

15<sup>th</sup> September 2020

## **Short-term Research Position in Atom-Molecule Scattering at Low Temperatures**

Department of Physics and Astronomy, University College London

### **Reports to:**

Professor Stephen Hogan  
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### **How to apply:**

Please send a CV with cover letter to Professor Stephen Hogan ([s.hogan@ucl.ac.uk](mailto:s.hogan@ucl.ac.uk)). In the cover letter please explain why you are suited to the role as outlined below.

**Closing date: 17:00 on Wednesday 30th September 2020.**

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### **The Project:**

We have a short-term research position immediately available in experimental AMO physics. The position will involve experimental studies of spin-changing collisions between Rydberg atoms and ground-state molecules at low temperature.

The hourly rate of pay for the duration of the project will be £16.54 including London allowance (Grade 6B; Spine Point 24).

It is expected that the project will be completed by the end of March 2021.

### **Duties and Responsibilities:**

- Intra-beam studies of spin-changing collisions between Rydberg helium atoms and oxygen molecules at temperatures of  $\sim 1$  K.
- Data analysis.
- The post holder will actively follow UCL policies including Equal Opportunities and Race Equality policies
- The post holder will maintain an awareness and observation of Fire, and Health and Safety Regulations.

### **Person Specification:**

- Given the short duration of the project it is essential that candidates:
  - Have prior experience in low-temperature intra-beam collision studies involving Rydberg atoms and ground-state molecules
  - Have experience in the theoretical methods for treating effects of electric fields on the energy level structure of atoms in high Rydberg states
  - Have experience of working collaboratively in a research environment
  - Are committed to high quality research
  - Are committed to UCL's policy of equal opportunity and the ability to work harmoniously with colleagues and students of all cultures and backgrounds.