

# StudentShapers Recruitment: Calling all Physics undergraduate students

### Exploring women Physics lecturers' teaching choices and decisions

Bursary: £36.67 per week during March-April (part-time, 2 hours each week). £330 per week during the summer vacation time, June-August (full-time). 2 bursaries are available.

#### Who should apply:

2 undergraduate students from the Department of Physics. Students must be in their penultimate year, i.e., 2<sup>nd</sup> year if on a BSc course, 3<sup>rd</sup> year if on an MSci course. Students of any gender are welcome to apply.

Campus/Location: South Kensington Campus with the option for hybrid/remote working.

#### **Project details:**

Within the undergraduate Physics course in the Department here at Imperial, women lecturers are underrepresented in the core lecture courses, which typically are taken by students in their first and second years. This means that, in theory, an undergraduate student can progress through their degree, and based on their chosen modules, may not be lectured by a single women physicist. This is an issue that has been raised by students themselves at Staff-Student committee meetings and by the Student Liaison Officer. So why is the underrepresentation of women lecturers a problem? Whilst women contribute to other areas of teaching, such as tutorials, project supervision, and Head of Year positions, these roles reach far fewer students, particular compared with a first year lecture course. Academic research has also shown that a woman instructor can benefit not just students' academic performance, but their motivation, interest, and engagement with a subject. Despite this, women professors are rated less knowledgeable, and women faculty members are more likely to undertake service or pastoral roles. As well as being beneficial for undergraduate students, we believe that having a greater representation of women in core lecture courses would start to tackle the stereotypes that surround women at university. To do this, we need to understand more about women lecturers' teaching preferences, which are little explored within academic literature.

We wish to conduct qualitative educational research over the summer to investigate the motivations and decisions of academic women within Physics. We aim to understand what is important to academics when deciding which modules to lecture, and whether their choice of lecture course is related to their identity as a physicist. This would work towards understanding the needs of women lecturers and ultimately towards increasing and normalising their visibility during the first half of the undergraduate degree. We will investigate this through interviews with the academic women in the Department as well as the teaching committee. Students' participation in this project will be invaluable, as they can offer unique perspectives in terms of their own lived experience of the underrepresentation of women in lecture courses, which will shape the interview questions and lead into the discussion of our findings.

The part-time phase of the project will be used to write up and submit our ethical approval application. Students will gain an understanding of the ethical issues in such a project, such as consent, confidentiality, positionality, and bias. The full-time phase of the project will be used to conduct the interviews, with the students' role as co-interviewers, collect and analyse the interview data using qualitative research methods, and finally disseminate our research findings, such as a conference presentation or a journal article, produced collaboratively by all members of this project.

The staff members and PhD student collaborating on the project are all members of the <u>Physics Education Group</u> and the <u>Women in Physics Society</u> committee.

## Imperial College London STUDENTSHAPERS

#### How to apply:



Applications (300-500) words should be made via the 'Student Expression of Interest' form on the StudentShapers website (here) or accessed using the QR code shown here. This will then be distributed directly to the appropriate staff partner. You may be invited to an informal online meeting as part of the selection process.

Deadline: Monday 21st March 2022

Contact details: jessie.durk10@imperial.ac.uk for informal correspondence/questions on the project