UROP Studentships for the Extreme Physics Laboratory (pulsed power)

Open to: All years
How many: 2 students required
Length: 8-10 weeks
Bursary: £300/week
Closing date for application: Weds 13th February
Contact: Dr Simon Bland – sn.bland@imperial.ac.uk

Description
We are seeking 2 UROP students to help with new experiments and diagnostics development in the extreme physics laboratory. Working with researchers on the MACH (Mega-Ampere Compression and Hydrodynamics) facility we will be exploring new methods to generate very high velocities in the laboratory to create multi-Mbar pressure conditions. A lot of the work will likely revolve around building, testing and optimising a new pulsed power X-pinch generator we hope to use to provide X-ray radiography and absorption spectrometry of experiments ran on MACH.

We require 2 students with excellent practical skills who are not afraid to get their hands dirty. You need to be happy with electronics, oscilloscopes etc - some experience of DIY/model building etc would be a big plus. Most importantly you should be able to think around problems and are happy with a combination of lots of experimental work with some analysis and simulation.

Further reading:
- [https://www.imperial.ac.uk/plasma-physics/research/extreme/](https://www.imperial.ac.uk/plasma-physics/research/extreme/)