

STFC Education, Training and Careers Committee

161 fellowship applications received in 2018/19

Studentship allocations calculated by an algorithm

220 Doctoral Training Partnership students allocated per year

12 Ernest Rutherford Fellowships awarded per year

Investment: £26M p.a., £5.5M of which is Fellowships with additional £3.8M in 2018/19 for National Productivity Investment Funding

Over 700 PhDs supported at any one time on Doctoral Training Partnerships

Less than 8% success rate on fellowships

8 Centres for Doctoral Training in Data Intensive Science with over 240 students

Ten Summer Schools were supported in 2018 with over 450 students attending

Immediate employment of students in diverse sectors of the UK economy, including:

- 53% University
- 5% public sector
- 28% private sector
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Over 70% of those working in private sector are employed in software development, data analysis, engineering and finance

Three industrial CASE awards per year

Education, Training and Careers Committee

Core Responsibilities

- Education, Training and Careers Committee (ETCC) meets three times a year
- Accreditation of departments to hold studentships
- Awarding of doctoral training partnership students by algorithm
- Industrial CASE students
- Peer review and award of fellowships
- Peer review of summer schools
- STFC also support Daphne Jackson Fellowships
- Advises on removing barriers to the participation of women and other underrepresented groups in STFC activities

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• Chair

- Professor Seb Oliver - University of Sussex

• Members

- Professor Gary Barker – University of Warwick
- Dr Ben Davies – Liverpool John Moores University
- Dr Meghan Gray – University of Nottingham
- Dr Claire Gwenlan – University of Oxford
- Dr Giles Hammond – University of Glasgow
- Dr David Hall – The Open University
- Dr Alison Laird – University of York
- Mr Peter Oakley – TWI Ltd
- Professor Marika Taylor – University of Southampton

• Secretary

- [Clare Heseltine](#) - STFC

Studentships

Studentships Awarded

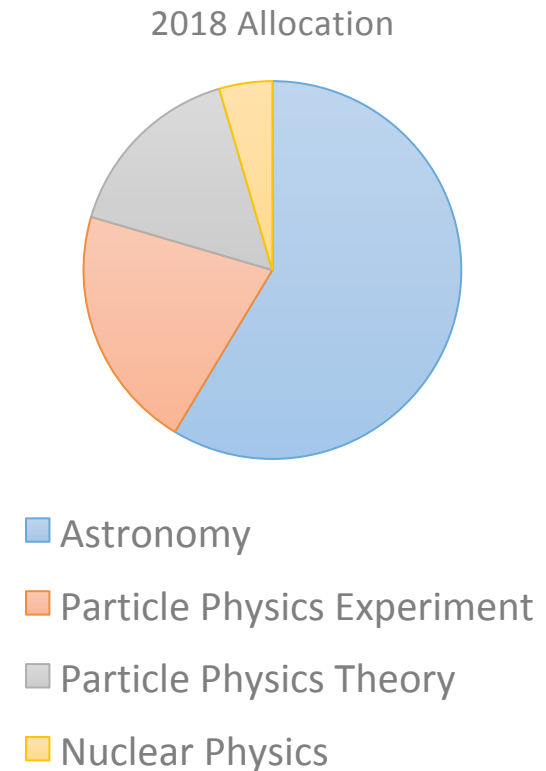
- Doctoral Training Partnerships – 220 students awarded per year, awarded by algorithm
- Industrial CASE awards – 3 awards per year, must have a non-academic partner
- Centres for Doctoral Training – 8 Centres with 19 universities involved. >180 Students. Data Intensive Science and Artificial Intelligence
- Alan Turing Artificial Intelligence Students – 5 students with the founding members of the Alan Turing Institute
- Innovation Placements – for students completing or who have completed their PhD to work with non-academic partners in strategic areas -ATLAS, DUNE, SKA, CMS, ELT, HL-LHC, DiRAC

DTP Quota Formula

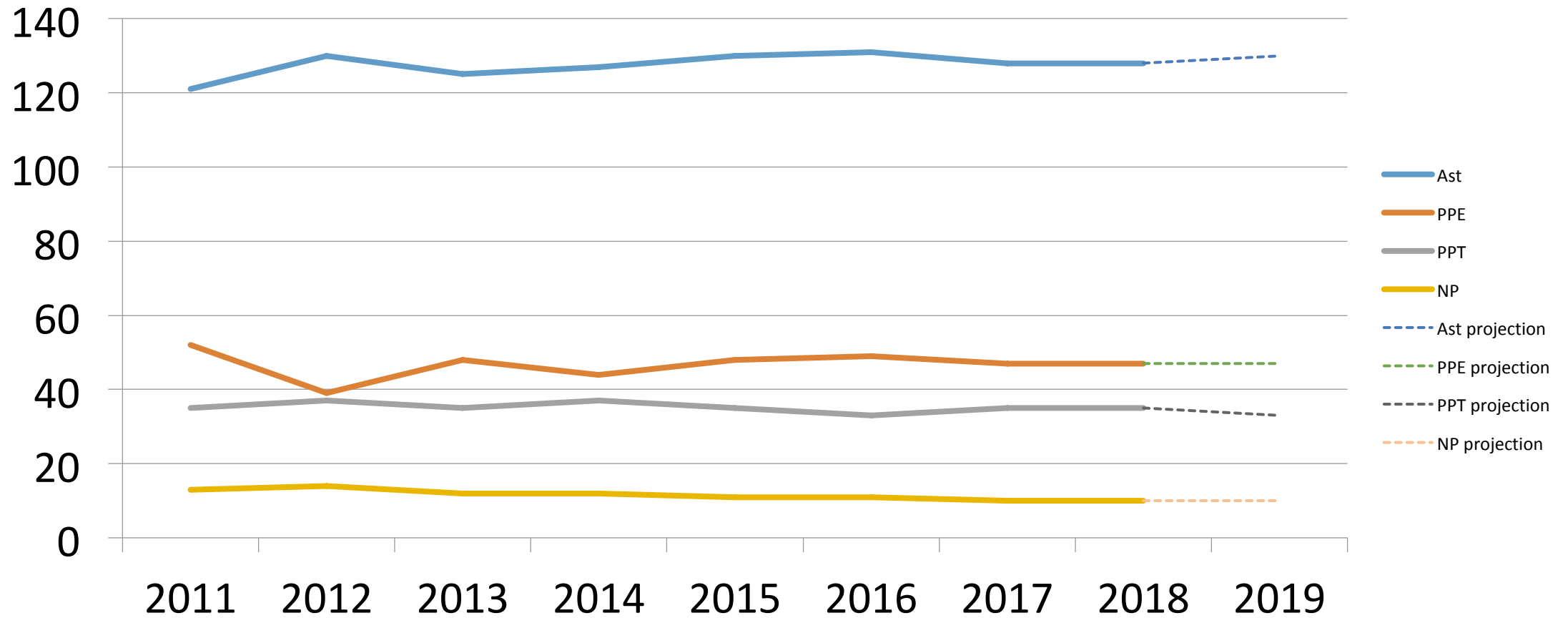
- Based on two factors intended to measure
 - Quality
 - Volume
- Minor changes to which fellowships included
- Tweaked to smooth unintended consequences of trends in investigator time decisions by grant panels

DTP students: 2018 Allocation

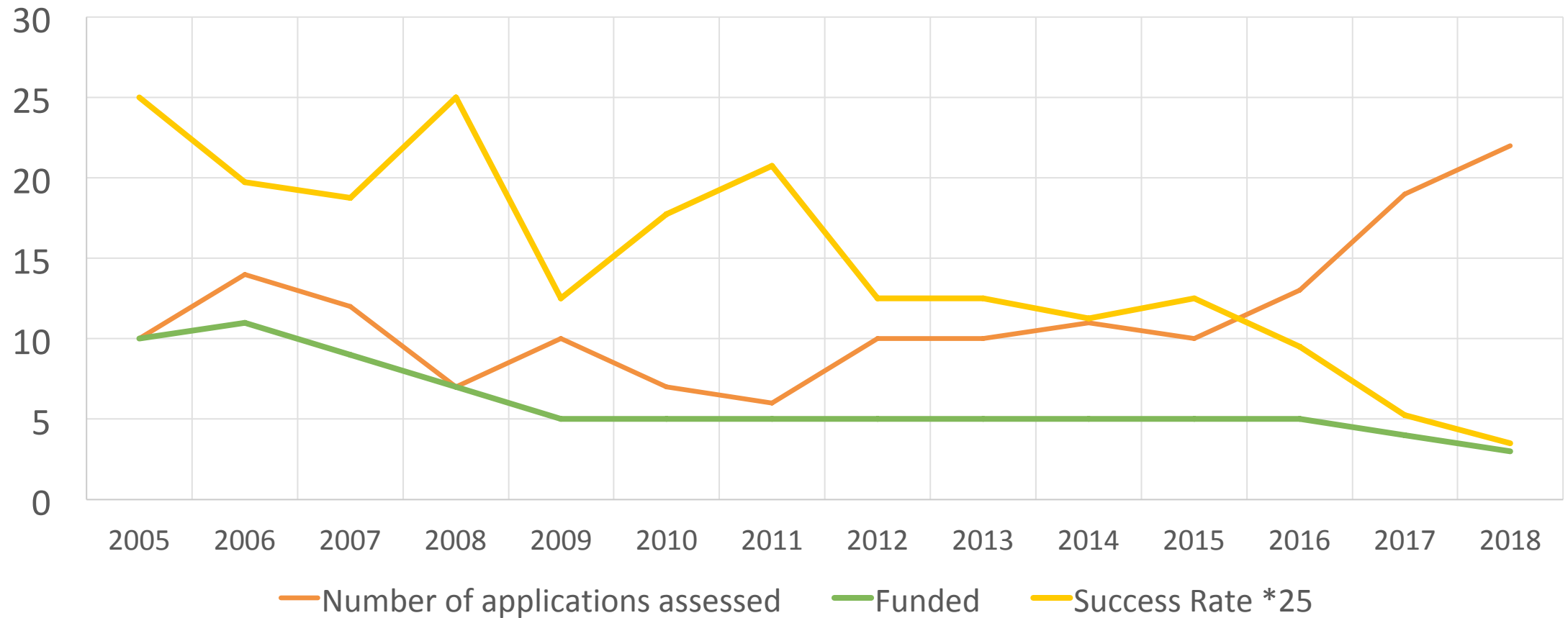
Field	Number
Astronomy	129
Particle Physics Experiment	46
Particle Physics Theory	35
Nuclear Physics	10
Total	220



DTP number trends



STFC Case Studentships



STFC DATA INTENSIVE SCIENCE CDTs

- We now have eight centres, involving 19 universities:
- UCL, Cambridge, Cardiff, Bristol, Swansea, Durham, Edinburgh, Glasgow, St Andrews, Liverpool, Liverpool John Moores, Manchester, Sheffield, Lancaster, Southampton, Sussex, Portsmouth, Queen Mary, Open
- £9.4 million STFC funding awarded as part of the talent and skills element of the National Productivity Investment Fund
- Very positive industry response: ~100 companies and other non-academic partners involved
- 120 students started October 2017 a 40% uplift on STFC studentship numbers (88 STFC-funded, the rest from other funding sources)
- Another 58 students started October 2018
- >£4.5 million cash contribution from non-STFC sources
- Networking across the centres including launch event, summer school and training events
- full review of the STFC CDT in DIS programme is currently underway
- UKRI call (administered by EPSRC) for CDTs in Artificial Intelligence is currently underway; there are a few bids in play from the STFC community.

	First cohort of students			Second cohort of students			Grand total
	STFC	Other	Total	STFC	Other	Total	
Cambridge	11	2	13	4	2	6	19
Cardiff, Bristol, Swansea	11	3	14	4	2	6	20
Durham	11	3	14	4	2	6	20
ScotDIST	11	5	16	4	4	8	24
Liverpool, LJMU	11	4	15	4	3	7	22
Manchester, Lancaster, Sheffield	11	6	17	3	4	7	24
DISCnet	11	7	18	4	5	9	27
UCL	11	4	15	5	4	9	24
	88		122	32		58	180

Studentship monitoring

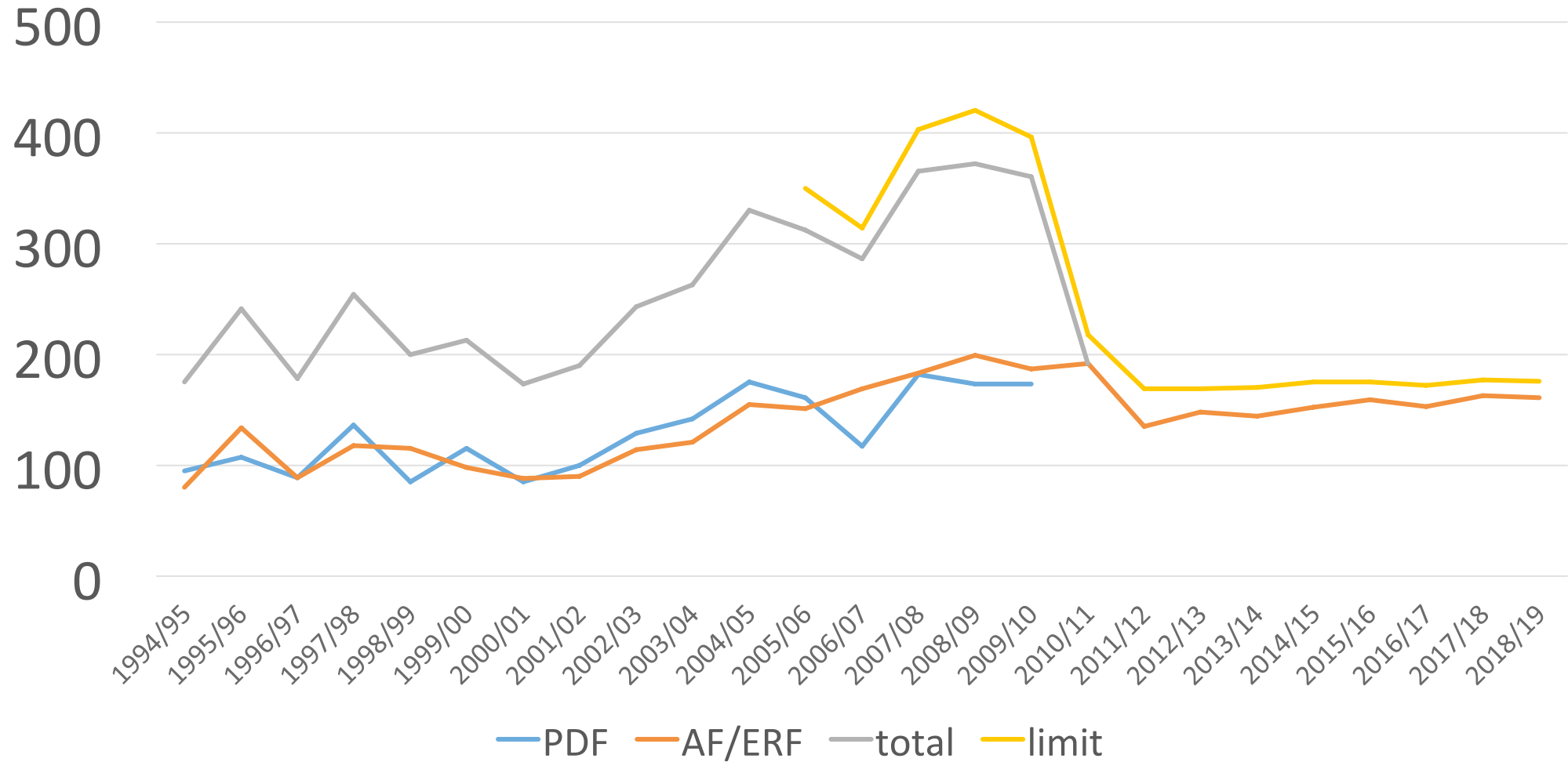
- Accreditation
 - Run twice. High success (one failure)
 - Will be reviewed before next cycle
- Student survey
 - Annual monitoring of student experience
- Departmental survey
 - Progressions, Outcomes

Fellowships

Fellowships

- Ernest Rutherford Fellowships – usually 12 awards per year, ~ 160 applications
- Future Leader Fellowships – New UKRI scheme, includes inter-disciplinary applications, innovation career paths, 4+3 years of support, tapered salary support from the institution, must have a commitment to an open-ended UK-based independent research position
- Innovation Fellowships – 10 fellowships awarded. Research projects which build programmes of innovation and translation from research within the STFC core programme remit. Interdisciplinary and addressing focused industry and sectoral needs
- Daphne Jackson Fellowships – for researchers returning after career breaks
- Hawking Fellowships – to be launched in 2019 in the areas of maths, physics and computer sciences, up to 10 per year for the next five years

ERF Oversubscription



Training

Training Programmes

- ERF Induction
- Summer schools
 - 10 summer schools in 2018, e.g. BUSSTEPP
 - The budget for the in 2019 is **£489k**
 - Applications **£611k**
 - **Oversubscription 1.25**

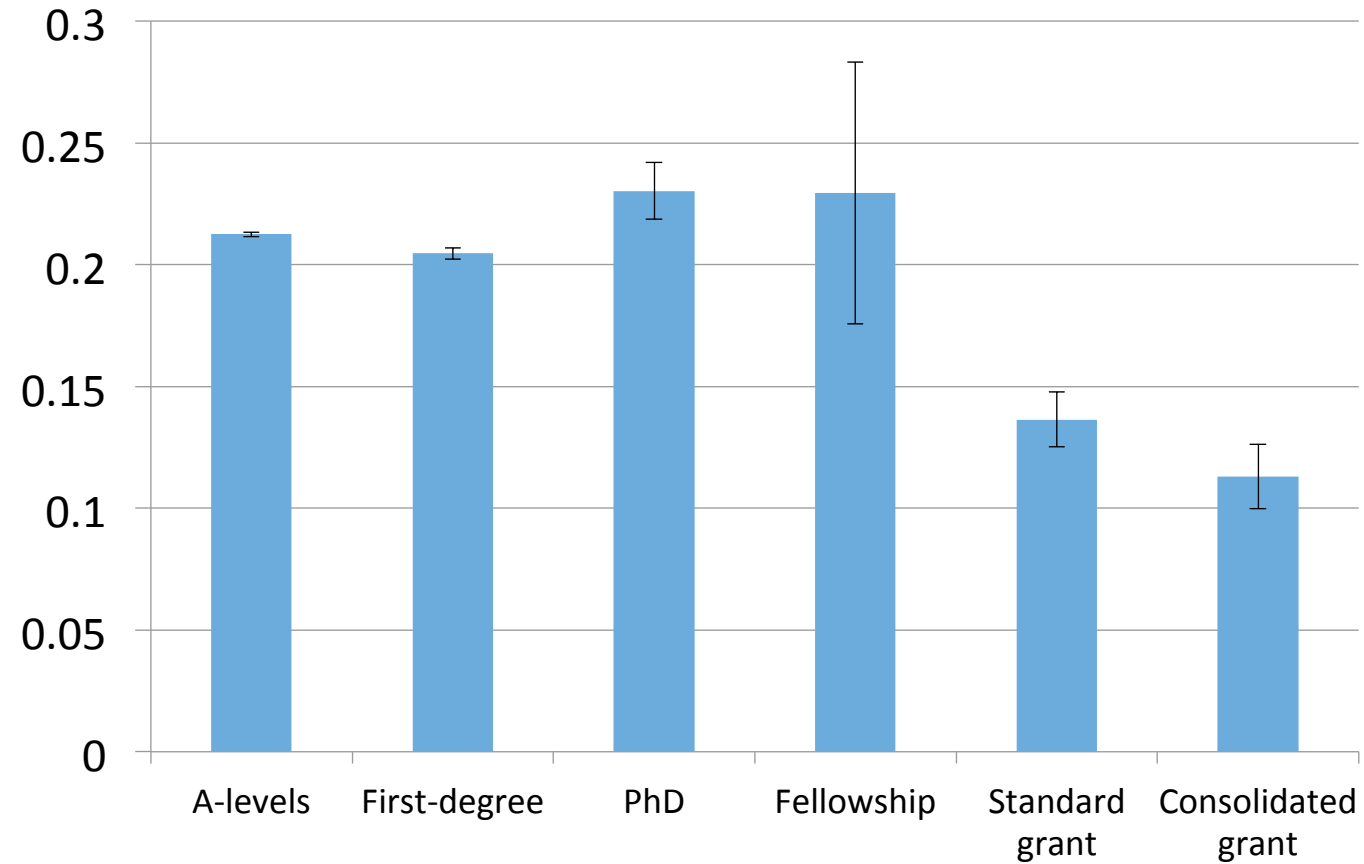
Equality, Diversity and Inclusion

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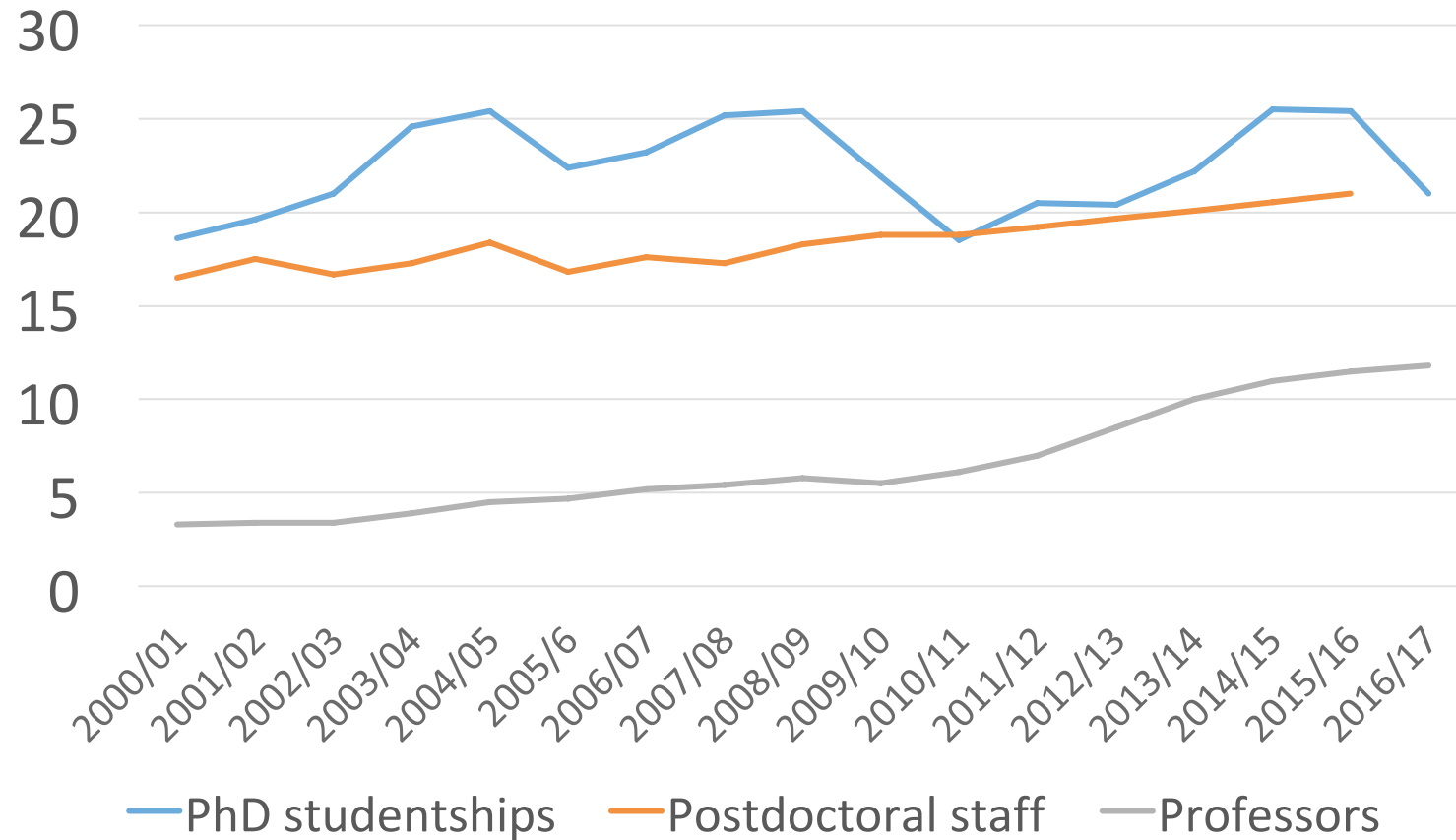
- Monitor diversity in studentships
- Policies and monitoring of ERF process
- Daphne Jackson and Returner Fellowships
- Influencing the community

Gender “leaky pipeline”

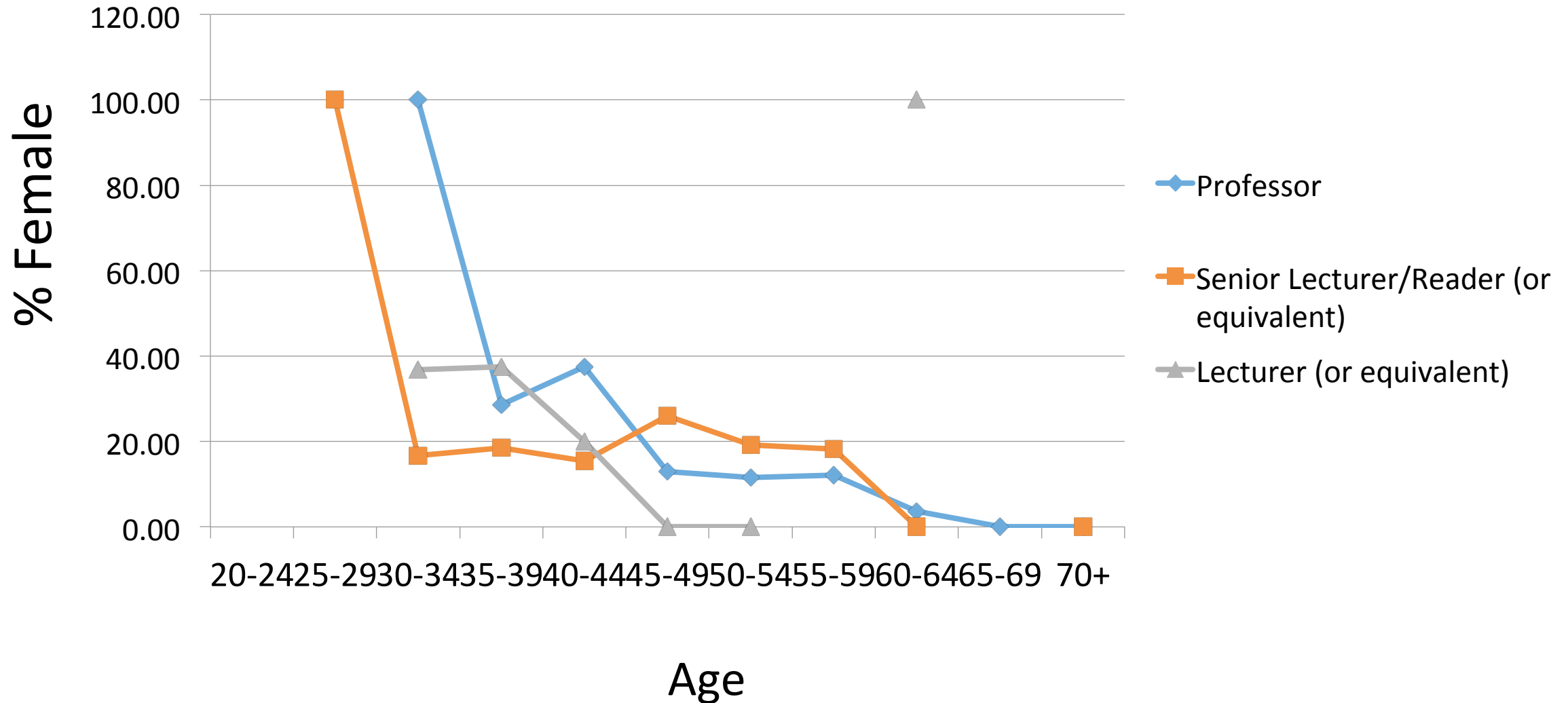
Fig 1 Proportion of women at different stages



Gender: trends with time



Gender trend with age/level (Astronomy, RAS)



Future

Skills Balance of Programmes

- ETCC fed into Skills Balance of Programmes
- DTP students to be kept constant volume this year (but flat cash...)
- New 40@6-month industrial placements
- Aim to keep ERF at same level
- Watch developments of UKFIR Future leaders
- No plans to reintroduce PDRF

National Productivity Investment Fund

- Data Intensive Science Studentships
- Future Leader Fellowships
- Innovation Fellowships
- Innovation Placements
- Alan Turing Artificial Intelligence Students
- Hawking Fellowships

Issues for the future

- **Increasing industrial engagement in student training**
- **Skills at postdoctoral level**
- **Technical support in the community**
- **Equality and diversity**
- **Mental health**
- **Provision of centralised training**
- **Balance between studentships and fellowships**
- **Brexit?**

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