

## PHYSICS PERSONAL STATEMENT

**DUKES EDUCATION** 



I don't want this to seem contrived, so forgive me if I do not start with how physics has been the sole dream in my life since I was two years old. While science has always been an interest of mine, it was over the last three years that my interest developed to the point where I wanted to spend my future learning more about physics. Over the past few years I have become gradually more fascinated with the way the world works, how the powerful forces that shape our universe can be described and understood through mathematical formulae and observable events from everyday life. The fact that we can now understand phenomena that has astounded mankind throughout history inspires me to deepen my understanding in this fascinating field of study. It is not only the newfound clarity that has been gained when considering many physical wonders that inspires me, but the incredible leaps in progress that have been achieved through scientific study.

Due in part to my vast interest in the subject, and to better my understanding of ideas that are briefly looked over in my A level syllabus, I have pursued some further reading including Richard Feynman's Six Not So Easy Pieces and QED. One topic I find particularly interesting is Special Relativity, particularly time dilation -the fact that time, a seemingly universal concept, can be affected by velocity is a bizarre concept to grasp. I have also attended lectures related to specific topics, including Frank Close's lecture on anti-matter and Simon Singh's lecture about The Big Bang. I found these talks very informative, but it was Frank Close's lecture I found the most intriguing; the symmetry displayed by elementary particles and their 'anti' equivalents astounded me, and learning about the reality of anti-matter as opposed to representations in various forms of media was fascinating. My intention to study Physics led me to attend Birmingham University Physics Summer School, where over two days I attended a number of lectures covering numerous topics including Dark Matter and Particle Physics. Not only were these lectures interesting, they assured my plan to study Physics at university.

My history course has shown me the importance of disseminating specific information within a subject that covers a diverse range of source material. Studying maths has helped to develop the mathematical skills that will be essential to study Physics at university, due to mathematics intrinsic relation to physics.

As an extracurricular activity, I have taken part in the Greenpower Engineering scheme, working in a team to design and construct an electric car to be entered into a number of races. Although more focussed on engineering than a pure science, this has enabled me to see physical ideas such as aerodynamics applied to solve a real world problem. I work as a volunteer at a charity residential home for deaf adults with learning difficulties, which has helped to improve my interpersonal skills, due to the inherent difficulties in communication. I am a member of our school's Chess Club, something which I enjoy as chess is particularly challenging game. I have started to produce amateur films with a group of friends, where I have been responsible for visual effects -improving my organisational skills, especially prioritising.

Over the last century we have ascended into space and created technology that allows for a previously unprecedented view into the substance of our very existence. Splitting the atom provided both a source of incredible power that could last for hundreds of years and the potential to completely annihilate the planet upon which we stand. It's astounding that behind all of this

**Commented [OA1]:** This is a really concise outline of the student's appreciation of the subject and its importance in

**Commented [OA2]:** When you mention something of particular interest to you within the subject, try to expand on this and explain why in a concise fashion, as this student does here.

**Commented [OA3]:** This demonstrates an active interest and commitment to the subject which acts as a good basis for why you want to study it.

**Commented [OA4]:** It is great to link your interest to other disciplines as it demonstrates the kind of lateral thinking that an admissions tutor will be looking for.

Commented [OA5]: It is good to link your subject to its practical implications and issues where possible to emphasise your passion and awareness

**Commented [OA6]:** It is important to link your extra-curricular activities back to your subject. Why have they helped develop your interest or make you a better student?

Commented [OA7]: Using words such as this, and "fascinating" etc., as above, really shows the student's passion for the subject.



progress lays a path derived from the study of science, this continues, with advances in computing, optics and numerous other fields. Why do I want to study physics? In this progressing world I can think of nothing more exciting than to be part of one of the most important fields of study currently pursued by scientists.

**Commented [OA8]:** This is a good last sentence to the personal statement. It is final, personal and makes an impact.