

# External Experiments Lead Scientist

## Job Ref 88

### Job Description

We are looking for a motivated and experienced scientist to organise and manage experiments at external, international facilities. In this newly funded role, which comes with a dedicated budget, you will be expected to rapidly grow the number of external experiments First Light Fusion funds and collaborates in. The aim of these experiments is to push forward our scientific knowledge and understanding of our target designs using conditions and/or diagnostics we cannot currently access internally.

Your role will manage, facilitate and actively participate in these experiments from end to end, including: identifying scientific questions; bidding for time; budgeting; experimental design; carrying out the experiments; analysis and reporting. This role sits within the Experimental Physics team and will work closely with the CTO and Head of Experimental Physics. You will be expected to network and utilise your own experience and that of others at First Light to make the most use of time on these facilities

Your role will also involve an aspect of facilitation. As the number of external experiments increases, it is not expected that you would be required to directly lead all efforts. Your role will include working with others in the team to help them lead their own external experimental campaigns.

Facilities we may expect to work at are ESRF, Omega, RAL, Gekko laser Osaka, Laser Megajoule, Magpie or other University laboratories.

At times where there is spare capacity from your role working on external experiments, you will work with the Experimental Team on in-house experiments.

### Essential

- PhD (or equivalent experience) in a STEM subject
- Good physics and engineering understanding
- End-to-end experience of high-energy experiments at international facilities, ideally related to inertial fusion
- Experience of managing projects
- Demonstrated self-motivation, enthusiasm to work in a dynamic team environment and evidence of taking the initiative
- Strong communication and interpersonal skills

### Desirable

- Experience in shock physics or inertial fusion physics
  - Experience with synchrotrons, x-ray diagnostics, high energy pulsed lasers
  - Omega PI training
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## Benefits

- Very competitive salary
- 25 days annual leave (increasing to 28 with time in service) + bank holidays
- 8% employer pension contribution without matching requirements
- Relocation support
- Flexible working
- Generous share options scheme
- Free lunch and soft drinks
- Enhanced maternal / paternal leave
- Enhanced sick leave

## Additional information

### [How to apply](#)

Please send your application and CV to [careers@firstlightfusion.com](mailto:careers@firstlightfusion.com) quoting the job title in the subject. If you don't hear back from us within four weeks, it means that unfortunately your application was unsuccessful at this time.

Informal enquiries may also be addressed to [careers@firstlightfusion.com](mailto:careers@firstlightfusion.com).

### [The interview process](#)

We typically carry out two separate interviews, each one about sixty to ninety minutes long. The first one aims to understand how your skills match what is required for the job and the discussion will be focused on your areas of expertise. If successful, you will be invited to the second interview, which is more focused on your personal skills, and how your objectives align with the company mission and values. We try to understand the value you will add to First Light, and how you can thrive and be happy with us. There will be opportunity to ask us as many questions as you like.

If you are invited to the second interview, it's probably time to warm up two of your referees, as we may ask you to put us in touch with them. If you are the successful candidate, we will send you an offer letter and, once agreed, a contract.

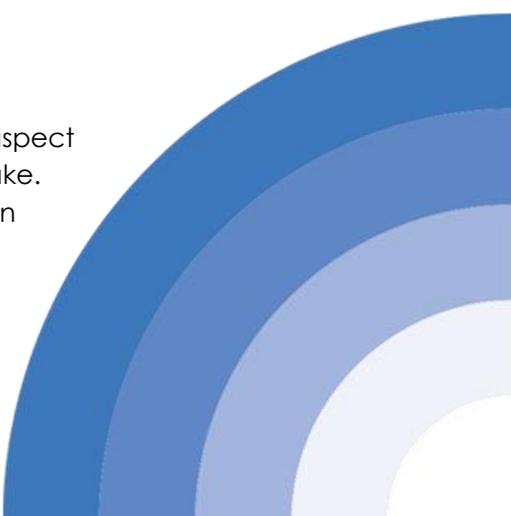
If you are invited to an interview, we will certainly get back to you to let you know the outcome.

To help with logistics issues, we can arrange so that the two interviews are organised on the same day. We will also reimburse reasonable expenses you incur to come to talk to us.

We don't have a dress code at First Light and regardless of seniority there is a good mix of t-shirts, trainers, shirts and blazers. For your interview, please dress in whatever makes you feel most confident and comfortable.

### [Our commitment to equality, diversity and inclusion](#)

We are a small company with a huge mission. The only important aspect for the team, and for each individual, is the contribution they can make. Our selection process and requirements for career progression disregard gender, gender identity, race, disability, colour, religion, and all other aspects of diversity that make us all humans. Diverse



teams have been proven to be better and we strongly believe it. We're not perfect but we strive to be.

### [Information for recruiters](#)

We work with a trusted network of recruiters, therefore CVs sent by other recruitment agencies will not be considered. In the event that the company receives a CV from both the direct applicant and a recruitment agency, the CV will be treated as a direct application by the individual only. Unsolicited contact from recruitment agencies will be disregarded.

## **First Light Fusion**

We are a lean, focused and agile company researching energy generation by inertial confinement fusion. We spun out from the University of Oxford in June 2011 and are based near Oxford. First Light continues to work closely with the academic community, both in the UK and internationally. The company is well-funded by both institutional investors and private individuals.

Inertial confinement fusion for energy generation is a well-established research field and is being pursued in many laboratories worldwide, perhaps most notably in the US at the National Ignition Facility. We are exploring a number of alternative research directions that harness the same fundamental physics, with the prime focus being power generation. Our work to-date has included theoretical analysis, detailed numerical simulation, and experimental validation. We have an increasingly clear vision of the pathway to a power plant.

We really believe fusion will be solved in the 2020s. If it's solved by us, fantastic, if it's solved by someone else, still great.

