

## JOB DESCRIPTION

Job Title:	Post-doctoral Research Assistant
Department / Unit:	School of Mathematics and Information Security
Grade:	7
Accountable to:	Reader

## Purpose of the Post

Together with Dr. Cong Ling (Imperial), Dr. Martin Albrecht received funding for "Bridging the Gap between Lattice-based Cryptography and Coding Theory" inspired by a joint seminar series co-organised by the two grant holders. The project aims to apply techniques from lattice-coding to cryptography to produce more efficient constructions and cryptanalytic attacks.

Dr. Martin Albrecht received funding to study the security of lattice-based and post-quantum cryptographic constructions from EPSRC. The project aims to provide confidence when selecting parameter sizes and schemes.

## **Key Tasks**

The project will involve a range of activities, including the following:

Conducting research in lattice-based cryptography in collaboration with Dr. Albrecht and the other team members;

Writing papers, reports and presentations;

Attending conferences, workshops, and summer schools to disseminate the research; Assisting in arranging project meetings and workshops;

Any other duties as required by the line manager or Head of Department that is commensurate with the grade.

The duties listed are not exhaustive and may be varied from time to time as dictated by the changing needs of the College. The post holder will be expected to undertake other duties as appropriate and as requested by his/her manager.

The post holder may be required to work at any of the locations at which the business of Royal Holloway is conducted.