geometric tensor in optical transitions and Euler topologies, but we are also working on interacting topological phases as well as magnetic systems. The candidate will be funded from a grant that aims to further develop these new phases of matter. Please see our recent works on the website or contact the PI for more details.

The successful candidate will hold (or be close to obtaining) a PhD in theoretical physics with a strong proven track record in topological phases of matter and/or quantum physics. Preference will be given to candidates with experience in the theoretical research of topological phases, quantum geometric structures and or magnetic systems.

In addition to being embedded in a highly active group, the candidate will also have the ability to further develop their own research ideas as well as profit from all training programmes in place to further progress their career.

The post holder will be located at the Theoretical Physics section at Department of Physics, University of Manchester.

To apply, see

<https://www.jobs.manchester.ac.uk/Job/JobDetail?isPreview=Yes&jobid=30915&advert=external>.

Alternatively, email your CV, a cover letter and the names of 3 references that can be contacted later to the PI at robert-jan.slager@manchester.ac.uk. See also the website,

http://www.tcm.phy.cam.ac.uk/~rjs269/index_recruitment.html. Applications submitted before the 30th of December will receive full consideration.