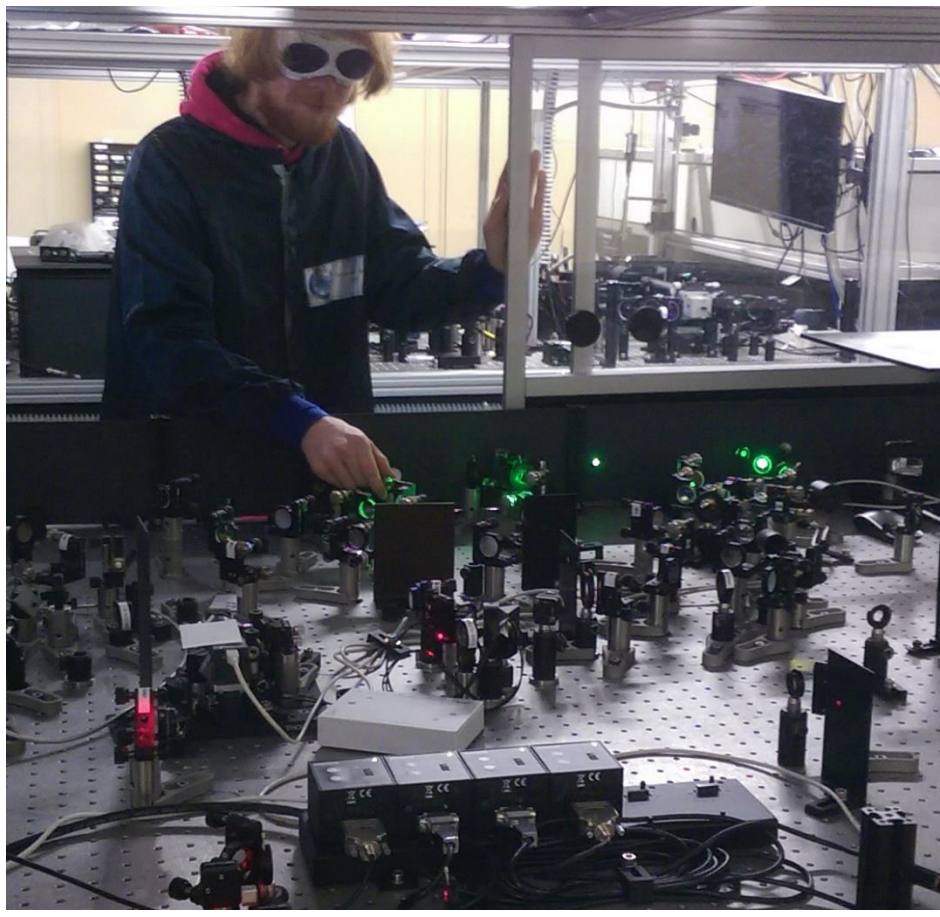


My year in industry

A year spent in industry can be a life-changing and rewarding experience. The MSci Physics with Industrial Experience gives you an opportunity to work on a paid physics-based placement which can help you hone your skills and gain invaluable insight into commercial pressures and real-world applied science. Our students have worked in companies involved in renewable energy, pharmaceuticals, finance, technology, defence and aviation.



Me, hard at work - aligning a multipass amplifier in our 10 petawatt laboratory.

Rhodri - MSci Physics with Industrial Experience:

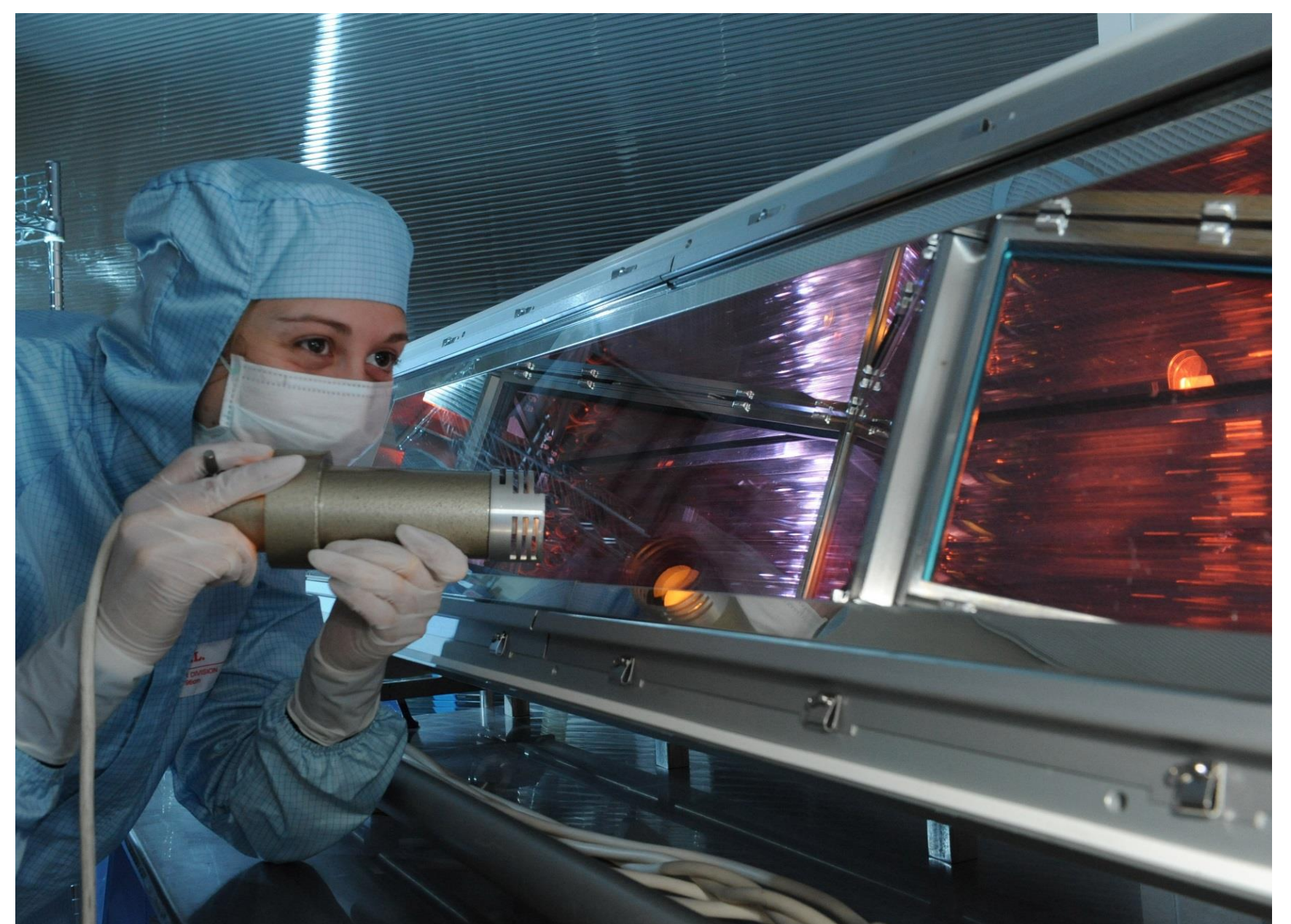
Run by the UK Science and Technology Facilities Council (STFC), the Central Laser Facility provides high powered laser capabilities to research groups from universities or industry groups. Scientists apply to run an experiment using our lasers and we offer time slots to those which would produce the most scientific benefit.

The experiments run here typically focus on the extremes of physics – we study the interaction of super-high intensity light with matter. Previously we've replicated supernovae conditions in the laboratory, shown the viability of laser induced ion acceleration, and the physics of fusion ignition.

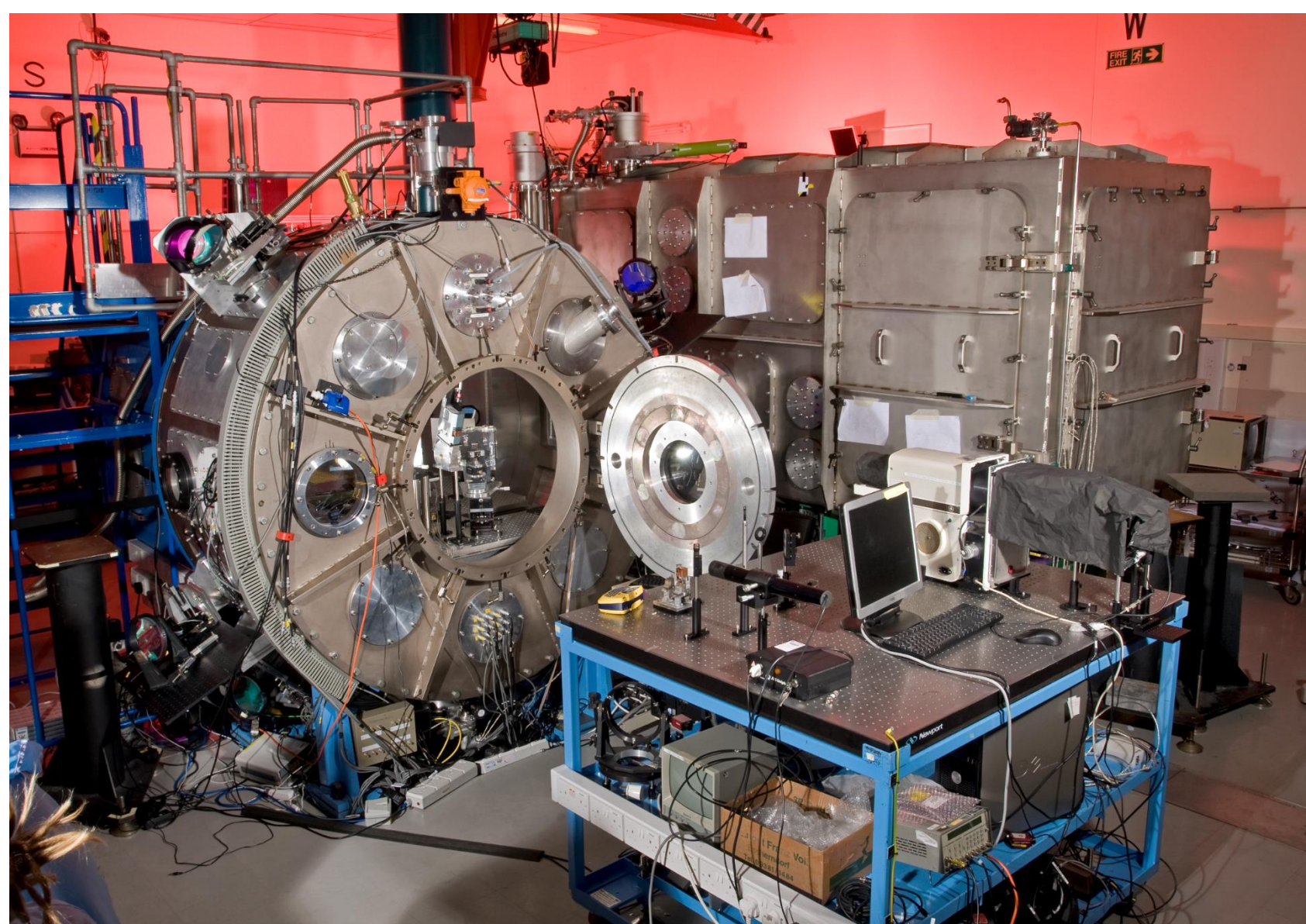
I worked on the Vulcan laser - a petawatt pulsed laser system (that's 10^{15} W) that at one point was the most powerful laser on earth.

We fired once every 20 minutes and it was important to analyze the pulse thoroughly to understand how the system was behaving, changing in this time span, and to provide data relevant to the experiment going on at the end.

“I've been working at the forefront of physics, contributing to an incredibly advanced system.”



An Optical Technician inspecting a disk amplifier.



A vacuum target chamber in Vulcan's target area West.

I've been working at the forefront of physics, contributing to an incredibly advanced system. There's no better environment to grow and develop as a scientist, and the majority of these facilities offer placements to university students.

I've particularly enjoyed the opportunity to work and study completely independently. The entire experience has taught me more about being an adult than university ever could have on its own.