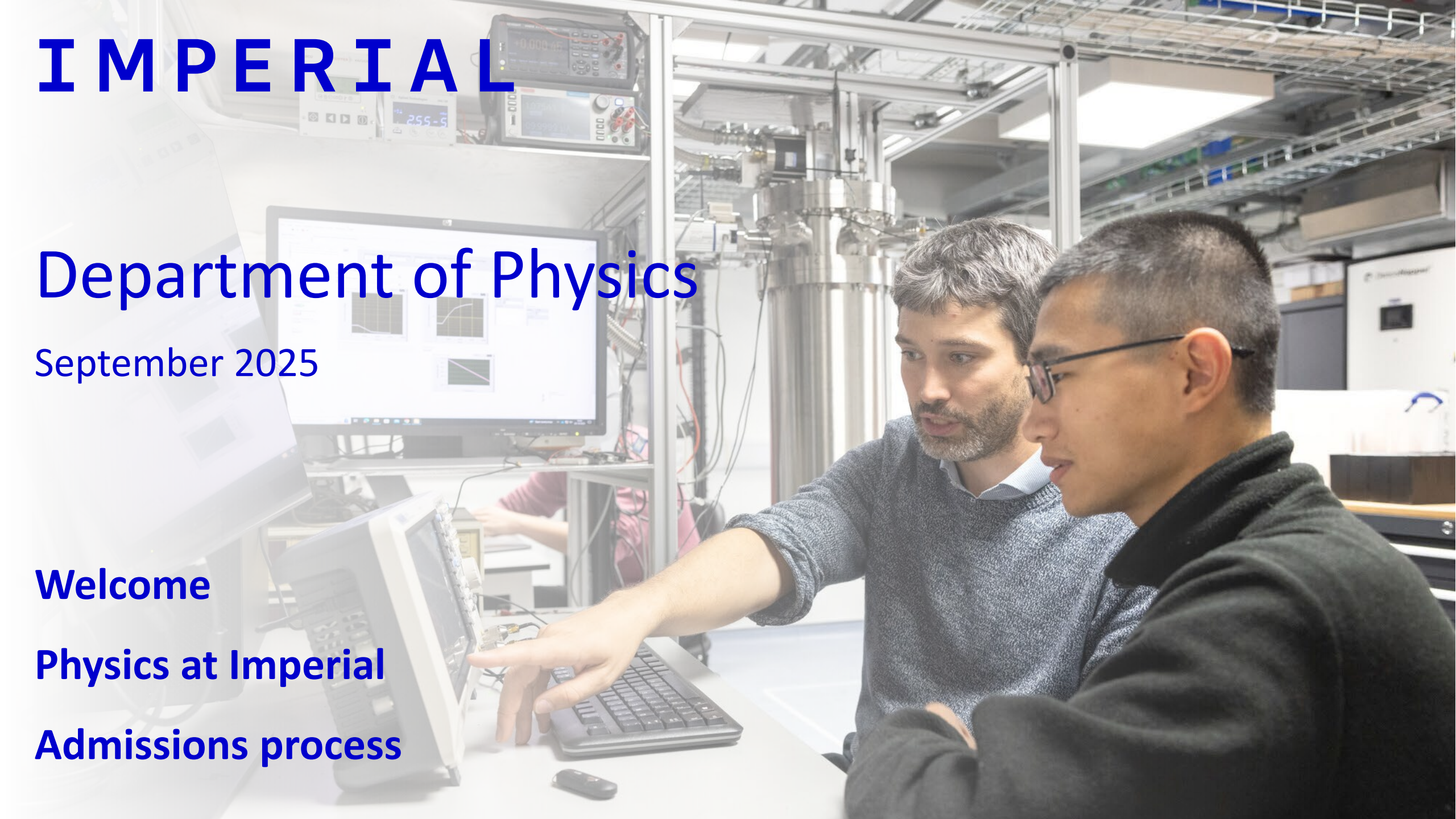
IMPERIAL

Department of Physics

September 2025



Welcome

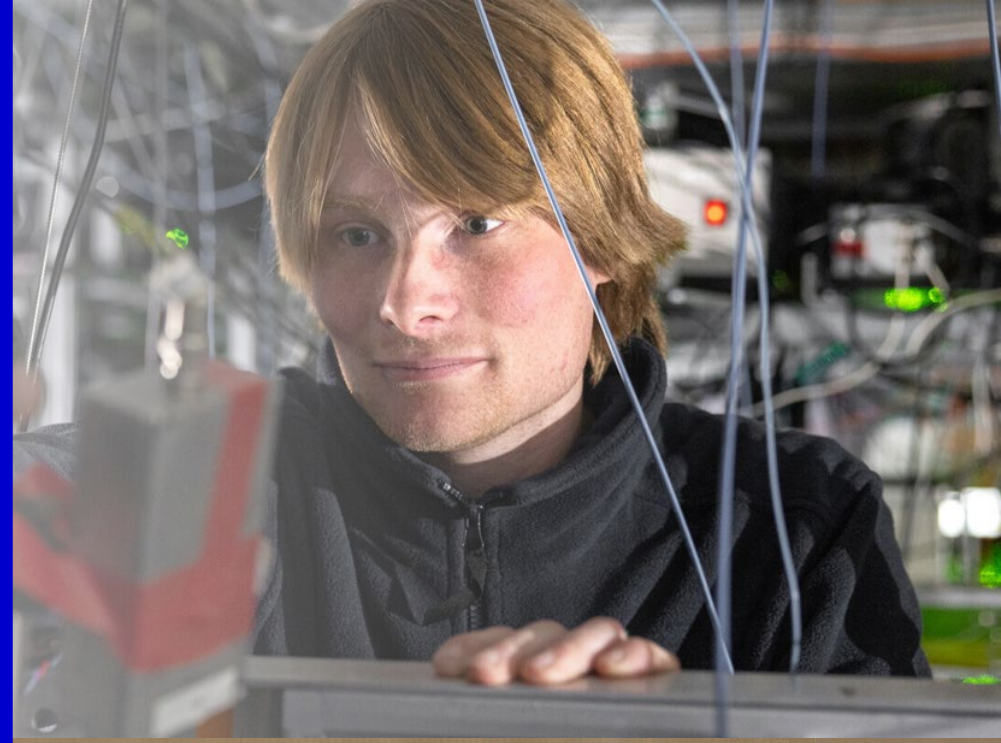
Physics at Imperial

Admissions process


IMPERIAL
1st
in the UK + Europe
2nd
in the World
QS World University
Rankings 2025
QS
WORLD
UNIVERSITY
RANKINGS

Physics for Humanity

Our mission is to
learn and teach about the universe and how light and matter behave through space and time,
using our knowledge to solve problems and advance technology

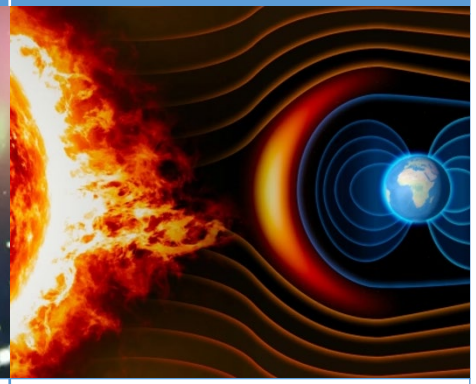


We are one of the largest Physics departments in the world

- 800 Undergraduate students
- 124 Academic staff
- 500 Masters students
- 285 PhD students
- 245 Professional and research staff

- PhySoc is the largest student society at Imperial

We conduct research in and teach on a broad range of topics

Light	Matter	Particles	Universe	Space, Plasma and Climate
				
Optics Photonics Laser Science Quantum Optics Medical Imaging	Renewable Energy Nanotechnology Quantum Computing Soft Electronics	Particle Searches New Forces Accelerator & Detector Design Nuclear Medicine	Astrophysics Dark Matter Cosmology String theory Quantum theory	Planetary and Solar Physics Space Plasmas Fusion Energy Climate Change

Notable People of Imperial Physics

Nobel Prize Winners:

George Thomson
1937, electron as wave

Patrick Blackett
1948, cloud chamber

Dennis Gabor
1971, holography

Abdus Salam
1979, electroweak unification

Peter Higgs
2013, Higgs boson

Maggie Aderin-Pockock
Scientist and presenter

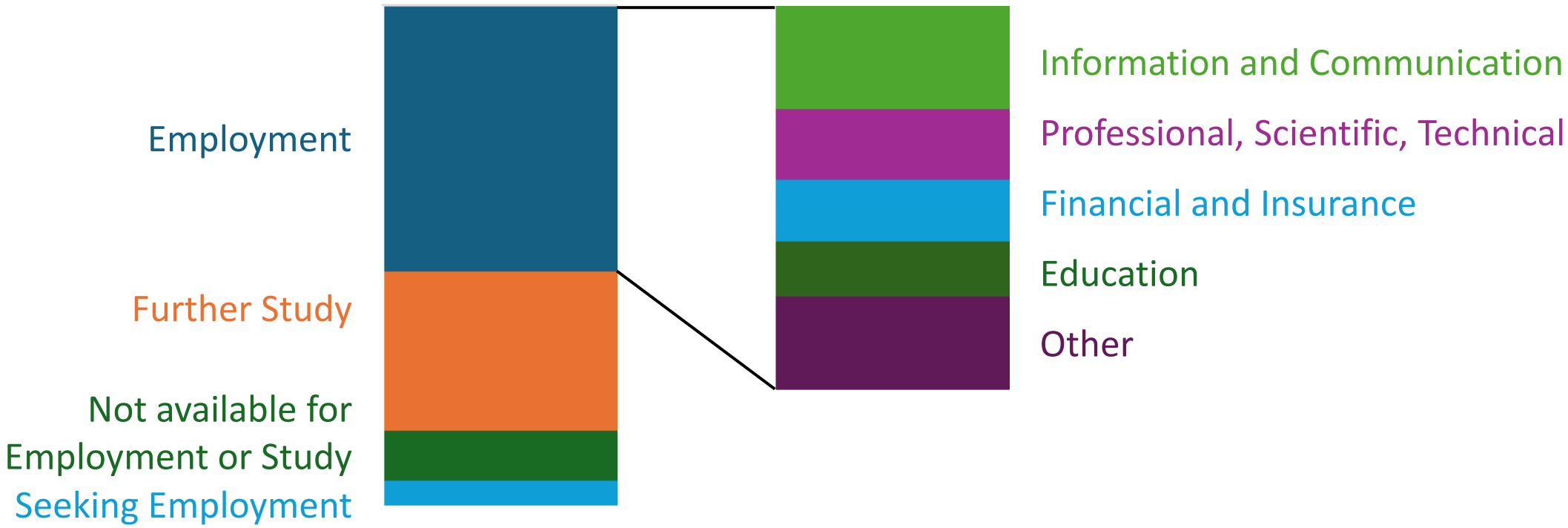
Nicola Fox
NASA head of science

Terry Rudolph
Co-Founder, PsiQuantum

Michele Dougherty
Astronomer Royal

Our graduates have bright futures

Destinations of Physics Graduates



No. 1 in UK for graduate prospects
The Guardian University Guide

The Guardian

University of the Year for graduate employment
The Times Good University Guide

THE TIMES

Lucas came from London to Imperial Physics

He’s now doing his PhD on the Higgs Boson at CERN

Shreyas came from London to Imperial Physics

He’s now an analyst at JP Morgan Private Bank

Ying Yan came from Malaysia to Imperial Physics

She’s now a trainee in medical physics with the NHS

Our courses

3 year courses
BSc Physics
BSc Physics with Theoretical Physics

4 year courses
MSci Physics
MSci Physics with Theoretical Physics
MSci Physics with a Year Abroad

You can switch between courses up to Year 3

MSci Physics with Year Abroad

Undertake year 3 at a partner university

France University of Paris-Saclay or Institut Polytechnique de Grenoble

Germany Universität Heidelberg

Italy Università degli Studi di Padova

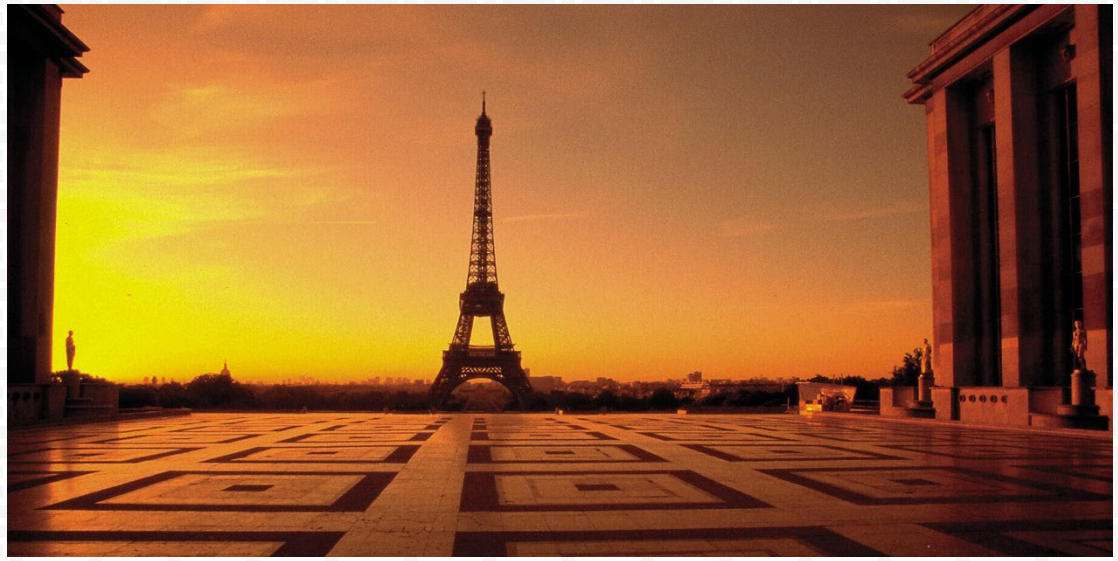
Netherlands University of Utrecht

Spain Universidad Autonoma de Madrid, Universitat de Valencia or Universidad de La Laguna

Switzerland École Polytechnique Fédérale de Lausanne

USA Massachusetts Institute of Technology

Partner universities are subject to change



Our Curriculum

	BSc Physics	MSci Physics	BSc Theory	MSci Theory	MSci Year Abroad
Year 1	Core Physics: Vector Fields, Electricity and Magnetism; Mechanics and Relativity; Oscillations and Waves; Statistics & Summer Project; Laboratory & Computing				
	Maths Analysis or Advanced Electronics				Language
Year 2	Core Physics: Thermal Physics and Structure of Matter; Differential Equations and Electromagnetism; Quantum Physics; Laboratory & Computing				
	I-Explore				Language
	2 electives		Maths Methods		2 electives
			1 elective		
Year 3	Core Physics: Nuclear and Particle Physics; Solid State Physics; Comprehensives				Year Abroad:
	Laboratory		Advanced Classical Physics		Project
	4-5 electives	4-5 electives	Project	Project	Electives
			3-4 electives	3-4 electives	
Year 4		Professional Skills		Professional Skills	Year 3 Core
		Project		Project	4-5 electives
		4-5 electives		4-5 electives	

We have a wide range of electives

Year 1
Mathematical Analysis
Advanced Electronics

Year 2
Environmental Physics
Sun, Stars and Planets
Mathematical Methods (T)
Communicating Physics
I-Explore

Year 3
Advanced Classical Physics (T)
Astrophysics (T)
Computational Physics (T)
Data Science and Machine Learning
Foundations of Quantum Mechanics (T)
Group Theory (T)
Lasers
Medical Imaging and Radiotherapy
Plasma Physics
Principles of Instrumentation
Statistical Mechanics (T)

Year 4
Advanced Particle Physics (T)
Atmospheric Physics
Concepts in Device Physics
Cosmology
General Relativity (T)
Hydrodynamics
Information Theory
Laser Technology
Nanotechnology
Optical Communications Physics
Quantum Field Theory (T)
Quantum Information (T)
Quantum Optics
Quantum Theory of Matter (T)
Space Physics
Unification - the Standard Model (T)

Electives offered are subject to change

I-Explore: broaden your knowledge and tackle a new subject area

Dozens of modules to choose from, for example:

Science:
AI and Robotics
Climate Change

Business School:
Economics
Entrepreneurship

Humanities & Social Sciences:
Creative Writing
Psychology

Languages

Multidisciplinary project

A typical week as a 1st year Physics student has lectures, interactive teaching and optional activities

Time	Monday	Tuesday	Wednesday	Thursday	Friday
9-10	Lab	Computing Lab	Functions	Lab Data Analysis	Seminar
10-11			Mechanics		
11-12			Week Ahead		Professional Skills
12-1			Research Frontiers		Year Abroad Language Classes
1-2			Reserved for sports and clubs		
2-3	Academic Tutorial	Complex Analysis			Computing
3-4		Functions		Personal Tutorial	Mechanics
4-5		Horizons		Vectors & Matrices	
5-6	Complex Analysis			Mechanics	

Academic tutorials

Weekly tutorials with 5 students and a staff member on course material through years 1-3

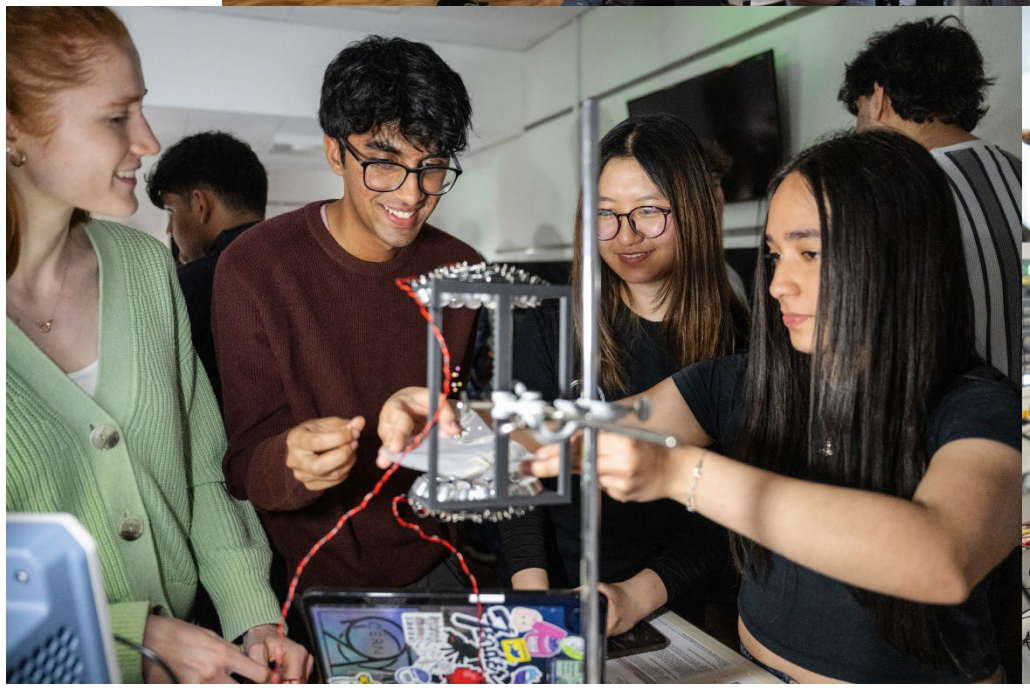
Seminars

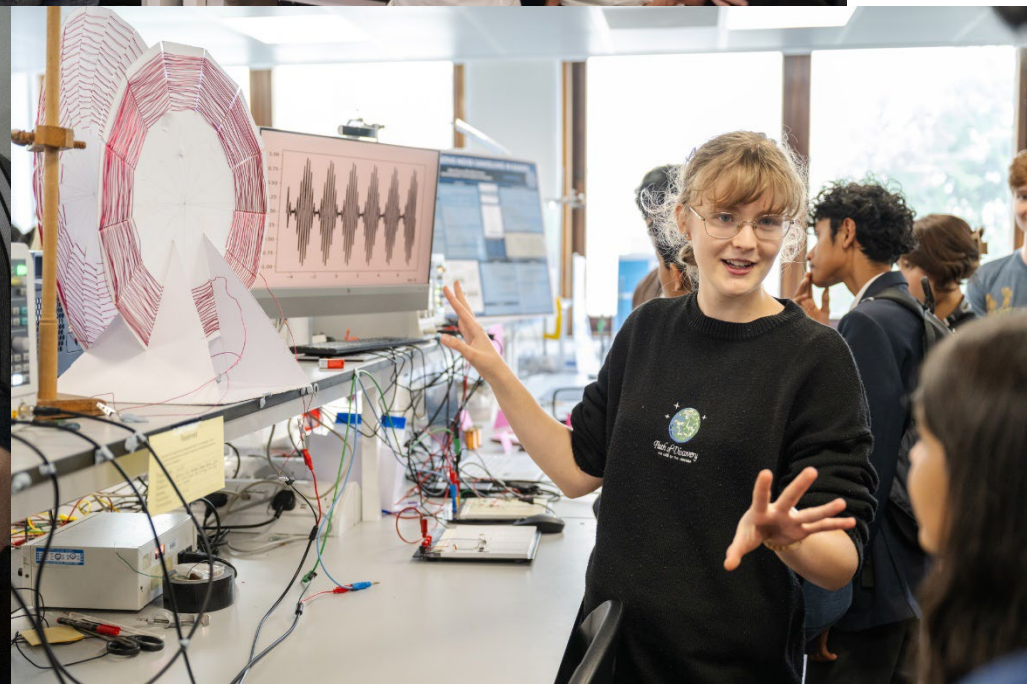
Weekly tutorials with staff members and teaching assistants for 60 students working in teams of 5 through years 1-2

We have an entire floor dedicated to teaching labs and a large computing lab

https://www.youtube.com/watch?v=oDnrCtjqRmA&t=78s

Our teaching is based on the world-class research we do





Original student research starts with the Year 1 Project

Fay Dowker

Professor of Theoretical Physics

Researching causal set theory to unify physics

Currently teaches Quantum Mechanics in Year 2 and supervises MSci projects

Chris Phillips

Professor of Experimental Solid State Physics

Researching Quantum Optical Effects in Nanostructures

Leading spinout company for novel medical imaging for detecting cancer

Teaches tutorials and supervises MSci projects

Helen Brindley

Professor of Climate Physics

Developing instrumentation to measure Earth's radiation from ground, aircraft and satellite

Currently teaches Atmospheric Physics as Year 3/4 elective and supervises MSci projects

Steve Kolthammer

Associate Professor of Physics

Researching Quantum Computing and Information

Currently serves as Head of Year 2, teaches Atomic Physics in Year 2, and supervises MSci projects

Student welfare and wellbeing

Personal Tutor meets students through all 3 or 4 years about their studies, interests, and careers

Professional support team to help with special circumstances, disabilities or any issue students need help with

Student-to-student support from Physics Helpdesk and big brothers and big sisters

Imperial provides health centre, counselling, sports facilities, chaplaincy, careers service, and more

Apply with UCAS for undergraduate courses in Physics at Imperial

UCAS

www.ucas.com

Deadline 14 January 2026

3 Year courses

BSc Physics or BSc Physics with Theoretical Physics

4 Year courses

MSci Physics or MSc Physics with Theoretical Physics

MSci Physics with Year Abroad

to USA or Netherlands:

→ Apply directly to any Physics course

→ Switch in year 2

to France, Germany, Italy, Spain, or Switzerland:

→ Apply directly to MSci Physics with Year Abroad

→ GCSE grade 6 in the relevant language required

Selection process

We take into consideration your:

- → Grades: past and predicted
- → School reference
- → Personal statement
- → ESAT admissions test

There are no interviews for undergraduate physics courses

Minimum entry requirements

A-level

A*A*A in three full A Levels (excluding General Studies, Critical Thinking), to include:
A* in Mathematics
A* in Physics
Further Maths is recommended but not a requirement

International Baccalaureate, international qualifications accepted

English Language:

GCSE at grade 6, IELTS at 7.0 overall (6.5 in each element), or other equivalent

Engineering and Science Admissions Test (ESAT)

The ESAT is a multiple-choice computer-based assessment which tests mathematical and science thinking, along with reasoning skills.

It is made up of multiple 40-minute assessments which run back-to-back on the test day.

Book the test online and sit it at a local Pearson VUE test centre.

For 2026 entry,
the test sittings are:

9 and 10 October 2025 (book by 29 Sept)

6 and 7 January 2026 (book by 19 Dec)

For Physics at Imperial, you need to sit:

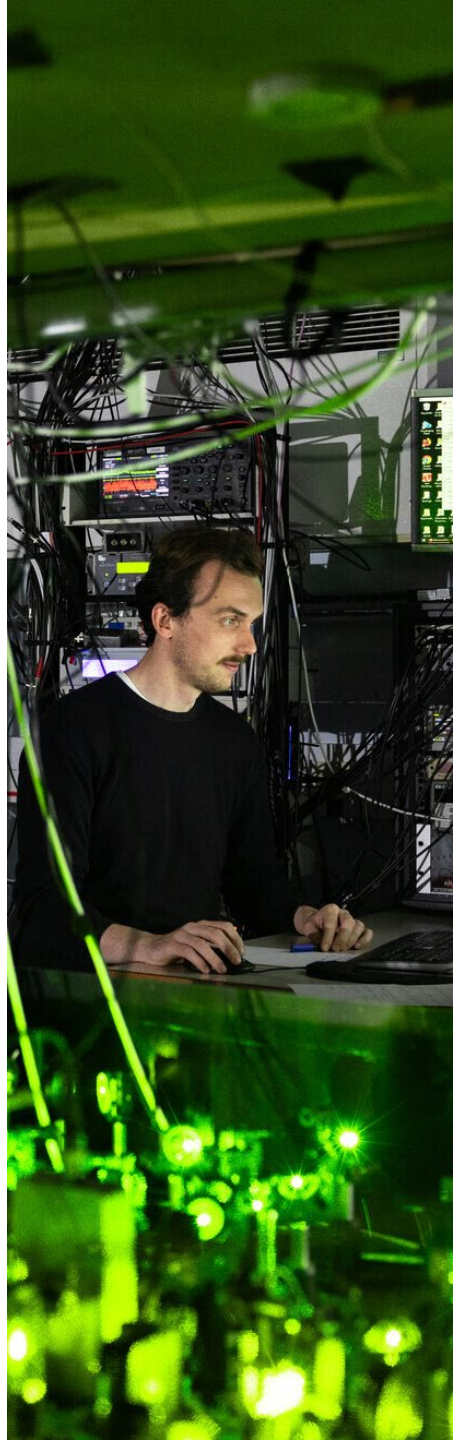
Physics	Maths 1	Maths 2

Only your first score will be accepted so you should only sit the test once for 2026 entry

We welcome applicants from disadvantaged or underrepresented backgrounds

Guaranteed offers to Home applicants who satisfy the Widening Participation criteria (see Study Guide), have predicted grades that meet the minimum College entry standard, demonstrate motivation to study Physics, and score above minimum threshold in ESAT.

Reconsideration: If you get exceptional results, your application might be reconsidered, even if you don't get an Imperial offer.



Imperial Bursary

One of the most generous bursaries of its kind in the UK

Who is it for?

All UK undergraduate students who meet the income criteria and who are eligible for UK government funding.

How to qualify?

You qualify automatically if your annual household income is **under £70,000.**

How much?

Up to £5,000 per year towards living costs.

Do you have to pay it back?

No

imperial.ac.uk/imperial-bursary

Search our scholarships:
imperial.ac.uk/study/fees-and-funding/scholarships-search

PHYSOC

PHYSICS SOCIETY

IMPERIAL COLLEGE LONDON

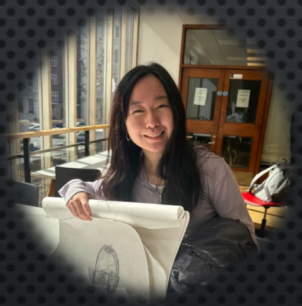
WHO ARE WE?

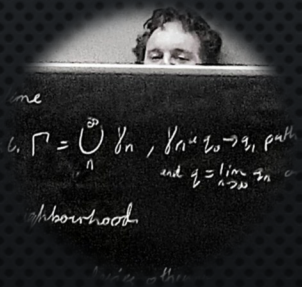
- Student-run
- Departmental Society for all Physics Students (UG and PG)





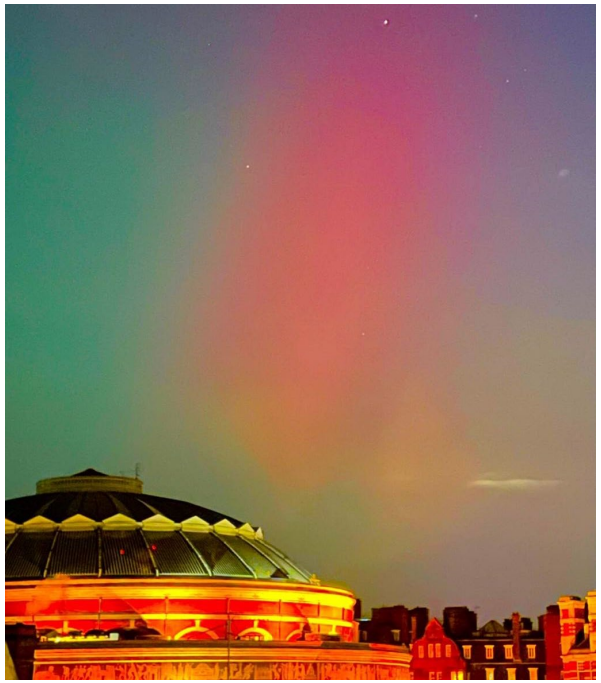


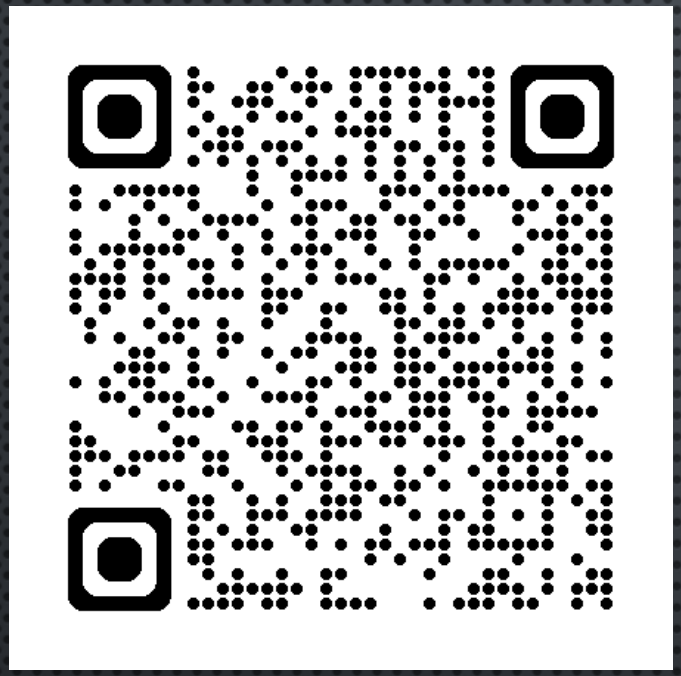


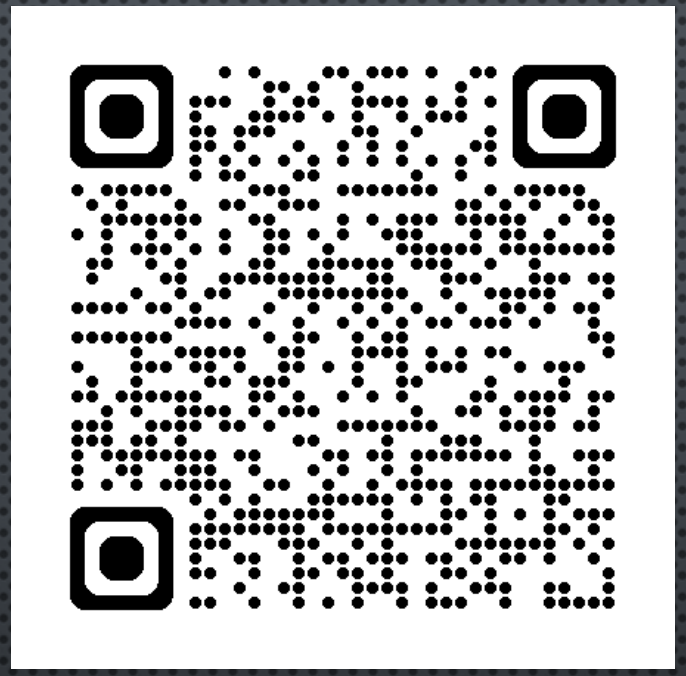

WHAT WE DO:

- PHYSOC FAMILY
- FLAGSHIP EVENTS:
  - QUIRK – PHYSICS CONFERENCE WITH OTHER UNIVERSITIES
  - RESEARCHATHON – HACKATHON FOR RESEARCH
  - UG COLLOQUIA
  - ANNUAL CHRISTMAS DINNER
  - BOAT PARTY
- SOCIALS:
  - HYDE PARK GAMES – FOOTBALL, FRISBEE, …
  - MOVIE NIGHTS (WITH SNACKS)
  - COLLAB WITH OTHER SOCIETIES
    - ASTRONOMY
    - DEBATE
- CAREERS FAIRS
- PHD AND MASTERS STUDENTS PANELES FOR UG

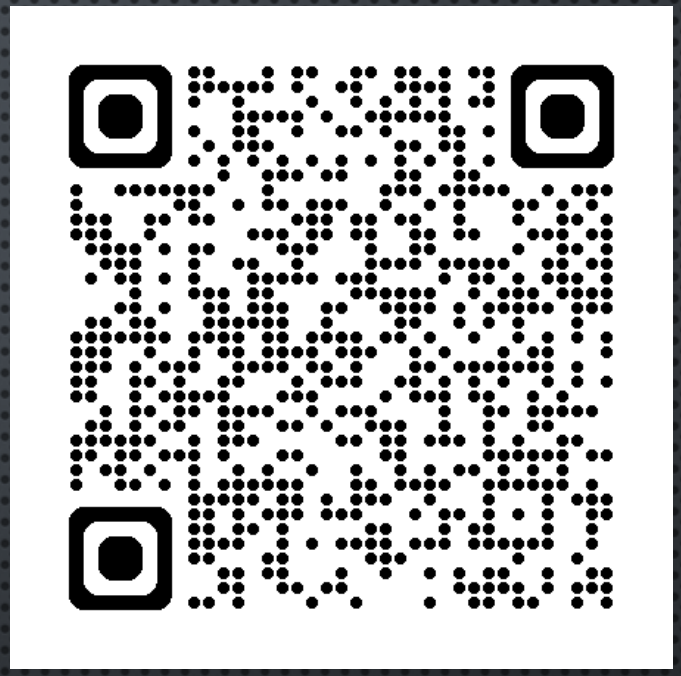




Website



LinkedIn



Instagram

THANKS FOR LISTENING!

Follow our socials

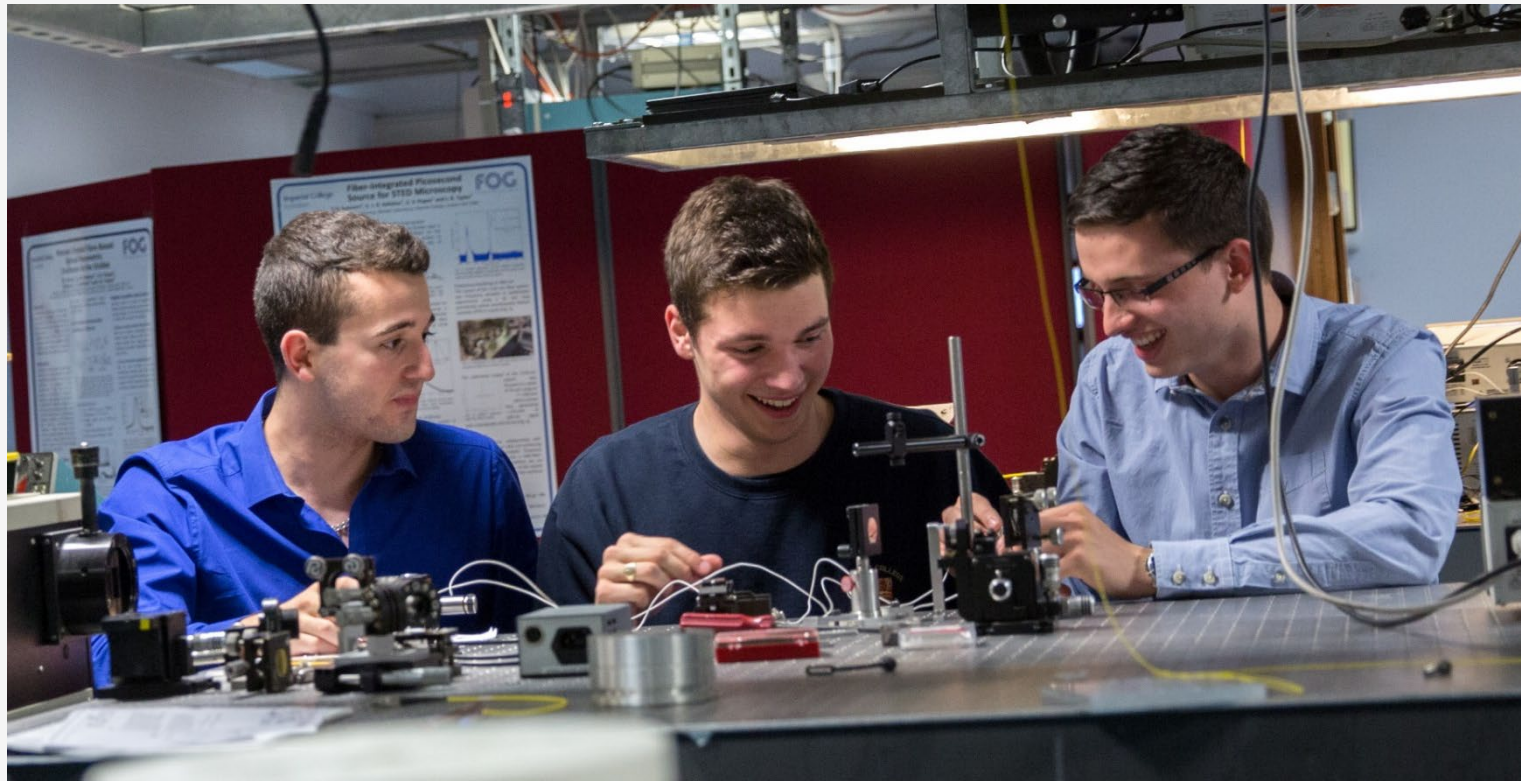
Thank you for visiting Imperial Physics!

imperial.ac.uk/physics/students/undergraduate-admissions/

UCAS website:
www.ucas.com

Undergraduate Study Guide:
imperial.ac.uk/study/ug

Questions? Email
ph.admissions@imperial.ac.uk



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