Physics at Strathclyde

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http://www.strath.ac.uk/physics/prospectivestudents/

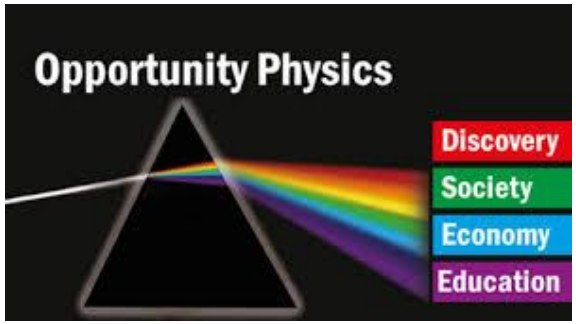
Myths and Misconceptions

- ~~"There's no money in physics"~~ Untrue
- ~~"I like the idea of a physics degree but what actual jobs do physicists do?"~~ Almost anything you want
- ~~"Surely, I can get a better job if I study something applied, like engineering?"~~ Physics leads to engineering
- ~~"A physics degree is great – if you want to teach physics"~~

  NO! NO! NO! NO! NO! NO!

Why Physics?

- Develops many transferable skills
  - Numeracy, literacy, communication
  - Enquiring, ethical, enterprising and engaged
  - Skills sought after by employers
- Find graduates work many areas



From www.IOP.org

Why Physics?

- Skills developed and used by graduates (HEA 2011)
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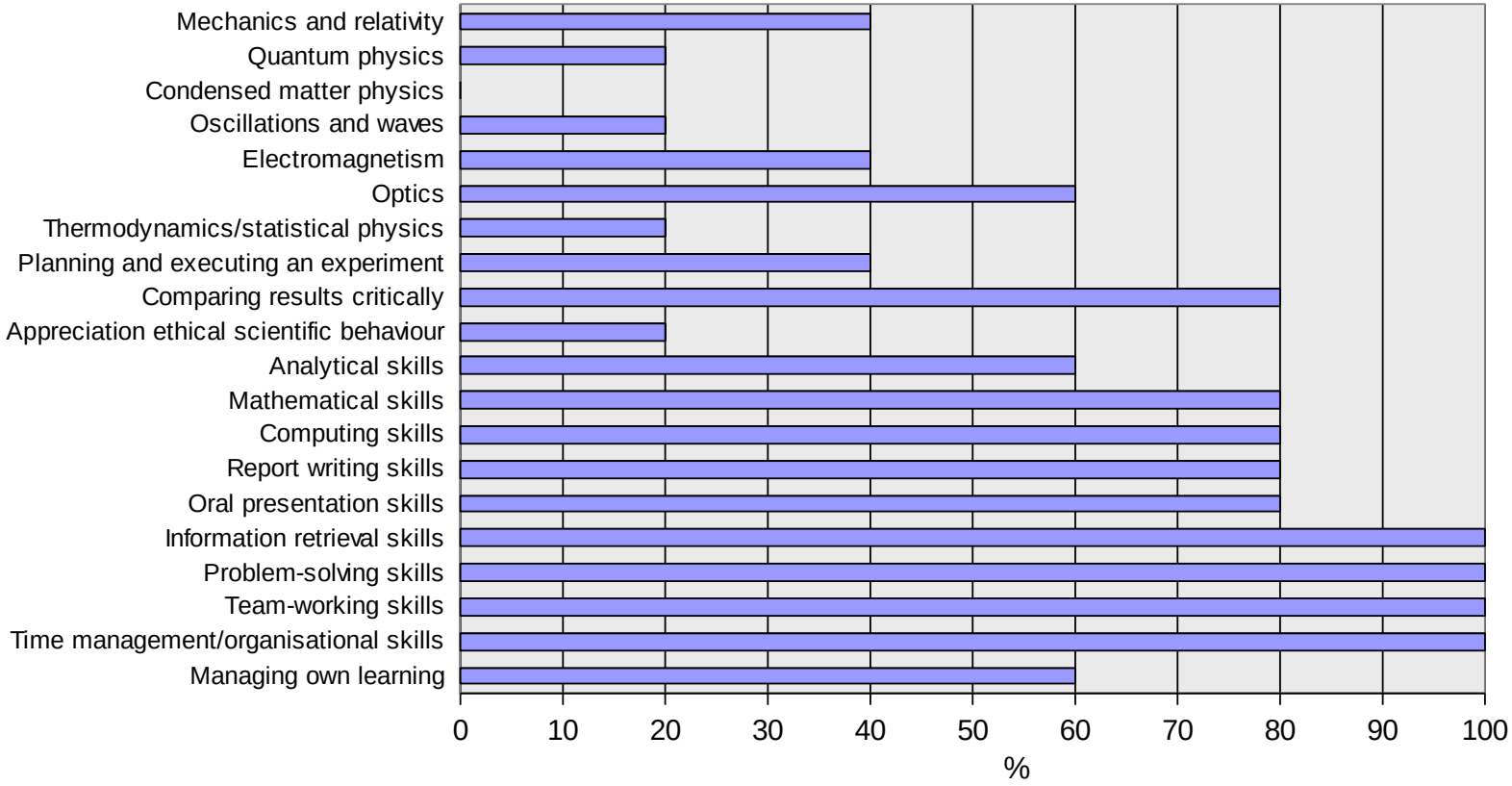
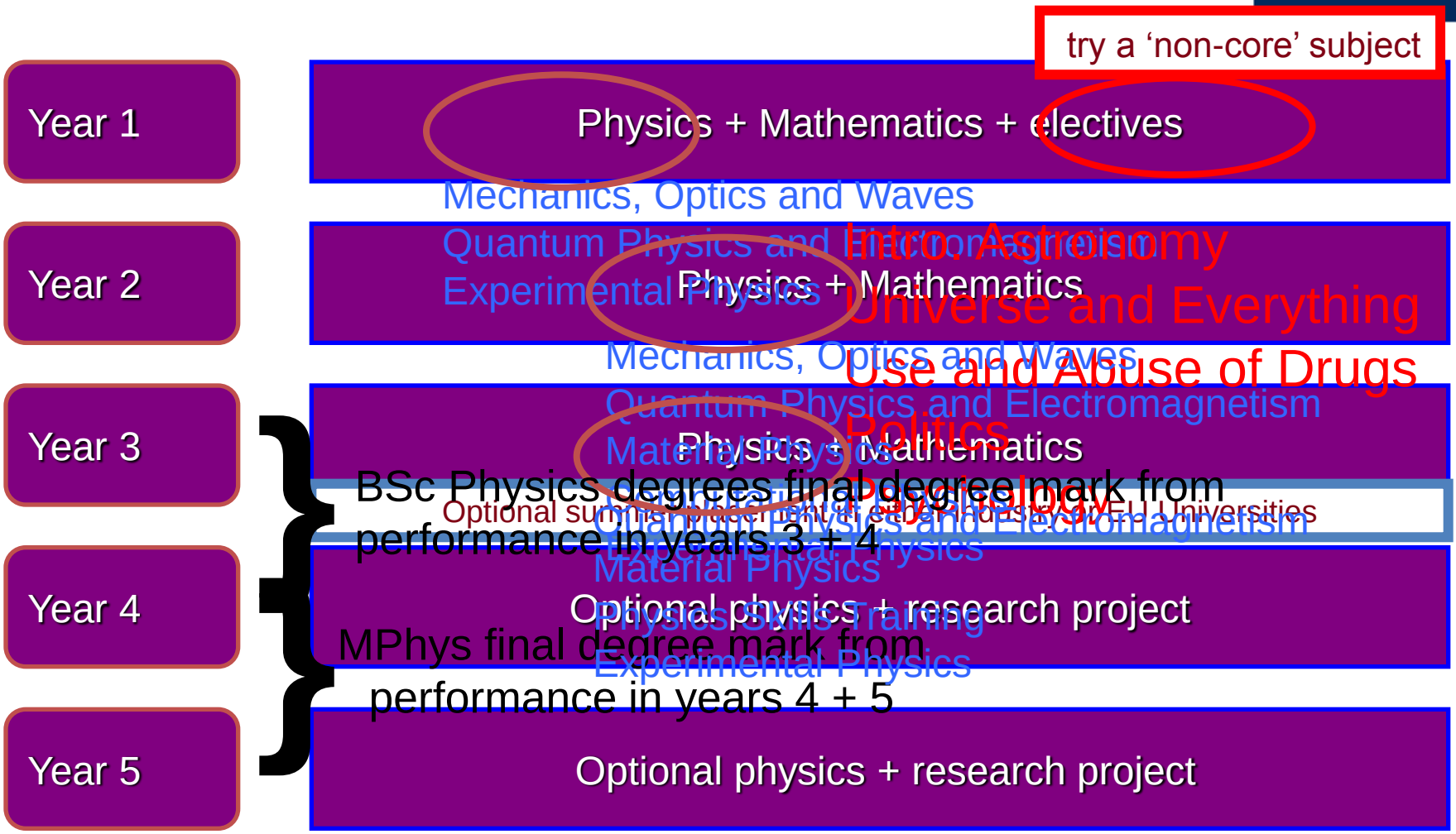


Physics Degrees

- MPhys – (5 Year Course)
  - Degree for professional physicist – research career
- BSc Physics – (4 Year Course)
  - General physics degree – non specialised career pathway
- BSc Physics with Teaching – (4 Year Course)
  - Offered in associated with HASS to produce graduates qualified to teach
- BSc Mathematics and Physics – (4 Year Course)
  - Joint with Mathematics and managed by Maths

Degree Structure



Entry Requirements
Recognised Higher Subjects

- For entry to Physics we require
  - Physics and Mathematics
  - English for Physics with Teaching
- Useful subjects
  - Chemistry, Computing, Engineering Science
- Recognise other subjects but may not include some in offer if taken in 6th year
  - Photography, Art, Music

Entry Requirements
1st Year and Curriculum for Excellence

- Physics considers applicant's current and predicted performance at the point of application
- We expect applicants to have met our entry requirements when they enter the University
- We do not worry about year in which Higher subjects were taken
- If applicant takes, for example, 1 Higher Y4, 3 Higher Y5 and 2 Higher Y6 we will consider application.

Entry Requirements

1st Year entry and 1st attempt at subject

- Minimum Entry Requirements based on Highers
- MPhys – at least AAAB including Physics and Maths
- BSc Phys – at least AABB including Physics and Maths
- BSc Phys with Teaching – at least AABB including Physics and Maths together with C in Higher English
- For applicants with a contextual flag (SIMD40, Focus West) the requirements will be reduced by one grade e.g. BSc Physics ABBB

Entry Requirements

1st Year entry and 2nd attempt at subject

- If applicant does not meet minimum entry requirements at 1st attempt Department will tailor offer to ensure that applicant meets requirements
- Offer depends on subjects taken
  - Repeat Higher Physics or Mathematics - normally expect offer to be at A
  - Take Advanced Higher - normally expect offer to be at B
- NOTE if an applicant has a fail or grade D in either Physics or Mathematics the application will not normally be considered

Entry Requirements
2nd Year entry – Advanced Higher

- Advanced Highers AB (Physics and Maths) plus two other Highers at AB (from previous year's attempt)
- Advanced Highers ABB (inc. Physics and Maths) plus one other Higher at B (from previous year's attempt)

2nd Year Entry Advantages

- Strong applicants given conditional offer
  - Avoids problems with applicants de-coupling from school studies if receive UO for 1st year entry
  - Applicants not repeating material already covered in AH therefore do not develop poor study habits in 1st year
  - Applicants will be stretched in 2nd year
  - Strong support offered by Faculty – mentors available if applicants want the additional support

Alternative Qualifications

- HN – Applied Sciences, Engineering
- Access to Science and Engineering
  - Entry to 1st year only and must attend Summer School Physics and Mathematics
- Open University Courses
  - S104 Exploring Science or replacement
  - MST124 Essential Mathematics 1
  - MST125 Essential Mathematics 2
- A' Levels
  - Physics and Mathematics

Application Processing

- Pre-15th January Applications
  - Hybrid Gathered Field
    - All applicants that will be made UO or Reject decisions are processed immediately
    - All applicants who will be made CO processed after 15th Jan. Offer released towards beginning of February
- Depending on numbers, Department considers Late and EXTRA applications

Application Processing

- Typical statistics
  - UO – 40 %
  - CO – 55 %
  - Reject – 5 %

UCAS Personal Statement

- Please ask applicants to avoid
  - "Having read Einstein's papers on …"
- Applicants should show interest in subject
  - If applicant looking to Medicine / other subjects then a single sentence justifying Physics is OK
- Evidence of a rounded individual
  - Extra-curricula activities such as "Scouting for Boys"
- Work Experience if relevant to subject
  - Tesco Saturday job, No,
  - Local engineering company, Yes

UCAS Teacher Statement

- Honest appraisal of applicant
  - Will applicant achieve predicted grades
  - Interest in subject
  - Activities in school
  - Extenuating circumstances

Health Warning

- Entry is competitive
- If applicant does not make the grades specified in offer it is unlikely that the applicant will gain entry

Questions after today

Please see me after talk or contact me by email, either

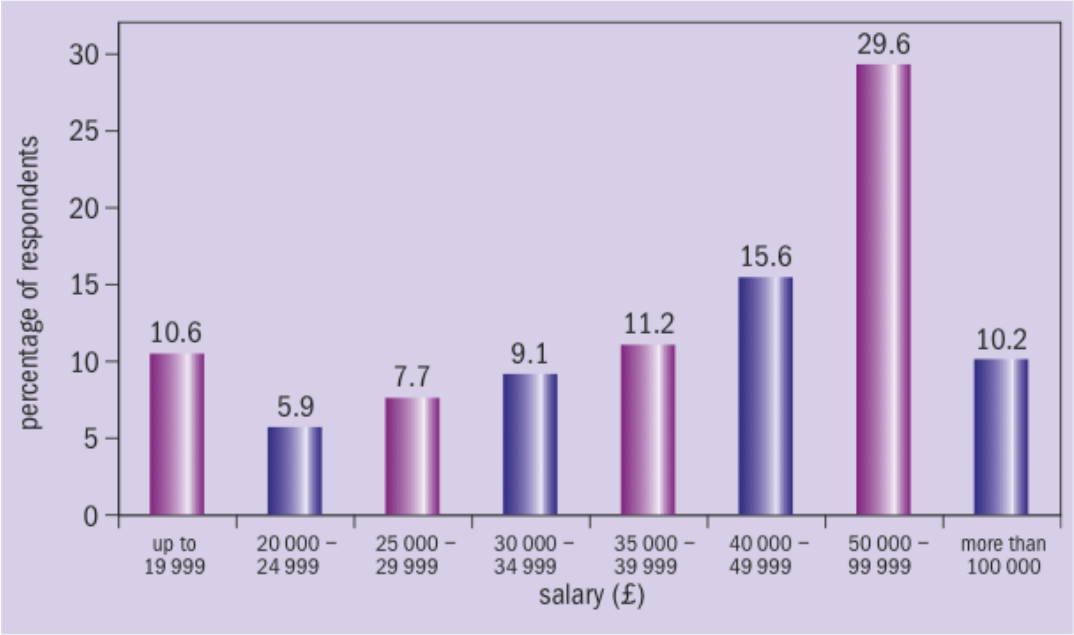
n.langford@strath.ac.uk or
study@phys.strath.ac.uk

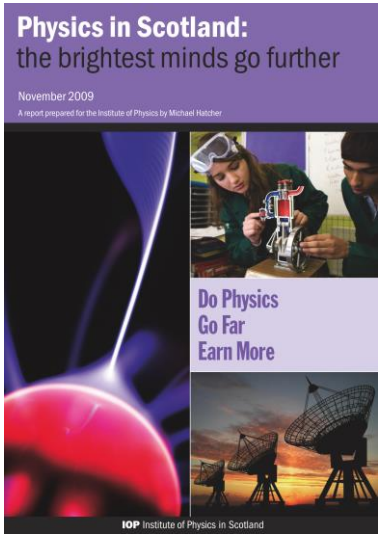
There is no such thing as a “stupid question” so please do not hesitate to ask.

University of
Strathclyde
Glasgow

Physics and Money

- > 50 % of 1st degree earn > £40,000 cf with £25,000 average
- Strathclyde most likely to produce high earners





Data from Institute of Physics Survey of Scottish Physics Departments' Graduates

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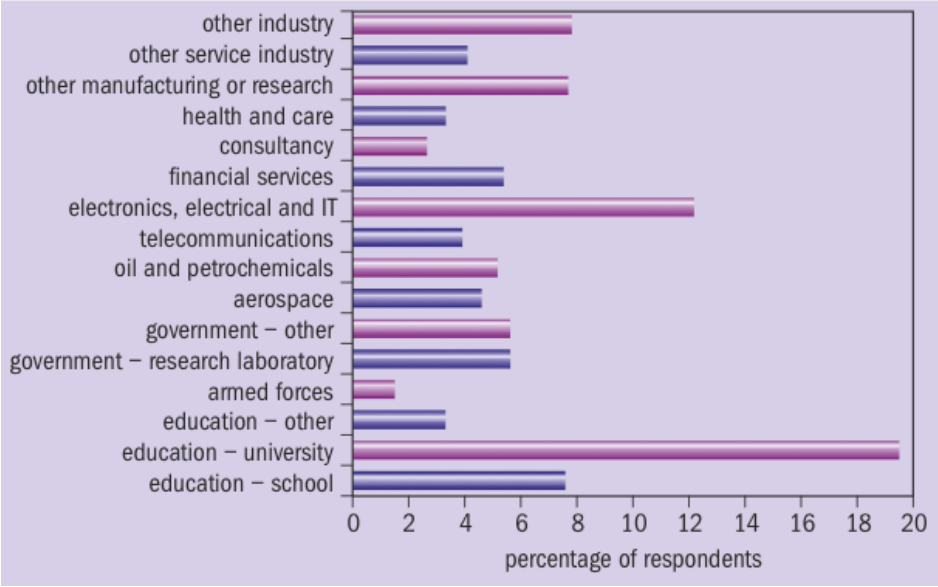
Physics and Employment

- Strathclyde physics graduates are
- **medical physicists**, **senior engineers**, professors, **company directors**, politicians, **systems engineers**, treasury analysts, **patent examiners**, software engineers, **teachers and education advisers**, **spacecraft project managers**, defence scientists, **Oscar winner**, product managers, **senior risk managers**, business development managers, **pop star**, and bankers



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Physics is a Degree of Opportunity

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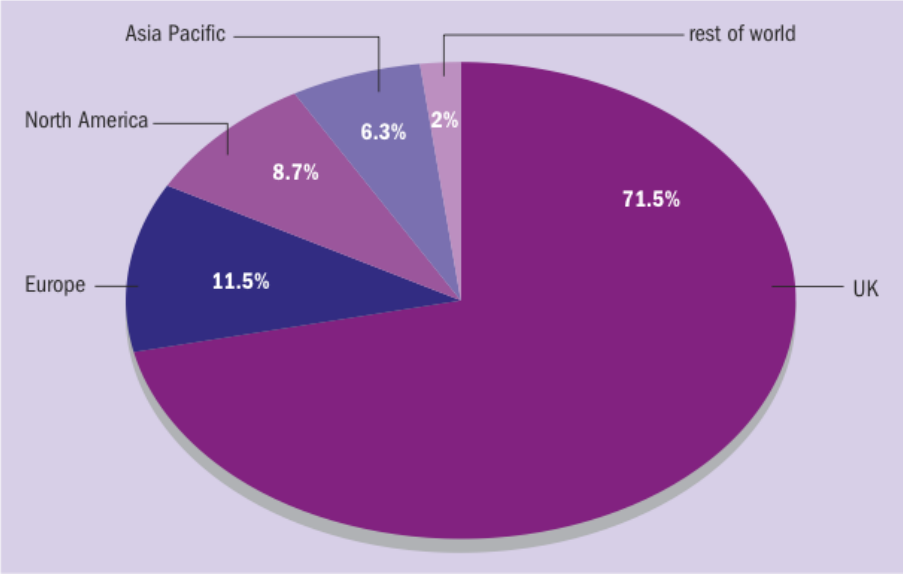
Physics and Employment

- Employment opportunities in many industry sectors within UK and overseas



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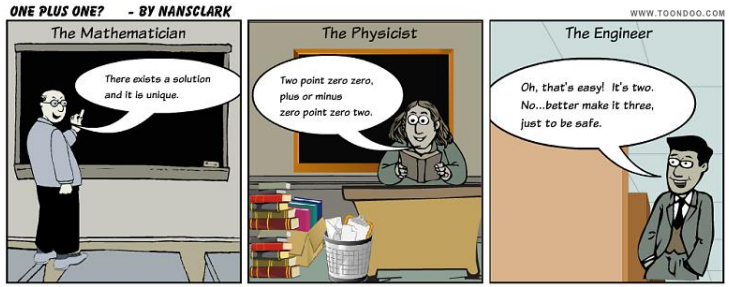
Physics and Engineering

- All Strathclyde Physics degrees are accredited by Institute of Physics
  - Chartered Physicist after graduation
  - Allows a fast-track route to Chartered Engineer status
- Physics degree gives you a broad subject education
  - Not labeled by type of engineering you study
  - Greater employment opportunities



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