

## Physics research internship, Spain

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### Post-trip report

The trip for which I claimed international mobility funding for was a month-long research internship in Santiago de Compostela, Spain. The activity involved working alongside PhD students, and members of a research group on a research project; Plasma acceleration of ions using high energy lasers. The work involved aiding in experimental sessions, collecting data, shadowing supervisors when carrying out this work and work on computational modelling towards the end of the project analysing images and graphs produced.

The host organisation was the IGFAE institute at the University of Santiago de Compostela in Spain. <https://igfae.usc.es/igfae/>.

## 2. Laser Laboratory for Acceleration and Applications(L2A2).

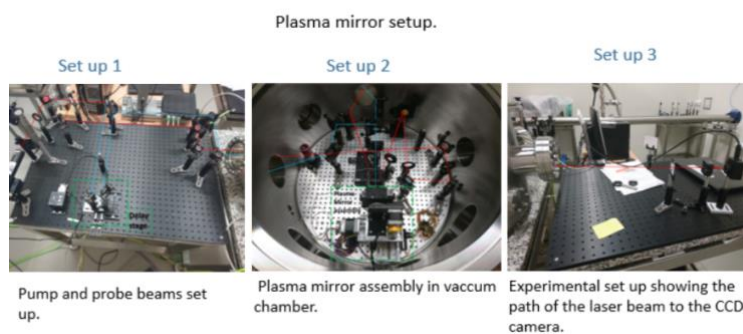


Figure 1 : Experimental setup required for the L2A2 lab.

The trip was able to help with both my personal and academic career development in a variety of different ways, one of which was directly developing my practical and experimental skills whilst working in a first-rate laboratory and on an impacting research project. I was able to work on my analytical skills as well as develop my ability to produce the conclusions obtained from these results into a scientific report and presentation following the internship. This allowed me to gain relevant lab and directly aiding further career development. During

the programme I also used Matlab software to analyse images of a laser spot produced from the laser beam so they could clearly be seen. This allowed me to develop my existing programming skills and work on applying these to a practical based environment linking directly to the research project. Working on programming during the summer allowed me to widen my coding experience enhancing my skill set as a future candidate. In general, during the programme I was able to meet a variety of different physicists of various skill sets and was able to build connections which will be helpful in the foreseeable future.

I was able to work on my communication and interpersonal skills, working in an unfamiliar environment with individuals who perhaps did not speak English as their first language. This meant that the clarity of explanations and results had to be greater and allowed me to work on building budding relationships with fellow colleagues and supervisors. The internship allowed me to work towards set deadlines and targets weekly as a weekly log was expected to be submitted at the end of each week. This also allowed me to work towards my research goals continuously ensuring tasks were prioritised and research goals met. Throughout the internship I worked continuously with a research team including both supervisors, PhD students and members of academic staff. This allowed me to work on my teamwork skills