

# Physics

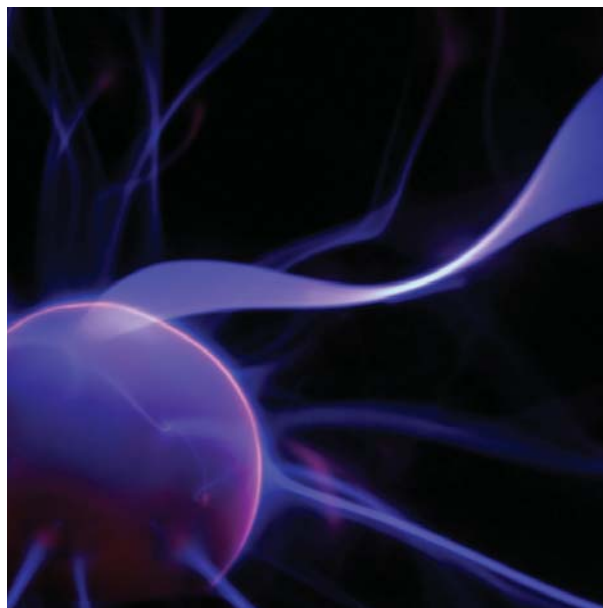
## Why study Physics?

Do you enjoy learning about modern and interesting applications of physics alongside more traditional concepts? Do you enjoy developing your practical, investigative and research skills? If so, then Physics is for you. Both the AS and A2 Physics courses develop knowledge and understanding of physics and an appreciation of the link between theory and experiment. You will learn how physics has developed and is used in present day society, and appreciate physics as a human endeavour which has historical, social, philosophical, economic and technological connections. Importantly, you will sustain and develop your enjoyment of, and interest in, physics.

## What will I study?

The course develops both your knowledge and understanding of physics and your practical and investigative skills. The AS course covers a range of modern applications of physics, as well as more traditional concepts and quantum physics. You will study *Communications, Designer Materials, Waves & Quantum Behaviour and Space and Time and Motion*. This is examined with two written exam papers at the end of the year. Your investigative skills are developed through a quality-of-measurement task, whilst your research skills will be developed through an investigation of a material.

In Year 13, the A2 course builds on the AS year. You will cover the topics: *Models and Rules; Matter in Extreme and Fields and Fundamental Particles*. The A2 course is



assessed partly through written exams at the end of the year and partly coursework. You will have the opportunity to develop further your experimental skills through a practical investigation and you will prepare a research briefing.

## Physics Extras

Physics offers a range of opportunities both locally (Cambridge University) and further afield (CERN, Geneva). Links with the Institute of Physics and Cambridge University will enable students to attend lectures and visit laboratories.

## Who should I contact for more information?

Euan Willder,  
Head of Physics.

## What can I do with Physics after sixth form?

Many students follow this course with a physics-related degree. The course also has clear links with a range of other subjects which are popular degree courses such as Mathematics, Medicine, Computing, Engineering (Electronics / Mechanical) and Architecture. Other students find the skills and knowledge gained from the A-level Physics course useful when pursuing degree courses or careers in other areas including business, finance and management.