A photograph of Neil deGrasse Tyson, an African American man with a mustache, wearing a dark suit, white shirt, and patterned tie. He is standing behind a podium with a microphone and a small floral arrangement. He is gesturing with his right hand, palm facing forward, as if making a point. The background is dark and out of focus.

In whatever you choose to do,
Do it because it's hard, not because it's easy.

Math and physics and astrophysics are hard.
For every hard thing you accomplish,
fewer other people are out there
doing the same thing as you.
That's what doing something hard means.

And in the limit of this,
everyone beats a path to your door
because you're the only one around
who understands the impossible concept
or who solves the unsolvable problem.

A-Level Physics

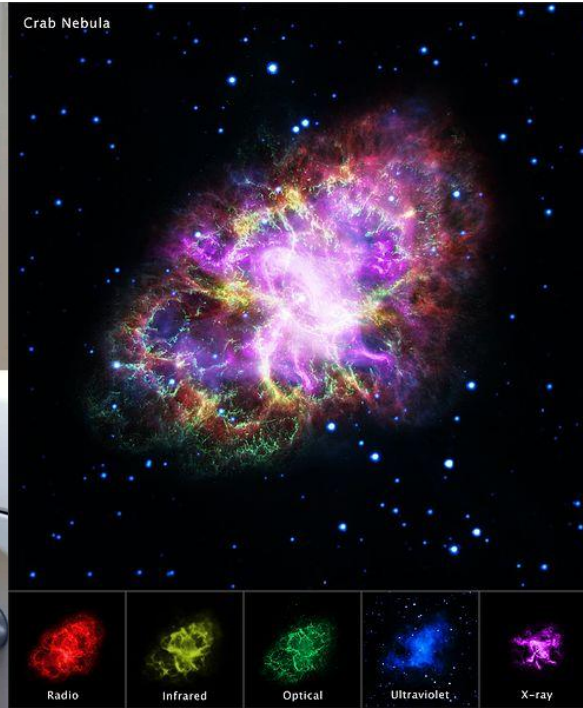


My goal is simple. It is a complete understanding of the universe, why it is as it is and why it exists at all.

(Stephen Hawking)

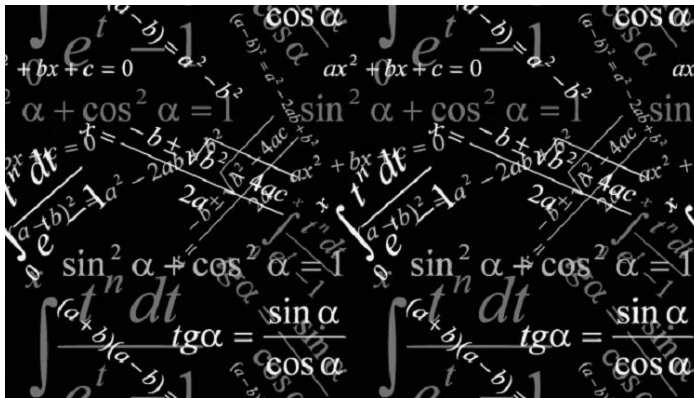
Why Study Physics?

**Go on to: Physics, Medical Physics,
Engineering, Astrophysics, Space Science.**



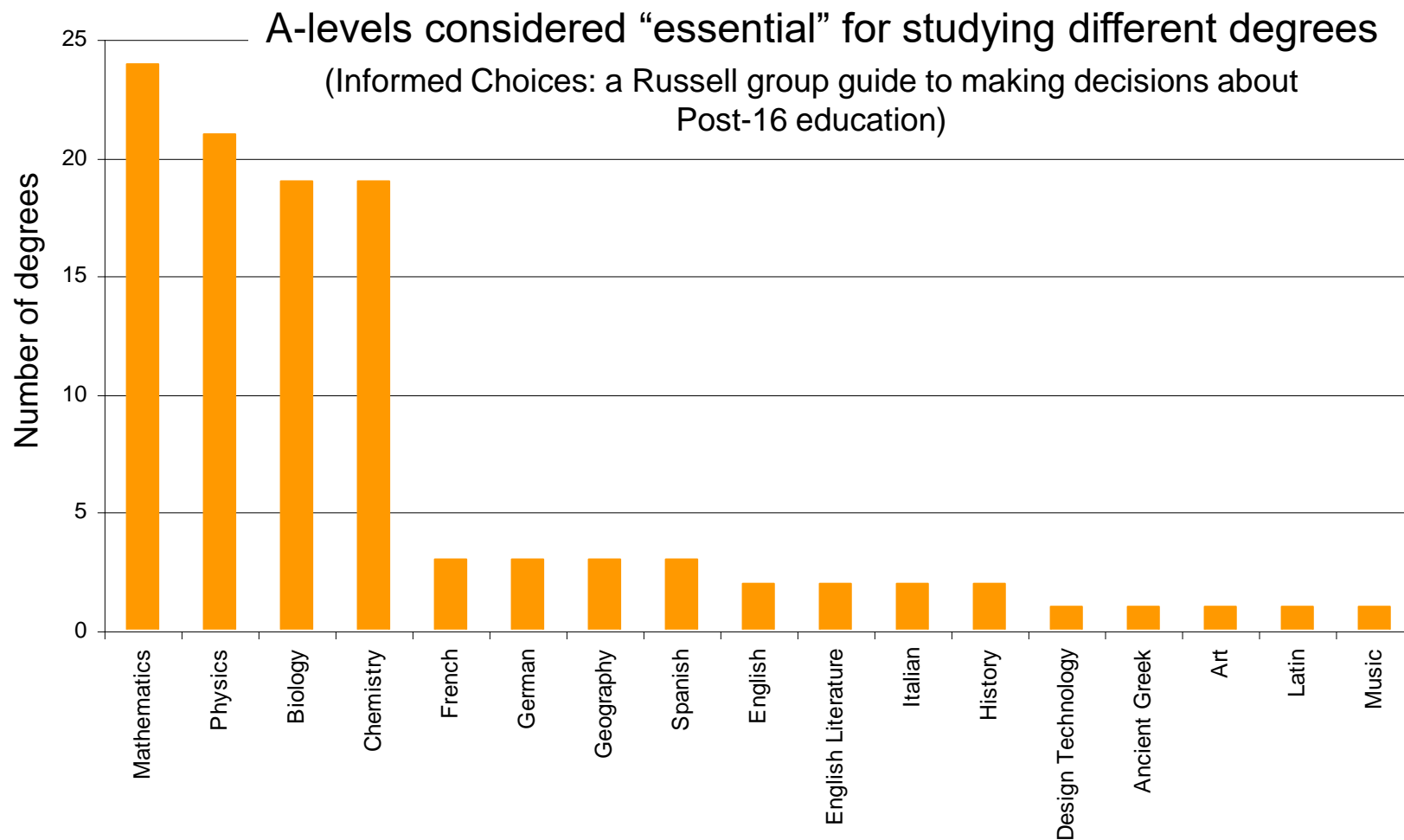
Why Study Physics?

Go on to: **Maths, Natural Sciences,
Architecture, Medicine, Vet Science,
Computer Science, Pilot**



Why Study Physics?

It's a facilitator subject



Complimentary Subjects

Maths and Further Maths

Chemistry and Biology

Computer Science

Design and Technology

Contrasting Subjects

Creative subjects (Art, Music...)

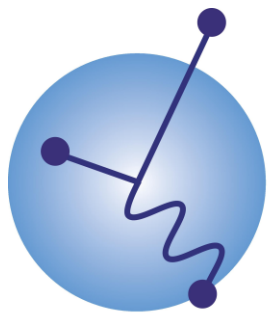
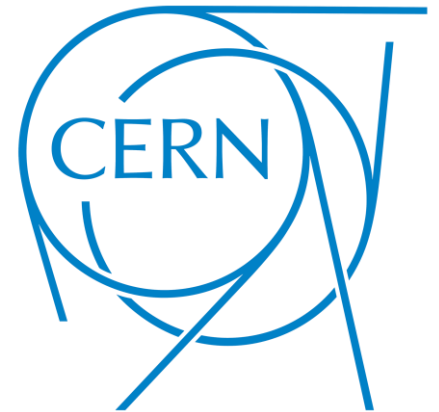
Essay writing subjects/humanities (History, English, Philosophy and Ethics, Geography, French...)

Why Here?



Co-Curricular

- IRIS Projects
- Educational Visits (CERN, Universities..)
- Guest Speakers
- Olympiad and Stretch and Challenge



BPhO

British Physics Olympiad



The Course:

Year 12:

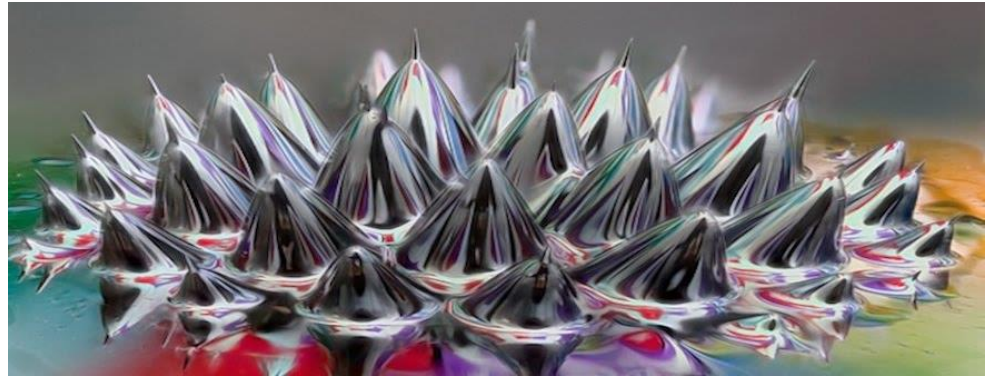
Mechanics

Materials

Electrical Circuits

Waves and Optics

Quantum Physics



The Course:

Year 13:

Circular and Harmonic Motion

Nuclear and Particle Physics

Medical Physics

Astrophysics

Electromagnetism and Fields



The Course:

3 Exams at the end of year 13

- Modelling Physics (Mainly motion, materials, astrophysics)

- Exploring Physics (Mainly electricity, waves, nuclear and medical physics)

- Unified Physics (Synoptic paper covering everything)

Ongoing practical assessment, recorded separately.

FAQ

How hard is A-Level Physics?

Fairly challenging

Highly regarded by universities.

Skill based subject, you get better by practising.

FAQ

Do I need to take A-Level Maths?

No

It is useful though as you spend more time practising the skills.

The Physics course is taught assuming only GCSE Maths

More information:

Search terms in bold

The Course: '**OCR Physics A (from 2015)**'

Choosing your A-Levels: '**Russell Group
Informed Choices**'