Application for Work Experience at RAL

*Required

In which areas are you most interested?

Rank in order of preference. (Please select at least two – mark as 1st, 2nd and 3rd choice)

Computing	Third Choice
Engineering	Second Choice
Science – theoretical	First Choice
Science - practical	

I have a specific interest in……*

Particle Physics, Nuclear Physics, Experimental Physics, Quantum Physics, Space Science, Laser science.

and I would particularly like to do……*

Particle Accelerator Research, Computer Modelling/ Simulations, experimental work.

Why do you want to do work experience at RAL, and what do you hope to gain from your placement? * Please write at least 50 words.

I want to do my work experience at STFC because I am fascinated by the research going on at the moment, especially the research in lasers, the pulsed neutron and muon source, the UK dark matter collaboration and T2K. I would also love to have a career in this general field, also the work experience here would be great practice for a future career prospect. From my placement I would hope to gain, experience, self-reliance, people skills, contact with people in the field and knowledge in the subject.

Do you have any computer knowledge or skills that might be of use? Which software packages are you familiar with? Do you have you any programming experience?*

I have a broad knowledge of computing, derived from fixing family computers and technology etc. I also have my level 1 and 2 ICT qualifications from school. With my astronomy GCSE I have used LTImage to process images from NSO and to assess aspects of them for my coursework. I am familiar with all Microsoft programs, and have used Registax. My programming experience is limited, however I did program a microchip for an electronic board game in D.T.

What are your interests (both in and out of school)?*

My main interests in school are Physics, Chemistry, Astronomy and Maths. I also enjoy biology in school and out, where me and three other pupils have just won the Welsh national life science quiz for the second consecutive time, for our school. I have also been to two STEM days in which we built a miniature wind turbine. My favourite thing to do out of school is to read about new physics concepts e.g. the holographic principal, quantum computing/mechanics, string/quantum loop theory, asteroseismology and laser science. Which I have learnt about in books and magazines (Focus). I also enjoy amateur astronomy taking advantage of the Brecon Beacons with my telescope. In terms of sport l I enjoy playing rugby and tennis. I also enjoy attending science museums and festivals like the British science festival where I saw lectures on asteroseismology, the improbability principal, 3D printing and a Darwin award lecture on the maths of emotion.

As a career I would like to be an experimental physicist as I would find it amazing to be testing new theories at the pinnacle of science. I would also like to become a nuclear physicist because its endless renewable potential fascinates me and it would be a good to forge a path through the impending energy crisis.