Research Fellow in Prof Jens Martin research group / CA2DM

Berry-curvature and electronic transport

Opportunities

The candidate will work at the Department of Physics and at the Centre for Advanced 2D-Materials at the National University of Singapore in a highly international environment with state-of-the-art equipment and facilities.

Job Description:

A postdoctoral position (research fellow) is available starting from 01/11/2017 to investigate effects of Berry-curvature on electronic transport. In particular, this project aims to develop devices which manipulate and detect valley-polarized electrons via local electro-static gating.
The research fellow will be involved in sample fabrication and conduct electrical transport measurements at low temperature. It is expected that the research fellow takes an active role in sample design and data interpretation.

Eligibility and Conditions

Candidates must hold an internationally-recognized PhD degree, preferably in physics, nanotechnology, material science, or equivalent. The candidate should have a strong background in:

- 2D-materials sample fabrication techniques
- Electron beam lithography and other nano-fabrication techniques
- Sensitive electronic measurements and low temperature equipment
- The physics of 2D-materials and topological matter

Candidates should be highly motivated to excel in a very competitive field of research. Team-players are preferred.
The position is available for an initial period of 1 year with possible extension to 2 years, or more, salary depending on experience.

Application procedure

The formal application should be submitted by e-mail to: phyjm@nus.edu.sg

E-mail submissions must include:
- Cover letter,
- Curriculum Vitae,
- The contact details of three potential references.

Potential candidates will be contacted by phone and invited for an interview.

Deadlines

The call will remain open until suitable candidates are identified.

Candidates may contact Associate Prof Jens Martin (phyjm@nus.edu.sg) for informal inquiries regarding the application.