Department Application

School of Physics, University of Bristol

Bronze Award

ATHENA SWAN BRONZE DEPARTMENT AWARDS

Recognise that in addition to institution-wide policies, the department is working to promote gender equality and to identify and address challenges particular to the department and discipline.

ATHENA SWAN SILVER DEPARTMENT AWARDS

In addition to the future planning required for Bronze department recognition, Silver department awards recognise that the department has taken action in response to previously identified challenges and can demonstrate the impact of the actions implemented.

Note: Not all institutions use the term 'department'. There are many equivalent academic groupings with different names, sizes and compositions. The definition of a 'department' can be found in the Athena SWAN awards handbook.

COMPLETING THE FORM

DO NOT ATTEMPT TO COMPLETE THIS APPLICATION FORM WITHOUT READING THE ATHENA SWAN AWARDS HANDBOOK.

This form should be used for applications for Bronze and Silver department awards.

You should complete each section of the application applicable to the award level you are applying for.

> Additional areas for Silver applications are highlighted throughout the form: 5.2, 5.4, 5.5(iv)

If you need to insert a landscape page in your application, please copy and paste the template page at the end of the document, as per the instructions on that page. Please do not insert any section breaks as to do so will disrupt the page numbers.

WORD COUNT

The overall word limit for applications are shown in the following table.

There are no specific word limits for the individual sections and you may distribute words over each of the sections as appropriate. At the end of every section, please state how many words you have used in that section.

We have provided the following recommendations as a guide.

Department application	Bronze	Silver
Word limit	**10,500**	**12,000**
Recommended word count		
1.Letter of endorsement	500	500
2.Description of the department	500	500
3. Self-assessment process	1,000	1,000
4. Picture of the department	2,000	2,000
5. Supporting and advancing women's careers	6,000	6,500
6. Case studies	n/a	1,000
7. Further information	500	500

Name of institution	University of Bristol	
Department	School of Physics	
Focus of department	**STEMM**	~~**AHSSBL**~~
Date of application	30 April 2019	
Award Level	**Bronze**	~~**Silver**~~
Institution Athena SWAN award	**Date: April 2017**	**Level: Bronze**
Contact for application Must be based in the department	Jonas Rademacker	
Email	Jonas.Rademacker@bristol.ac.uk	
Telephone	0117 3317904	
Departmental website	http://www.bristol.ac.uk/physics/	

Legend

School refers to the School of Physics, University of Bristol

University refers to the University of Bristol

Benchmarking data is taken from the Higher Education Statistics Agency and the IoP.

Actions are denoted with a bold letter and number as in **G1**. The letters mean:

G	**G**eneral
S	**S**tudents
A	**A**cademic and research staff
C	**C**areer transition and **C**areer development
F	**F**lexible Working and Career Breaks
O	**O**rganisation & Culture

Glossary

BDC	Bristol Doctoral College
BQIT	Bristol Quantum Information Technologies (conference)
CDT	Centre for Doctoral Training
CHλOS	Bristol Physics Student Society
CREATE	Cultivating Research and Teaching Excellence (staff development)
EDI	Equality, Diversity & Inclusion
EPSRC	Engineering and Physical Sciences Research Council
FTC	Fixed Term Contract
FTE	Full Time Equivalent
HoS	Head of School
HR	Human Resources
PDP	Personal Development Plan
PDRA	Postdoctoral Research Assistant/Associate
PGR	Postgraduate Research
PGT	Postgraduate Taught
QET	Quantum Engineering and Technology
RCS	Returning Carers Scheme
SAT	Athena SWAN Self Assessment Team
SoP	School of Physics
STFC	Science and Technology Facilities Council (funds Astro + Particle)
UG	Undergraduate
UoB	University of Bristol
WAM	Workload Allocation Model
WITS	Women in the School of Physics group

Total wordcount for application: 10,256

1. LETTER OF ENDORSEMENT FROM THE HEAD OF DEPARTMENT

Dear Ruth Gilligan,

I started as Head of School in August 2018. A key motivation in accepting the role was the opportunity to help foster an environment in which every student and member of staff can **realise their academic and personal potential** irrespective of their gender, ethnicity, disability and economic background. My aim is to translate this aspect of my strategic vision into **concrete actions that make a difference.**

Our previous Bronze Athena SWAN award, together with our commitment to the charter principles, has helped **raise the profile of gender equality issues** within the School and set us on an upward trajectory: in 2018 we promoted a female reader to a personal chair, and we also recruited a new female lecturer; we were above average for recruitment of female undergraduates. However, much more needs to be done to build on this progress. Key to achieving this is - I believe - **a cultural change to an environment more supportive** for staff and students, irrespective of gender and personal circumstances. Doing so will help tackle the "leaky pipeline". With this in mind, I have allocated considerable staff resources to several new initiatives:

- I have introduced a **workload allocation model** for academic staff, whose principles and operations were established in **detailed consultation** with colleagues. This is being rolled out for 2019/20 and should help me allocate activities **equitably and transparently.**

- I am revamping the School's governance structures. This involves a **fairer and more transparent role-based model** for committee membership; roles are defined by a description, terms are limited, and ***all* academic staff can apply for any role**. We particularly encourage women to gain leadership experience in this way and the EDI group is involved in selections.

- I have moved away from a hierarchical system of academic staff reviews by group heads, to a more **supportive peer-based model.** Training and guidelines ensure that the process is sensitive to the **distinct challenges** faced by staff of different gender and backgrounds, as well as being **supportive of developmental needs.**

As a parent of two school age children, and with a partner who works full time, I understand the pressures of juggling career and family. I actively encourage all staff in taking parental and compassionate leave. I also make a point in not promoting excessive work hours and avoid sending out-of-hours emails.

With four current vacant academic positions, I am determined that we **attract outstanding female candidates** to apply. Our recruitment process pays particular attention to women applicants and I shall personally review all cases that have not been shortlisted. Moreover, search champions have been specifically tasked with identifying potential female candidates and contacting them directly to **encourage them to apply**.

The enclosed Athena SWAN application was prepared by our SAT under the leadership of Prof Jonas Rademacker, the School's EDI Chair. I can certify that the data and information presented in the application (including qualitative and quantitative data) is an honest, accurate and true representation of the School.

Yours sincerely,

Professor Nigel Wilding

Head of School

Wordcount Section 1: 501

2. DESCRIPTION OF THE DEPARTMENT

Figure 1: Clockwise from top left: The HH Wills Physics Laboratory, the Centre for NanoScience and Quantum Information, the gardens outside Physics, and PhysBar, a student-run coffee bar.

The School of Physics is a large and active research and teaching school based mainly across two adjacent buildings at the heart of the University of Bristol's main campus. To foster an **inclusive and friendly culture**, the School has two common rooms where staff and postgraduate students can relax and socialise, and other shared spaces, including the student-run PhysBar and the gardens. The School regularly organises events that encourage cross-group interaction. Colloquia are held weekly during term-time and provide an opportunity for staff and students to socialise and learn about current physics topics outside their immediate field of research or study. The Women in the School of Physics group is open to all staff and students who identify as female and organises regular lunches and seminars. In total, we are home to 186 staff and 888 students.

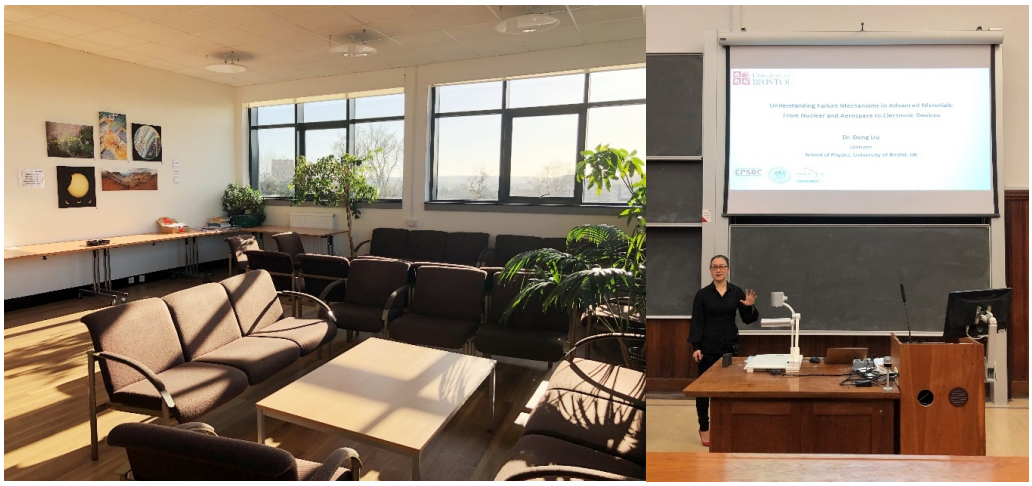


Figure 2: Left: The Common Room in the HH Wills Physics Laboratory. Right: Dr Dong Liu giving a School Colloquium.

		Female	Male	% Female
Staff (2017/18)	Research+Teaching	7	41	15%
	Research Only	11	72	13%
	Teaching Only	4	5	44%
	Total Academic & Research	**22**	**119**	**16%**
	…of which:			
	Lecturer	2	9	18%
	Senior Lecturer	3	12	20%
	Reader	1	7	13%
	Professor	1	14	7%
	Professional Services	**24**	**21**	**53%**
	Total Staff	**46**	**140**	**25%**
Students (2017/18)	Undergraduate	168	496	25%
	Postgraduate Taught	4	18	18%
	Postgraduate Research	50	150	25%
	Total Students	**222**	**666**	**25%**

Table 1: Staff and students at the School of Physics.

The School is research-intensive, with 85% of research rated as world-leading or internationally excellent in the last REF exercise. Our research income in 2017/18 was ~£11.5M.

Undergraduate students can take BSc or MSci courses, with the option of studying Physics on its own, or in combination with Chemistry, Maths, Philosophy, Astrophysics, Innovation, Industrial Experience, International Experience or Study in Continental

Europe. Students on joint degree courses have a 'home' School to ensure they receive the same care and support as single honours students. Our standard offer is A*AA, including Physics and Maths, which is reduced by up to two grades for the 26% of our students that satisfy **widening participation** criteria, for example being from an area or school with low progression to higher education.

We offer interdisciplinary postgraduate taught courses in Nuclear Science and Engineering and Functional Nanomaterials, and postgraduate research degrees, as part of 3 EPSRC/STFC Centres for Doctoral training as well as through a more traditional route of PhD study.

Research in the school is organised in 6 research themes, each with a theme leader. The HoS is a time-limited (4 years), **externally advertised job, won in open competition**. The overall leadership of the department is through the Executive Group, which meets bi-weekly and has an **EDI representative**. The academic roles on the Executive Group are rotated on a three-yearly basis.

All academic staff belong to one of three pathways, as outlined in Figure 3. Movement between and within these pathways is discussed in section 5.

The academic endeavour is supported by a team of 45 professional services staff, covering administrative and technical work.

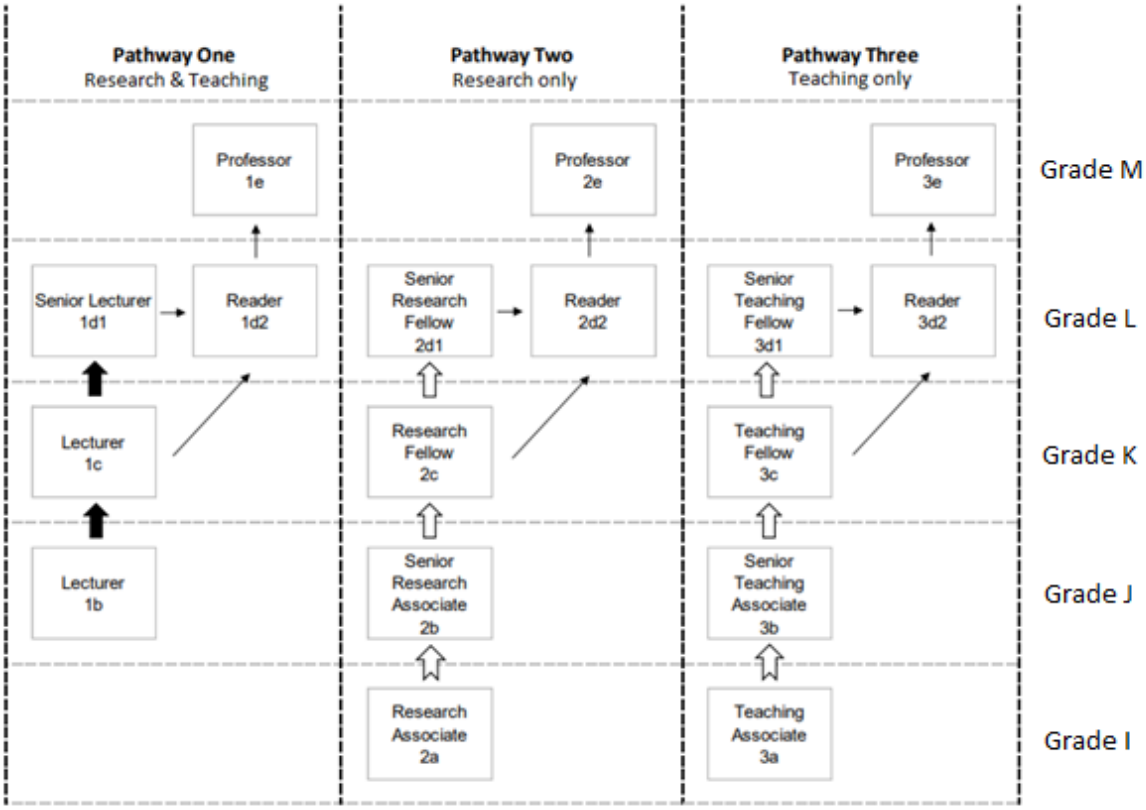


Figure 3: Academic staff pathways and grades. The arrows indicate progression/promotion between grades.

Wordcount Section 2: 475

3. THE SELF ASSESSMENT PROCESS

(i) a description of the self-assessment team

Following our bronze award in 2014, responsibility for implementing our action plan was given to the School's Equality, Diversity & Inclusion (EDI) Committee. The EDI Committee's core membership is: Head of School (HoS), School Manager, undergraduate and postgraduate student representatives, Disability Co-ordinator and Chairs of the Women in the School of Physics Group and Early Careers Forum. There is an open invitation to any member of the School to join. Since 2017, the undergraduate student representatives are elected by the students.

The chair of the EDI committee rotates every 3-4 years. The group meets at least termly to discuss EDI issues and implement SWAN actions. The group has a representative on the School's Executive Group who acts as a conduit between the two committees. This ensures that **EDI issues are central to the School's decision making-processes**.

To increase focus and effectiveness, the Self-Assessment Team (SAT) is separate from the EDI group, although there is overlap**.** The membership was decided by the HoS, EDI chair and School Manager, taking into account expressions of interest and the capacity of staff to dedicate time to writing this application. The SAT reflects the **diversity of roles and people** within the School. It includes academic and professional services staff at various stages in their careers, a balance of men and women, and is representative of several nationalities and cultures. Many SAT members have caring responsibilities, some work flexibly.

In recognition that the work to realise the objectives of the School's Athena SWAN action plan is **important and time-consuming,** 30 hours will be allocated in the School's new workload model for each member and 250 hours for the SAT+EDI chair (reviewed annually).

Professor Jonas Rademacker

Professor of Physics

Formerly Early Career, Gender and Diversity officer of the LHCb collaboration.

Chair of SAT and EDI Committee

Ms Lucy Alker

Executive Administration Manager

Chair of the Women in the School of Physics Group

Administrative Lead

Dr Alisha Cramer

Research Technician

One of three female technicians within the School of Physics

Technical Staff Representative

Ms Becky Freshwater

Manager of the Quantum Engineering CDT

Has sat on EDI boards in previous roles

Administrative Staff Representative

Dr Jude Laverock

Teaching Fellow, Condensed Matter Physics CDT

Chairs Student Staff Liaison Committee of his CDT and is the pastoral care contact for his CDT

Teaching-Only Staff Representative

Dr Zoe Leinhardt

Senior Lecturer in Astrophysics, School of Physics

Astrophysics Coordinator and Exams officer

Zoë is the mother of one child

Academic Staff Representative

Dr Tomas Martin

Lecturer in Materials Physics

Chair of the Early Careers Forum for junior academic staff

Early Careers Representative

Dr Ben Maughan

Reader in Astrophysics, School of Physics

Chair of workload allocation model working group. Works flexibly due to caring responsibilities

Academic Staff Representative

Dr Paras Naik

Senior Research Associate in Physics

Co-chair of the Early Careers Forum for postdoctoral staff

Research-Only Staff Representative

Paul Skrzypczyk

Royal Society University Research Fellow and Lecturer

Took shared parental leave in 2017. He and his wife are expecting their 2nd child.

Junior Academic Staff Representative

(ii) An account of the self-assessment process

In order for the SAT to have the freedom to cast an **unbiased and critical eye** over School data, processes and culture, it was decided early on that the HoS and School Manager would not be SAT members; they would still attend meetings intermittently to stay connected to the process. Throughout the self-assessment process, **regular updates have been given to the Executive group** by the administrative lead and actions requiring resource have been discussed with the HoS and School Manager.

The self-assessment process was launched with a SAT away day, supported by School funds, where initial data and trends were discussed, first actions identified, and the future strategy of the SAT defined.

Since our last application, the SAT, EDI Committee and Executive Group have undertaken a wide variety of **department-wide consultations** which include:

- **Collecting and analysing data** on all staff and students.
- We use data from five surveys

- Two University-organised **Staff surveys** in 2015 and 2018.
- Two SAT-organised **EDI surveys** in 2017 and 2018. These cover all staff groups and PhD students.

Year	Staff Response Rate	PhD Student Response Rate
2017	42%	14%
2018	48%	16%

- A (much shorter) **student EDI survey** organised in 2017 by student EDI-reps and the EDI chair. Response rate: 20%.

We always show the latest survey results; note that not all questions from 2017 were repeated in 2018. Answers to our EDI surveys are often given on a scale 1(disagree) – 5(agree); when we report these as a single number, it is the percentage that answered 3 or more.

- We held anonymous **one to one interviews and group feedback sessions** around themes identified in the 2015 staff survey with Red Door Consulting – note that we do not have any information on uptake by gender or staff group as these sessions were designed to be **completely anonymous**.

On 1 April 2018 the University introduced a new Integrated Finance and HR system. This caused major disruption and as a consequence, **the University was unable to provide 2017/18 data** in time for this submission.

In addition to the mechanisms provided by the EDI group, students can raise EDI issues in termly **Student-Staff Forums** (which are also attended by the EDI chair).

This application is the result of a **collaborative effort** of **all** SAT members, who each had responsibility for writing and editing specific sections of the document.

The submission and action plan have been circulated within the School for comment and have been signed off by the executive group.

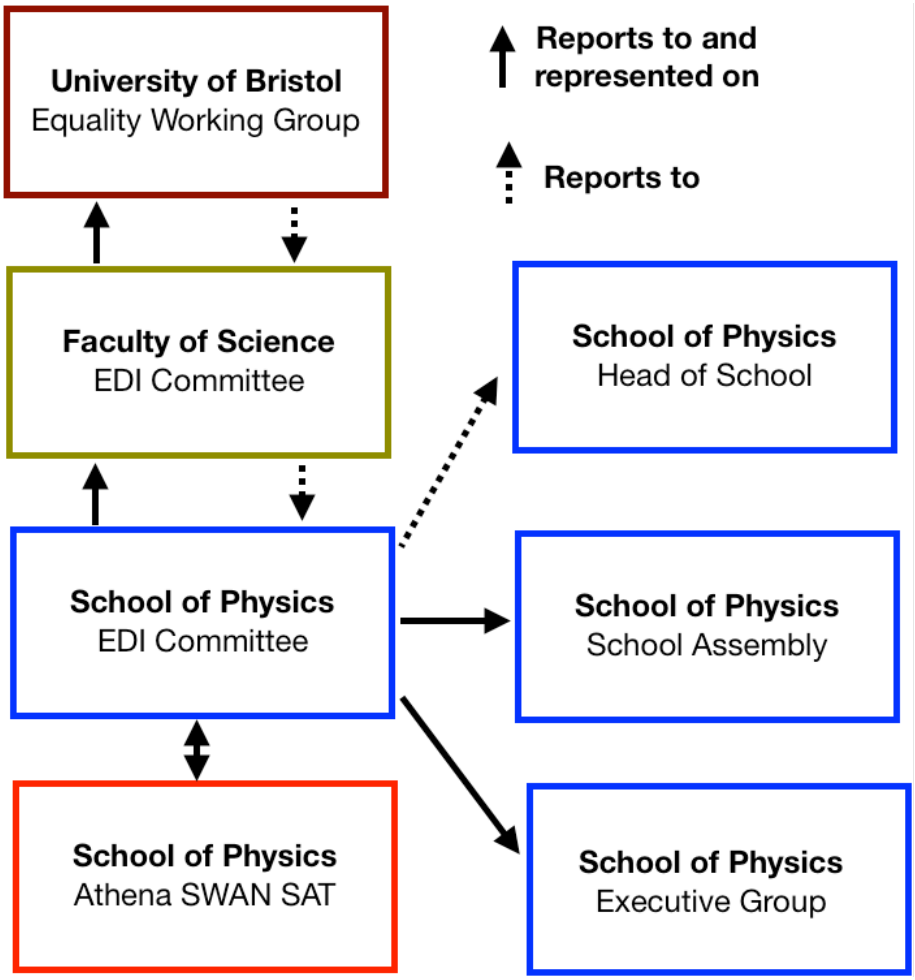


Figure 4: EDI and SAT within the School's committee structure

iii) Plans for the future of the self-assessment team

The SAT will continue to meet termly to **monitor the progress of the action plan** and organise its implementation. These meetings will be scheduled in August each year, along with all other School committees. The spring term meeting will be longer and include a review of the annual data provided by the University, bi-annual EDI survey data, and a formal review of the bronze action plan. A report will be given to School assembly each term on the progress of actions and to notify of any new actions added by the SAT during the yearly review. This will ensure that the **implementation of the action plan is visible** to School staff and students. The SAT will conduct an EDI survey bi-annually to ensure progress on actions can be monitored effectively, but without causing survey fatigue **(Action G1)**. Undergraduate Students will be included in the survey **(Action G2).** The SAT will also begin work on the School's application for **Institute of Physics Juno Champion Status**, later in 2019, with a view to applying for an **Athena SWAN Silver Award** thereafter. Professor Rademacker will continue as chair for at least another academic year, to ensure continuity. The SAT will **plan** the **handover process** to the next chair. A proportion of the SAT will be replaced each year to ensure both continuity and that a wide range of staff contribute.

As a direct result of the Self-Assessment process, the School will provide from from 1st August 2019 a **budget of £1500 per year** to the EDI/SAT chair to support EDI-related activities, such as seminars, social events and Women in the School of Physics events.

Wordcount Section 3: 979

4. A PICTURE OF THE DEPARTMENT

4.1. Student data

(i) Numbers of men and women on access or foundation courses

	2014/15			2015/16			2016/17			Average rate enrolled/ applied	
	M	F	% F	M	F	% F	M	F	% F	M	F
Applied	8	1	11%	11	2	15%	22	2	8%	37%	40%
Enrolled	3	1	25%	4	0	0%	8	1	11%		

Table 2: Students enrolled on "Physics with a Preliminary Year of Study"

"Physics with a Preliminary Year of Study" provides a foundation year for students with a weaker science background, from which they progress to standard BSc/MSci courses. All applicants are interviewed. Success rates of male and female candidates are the same, but a smaller proportion of women apply than to our standard courses (Table 2, Table 3, Figure 8). We will investigate this (**Action S1**).

We do not have part-time undergraduate programmes. However, part-time options have been offered to individuals with extenuating circumstances.

(ii) Numbers of undergraduate students by gender

Overall Student Numbers

From 2014/15 to 2016/17, our undergraduate student numbers grew by 36% (Figure 5); the proportion of female students increased from 21.4% to 25.4%, **above the national average** for physics.

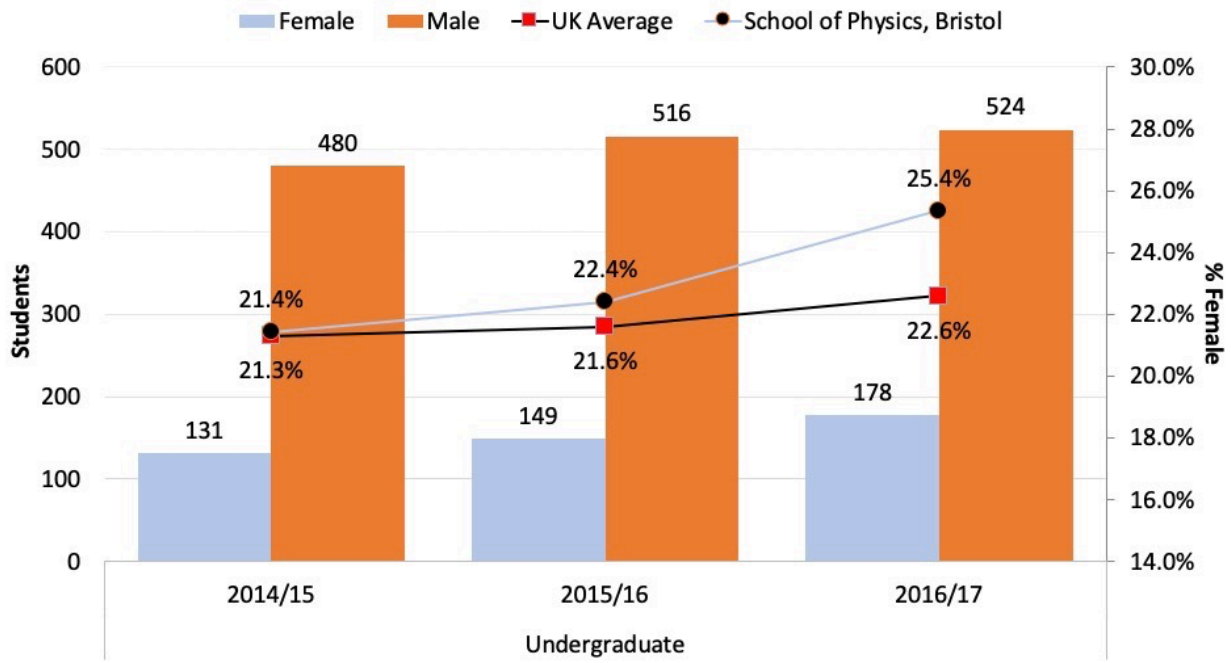
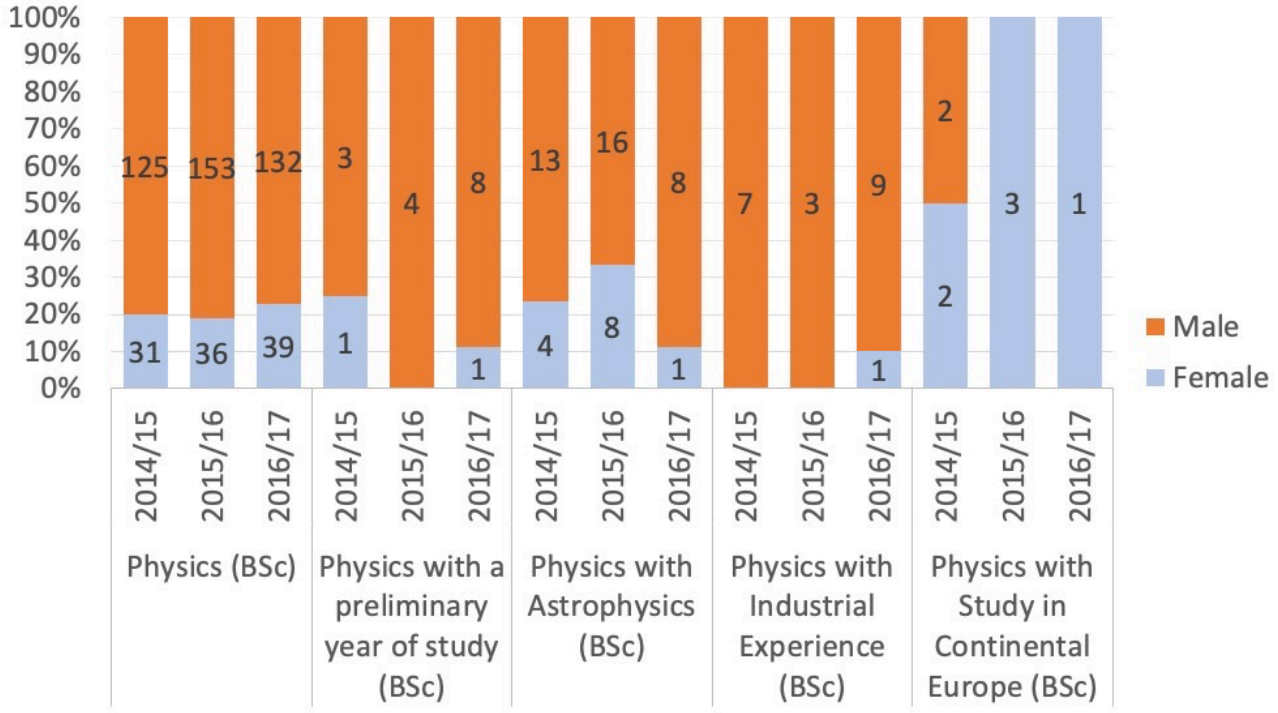


Figure 5: Percentage of female undergraduate students compared to national data for physics.

Figures 6 and 7 show the breakdown by course. All students on Physics with Industrial Experience (BSc) transferred from the MSci course; transfer rates are discussed below. Theoretical Physics (MSci) and Mathematics and Physics (MSci) have a lower proportion of women than average, Physics with Study in Continental Europe and Physics with Philosophy (BSc + MSci) have a higher proportion. While some variations reflect national trends, we will also review promotional material for all courses (**Action S2**).

(a) Number of undergraduate students on single honours BSc program



(b) Number of undergraduate students on single honours MSci programs

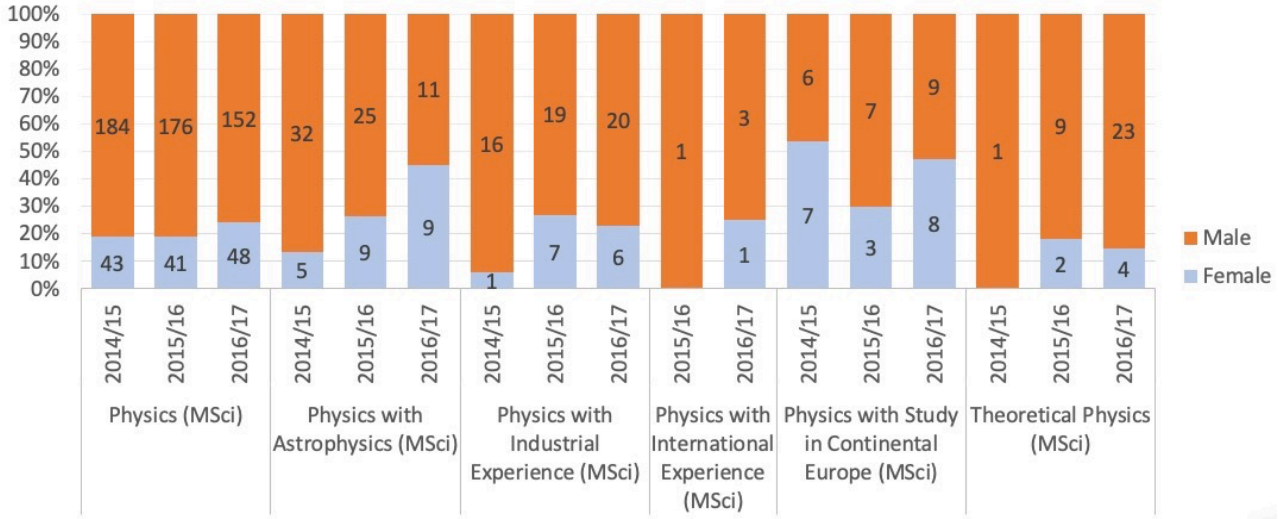
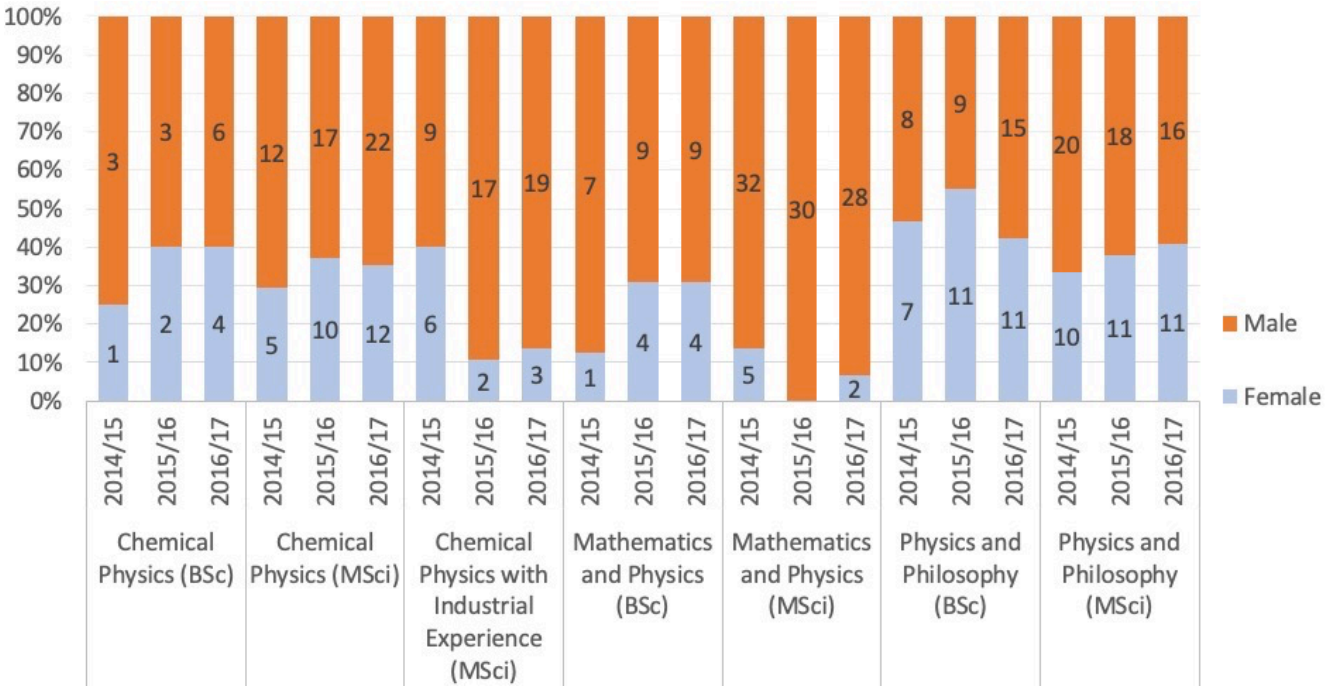


Figure 6: Number of male and female students on single honours programmes

(a) Joint honours programmes



(b) Programmes introduced in 2016/17

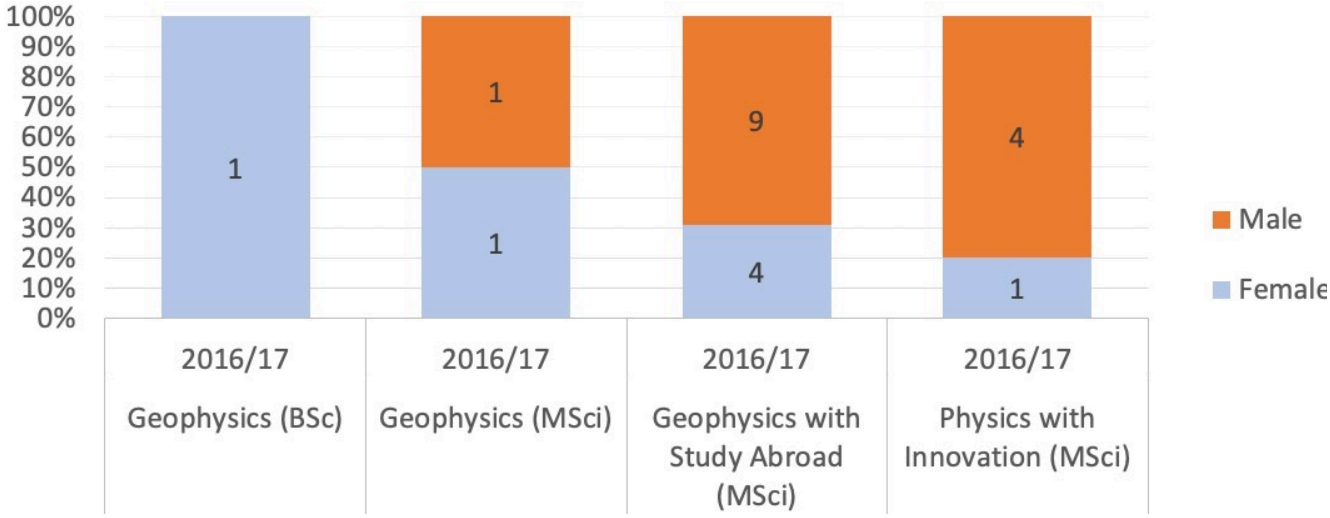


Figure 7: Number of undergraduate students on joint honours programmes

Admissions

Over the period considered, the fraction of male applicants receiving offers has increased to reach parity with female applicants (Figure 8, Table 3). As our offer-decision is **algorithmic**, this implies men and women apply on average with equivalent predicted grades.

In 2014/15, acceptance rates for women were lower than for men, but have since increased to reach parity. This follows changes to our open and visit days introduced in 2014, including:

- **Not isolating** female students in small subgroups on visit days.
- Improving **gender balance** in promotional content at these events.

Figure 8: Undergraduate applications, offers and acceptances.

Year	Gender	Applications	Offers	Acceptances	Offers/ Applications	Acceptance/ Offers	Acceptances/ Applications
	Female	390	331	44	84.9%	13.3%	11.3%
2014/15	Male	1288	986	157	76.6%	15.9%	12.2%
	% Female	23.2%	25.1%	21.9%			
	Female	349	308	47	88.3%	15.3%	13.5%
2015/16	Male	1118	945	155	84.5%	16.4%	13.9%
	% Female	23.8%	24.6%	23.3%			
	Female	456	399	61	87.5%	15.3%	13.4%
2016/17	Male	1169	1039	160	88.9%	15.4%	13.7%
	% Female	28.1%	27.7%	27.6%			
	Female	1195	1038	152	86.9%	14.6%	12.7%
Overall	Male	3575	2970	472	83.1%	15.9%	13.2%
	% Female	25.1%	25.9%	24.4%			

Table 3: Numbers and rates of undergraduate applications, offers and acceptances.

Attainment

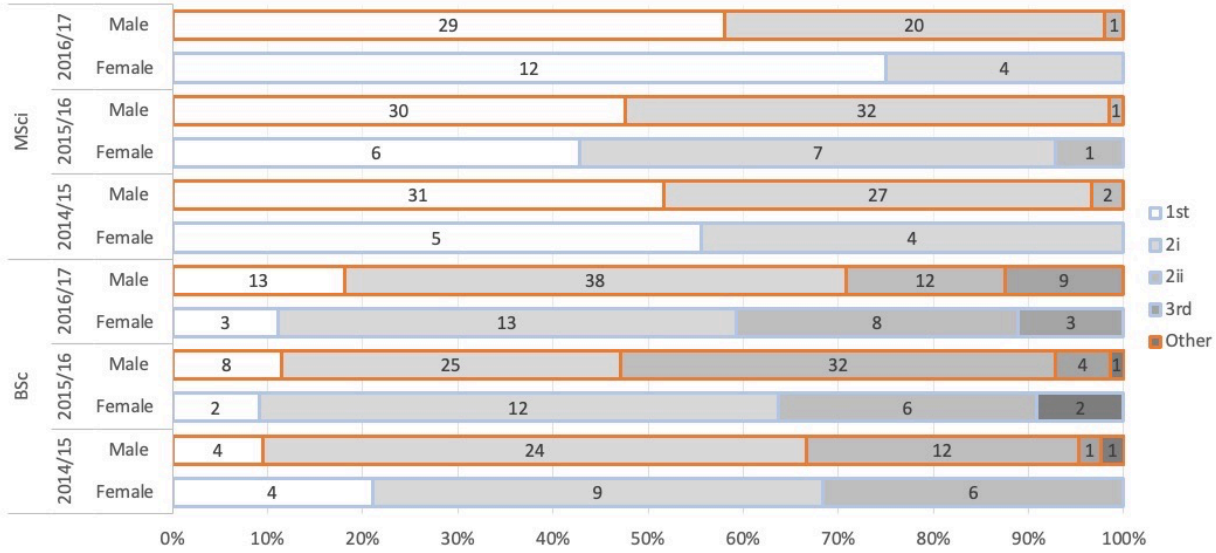


Figure 9: Undergraduate student degree classifications

year	Transfer Route	N male	N female	Transfer rate M	Transfer rate F
14/15	MSci to BSc	23	7	9%	11%
15/16	MSci to BSc	31	16	12%	22%
16/17	MSci to BSc	31	9	12%	10%
14/15	BSc to MSci	5	0	3%	0%
15/16	BSc to MSci	10	1	5%	2%
16/17	BSc to MSci	8	3	5%	5%

Table 4: Students transferring between MSci and BSc programmes – transfer rate is calculated as a fraction of total number of students (across all years) registered on the course being transferred from.

Figure 9 gives no indication of gender disparities in students' degree classifications.

MSci→BSc transfer rates (Table 4) are similar between men and women except for 2015/16, where it is higher for women. In 2016/17 it is back to parity, but we will monitor the situation to take action if a pattern emerges. The BSc→MSci rate for women has increased to equal that of men.

Year	Number of male students	Number of female students	Withdrawal rate, male students	Withdraw rate female students
14/15	4	1	3%	2%
15/16	7	1	5%	2%
16/17	11	2	7%	4%

Table 5: Students withdrawing during year 1

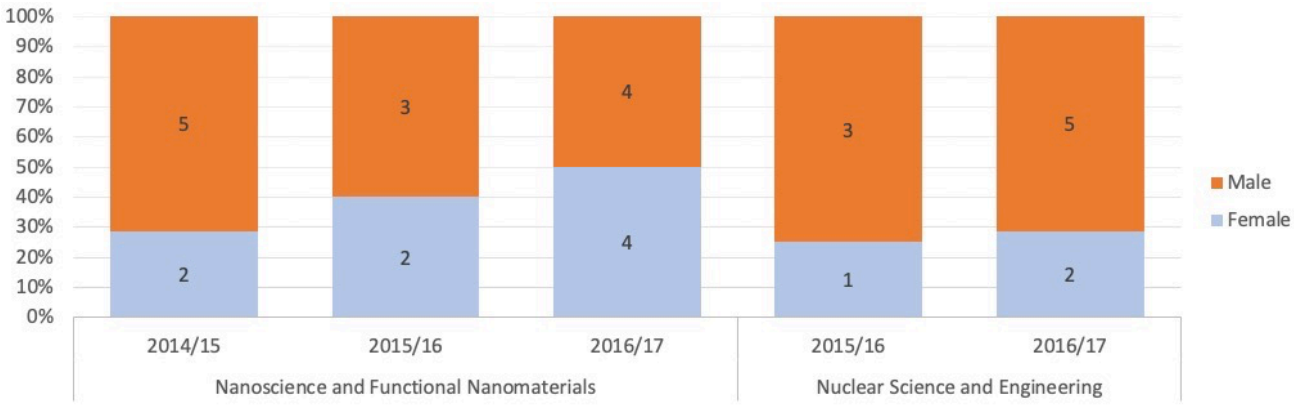


Figure 10: Number of postgraduate taught students by programme.

Withdrawal rates in year 1 have been increasing, and men are more likely to discontinue studies than women (Table 5). The School will review non-continuation data and investigate individual cases. This will inform actions to reduce non-continuation and address possible gender bias (**Action S3**).

(iii) Numbers of men and women on postgraduate taught degrees

Overall Student Numbers

Opposing national trends, Bristol has seen an increasing proportion of women in postgraduate taught (PGT) physics courses over the three years considered (Figure 11, Table 6). Averaged over that period, 35% of students on our two PGT courses were female, compared with 23% nationally.

	2014/15		2015/16		2016/17	
	Male	Female	Male	Female	Male	Female
School of Physics, University of Bristol	5	2	6	3	9	6
	71%	29%	67%	33%	60%	40%
Physics & Astronomy, UK	345	125	355	95	460	120
	73%	27%	79%	21%	79%	21%

Table 6: Total postgraduate taught students compared with national data.

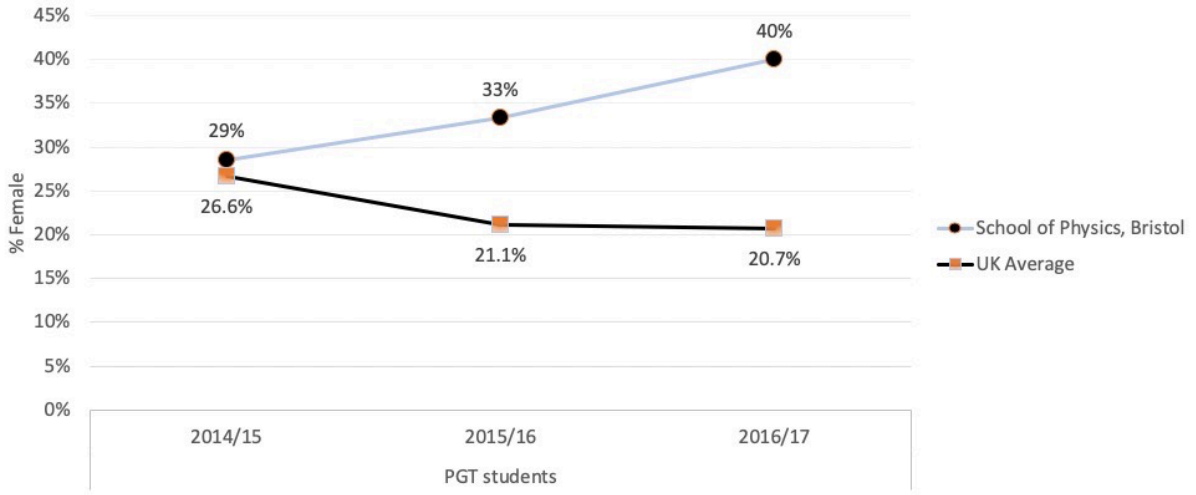


Figure 11: Percentage of female postgraduate taught students compared with national data.

Admissions

The proportion of female PGT applicants has been steady around 39 (Figure 12, Table 7); Female and male applicants are approximately equally likely to receive an offer. Acceptance rates amongst women started low with 8% in 2014/15, but quadrupled to 32% in 2016/17, while men's increased from 17% to 27%.

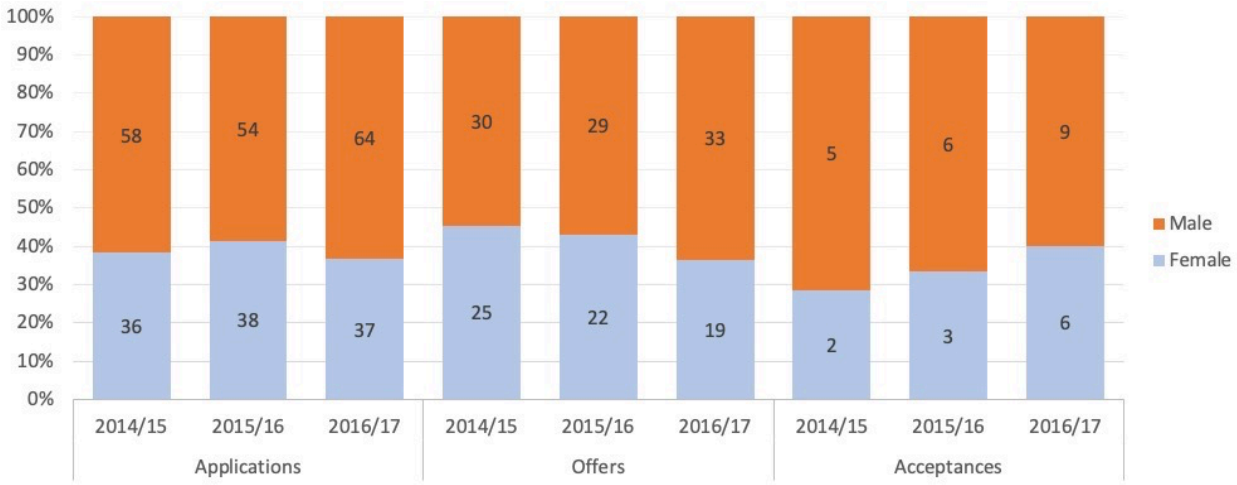


Figure 12: Applications, offers and acceptances for postgraduate taught courses.

Year	Gender	Applications	Offers	Acceptances	Offers/ Applications	Acceptance/ Offers	Acceptances/ Applications
2014/15	Female	36	25	2	69%	8%	6%
	Male	58	30	5	52%	17%	9%
	% Female	38%	46%	29%			
2015/16	Female	38	22	3	58%	14%	8%
	Male	54	29	6	54%	21%	11%
	% Female	41%	43%	33%			
2016/17	Female	37	19	6	51%	32%	16%
	Male	64	33	9	52%	27%	14%
	% Female	37%	37%	40%			
Overall	Female	111	66	11	59%	17%	10%
	Male	176	92	20	52%	22%	11%
	% Female	39%	42%	36%			

Table 7: Applications, offers and acceptances for postgraduate taught courses.

Attainment

Averaged over the three years, female students are slightly more likely to achieve the highest grade of Distinction than male students (Figure 13). With increasing student numbers, a more meaningful analysis should become possible in the future.

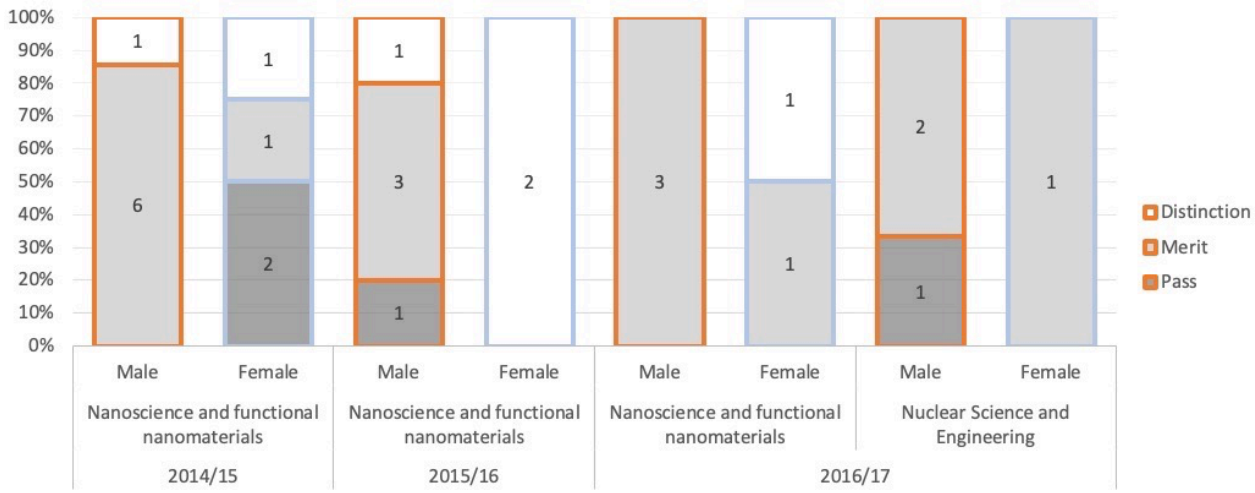


Figure 13: Number of postgraduate taught students attaining degrees.

(iv) Numbers of men and women on postgraduate research degrees

Overall Student Numbers

The School offers PGR courses within and without Centres for Doctoral Training (CDT). Averaged over the three years, 34% of PGR students were female, significantly above

the national average (Figure 15), ranging from 16% in Quantum Engineering PhD to 52% in Functional Nanomaterials PhD (Table 8, Figure 14).

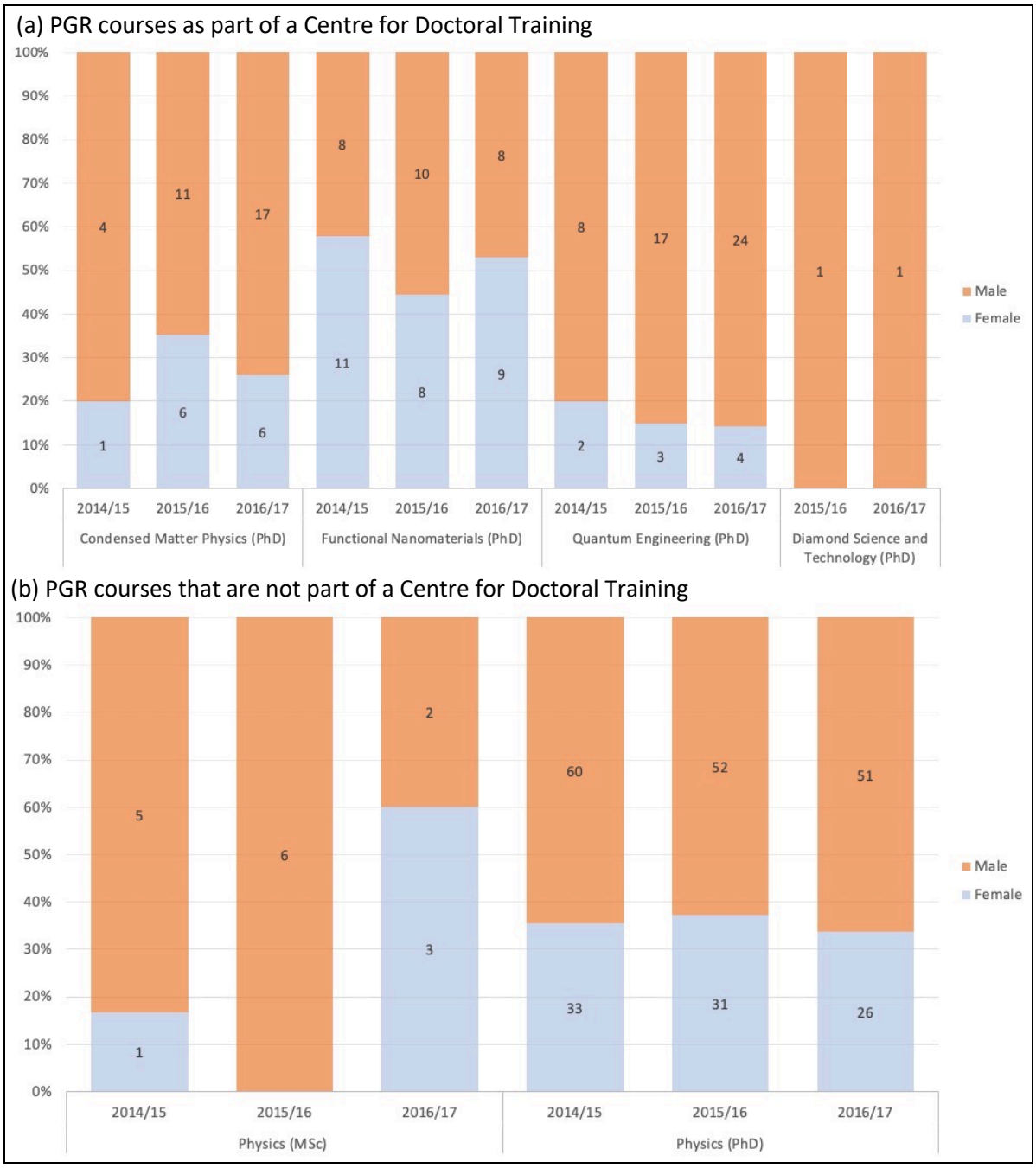


Figure 14: Number of postgraduate students in PGR courses that are (a) part of a Centre for Doctoral Training, or (b) on a "traditional" Research MSc or PhD course.

	2014/15		2015/16		2016/17	
	Male	Female	Male	Female	Male	Female
School of Physics, University of Bristol	85	48	97	48	103	48
	64	36	67%	33%	68	32
Physics & Astronomy, UK	1840	505	1890	530	1950	560
	78%	22%	78%	22%	28%	22%

Table 8: Total postgraduate research students compared to national data.

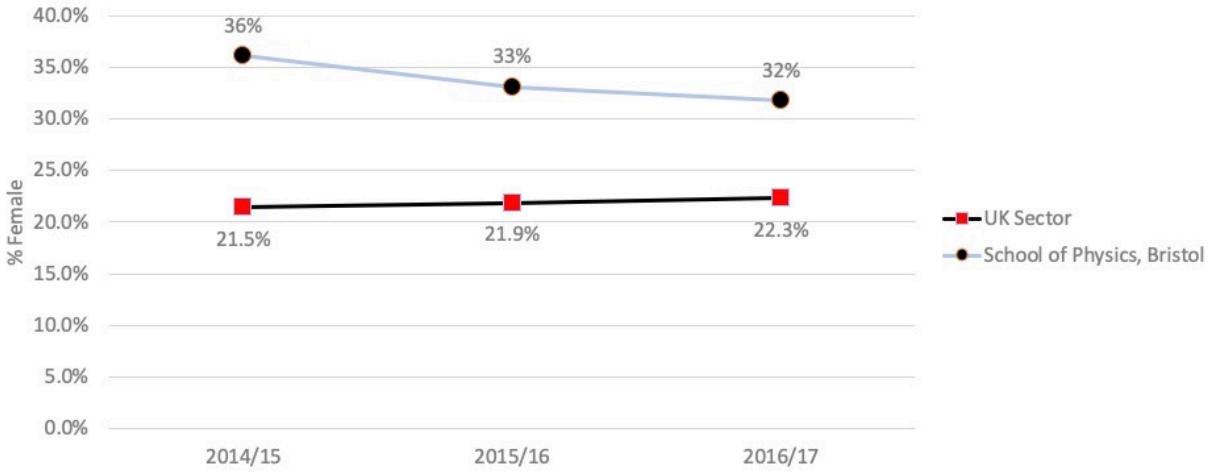


Figure 15: Percentage of female postgraduate research students compared with national data.

The proportion of female applicants has remained steady at 25% (Table 6, Figure 16). Female applicants are more likely to receive an offer (34%) than men (26%). Anecdotal evidence suggests this is due to more applications below threshold by male applicants. We will improve the recording of rejection data to investigate this **(Action S4)**. The acceptance per offer rate is the same between men and women.

The imminent changes in our research group structure provide an opportunity to review our PGR recruitment processes and share best practice between research groups **(Action S5)**.

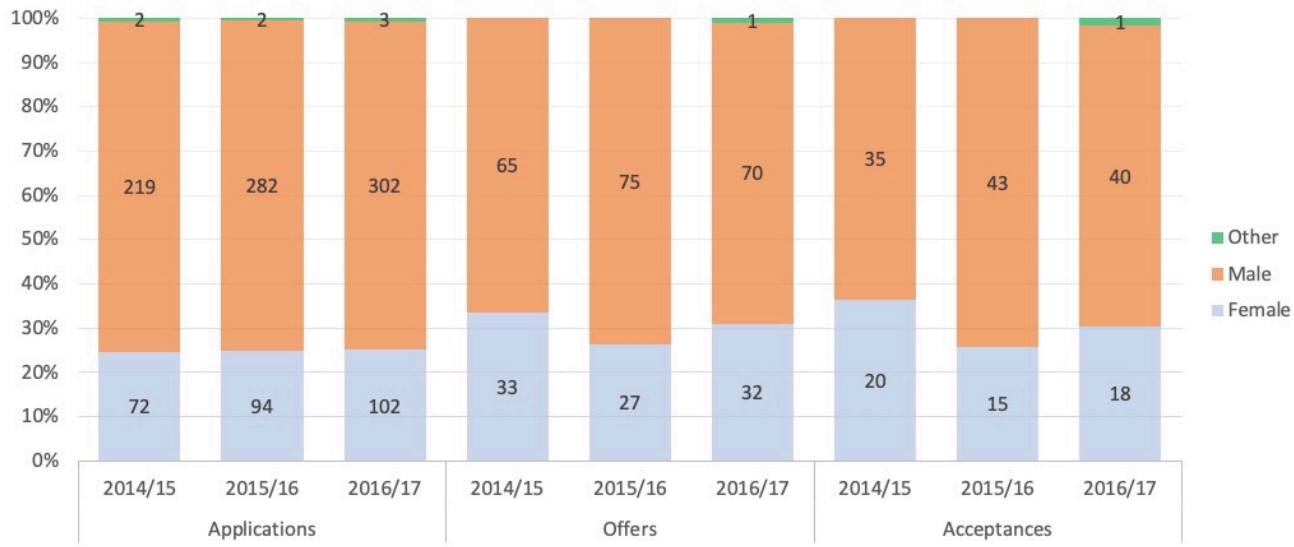


Figure 16: Numbers of postgraduate research applications, offers and acceptances.

Year	Gender	Applications	Offers	Acceptances	Offers/ Applications	Acceptance/ Offers	Acceptances/ Applications
2014/15	Female	72	33	20	45.8%	60.6%	27.8%
	Male	219	65	35	29.7%	53.8%	16.0%
	% Female	25%	34%	36%			
2015/16	Female	94	27	15	28.7%	55.6%	16.0%
	Male	282	75	43	26.6%	57.3%	15.2%
	% Female	25%	26%	26%			
2016/17	Female	102	32	18	31.4%	56.3%	17.6%
	Male	302	70	40	23.2%	57.1%	13.2%
	% Female	25%	31%	31%			
Overall	Female	268	92	53	34.3%	57.6%	19.8%
	Male	803	210	118	26.2%	56.2%	14.7%
	% Female	25%	30%	31%			

Table 5: PGR applications, offers and acceptances.

Attainment

Intake year	submitted within 4 years	submitted after 4 years	not submitted - other reasons	not submitted as ran out of time	Total	% submitted
2010/11						
Female	3	2	0	0	5	100%
Male	17	5	1	0	23	96%
2011/12						
Female	3	2	0	0	5	100%
Male	20	10	0	0	30	100%
2012/13						
Female	11	5	0	0	16	100%
Male	7	7	0	0	14	100%
2013/14						
Female	6	2	1	0	9	89%
Male	11	3	0	0	14	100%
2014/15						
Female	4	3	0	0	7	100%
Male	16	7	0	0	23	100%

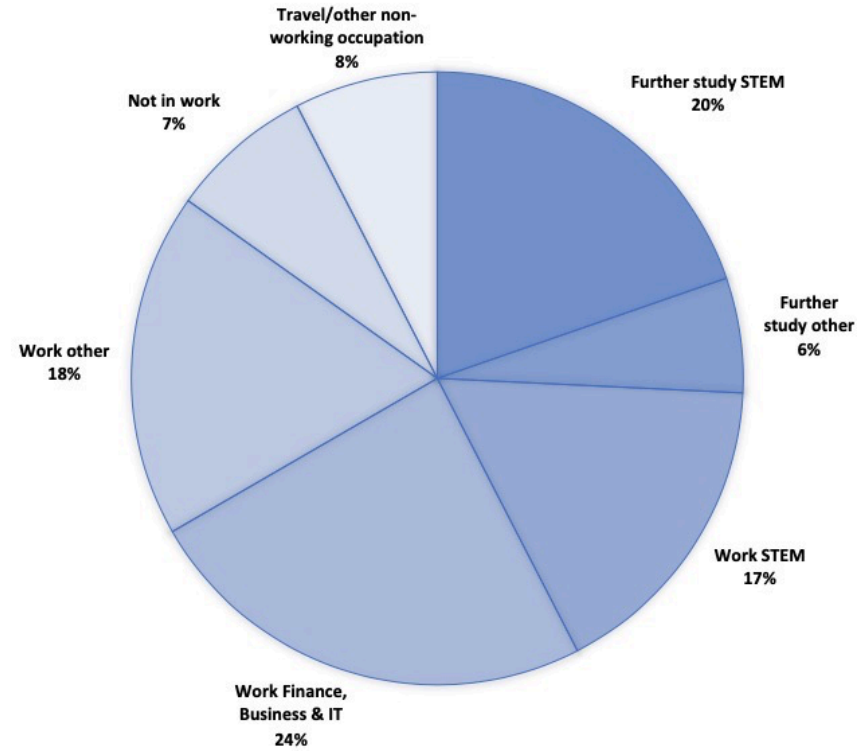
Table 9: PhD completion data for students with expected completion date 2014-2018.

Nearly all students complete their PhD successfully (Table 9). Reasons for non-completion or delay are often personal in nature - improvements in pastoral care arrangements are intended to address this **(Action S6)**.

(iii) Progression pipeline between undergraduate and postgraduate student levels

Career advice and support is built into our degree programmes though courses such as "Skills for Science" and "Skillset" that include CV reviews and mock interviews, complemented by the **Careers Service** and **support from tutors**. PGR opportunities throughout the world are advertised within the School. **School-funded summer internships** often lead students to pursue PhDs.

Figure 17 shows destinations of 297 students (230 male, 67 female) who graduated 2014/15 – 2016/17, 6 months after graduation. Female graduates are slightly more likely to work in STEM. A larger proportion of male graduates pursue further study; actions **S7, S8** are intended to address this imbalance.



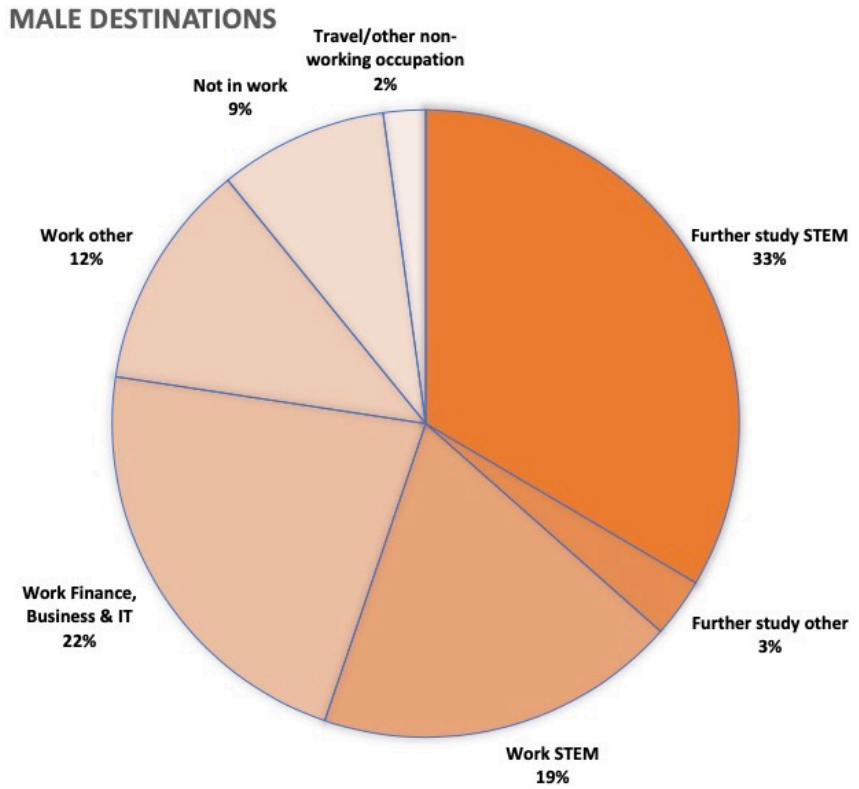


Figure 17: Destinations of Bristol Physics graduates by gender

Wordcount Section 4.1: 1183

4.2. **Academic and research staff data**

(i) Academic staff by grade, contract function and gender

Overall Data

Contract Function	Sector	2014/15		2015/16		2016/17	
		Male	Female	Male	Female	Male	Female
Research & Teaching	Bristol	38	5	40	5	40	5
		88%	12%	89%	11%	89%	11%
	National	1675	260	1660	270	1705	295
		86.6%	13.4%	86.0%	14.0%	85.3%	14.8%
Research only	Bristol	62	9	66	10	67	11
		87%	13%	87%	13%	86%	14%
	National	2065	545	2165	530	2130	500
		79.1%	20.9%	80.3%	19.7%	81.0%	19.0%
Teaching only	Bristol	2	1	3	2	4	1
		67%	33%	60%	40%	80%	20%
	National	380	145	395	150	375	165
		72.4%	27.6%	72.5%	27.5%	69.4%	30.6%
Total	**Bristol**	**102**	**15**	**109**	**17**	**111**	**17**
		87%	**13%**	**87%**	**13%**	**87%**	**13%**
	National	**4120**	**950**	**4220**	**950**	**4210**	**960**
		81.3%	**18.7%**	**81.6%**	**18.4%**	**81.4%**	**18.6%**

Table 10: Academic staff by contract function and gender compared to national data in physics & astronomy.

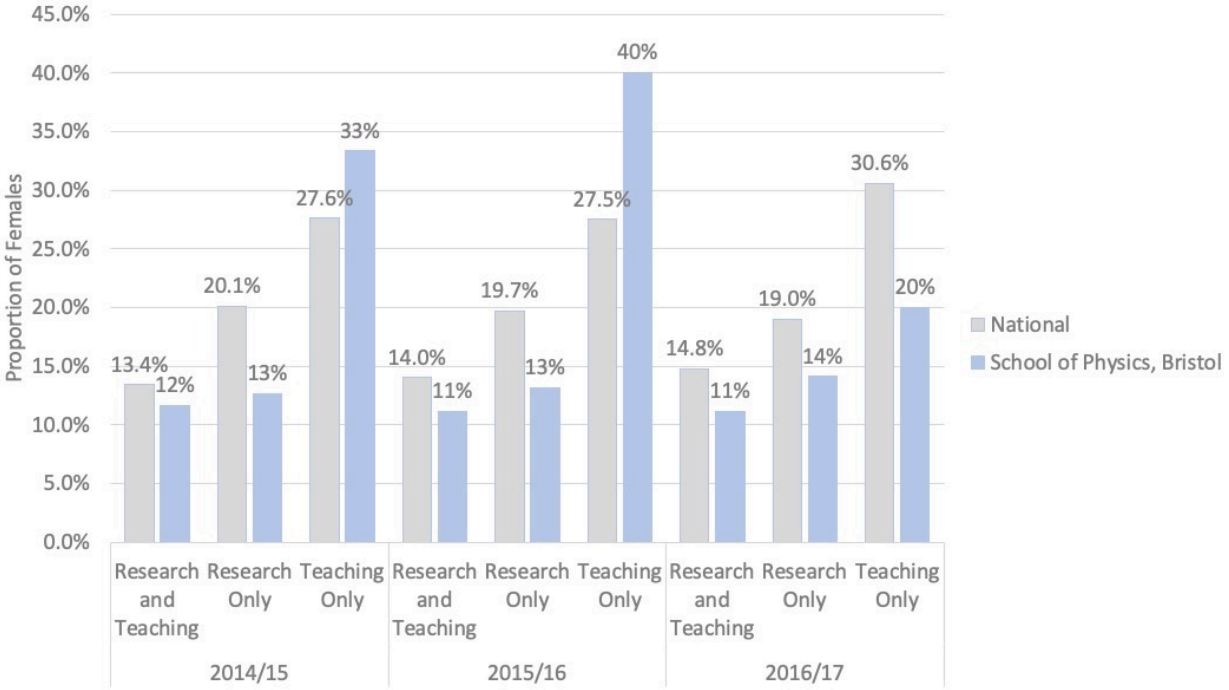


Figure 18: Percentage of female academic staff in physics and astronomy, by function.

Table 10 and Figure 18 show that the proportion of female academics is below the national average across all contract functions. This is the focus of several actions covering recruitment and progression **(A1-A4)**.

Grade	2014/15			2015/16			2016/17		
	F	M	%F	F	M	%F	F	M	%F
M	1	24	4%	1	24	4%	1	22	4%
L	2	14	13%	2	14	13%	5	14	26%
K	3	10	23%	2	11	15%	1	14	7%
J	3	20	13%	2	24	8%	1	21	5%
I	5	30	14%	10	32	24%	9	38	19%

Table 11: Academic staff at each grade (see section 2 for grade description)

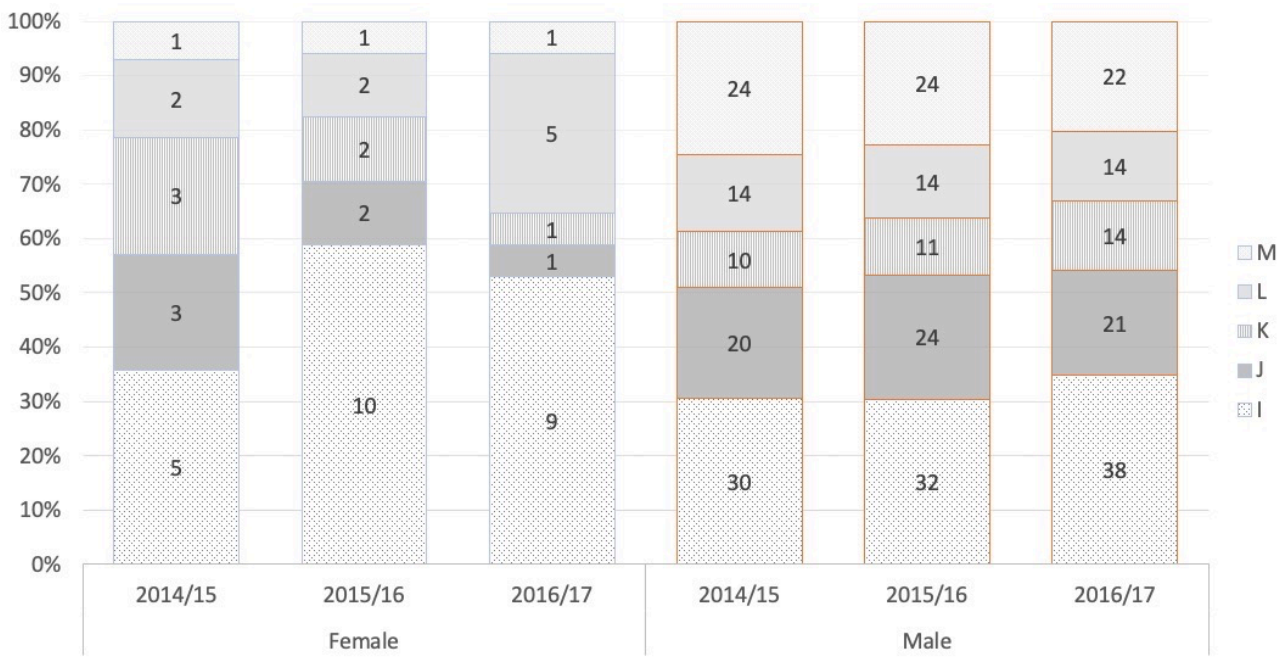


Figure 19: Proportions of academic staff at each grade

Table 11 / Figure 19 show a decrease in grade M (professorial) staff due to retirement and an increase of grade I staff due to hiring of postdocs and teaching fellows. The increase in the number of women at grade L (senior lecturer) is due to promotion.

Research+Teaching

Grade	Gender	2014/15	2015/16	2016/17
Grade M (Professor)	**Female**	1	1	1
	Male	22	21	19
	% Female	4%	5%	5%
Grade L (Reader, Senior Lecturer)	**Female**	1	1	3
	Male	11	12	13
	% Female	8%	8%	19%
Grade K (Lecturer)	**Female**	3	2	1
	Male	4	4	5
	% Female	43%	33%	17%
Grade J (Lecturer)	**Female**	0	1	0
	Male	1	3	3
	% Female	0%	25%	0%

Table 12: Pathway 1- Research+Teaching Staff by Grade and Gender

The promotion/progression of women from lecturer to senior lecturer/reader accounts for the increase in the number of women at grade L in 16/17 seen in Table 12; however, recruitment is still an issue **(Actions A3, A4).**

Research only

Grade	Gender	2014/15	2015/16	2016/17
Grade M (Professor)	**Female**	0	0	0
	Male	1	2	3
	% Female	0%	0%	0%
Grade L (Reader, Senior Research Fellow)	**Female**	0	0	1
	Male	3	2	1
	% Female	0%	0%	50%
Grade K (Research Fellow)	**Female**	0	0	0
	Male	6	6	7
	% Female	0%	0%	0%
Grade J (Senior Research Associate)	**Female**	3	1	1
	Male	18	20	17
	% Female	14%	5%	6%
Grade I (Research Associate)	**Female**	5	9	9
	Male	30	32	37
	% Female	14%	22%	20%

Table 13: Pathway 2-Research-Only Staff by Grade and Gender

Research-Only positions comprise:

(i) short-term grant-funded PDRAs (grades I & J)

(ii) long-term grant-funded research fellows (grades K&L);

(iii) core-funded professors (grade M).

The fraction of female staff on all but the lowest grade is worryingly small. This is targeted by several actions around recruitment **(Actions A3 and A4)**.

The increase in grade M staff was due to transfers from Pathway 1 (Research+Teaching). Improving the gender balance at this grade requires improvements in recruitment and effective promotion (**Actions A1-A3, A5-A6**).

Teaching only

Grade	Gender	2014/15	2015/16	2016/17
Grade M (Professor)	**Female**	0	0	0
	Male	1	1	0
	% Female	0	0	N/A
Grade L (Reader, Senior Teaching Fellow)	**Female**	1	1	1
	Male	0	0	0
	% Female	100	100	100
Grade K (Teaching Fellow)	**Female**	0	0	0
	Male	0	1	2
	% Female	0	0	0
Grade J (Senior Teaching Associate)	**Female**	0	0	0
	Male	1	1	1
	% Female	0	0	0
Grade I (Teaching Associate)	**Female**	0	1	0
	Male	0	0	1
	% Female	0	100	0

Table 14: Pathway 3-Teaching-Only Staff by Grade and Gender

The proportion of women amongst Teaching-Only staff has been below the national average (Table 14). This increased in 17/18 to 44% due to several new hires.

The pipeline

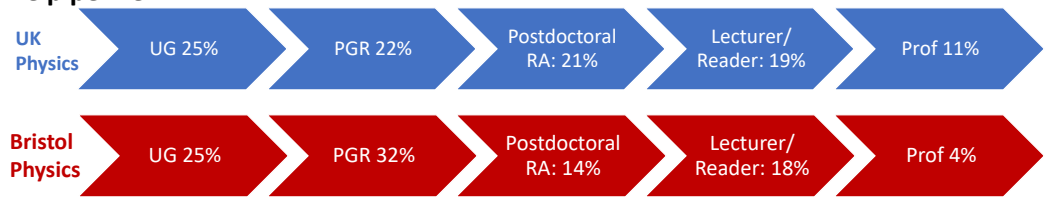


Figure 20: Fraction of women from undergraduate to professor in Bristol (2016/17) compared to national data (Juno data brief 2017). UoB researcher is defined as grade I, J; lecturer/reader as grade K, L. For national data, lecturer/reader are all staff not classified as PDRAs or professors.

Figure 20 shows that Bristol Physics recruits a larger proportion of female PGR students than the national average; this proportion drops dramatically for postdoctoral researchers. Since transitions into postdoctoral or lectureship positions typically involve a change of employer, this needs to be addressed through improved recruitment **(Actions A1-A4)**.

The pipeline shows another substantial fall in female representation at professor level. Since most professors are promoted from within the university, this is a promotion issue, addressed in **Action A7**.

(ii) Academic and research staff by grade on fixed-term, open-ended/permanent and zero-hour contracts by gender

Year	Gender	Research Only			Teaching & Research			Teaching Only		
		Fixed Term	Open Ended	% Fixed Term	Fixed Term	Open Ended	% Fixed Term	Fixed Term	Open Ended	% Fixed Term
2014/15	Female	8	1	89%	0	5	0%	0	1	0%
	Male	34	28	56%	2	36	5%	1	1	50%
2015/16	Female	10	0	100%	0	5	0%	1	1	50%
	Male	41	25	62%	1	39	3%	1	2	33%
2016/17	Female	8	3	73%	0	5	0%	0	1	0%
	Male	27	40	40%	1	39	3%	0	4	0%

Table 15: Number of Staff on Fixed-Term and Open-Ended Contracts by Career Path

The School employs no staff on zero-hour contracts.

Over recent years, the School has been **moving away from issuing fixed-term contracts** (FTC). Table 15 shows that the use of FTC is indeed going down. They are most prevalent in research staff, where women are more likely to be on fixed-term contracts than men. We will investigate the cause of this imbalance **(A8)**.

Academic staff on the Research+Teaching and Teaching-Only pathways are almost all on open-ended contracts.

Staff reaching the end of their funding period can enter the centralised University Redeployment Pool. If any appropriate positions become available candidates are approached to apply and are given first refusal before the vacancy is advertised.

Often, non-core funded Research-Only staff on open-ended contracts are named on new grant applications to provide follow-up funding.

(ii) Academic leavers by grade and gender and full/part-time status

Career Path		2014/15		2015/16		2016/17	
		F	M	F	M	F	M
Teaching & Research	Staff	5	38	5	40	5	40
	Leavers	1	3	0	2	0	2
	Leaving Rate	20%	8%	0	5%	0	5%
Research only	Staff	9	62	10	66	11	67
	Leavers	3	10	4	8	9	14
	Leaving Rate	33%	16%	40%	12%	82%	21%
Teaching only	Staff	1	2	2	3	1	4
	Leavers	0	0	1	0	0	1
	Leaving Rate	0	0	50%	0	0	25%

Table 16: Leavers and Leaving Rates for Staff by Career Path and Gender.

Contract Type	Gender		2014/15	2015/16	2016/17
Fixed Term	Female	Staff	8	11	8
		Leavers	3	5	7
		Leaving Rate	38%	45%	88%
	Male	Staff	37	43	28
		Leavers	9	6	7
		Leaving Rate	24%	14%	25%
Open Ended	Female	Staff	7	6	9
		Leavers	1	0	2
		Leaving Rate	14%	0%	22%
	Male	Staff	65	66	83
		Leavers	4	4	10
		Leaving Rate	6%	6%	12%

Table 17: Leavers and Leaving Rates for Staff on by Contract Type and Gender

Tables 16 and 17 show that the leaving rate on Research+Teaching and Teaching-Only pathways is small. The largest turnover is in Research-Only staff. The leaving rate of women in the Research-Only category is consistently higher than that of men, consistent with the larger proportion of female postdocs on FTC. Our exit data are sparse, so it is difficult to analyse why staff leave (Action **A9**). A survey of PIs indicates that nearly all leavers do so because their funding ends. Almost all postdoc leavers stay in academia or move to STEM industry. The Bristol Physics LinkedIn group helps potential leavers connect with relevant contacts elsewhere in academia and industry, and helps us collect long-term destination data.

Wordcount Section 4.2: 755

5. SUPPORTING AND ADVANCING WOMEN'S CAREERS

5.1. Key career transition points: academic staff

(i) Recruitment

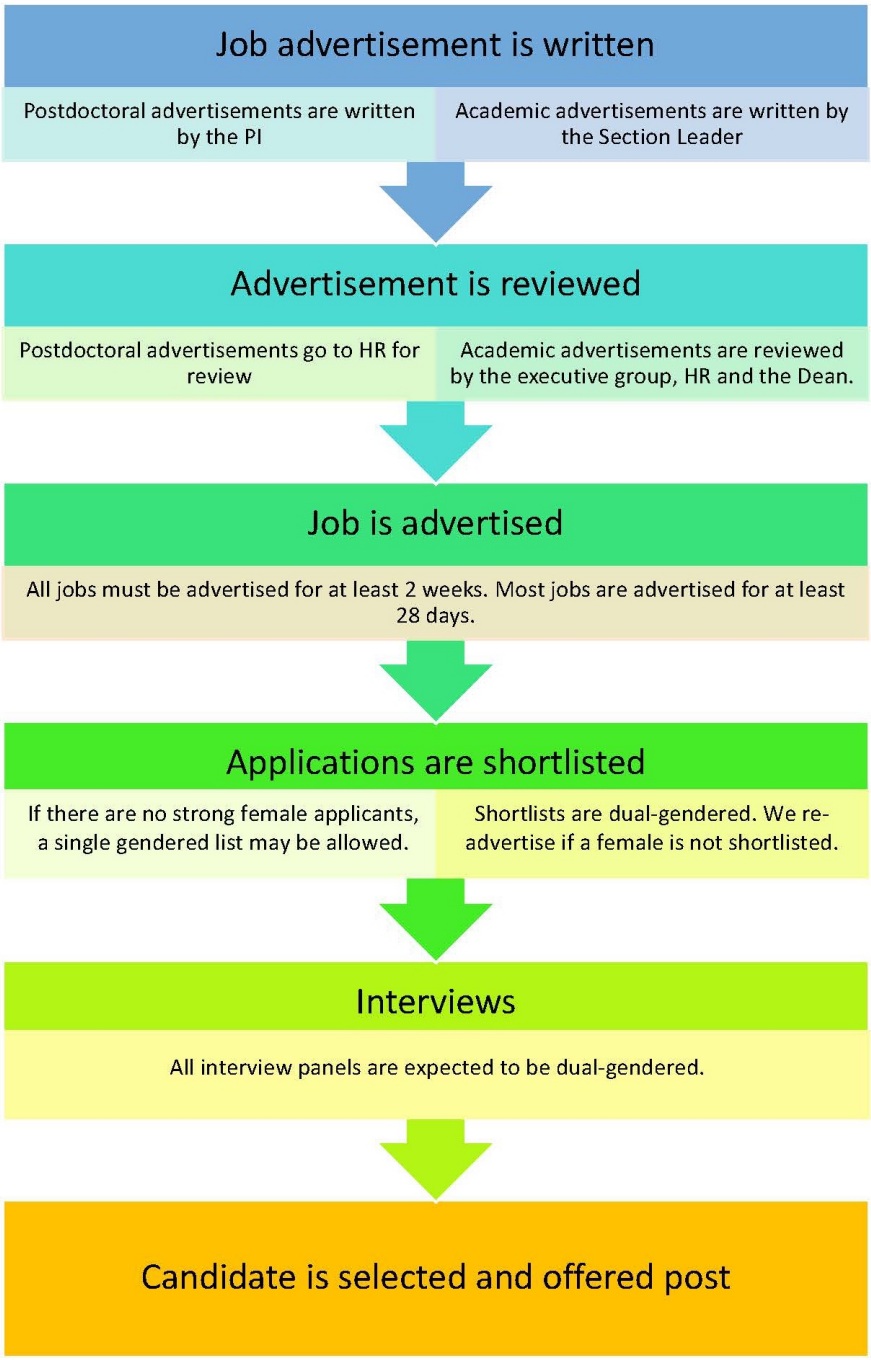


Figure 21: Recruitment process

The recruitment process is summarised in Figure 21. Job adverts and descriptions are reviewed to **avoid gender biased phrasing** by a member of the EDI committee, and by

Human Resources (HR). All adverts include a statement **encouraging applications** from women and under-represented groups.

If shortlists are single-gendered, we re-advertise, with rare exceptions for postdoctoral positions tied to time-sensitive external funding; this will be tightened with **A4**. Interview panels cannot be single-gendered. Panel members are expected to have completed the University's ***Successful Recruitment and Selection*** **training**, which includes **unconscious bias training**. This is strictly enforced for panel chairs but not always for members, which will improve with Action **A2**.

Interviews are scheduled over a single day to minimise inconvenience for candidates. For our recent Head of School interviews, we offered **childcare provision** to candidates, which will become our usual practice (**Action C1**).

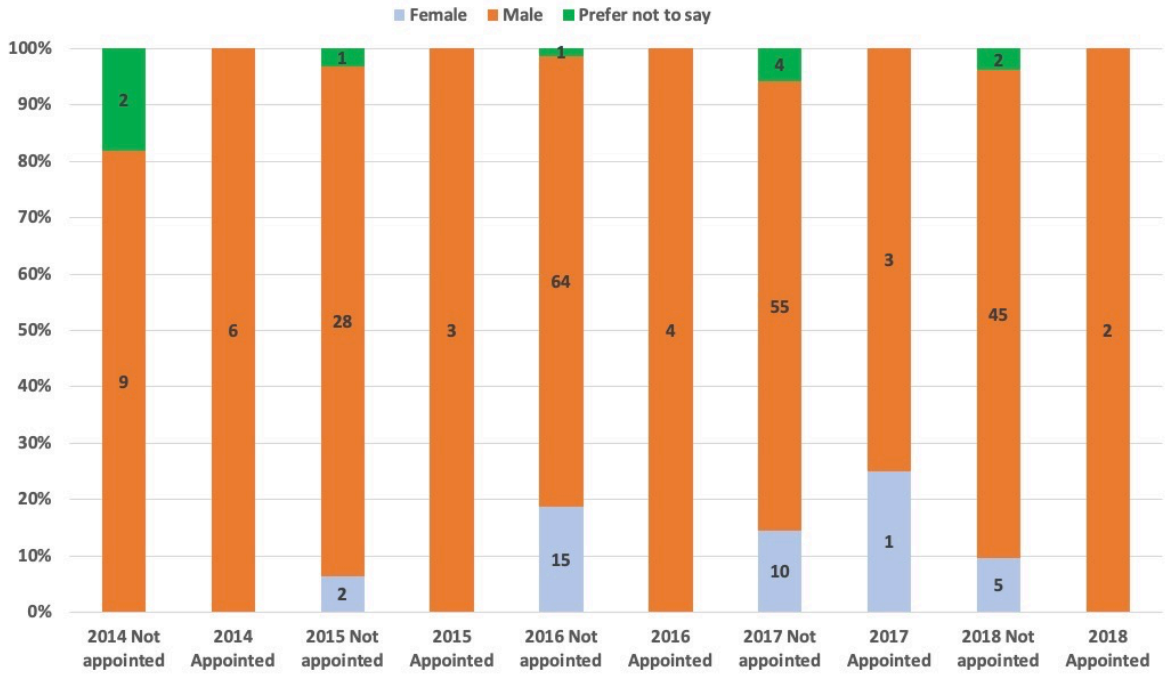


Figure 22: Recruitment data 2014-18 for Research+Teaching positions

Year	Gender	Applications	Appointments	Appointments/ Applications
2014	Female	0	0	-----
	Male	15	6	40%
	Prefer not to say	2	0	0%
	% Female	0%	0%	
2015	Female	2	0	0%
	Male	31	3	10%
	Prefer not to say	1	0	0%
	% Female	6%	0%	
2016	Female	15	0	0%
	Male	68	4	6%
	Prefer not to say	1	0	0%
	% Female	18%	0%	
2017	Female	11	1	9%
	Male	58	3	5%
	Prefer not to say	4	0	0%
	% Female	15%	25%	
2018	Female	5	0	0%
	Male	47	2	4%
	Prefer not to say	2	0	0%
	% Female	9%	0%	
Overall	Female	33	1	3%
	Male	219	18	8%
	Prefer not to say	10	0	0%
	% Female	13%	19%	

Table 18: Recruitment data 2014-18 for research-and-teaching positions.

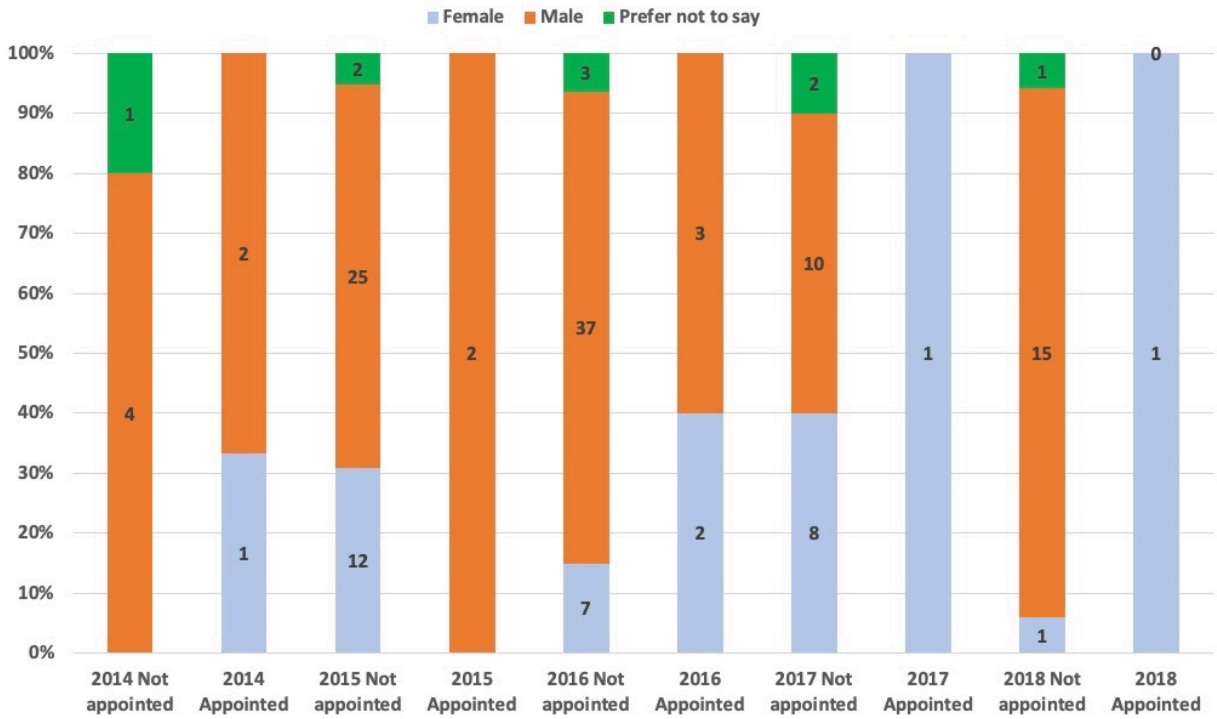


Figure 23: Recruitment data 2014-18 for Teaching-Only positions

Year	Gender	Applications	Appointments	Appointments/ Applications
2014	Female	1	1	100%
	Male	6	2	33%
	Prefer not to say	1	0	0%
	% Female	13%	33%	
2015	Female	12	0	0%
	Male	27	2	7%
	Prefer not to say	2	0	0%
	% Female	29%	0%	
2016	Female	9	2	22%
	Male	40	3	8%
	Prefer not to say	3	0	0%
	% Female	17%	40%	
2017	Female	9	1	11%
	Male	10	0	0%
	Prefer not to say	2	0	0%
	% Female	43%	100%	
2018	Female	2	1	50%

	Male	15	0	0%
	Prefer not to say	1	0	0%
	% Female	11%	100%	
Overall	Female	33	5	15%
	Male	98	7	7%
	Prefer not to say	9	0	0%
	% Female	24%	19%	

Table 19: Recruitment data 2014-18 for Teaching-Only positions

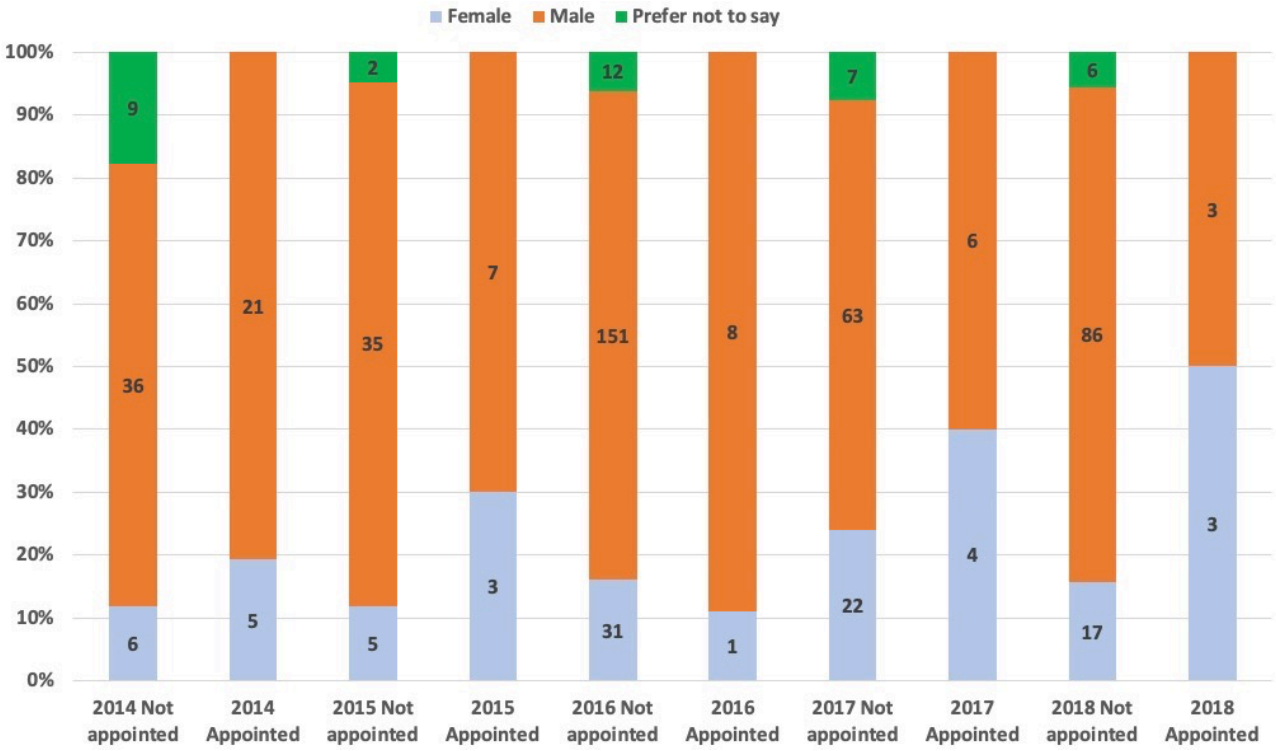


Figure 24: Recruitment data 2014-18 for Research-Only positions

Year	Gender	Applications	Appointments	Appointments/ Applications
2014	Female	11	5	45%
	Male	57	21	37%
	Prefer not to say	9	0	0%
	% Female	14%	19%	
2015	Female	6	3	50%
	Male	42	7	17%

	Prefer not to say	2	0	0%
	% Female	12%	30%	
2016	Female	32	1	3%
	Male	159	8	5%
	Prefer not to say	12	0	0%
	% Female	16%	11%	
2017	Female	26	4	15%
	Male	69	6	9%
	Prefer not to say	7	0	0%
	% Female	25%	40%	
2018	Female	20	3	15%
	Male	89	3	3%
	Prefer not to say	6	0	0%
	% Female	17%	50%	
Overall	Female	95	16	17%
	Male	416	45	11%
	Prefer not to say	36	0	0%
	% Female	17%	26%	

Table 20: Recruitment data 2014-18 for Research-Only positions.

Role	Gender	Shortlisted	Appointments	Appointments/ Shortlisted
Pathway 1 (Teaching and Research)	Female	11	2	18%
	Male	42	10	24%
	% Female	21%	17%	
Pathway 3 (Teaching)	Female	13	3	23%
	Male	17	5	29%
	% Female	43%	38%	
Overall	Female	24	5	21%
	Male	59	15	25%
	% Female	29%	25%	

Table 21: Shortlisting data for 2015/16 – 2017/18 academic years for Research+Teaching and Teaching-Only positions

The 0% success rate of those who answered "Prefer not to say" is an artefact of how data are recorded. Once employed, HR record an employee as either male or female (this practice is being challenged by us, we managed to change it for one non-binary colleague).

Recruitment data are shown in Figures 22-24 and Tables 18-21. Due to a processing error, HR did not capture accurate shortlisting data for several years. We were able to reconstruct this from internal records for Research+Teaching and Teaching-Only

positions. We will work with HR to ensure the systems are reporting as needed (**Action C2**).

Overall, the proportion of female applicants **matches the proportion of women in these roles nationally** (17% in Research+Teaching or Teaching-Only; 19% for Research-Only).

For all positions, the appointment/application ratio is slightly higher for women, consistent with research that finds men are more likely to apply for jobs where they do not fully match the job description.

For Research+Teaching and Teaching-Only positions, shortlisted men were slightly more likely to be appointed than women (Table 21). Action **A2** will address the effect of unconscious bias on this process.

Key to increasing the proportion of women in postdoctoral and lecturer roles will be an increase in applications from women. We will

- Improve the quality of information about the School and its support for women's careers in the job description (**A1**)
- Improve unconscious bias training for panel members (**A2**)
- Increase the number of applications from under-represented groups by approaching potential candidates directly (**A3**)
- Require evidence that every effort has been made to ensure gender balance on shortlists for Research-Only roles; give guidance of what effort is required (**A4**).

(ii) Induction

Induction begins before arrival, with welcome emails to prepare new staff for their first day. Upon arrival, the process includes an induction meeting with the line manager, and essential training, including a module on EDI.

In 2018, we introduced an induction checklist, completed with the line manager and monitored by our Executive team. We have a **100% positive response rate** for the induction survey, also introduced in 2018, which allows us to identify concerns and **provide support** from the beginning.

The initial service review is a structured interview with the line manager. It is mandatory and takes place within the first 6-12 months. It provides another checkpoint to identify problems and **offer support**. The outcome is centrally recorded, and the process cannot be completed unless the induction has been completed.

Junior Lecturers are assigned a mentor upon arrival, following the 2017 EDI survey that identified the need for more individual support. Mentors receive guidance; a mentoring course is also available. The programme has been **well received by both mentors and mentees** and will be rolled out to all staff (**Action C3**).

In the new workload model, new staff's **workload** will be **reduced** by 500, 200, and 100 hours in their 1st, 2nd, and 3rd year. New staff can apply for School **start-up funds** to kick-start their research.

The School hosts a variety of events that encourages both social and scientific integration across all groups; this encourages **staff to feel part of the School**.

(iii) Promotion

Figure 3 (Section 2) gives an overview of the career paths and movements between academic roles at the University. Key transition points are progression to Senior Lecturer, and promotion to Reader or Professor. The University expects all lecturers to eventually *progress* to Senior Lecturer, while no such expectation exists for the *promotion* to Reader or Professor. All eligible staff can submit an application, which is evaluated at Faculty/University level.

The promotions criteria include research, teaching and **citizenship**. The focus on ***quality* of work over *quantity*** helps to reduce bias against candidates who must work compressed hours. The application form also asks candidates to **highlight equality issues/individual circumstances** such as career breaks.

The annual progression/promotion process is advertised via schoolwide email and on the University's web pages. While 60% of staff answering the 2018 Physics EDI survey felt well-informed about career progression paths, 20% did not; a similar proportion did not feel that promotion and progression process was fair, transparent and based on merit. Actions **A6 & A7** are intended to address these issues.

The School's Advisory Group for Progression and Promotion (SAGPP, 3 men, 2 women), **identifies, encourages** and **supports** suitable candidates, and provides feedback on all applications prior to submission. This **proactive approach** was introduced since our last Athena SWAN award and champions those who are reluctant to put themselves forward – more often women than men. We believe this has been instrumental in the **increase of senior female staff** in the School.

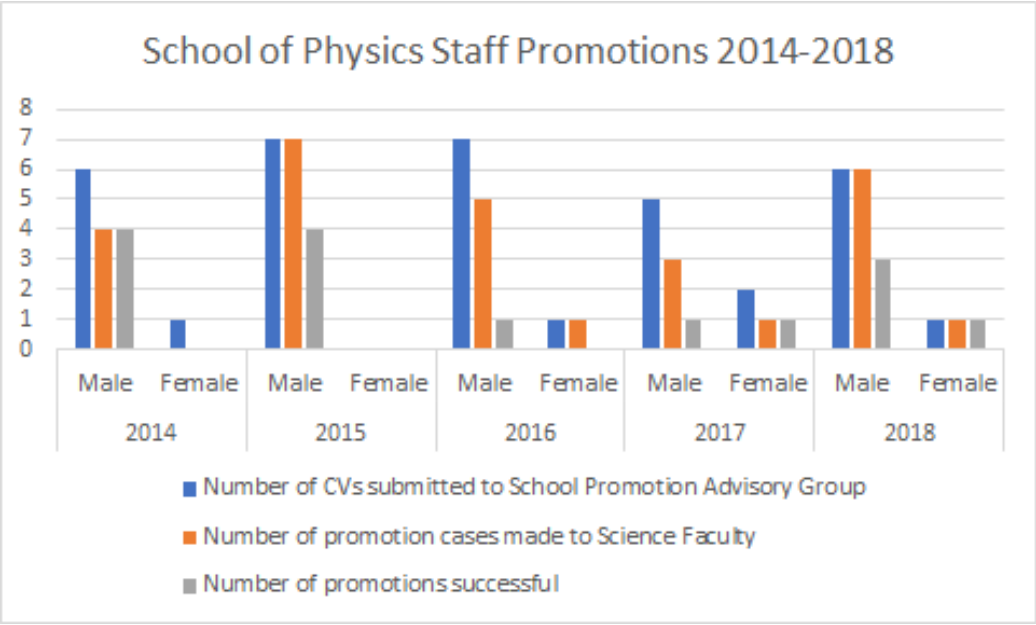


Figure 25: School of Physics, promotions

Year	Gender	Eligible (Grade J/K/L)	Submitted (School)	Submitted (Faculty)	Promotions	Submitted (Faculty) /Submitted (School)	Promotions/ Submitted (Faculty)
2014/15	Female	8	1	0	0	0%	0%
	Male	44	6	4	4	67%	100%
	% Female	15%	14%	0%	0%		
2015/16	Female	6	0	0	0	0%	0%
	Male	49	7	7	4	100%	57%
	% Female	11%	0%	0%	0%		
2016/17	Female	7	1	1	0	100%	0%
	Male	49	7	5	1	71%	20%
	% Female	13%	13%	17%	0%		
2017/18	Female	8	2	1	1	50%	100%
	Male	57	5	3	1	60%	33%
	% Female	12%	29%	25%	50%		
2018/19	Female	8	1	1	1	100%	100%
	Male	57	6	6	3	100%	50%
	% Female	12%	14%	14%	25%		
Overall	Female	N/A	5	3	2	60%	67%
	Male	N/A	31	25	13	81%	52%
	% Female	N/A	14%	11%	13%		

Figure 26: School of Physics, promotions compared with an estimate of eligible staff

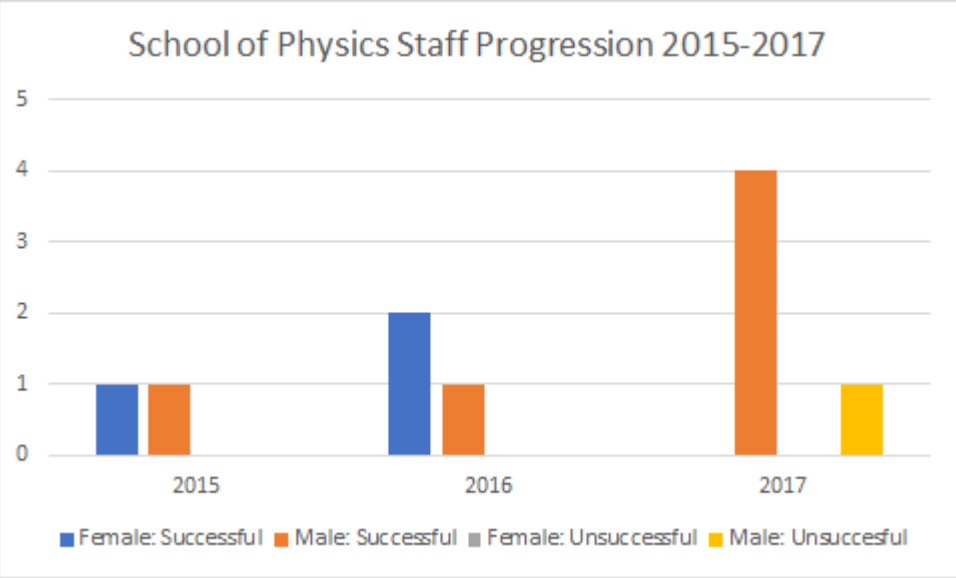


Figure 27: Progression to senior lecturer (or equivalent)

The statistics for promotions (Figure 25) show a small number of female applicants consistent with the small number of female staff in eligible positions (Figure 26). The

success rate is consistent between genders (67%±11% for female, 52%±5% for male applicants).

During the same period, 3 women and 7 men applied for progression to senior lecturer (Figure 27). All female applicants were successful, raising the percentage of women in senior lecturer roles from 14% (2014) to 36% (2018). This sets a **positive trajectory to promote more women to professorial roles.**

(iv) Department submissions to the Research Excellence Framework (REF)

RAE2008 gender analysis (taken from PIMS)						REF2014 gender analysis (taken from PIMS)				
PHYS	Submitted	Not submitted	Eligible pool	% submission		PHYS	Submitted	Not submitted	Eligible pool	% submission
Female	3	0	3	100.0%		Female	5	1	6	83.3%
Male	46	1	47	97.9%		Male	49	1	50	98.0%
Total	**49**	**1**	**50**	**98.0%**		**Total**	**54**	**2**	**56**	**96.4%**

Table 22: RAE & REF data

We submit nearly all eligible staff to the RAE/REF (Table 22). The two exceptions in 2014 were senior staff members (1 female, 1 male) near retirement with established careers but a very small number of eligible papers.

Wordcount Section 5.1: 1254

5.3. Career development: academic staff

(i) Training

CREATE (Cultivating Research and Teaching Excellence) is the University's **professional development scheme for academics**. CREATE is compulsory for academic staff in teaching roles. In 2017/18, 7 male, 4 female staff enrolled. From 2019, time spent on CREATE will be accounted for in the Workload Model.

Most training is funded by the School and organised by the University's staff development team. Staff are **kept informed of training opportunities** via regular email bulletins from the School and central teams.

Most staff who answered the 2018 School EDI survey felt they were offered training to help further their career. However, 20% of male academics did not feel that way, compared to 0% of female academics. This is reflected in the higher uptake of training by female staff (Table 10). **Action C4,** to collect feedback on training more systematically, should help target training opportunities to staff and reduce the number of male staff who feel they are not offered relevant training.

Academic Year	No. of staff completed	M	F	% of staff completed	M*	F*
2017/18	40	30	10	31%	28%	45%

Table 23: Training Attendance by gender, for staff from the School of Physics.

Event category / Event title	M	F	Grand Total
CREATE Scheme	7	4	11
Academic Personal Tutoring	2	3	5
Acad. Staff Development leadership programmes Q&A session	1	0	1
Academic Staff Review and Development	1	0	1
Assessment	5	1	6
Beginning Python	1	0	1
Bristol Senior Leaders - Days 1&2	1	0	1
Business Engagement and Research Impact	1	0	1
Creating Purposeful Presentations	2	0	2
Developing Your Research Career Strategy	3	1	4
Encouraging a Positive Culture of Research Integrity?	0	1	1
Evaluating Teaching	1	1	2
External Examining Project	0	1	1
Feedback	1	2	3
File sharing and collaboration in Office 365	1	0	1
Fire Warden Refresher Training	2	1	3
Handling Difficult Conversations	1	0	1
How to be a Productivity Ninja	1	0	1
How to Peer Review Research Manuscripts for Journals	1	0	1
How to Prepare a Good Research Bid: Science and Engineering	1	0	1
Interview Confidence	2	0	2
Introduction to the Scholarship of Teaching and Learning (SoTL)	0	1	1
Keeping your research project on track	1	0	1
Lecturing	2	2	2
Lost in Translation: Leadership and Communications	1	0	1
Managing Staff in an Academic Context: Effective Delegation	1	1	2
Managing Your Own Time & Effectiveness	3	1	4
Men's Allyship Workshop	2	0	2
Mental Health First Aid	3	2	5
MyERP: Introduction for Budget Holders and Line Managers	0	1	1
MyERP: Purchasing Card Reconciliation	1	0	1
MyERP: Reports Workshop for Budget Holders and Line Managers	3	1	4
MyERP: Requisitions	1	0	1
Networking with Purpose	0	1	1
Peer to Peer Mentoring	2	0	2
Radiation Protection for Users of UNSEALED Sources	1	0	1
Research Professionals' Network - Communicating our Research	1	0	1
Research Supervision	4	0	4
Research-Teaching Interface	4	1	5
Small Group Teaching	0	1	1
Staff Welcome Fair	3	1	4
Strategies for Managing Performance	0	1	1
Student Learning and Student Diversity	1	2	3
Successful Recruitment and Selection	0	3	3

Teaching Bites - Personal development planning	0	1	1
Teaching@Bristol for Research Staff: Small Group Teaching	2	0	2
TEL (Technology Enhanced Learning) Essentials	2	0	2
The Balanced Academic	1	1	2
The Exchange Conference for Technical Leaders	0	1	1
Understanding Research Governance and Ethics	0	1	1
Unit and Programme Design	3	0	3
Writers' Retreat	1	0	1
Grand Total	**78**	**38**	**116**

Female Majority / Male Majority / Equal Attendance

Table 24: School of Physics Academic Staff Training Attendance 2017/18

To address the under-representation of women in leadership positions, the School identifies, encourages and supports female staff to participate in **career development training and coaching**. In 2019, three applications to the **Aurora women-only leadership** development programme were supported by the School. One was successful. The other applicants were invited to join the University's **new Female Leadership Initiative** programme.

EDI training is integrated into staff induction and review. Of the 2017 EDI survey respondents, 62% had attended EDI-related training (consistent across genders); training rates were highest amongst lecturers/readers/professors (97%), and lowest amongst PhD students (29%).

In our 2018 EDI survey, 73% of respondents (86% female, 69% male) would welcome more EDI training and 83% (92% female, 81% male) wanted more training on unconscious bias. We will build on this positive attitude by providing regular in-School training on EDI issues, especially unconscious bias **(C5, C6)**. Some CDTs cover EDI during the PhD induction – we intend to expand this across the School **(C7)**.

(ii) Appraisal/development review

At the heart of the mandatory annual development review for all staff is a personal discussion with a trained reviewer (currently, usually the reviewee's line manager). The reviewee can request another reviewer. Guidance is available for reviewees.

Past achievements and future plans, including **progression/ promotion,** are discussed, **training needs and other support requirements** identified. Outcomes are recorded on an online system and followed up as agreed between reviewer and reviewee. Work-life balance is not included in the current review guidance but will be in future (**Action C8**).

Since 2018, **mandatory EDI training** has been integrated in the online part of the review process.

Academic Year	No. of staff completed	M	F	% of academic staff completed	M*	F*
2014/15	27	24	3	18%	20%	11%
2015/16	45	40	5	27%	31%	15%
2016/17	48	43	5	28%	31%	16%
2017/18	32	29	3	19%	23%	14%

Table 25: Completion rates of staff review

Table 25 shows that most academic staff do not complete the staff review and that uptake is lower amongst women. We will address this with substantial improvements to the staff review process in the School; this includes a move to a more peer-based system, where the default reviewer is not the line-manager (**Action A6**)

(iii) Support given to academic staff for career progression

The University offers a large number of **training courses for career development**, such as "*Working towards a lectureship or fellowship"*, or "*Interview confidence."* For uptake, see Table 24.

The Early Careers Forum meets regularly and provides **guidance and support** to early career academic staff. The forum discusses **promotion and progression** and gives talks on topics such as **fellowship opportunities**.

The forum's chairs (two postdocs, one junior lecturer) meet regularly with the HoS to discuss issues raised. The postdoctoral chairs also represent the School's postdocs and research fellows in the University Research Committee.

The efficacy of the group was proven when they proposed an initiative that led to most grant-funded staff being employed on **open-ended contracts**.

The School collects staff destination data through a survey sent after the staff member has left; the response rate is very low. We will in the future collect this information before staff leave (**A6**) and collect additional data using the Bristol Physics LinkedIn group (**C9**).

(iv) Support given to students (at any level) for academic career progression

Undergraduate Students

Career development is a key topic in regular (at least termly) meetings between students and their tutor, especially in years 3 and 4.

We arrange tutorial groups wherever possible to avoid female students being alone in an otherwise all-male group. While students can't currently request a female tutor, we plan to change this (**C10**).

Students create **Personal Development Plans** (PDP) with guidance from their tutors, in order to tailor skill sets for the next stage in their career.

Several career-focused training modules are available to students, including CV writing, presentation skills, interview practice, group work and 'Skillsets', where students experience **teamworking exercises typical of graduate recruitment schemes**. PhD opportunities within the University and elsewhere are regularly advertised in posters and during lectures.

	2014/15 – 2016/17					
Most Important Activity	**Total**	**No. Male respondents**	**No. Female respondents**	**% Male**	**% Female**	**% of Total**
Further study STEM	90	77	13	33%	20%	30%
Further study Other	11	7	4	3%	6%	4%
Work STEM	54	43	11	19%	17%	18%
Work Finance, Business, IT	67	51	16	22%	24%	23%
Work Other	39	27	12	12%	18%	13%
Not in work	25	20	5	9%	7.5%	8%
Travel/Other non-work	10	5	5	2%	7.5%	3%
Grand Total	**296**	**230**	**66**			

Table 26: Physics undergraduate destinations

Table 26 shows undergraduate destinations from 2014 – 2016. Amongst those who completed the survey, a similar proportion of men and women work in STEM, but fewer women continue to further study in STEM. We will update guidance for 2nd, 3rd, and 4th year career-focused tutorials so tutors ensure (especially female) students don't miss out on further study because they lack of awareness or underestimate their capabilities **(S7)**. This will be complemented by Careers in STEM seminars where Bristol Physics alumni talk about their STEM careers and answer questions **(S8)**.

Postgraduate Students

In addition to their supervisor, who is the primary contact in matters of career development, each postgraduate student has **two academics assigned** in the context of the Annual Progress Monitoring (APM) process, which monitors students' progress in research as well as **career development and skills training**.

A key element in postgraduate career development is the opportunity to present research at conferences. Nearly all PG students have this opportunity. In our CDTs (where this is recorded), in 2017/18, 69 posters and talks were presented by 30 students (12 female, 18 male), at national and international conferences.

	PGT		PGR		
Event category / Event title	**M**	**F**	**M**	**F**	**Grand Total**
Careers fairs	5	2	18	10	35
Choosing and researching your career	2	1	4	6	13
CVs, covering letters and application forms	3	0	2	7	12
Diversity issues	0	0	0	2	2
Employer presentations and promotional activities	0	0	13	7	20
Enterprise	0	0	3	0	3
Faculty event recognised by Bristol PLUS Award	0	0	1	3	4
For international students	0	0	0	1	1
For postgraduate researchers	0	0	26	19	45
Intensive Skills Activity	1	0	0	0	1
Interviews and selection processes	2	0	2	7	11
Introductory talks	0	0	0	1	1
Job seeking and networking	0	1	1	4	6
Outstanding Award Introduction Workshop	0	0	1	0	1
PLUS Award Final Review	0	0	1	1	2
PLUS Award Introduction Workshop	0	0	4	2	6
Skills development	1	0	0	0	1
Grand Total	**14**	**4**	**76**	**70**	**164**

Female Majority Attendance

Equal Attendance

Male Majority Attendance

Table 27: School of Physics Postgraduate Student Events Attendance 2017/18

PG students say about Career Service events (attendance by gender given in Table 27), that they provided them with useful resources, and clear and concise information on **how to achieve career goals**. The main criticism is that workshops were not long enough.

As part of CDT training, students attend workshops covering skills such as **giving presentations, networking, interview and CV writing, project management and social media**. Many sessions are available to non-CDT students, and advertised via email.

The Bristol Doctoral College provides a wide range of skills training for all PG students and send **regular bulletins with links to the course menus**. In the 2017/18 academic year, 345 Postgraduate students (214 female, 131 male) across the University attended these training programmes, though it is not possible to identify students by individual School.

97% of PhD students answering the 2018 EDI survey **felt they had opportunities to develop transferable skills** beyond that of their research, to help them prepare for future employment.

PG students are **made aware of suitable job opportunities**, both internal and external, in frequent email from the School, research groups, and supervisors. Only 5% of PhD students who responded to the 2017 EDI survey felt they did not receive "adequate support in applying for jobs, such as information on available opportunities, CV writing and mock interviews."

	2014/15 – 2016/17					
Most Important Activity	**Total**	**No. Male respondents**	**No. Female respondents**	**% Male**	**% Female**	**% of Total**
Further study STEM	5	4	1	9%	6%	8%
Work STEM	43	31	12	69%	75%	70%
Work Finance, Business, IT	8	7	1	16%	6%	13%
Work Other	1	1	0	2%	0%	2%
Not in work	4	2	2	4%	12%	7%
Grand Total	**61**	**45**	**16**			

Table 28: Postgraduate researchers' destinations
Note: "Not in work" includes travel and other non-work activities as well as unemployment

Table 28 shows PGR destinations from 2014 – 2016. Most PGR graduates now work in STEM, with a slightly higher proportion amongst women. The percentage of women not in work is also slightly higher. Although not statistically significant at present, we will carefully monitor this.

(vi) Support offered to those applying for research grant applications

The University's Research and Enterprise Development (RED) team works with academics to **support funding applications**, ranging from advertising opportunities, to support with application writing, and mock interview panels.

Senior researchers regularly assist junior colleagues with grant and fellowship applications; this is recognised in progression and promotion applications. The School's Research Initiator scheme provides **funding for new initiatives,** to prepare the ground for future grant applications.

Early career researchers can be named on grants, and often are. Researchers on time-limited contracts cannot be PI on grants that would extend their contract. The Early Career Scientists group is lobbying the University to find ways around this limitation.

Number Applications Submitted				Applications per staff		… per staff at grade K or higher	
Year	Total	Male	Female	Male	Female	Male	Female
2015/16	107	96	11	0.91	0.65	2.0	2.2
2016/17	156	143	13	1.31	0.76	2.9	1.9

Successful Applications				Success rate		
Year	Total	Male	Female	Total	Male	Female
2015/16	34	32	2	31%	33%	18%
2016/17	33	32	2	21%	22%	15%

Value applied for				Value per staff		… per staff at grade K or higher	
Year	Total	Male	Female	Male	Female	Male	Female
2015/16	£27M	£26M	£1.5M	£248k	£88k	£531k	£300k
2016/17	£29M	£28M	£1.5M	£257k	£88k	£554k	£215k

Funds received				Received/applied for		
Year	Total	Male	Female	Total	Male	Female
2015/16	£11M	£10M	£184k	38%	40%	12%
2016/17	£5.6M	£5.6M	£13k	19%	20%	1%

Table 29: Funding applications and success rates

2015-2017, the School submitted 263 funding applications (no earlier data is available). Table 29 shows that women were less likely than men to submit applications, their applications less likely to be funded, and if funded, they received less money. Most high-value funding schemes are accessible to senior staff only, and nearly all applications in the above statistics were submitted by senior staff (grade K or higher), where the proportion of men is particularly high. These observations suggest two actions: support early career researchers more effectively with funding/fellowship applications (**C11)** and work with RED to address the remaining gender imbalance (**C12**).

Wordcount Section 5.3: 1545

5.5. **Flexible working and managing career breaks**

(i) Cover and support for maternity and adoption leave: before leave

As soon as pregnancy is communicated, a meeting is scheduled with the School Manager to discuss arrangements in preparation for and during leave. Pregnancy-specific risks (e.g. radiation) are assessed; office furniture is updated where appropriate (e.g. new chairs, footrests).

This is arranged by the School's Deputy Technical Manager, who, encouraged by the School, recently introduced the role of **Maternity, Paternity and Adoption Advisor**, which is yet to be formalised (**F1**).

Figure 28: Poster advertising our new Maternity, Paternity and Adoption Advisory service.

A poster campaign (Figure 28) was launched to increase awareness and uptake of this new service, and laboratory signage was updated to warn of spaces that harbour specific dangers to pregnant women.

The University's Maternity and Adoption provisions and pay substantially exceed legal requirements. The University also provides **maternity and paternity coaching**.

The University and School **fully support taking of paid time off work** to attend appointments for antenatal care and adoption appointments. Interviews suggest staff feel supported.

Comments have been **overwhelmingly positive** and indicated that the School and Line Managers are **highly supportive** in this respect.

"I was encouraged to apply for a promotion when pregnant and was subsequently offered the job, which I took up a couple of weeks before going on maternity leave. The fact that I was pregnant was not an issue whatsoever." [redacted]

"I was a little nervous about my pregnancy in the early days because I had only been in my role for 2 weeks before I fell pregnant, but my team have been extremely understanding and accommodating, and they are willing to be flexible when I return." [redacted]

The Faculty of Engineering is discussing with our School Maternity Paternity and Adoption Advisor a possible implementation of the School's approach within their Faculty.

(ii) Cover and support for maternity and adoption leave: during leave

For Professional Services staff, cover for long-term leave is usually provided as a fixed-term contract. This is not always for practical academic staff due to the specificity of their role. In this case, cover for PhD supervision and other duties is provided by members of the School; arrangements are made in conjunction with the HoS.

Staff on parental leave can choose if and how to be contacted by the University. Most **stay in touch informally** and the School makes every attempt to support this.

The University supports up to 10 Keeping in Touch (KIT) days, which are **voluntary and arranged by mutual agreement**. These have been used for a wide variety of purposes, for example attending Away Days.

(iii) Cover and support for maternity and adoption leave: returning to work

Prior to their return, staff meet with the School Manager to plan **the reintegration process**. The School Maternity, Paternity and Adoption Advisor supports the process.

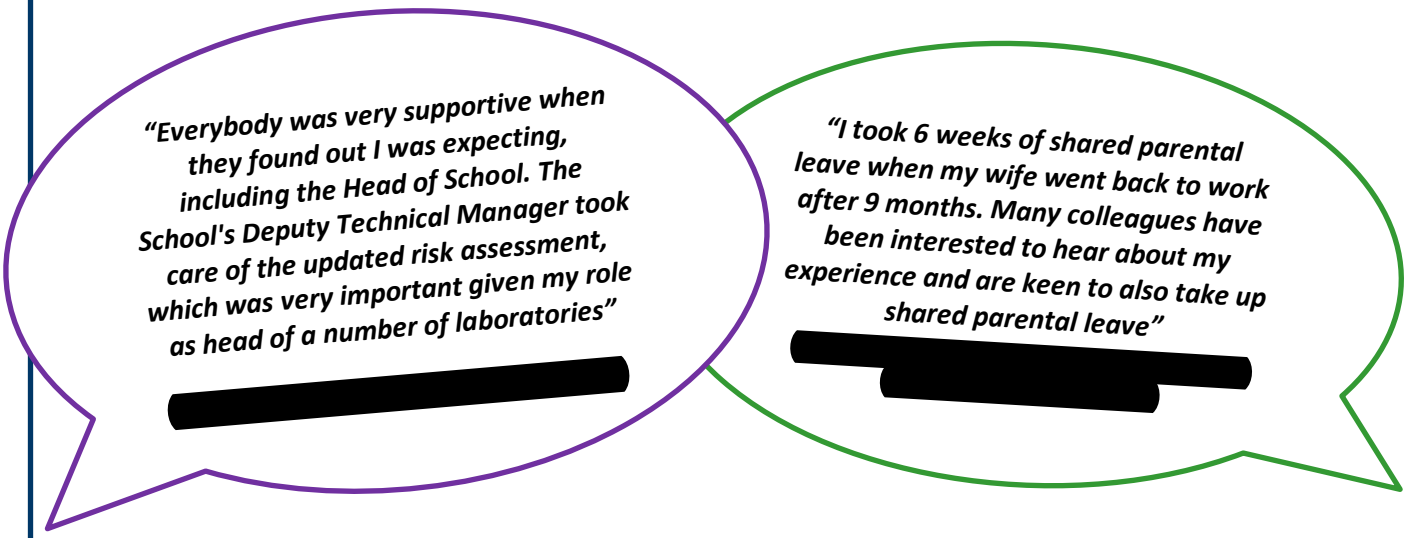
The School supports formal and informal **flexible working arrangements**, and temporary moving to part-time work where desired and feasible. Professional services staff also often **phase their return** using accrued annual leave.

Returning academics get a **reduced workload**. This practice will be formalised using the new workload model. Additionally, through the **Returning Carers Scheme,** staff can apply for £10k to support their return to research, e.g. to fund a teaching replacement.

An office has been prepared to facilitate expressing milk. Fitted with a small fridge, thoroughly cleaned, with a new comfortable chair, it offers a private, safe, welcoming environment.

For academic staff on fixed term contracts, the normal practice in the School is to **extend contracts** by the amount of time spent on leave, in line with EPSRC UKRI rules.

The University operates a subsidised nursery between 8am and 6pm. It is located on campus and University staff and students take **priority for places**. The Faculty of Science allows **reimbursement of travel-related childcare costs** from the School budget.



(iv) Maternity return rate

In 2016 two staff members went on maternity leave; one returned (Professional Services) and one (Academic with fixed-term contract) decided, for personal reasons, not to.

In 2017 one member of staff took leave and returned, with a period of **flexible working**, including working from home.

In 2018 one member of Professional Services took leave and returned, and one academic took leave and is currently **working part time**.

(v) Paternity, shared parental, adoption, and parental leave uptake

Paternity leave:

- 2016 – 4 Academics and 1 Professional Services staff
- 2017 – 2 Academic staff and 1 Professional Services staff
- 2018 – 3 Academic staff

In addition, in 2017 and academic staff member took 6 weeks of shared parental leave. This led to a **no-cost extension of their research fellowship**.

(vi) Flexible working

Staff are encouraged to request formal or informal flexible working arrangements when needed. This has been used by staff returning from long-term sick leave; with medical conditions; and with caring responsibilities. Over the past three years eight formal requests have been made, with only one not agreed. Academic staff are generally free to informally adjust working patterns and/or work from home some of the time, provided they fulfil formal duties. Many staff take this opportunity, reflecting the culture of trust within the School. The School is **very supportive** of these informal arrangements.

Academic staff can request **exemptions from teaching duties at certain times**, e.g., between 9-10am to drop off children. In 2017, twelve requests were made of which nine were approved by the Faculty, in 2018 eight requests were made and seven approved.

"Good support for my personal needs for childcare etc. Particularly helpful: childcare timing taken into account for teaching scheduling, e.g. avoid teaching before 9.30am."

[redacted]

Several Professional Services staff work flexibly. Three current examples include a member of staff starting and finishing earlier than standard working hours, one working at 0.8FTE, and one working from home for half a day a week.

	All staff		Academic		Admin		Technical		Survey
	M	F	M	F	M	F	M	F	
Do you feel that your line manager or supervisor is supportive of requests for flexible working (e.g. requests for part-time working, a job share or compressed hours)?	93%	97%	100%	90%*	100%*	100%	100%*	89%*	2017 EDI
I feel my manager or PI supports flexible working if I need it (such as part-time working, job-sharing arrangements, home-working, etc.)	82%	81%	98%	100%*	100%*	89%	75%*	75%*	2018 EDI
I am satisfied with the University approach to flexible working	60%	68%	60%		60%		36%		2018 Staff
I have a good work life balance	45%	65%	38%		77%		64%		2018 Staff
The University provides good support to help me balance my work and personal commitments	28%	42%	24%		50%		55%		2018 Staff

Table 30: Survey data relating to flexible working and work/life balance
Entries with (*) indicate low statistics with less than 10 respondents; some staff survey data are not available by gender

Survey results in Table 30 show that staff are happier with the School's approach to flexible working than with the University's. **Action F2** will better promote flexible working. Where data exists, women and men *within a given staff group* are equally satisfied. Administrative staff are most satisfied. Academic staff are unhappy with their work/life balance.

The **new Workload Allocation Model** and the **transparent redistribution of duties** for academic staff will be a first step towards improving staff satisfaction related to workload (**F3**); a second, more ambitious step will be workload reduction **(F4)**. Work-life balance and flexible working will become an integral part of the Staff Review (**A6**).

(vii) Transition from part-time back to full-time work after career breaks

The School does not have a formal policy due to the small number of cases but aims to provide a **supportive environment**. A recent example illustrates our practice: following maternity leave, a staff member initially returned part-time, which involved a change of role, before returning to her original full-time role.

Mentoring and coaching for returning staff is provided by the School's Maternity, Paternity and Adoption Leave Advisor. Academic staff will have a reduced workload allocation upon return from long-term leave and are actively encouraged to apply to the Returning Carers Scheme.

Wordcount Section 5.5: 1381

5.6. **Organisation and culture**

(i) Culture

	M	F	Survey
There is a friendly working atmosphere within the University	74%	87%	2018 staff
I have a good working relationship with colleagues	89%	87%	
In my experience, the school is committed to treating all staff, students and visitors with dignity and respect	93%	97%	2018 EDI (staff)
Do you feel the School is doing as much as possible to promote an atmosphere of equality and inclusiveness	87% >=3 on scale 1-5		2017 Student EDI (gender split unavailable)

Table 31: Survey results for questions related to the atmosphere and culture in the School

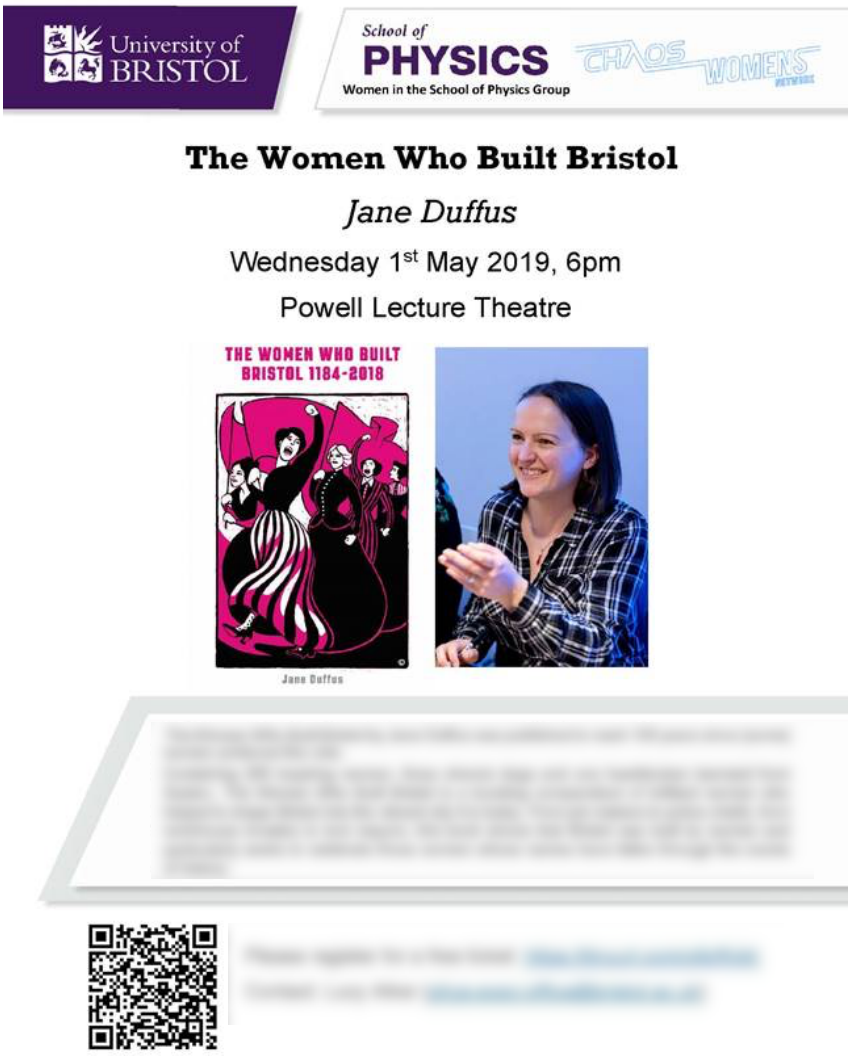


Figure 29: Poster advertising a joint event by the Women in the School of Physics Group and the CHλOS Women's Network. (The late start time was determined by the speaker's availability.)

School management proactively engages with the EDI group, recently for example on the workload model and recruitment. The EDI group conducts surveys and organises events such as "The BME attainment gap" and "LGBT+ 101"; members participated in workshops like the Juno workshop on professional conduct in STEM in Manchester. **School supports these activities financially and will provide a budget of £1500/year for the EDI group from 2019/20.**

The Women in Physics Group was re-launched in 2018 as the Women in the School of Physics (WITS), emphasising the inclusion of all female staff and students (not just physicists). WITS provides networking opportunities and stages events (Figures 29, 38), some jointly with the student society's CHλOS Women's Network.

The new HoS invited all staff, in groups of 5-6, for coffee in his office; these informal meetings mix technical, support and academic staff of various backgrounds and seniority, and foster communication between staff groups and with management.

Regular school-wide events (e.g. Physics by the Cake, show-casing groups' research while eating cake) and shared spaces including the **much-frequented** Staff common room and the student-run PhysBar, **strengthen the sense of community**.

All students are invited to the termly Staff Student Forum (SSF), which is attended by several teaching staff, the EDI chair and student representatives. The SSF, usually chaired by a student, is generally well attended with a friendly atmosphere.

Staff and students rate the working atmosphere in the School and its commitment to EDI highly (Table 31).

(ii) HR policies (364)

The School has well-defined processes in place for handling HR issues both informal and formal. Each case is reviewed at School level, involving the HoS and our local HR team before any escalation. The HoS and School Manager regularly meet with the Faculty HR Manager. University policies are communicated to staff through the staff handbook, websites, newsletters, and training courses such as "*Managing Health and Absence"*.

	M	F	Survey
Have you experienced bullying or harassment within the School in the last 3 years?	7%	14%	2018 Staff survey
Have you ever experienced or witnessed (any type of) discrimination or harassment within the Physics department?	23%		2017 Student EDI (gender split unavailable)

Table 32: Survey results related to harassment

While staff and students experience a positive working atmosphere (Table 31), the EDI surveys (Table 32) also revealed cases of bullying and discrimination.

In response, the School ran a compulsory, externally facilitated **partnership workshop** in 2018 on identifying and challenging unacceptable behaviour, especially related to gender, seniority and role. Anecdotally, several colleagues reported that the way they are treated at work has improved since the workshop. The School will **develop a code of conduct (O1)** with input from all staff and students.

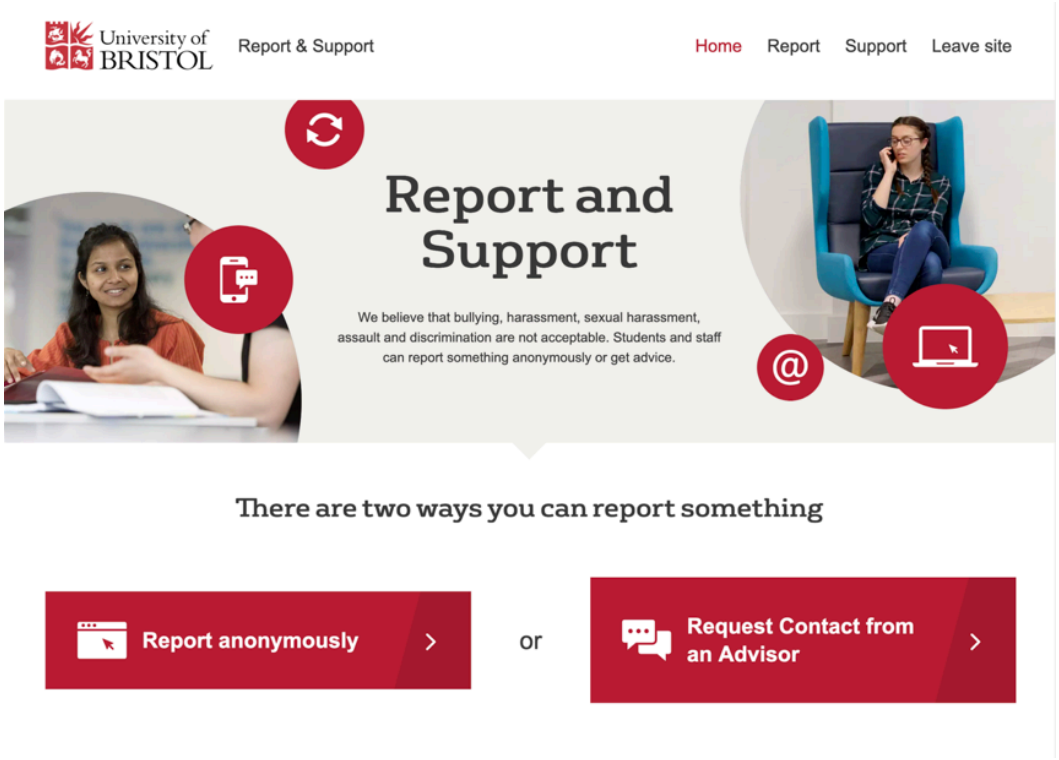


Figure 30: The University's Report and Support tool for staff & students

Staff can report unacceptable behaviour confidentially to any member of management, or an Acceptable Behaviour Officer (in their own School or another). Students can report to their tutor, senior tutor and the school's Student Wellbeing officer. Staff and students can also use (anonymously if desired) a recently introduced web-based tool (Figure 30). As not everybody is aware of all these (in some cases new) options, we will conduct an awareness campaign **(O2).**

(iii) Representation of men and women on committees

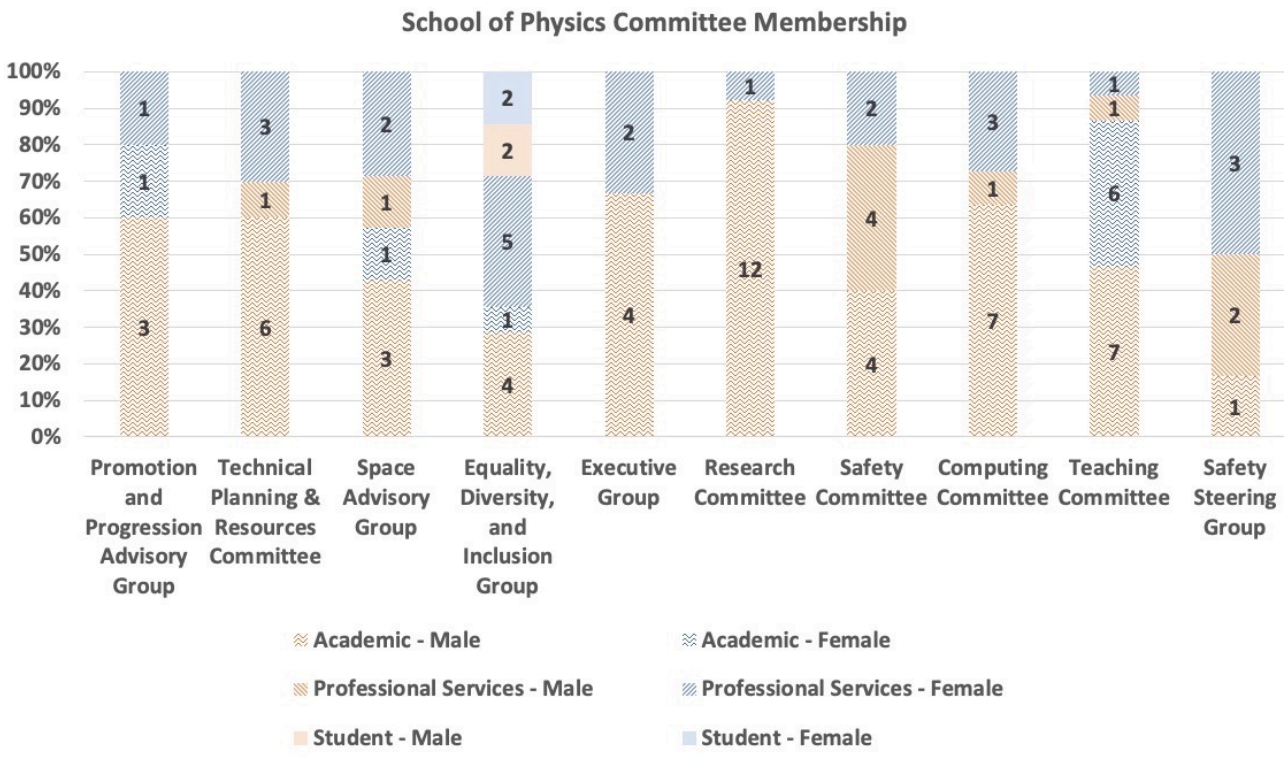


Figure 31: Committee members

Figure 31 shows the membership of core committees. **Professional services staff are fully participating committee members** whose voice is highly respected; nevertheless women, especially female academics, are clearly under-represented. The current **reorganisation** of the **School's research group and committee structure** provides an opportunity to address this (**O3**), while using the new workload model to monitor committee workload of women.

(iv) Participation on influential external committees (92)

In the 2017 EDI survey, 80% of female and 50% of male academics reported membership of external committees. Asked if "the School supports and encourages participation in external committees", 0% of female and 25% of male respondents disagreed.

As an example, STFC committee vacancies are regularly discussed in particle physics group meetings. Group members are encouraged to apply for suitable committee membership, with the Head of Group providing nomination letters. **Action O4** will spread good practice throughout the School.

Work on high-profile external committees will be recognised in the new workload model.

(v) Workload allocation model (WAM) (252)

The School is **introducing a workload model for academic staff** in 2019/20. The WAM captures academics' workload in terms of actual time spent on tasks. Staff were consulted throughout the process and the model was reviewed by the EDI group.

The model shows that while there are large individual variations, male and female faculty members work on average the same number of hours, with a similar distribution of tasks (Table 33). Female academics spend more time on administration and citizenship tasks, though.

Task	*FTE (men)*	*FTE (women)*
All hours	1.31	1.32
Teaching	0.43	0.41
PGR supervision	0.20	0.20
Admin + citizenship	0.17	0.26
Research	0.50	0.46

Table 33: Workload of faculty members in terms of full time equivalents (FTE) where 1FTE = 37.5h per week

The average current workload of academic staff is 130% of a full time equivalent, consistent with widespread dissatisfaction about excessive workload. The School will use this evidence to request additional staff, and will investigate ways to reduce workload **(F4)**. Workload will be discussed in annual staff reviews (**A6**).

The model will be used for a **fairer and more transparent** workload allocation **(F3)**. The HoS and chair of the workload group will allocate tasks each year, with input from staff on preferences. All model details and individual allocations will be visible to all staff. The model will be continuously adjusted based upon experience and feedback.

New staff and those returning from long-term leave will be assigned a reduced workload. The additional demand on female staff to participate in recruitment panels is taken into account with 35h/year.

(vi) Timing of departmental meetings and social gathering (105)

All School committee meetings are held between 11am and 4pm and scheduled well in advance to ensure that those with caring responsibilities can attend. Away Days are held close to the university so that staff can use their usual childcare arrangements.

School parties are scheduled several months in advance and held during core working hours. All dietary requirements are catered for and, while alcohol is available, a good variety of soft-drinks are offered. These events are **open to all staff, postgraduate students, and their families**. Uptake is high, with typically 120-150 attendees.

Colloquia are scheduled 5-6pm due to timetabling constraints – we aim to change that (**O7**).

(vii) Visibility of role models (488)

A positive example of embedding EDI in conference organisation is the BQIT (Bristol Quantum Information Technologies) conference. **The percentage of female speakers tripled over the last 5 years** (Table 34). BQIT 2019 had a well-attended EDI session.

Year	2014	2015	2016	2017	2018	2019
% female speakers (out of ca 30-40 speakers in total)	11%	12%	12%	19%	24%	35%
% female attendees (out of ca 150-200 attendees in total)	n/a	13%	19%	20%	21%	27%

Table 34: Gender distribution of BQIT conference.

The percentage of female speakers in seminars in 2017/18 varied amongst groups from 13% to 59% with an average of 25% (Table 35). For School colloquia, this percentage has been stable in recent years at 20%. One colloquium a year is given by postgraduate students (in 2018/19: 2 male, 1 female).

	2014/15	2015/16	2016/17	2017/18	2018/19
Correlated Electron Systems	8%	8%	18%	13%	n/a
Astrophysics	33%	23%	32%	59%	n/a
Particle Physics	38%	25%	21%	14%	36%
Theory	n/a	12%	11%	16%	19%
Complex Materials	27%	n/a	50%	22%	14%
Total	27%	17%	23%	25%	n/a

Table 35: Percentage of female seminar speakers by research group (where available)

Based on best practice as exemplified by BQIT, the School will provide **guidelines on EDI in organising conferences, seminars and colloquia (O5)**, which organisers using School facilities or logos will need to use. The faculty is planning to base a new faculty-wide policy on our initiative.

Currently, all colloquia and seminar organisers are male. Our recommendations will include separating the roles of organisers and chairs, and to rotate chairs on an event-by-event basis to improve diversity in this visible role **(O5)**.

Noticing low female representation amongst 2nd year lab demonstrators, we now take gender into account when distributing teaching tasks amongst postgraduates. The percentage of female 2nd-year lab demonstrators increased from 8% in 2017 to 23% in 2018 and for computing labs from 0% to 13%.

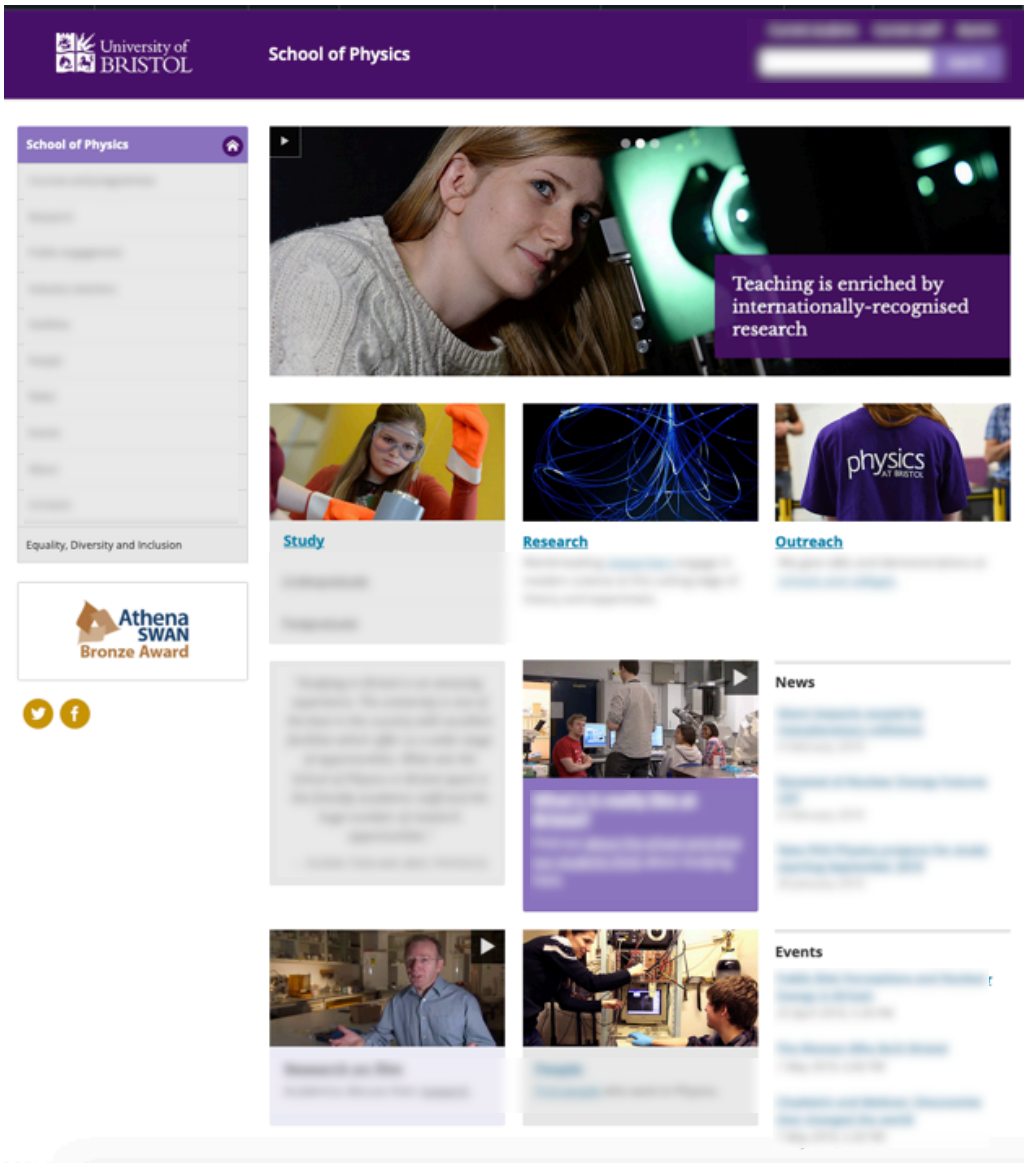


Figure 32: Physics Home Page.

BCFN Student Noah Abu el Magd Awarded Funding

BCFN PhD student Noha Abu el Magd has been awarded funding from Innovate UK to develop the business plan for a start-up company that is developing from an agricultural technology identified by another BCFN student (Tom Swift). Tom was awarded an EPSRC Doctoral Prize in 2018 to explore the fundamental science behind his discovery; Noha has joined the team, led by Dr David Benito-Alifonso, who are developing the technology towards commercial launch.

Noha was awarded her funding at the culmination of the exploration phase of the ICURe programme: she has been travelling since January, covering ten major trade shows in nine countries, and meeting over a hundred industry representatives to establish and develop a business model. The purpose was to understand how the technology (christened Beanstalk Agritech) would fit into the marketplace, where and to whom it would provide the most value, and what technologies already existed that might offer competition. She pitched her findings and business roadmap to a panel of VCs and investors from around the country at a Dragons' Den-style event in Manchester on 27th March, to a hugely positive response.

The additional funding will support Noha's salary for a further three months, during which we intend to develop the Beanstalk business plan for launch in summer 2019. Further ICURe funding calls will be open throughout 2019: if you have a technology that you'd be interested in exploring for commercial development, please contact Dr Duncan Casey of the BCFN for more information.

Figure 33: School Newsletter Article (9 April 2019)

Figure 34: Portraits of Bristol alumnae Professor Dame Julia Goodfellow and Professor Kathy Sykes hang in a frequented space in the School of Physics.

School webpages show approximately 50% women (Figure 32). Individual and collective successes are celebrated in staff meetings and in the School's weekly newsletter (Figure 33).

Two portraits of esteemed female alumnae are displayed outside a main lecture theatre (Figure 34). We will add a photo gallery representing the diversity of our current staff and students (**O6**).

Figure 35: International Women's Day posters (left) and poster prize winners (right).

For International Women's Day 2019, the EDI group invited students and staff to contribute posters showcasing women's contributions to Physics. These are displayed in the foyer of the physics building (Figure 35).

(viii) Outreach activities

Figure 36: Dr Heath (Reader in Physics) making liquid nitrogen ice cream at a secondary school.

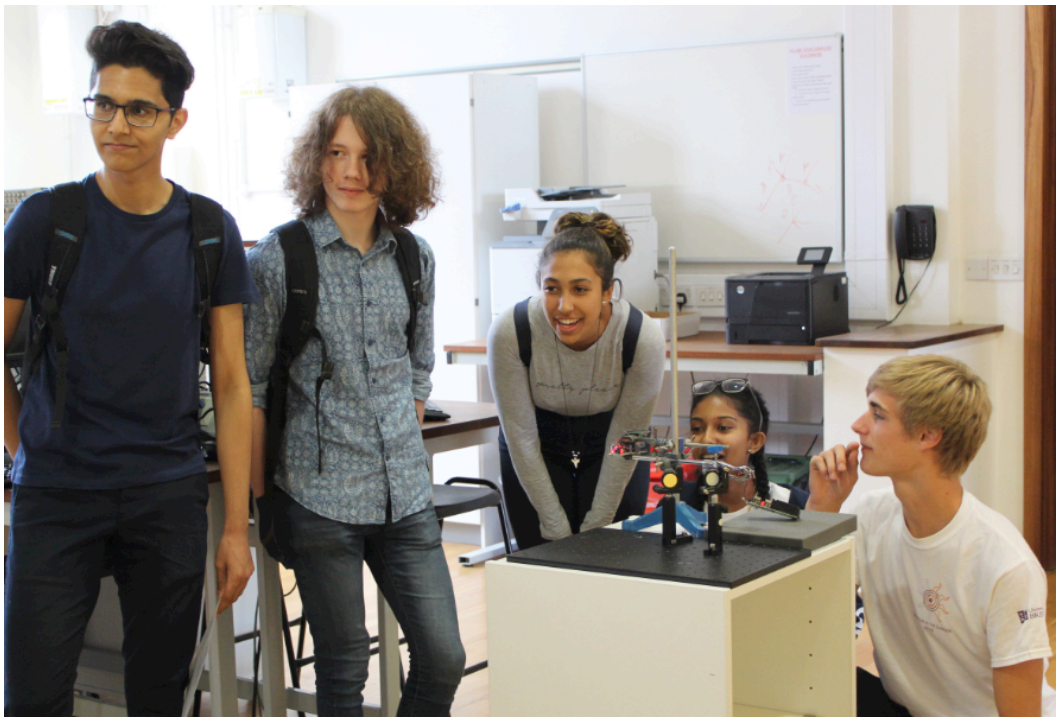


Figure 37: Students at Quantum In the Summer (summer school for A-level students).

Figure 38: Lucy Alker (executive administration manager) at an outreach event organised by the Women in the School of Physics Group.

Academic staff participating in the 2018 EDI survey spent **on average 12h on outreach per year** (same for female and male staff), PhD students 10h, administrative staff 12h. Table 36 lists a few highlights.

In the new workload model, outreach at a level of a few talks/year is included under the generic citizenship allocation; activities beyond that are allocated hours on a case by case basis.

Title & info on presenters/instructors	Target group	Number	% female
'A beginners Guide to Space' workshop (2018); female presenter.	Year 4-6; visited 7 schools	800	50%
'Space Ballet Q&A – how to be a scientist' session for The Lightyear Foundation (2018); female instructor.	Children with disabilities, various ages.	200	70%
Work experience at School of Physics (annual), male and female instructors	School children; at least 50% state school	20	50%
Particle Physics Master class (annual), male and female instructors	Students from local schools	90	20%
Women in STEMM, with 3 Physics stands (2018). Male and female instructors	Female students from local schools	100	100%
'The future of Physics' talks (2018) female presenter	GCSE physics students at girls' schools	100	100%
'Quantum In the Summer' summer school (annual), male and female teachers.	Students age 16 and over	20	50%

Table 36: A small selection of recent outreach highlights. For annual events, numbers are for 2018. Not included are the large number of talks at schools and science festivals.

Wordcount Section 5.6: 1714

7. FURTHER INFORMATION

We hope this application conveys a sense of the momentum that is felt in the School regarding equality, diversity and inclusion. We have made measurable progress, especially on promotion and progression; we are proud of our outreach work; we lead the faculty in EDI at conference organisation. While we do not feel ready for silver yet, we are certainly hopeful to be so in the foreseeable future.

The School, with its new Head, has just started a process of re-structuring; we will also fill a number of vacant faculty posts. These are great opportunities to more firmly embed EDI in all our processes, apply our actions on recruitment and make real progress in the representation of women in powerful roles. This view is enthusiastically shared by the management. We aim to take all staff and students with us on this journey, rather than dictate EDI compliance from above. This approach is illustrated by the consultative process for the new workload model, and the planned bottom-up process for the code of conduct. The positive attitude towards EDI in the School, evident in surveys as well as personal interactions with staff, gives every reason to be optimistic.

While professional services staff do not feature very prominently in this application (such is the structure of a bronze application), they play a hugely important role in the School. They also carry a significant part of the momentum mentioned above. This document was written by academic, technical and administrative SAT members working in partnership. This partnership is also reflected in the Women in the School of Physics Group and in fact the entire committee culture of our School, where professional

services staff are never “just” note-takers, but fully participate in the discussion; due to their experience and competence, their input is often decisive.

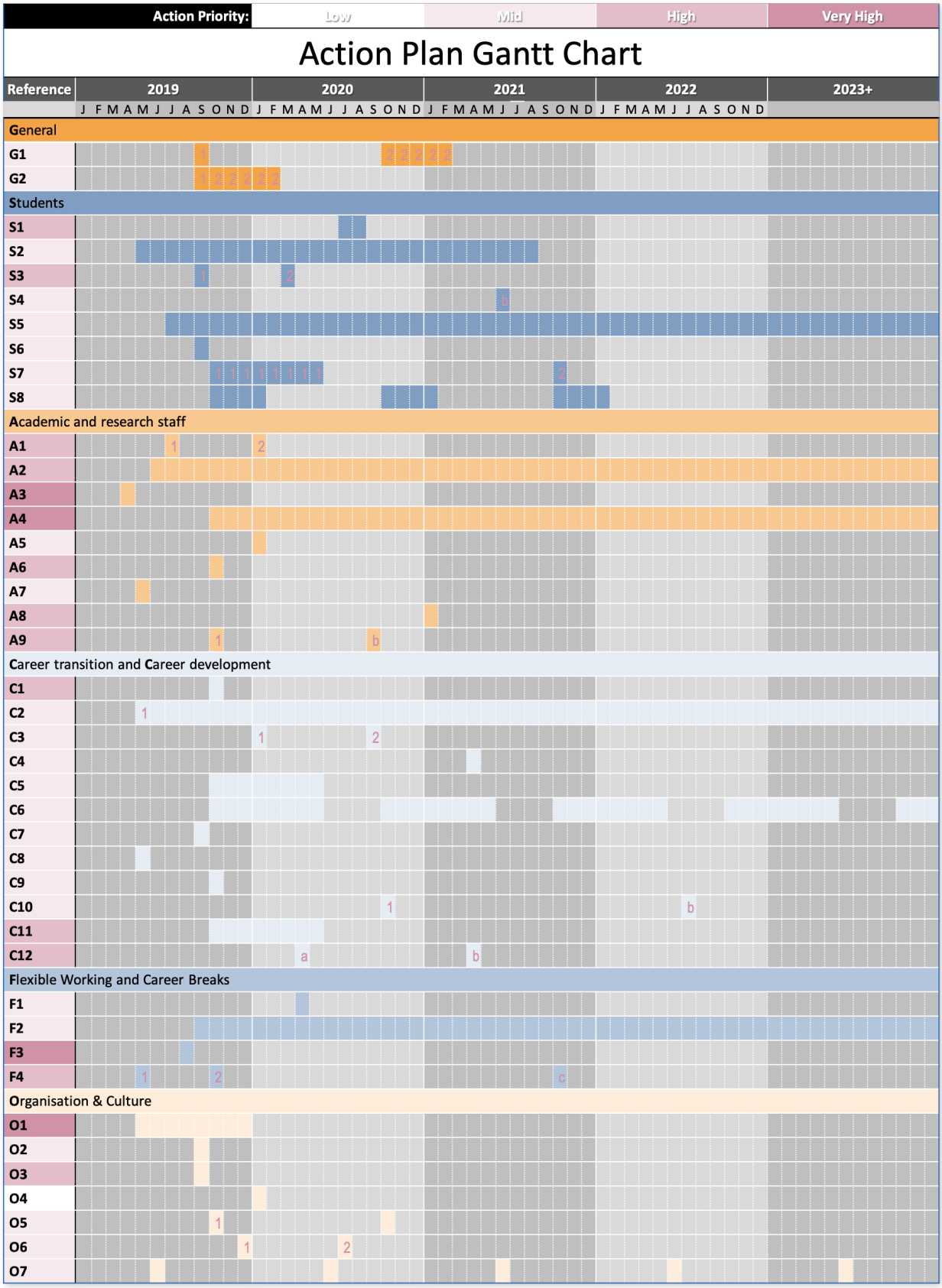
We are delighted to report that the School of Physics is getting more diverse. The fraction of staff from ethnicities other than white/Caucasian has been increasing steadily from 11% in 2015/16 to 14% in 2015/16 and 16% in 2016/17. The challenges of being BAME in STEM were discussed in a well-attended one-day workshop with several participants from the School; the organisation was also supported by members of the School. The pro vice chancellor attended the event and outcomes were fed back to the University.

Figure 39: BQIT (Bristol Quantum Information Technologies) EDI session with panel discussion.

The annual BQIT conference had an EDI session that was another highlight beyond the scope of the main text of this document. The event was organised by members of the school and attended by 100 participants from academia and industry. The panel discussed a variety of diversity and inclusion topics related to gender, race, LGBTQ+, poverty and other characteristics, and how academia and industry can become better employers with a more diverse, happier, work force.

Wordcount Section 7: 469

ACTION PLAN



Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
			General Actions				
G1	Conduct a Staff and Postgraduate EDI survey biannually.	To measure effectiveness of actions and assist in identifying new actions.	1. Add biannual EDI data collection to the terms of reference of the Self-Assessment Team. 2. Develop questions for and send out 2020 EDI survey. Write up results within 3 months.	Sep 2019 Oct 2020 - Feb 2021	Chair of SAT Chair and Admin Lead of SAT	a. A Biannual EDI survey will be required to be completed by future iterations of the SAT. b. The 2020 EDI survey will be developed, sent and written up by the end of February 2020. It will have at least a 50% response rate and results will be fed back to staff.	Mid

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
G2	Support the development of an Undergraduate Student EDI survey, in conjunction with elected EDI representatives.	To gather valuable data on the EDI issues faced by undergraduate students in the School, to measure effectiveness of actions and assist in identifying new actions.	1. Discuss the development of an EDI survey with newly elected representatives. 2. Develop questions for and send out 2019 student EDI survey. Write up results within 3 months.	Sep 2019 Oct 2019 - Feb 2020	Chair of SAT Student Representatives, with assistance of SAT.	a. Have identified what form an effective student EDI survey will take. b. The 2019 EDI survey will be developed, sent and written up by the end of February 2020.	Mid
Student Related Actions							
S1	Investigate the reason for low numbers of female students on preliminary year programme.	To ensure that the School does not put off female applications or act in a biased way against female applicants.	Set up a working group to look into the complex cases of students on the preliminary year programme in detail and identify any patterns. Concurrently, look at how programmes are advertised to prospective students.	Jul - Aug 2020	EDI Chair, School Education Director and Preliminary Year Director.	Have identified any reasons for reduced numbers of women on this programme and developed specific actions to address these reasons.	High

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
S2	Ensure a balance of people of different gender identities and races on School promotional materials.	To appeal to a broader range of applicants by reflecting diversity on our printed and online literature, aiding conversation of minority groups.	Carry out a phased review of all online and printed promotional materials (e.g. at tri-annual review of prospectus information, or when new material is produced). Include a more diverse range of photos where this is lacking.	May 2019 - Aug 2021	Student Admin Manager, Executive Admin Manager	Promotional materials in the School will reflect the diversity of the people studying and working in Physics in the UK, or who might want to.	Mid
S3	Review data on UG non-continuation rates and investigate individual cases.	To determine the reasons for the higher proportion of male students who withdraw during their first year, and whether these can be addressed through our pastoral or academic support structures to lower the rates and remove the gender difference.	1. Review all individual cases for the past 5 years to assess whether the reasons for withdrawal were primarily pastoral or academic. Correlate with incoming grades. 2. Decide on further actions based upon findings of investigation.	Sep 2019 Mar 2020	Senior tutor & admissions tutor	a. Report to SAT on reasons for withdrawals and correlations with incoming grades. b. Have analysed data, and defined list of actions.	High

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
S4	Understand lower PGR offer rates amongst men compared to women.	Men have a lower PGR offer rate than women. It is important to understand whether this is a bias; related to a larger number of unprepared “chance” applications by men; a larger number of rejections by men; or some other unforeseen reason. Currently both those that we reject on academic grounds and those that reject us are reported together as a rejection.	1. Improve monitoring of rejection reasons for PGR applicants. 2. If a gender bias is found, understand and address it with actions to mitigate against it.	Jun 2021	PG Director & PG Administrator	a. Having the data from improved monitoring of rejection. b. Bias either understood, or action to address it defined.	Mid

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
S5	Monitor recruitment data and share best practice in student recruitment between postgraduate programmes.	To identify positive actions in the recruitment of female students and adapt these for use in other areas within the School.	Organise an annual meeting of PG programme directors and administrators to look at recruitment data, identify areas of strength and share positive actions.	Jul 2019 onwards	Director of Graduate School	The first annual meeting will have taken place and this event added to the School's schedule for future years.	Mid
S6	Increase awareness among postgraduate students of the pastoral role of Annual Progress Monitoring (APM) panels.	To improve uptake of pastoral support particularly in cases where supervisors are overstretched, and to help PGR students with their career options at the end of their studies. This should reduce dropouts, which are more common for female than male students.	Ensure that all APM panels are set quickly and add information about the pastoral support they can provide to handbooks and newsletters. Encourage APM panels to engage with postgraduate students about career options during the APM process.	Sep 2019	Postgraduate Student Administrator CDT Managers	All students will be able to easily find information on receiving pastoral support from their APM panel. To be verified in surveys.	Mid

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
S7	Tutors to begin discussing career paths and internships with UG tutees in the penultimate year of study, with follow up in final year. Provide tutors with guidance and promotional material.	Planning, and taking action such as summer internships can be decisive for a career in STEM, be it in industry or academia. Encouraging all students to be ambitious and aim for a career matching their skills, early, this should especially help those who underestimate themselves (research suggests this is more often females)	1. Provide clear guidance to tutors to cover career paths and especially internships already in the 2nd year tutorials (and subsequently). This guidance will be sent together with the termly reminder to organise 2nd, 3rd, (and potentially 4th) year tutorials. 2. Provide promotional material which will include case studies of internships at universities and industry from a diverse range of students.	2019/20 Academic year Oct 2021	School Education Director, Student Administration Manager	a. Guidance updated and sent termly to tutors. b. Promotional material exists, is available online and accessible to students and tutors.	Mid

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
S8	Organise annual 'Careers in STEM' seminar where alumni are invited to come and briefly talk about the different types of STEM, or STEM-related careers they've gone into.	Increase both the number of male and female graduates who end up in STEM careers	Have organised an annual event for 3 years in a row	Autumn terms of 2019/20, 2020/21, 2021/22	Education Director	Collect feedback after events to judge effectiveness and impact on students' outlook	Mid
Academic and Research Staff Related Actions							
A1	Improve the quality of information about the School and its support for women's careers that is given to candidates for academic positions as part of the recruitment process.	To improve both the number of applications and number of acceptances of offers from female candidates.	1. Develop better EDI web pages with a wider variety of case studies. 2. Develop high quality and professional supporting materials to send out with job descriptions and adverts. This material will celebrate the diversity of staff in the School.	July 2019 Jan 2020	SAT SAT	The number of female applicants, and recruited staff, will rise over the next 3 years. We will have recruited at least 2 additional female members of staff by the end of the self-assessment period.	High

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
A2	Reduce the effect of implicit bias on staff recruitment.	More women (or, for professional services, men) will be shortlisted if implicit bias is significantly reduced through education.	1. Make it compulsory for all staff on interview panels to have taken implicit bias training. 2. Review unsuccessful applications for jobs from those within the minority gender once per term and feed back any observations of implicit bias to the relevant recruiting manager.	Jun 2019 onwards	Chair of SAT and SAT members	a. All interview panel members trained in all interviews; b. The first set of shortlisting data will have been reviewed by the SAT and feedback given to managers.	High

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
A3	Increase the number of high-quality applications to academic roles made by women approaching potential candidates.	To increase the likelihood of female applicants being shortlisted, and later appointed, addressing gender imbalance within the School.	Develop and implement a policy for all academic recruitment processes which outlines the expectation of search panels to identify and contact strong potential female applicants, inviting them to apply.	Now, ongoing	HoS, Chair of SAT, Executive Admin Manager	a. An increased number of applications from women in the 2019 round of recruitment, and a database of approaches made and outcomes for female applicants. b. We will have recruited at least an additional 2 female members of staff by the end of the self-assessment period.	Very High

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
A4	EDI group and Management will give clear guidance about measures panels are expected to take to avoid single-gender shortlists – especially for PDRAs. Require evidence that every effort has been made to ensure gender balance on shortlists for Research-Only roles. Review effectiveness of measures.	While for many posts we re-advertise if we have a single gender shortlist, single-gender shortlists still occasionally occur in research-only posts. Since the gender imbalance in PDRA recruitment is of significant concern, this action specifically targets this area.	1. Issue EDI guidance to all panels with specific steps to be taken to avoid single-gender shortlists in PDRA jobs. 2. Require panels to produce evidence that they made every attempt to produce a non-single gender shortlist. 3. Review data on gender balance on Research-Only shortlists once per term to see if there is progress.	10/2019 onwards	Chair of EDI group HoS School Manager Chair of Research Committee	a. Written guidance will be issued by 10/2019 b. All panels will receive this guidance, and provide the required feedback c. Effectiveness of measure monitored termly.	Very High

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
A5	Encourage and support more female academic staff to apply for research grants and fellowships.	To improve the application and success rates of female staff in applying for grants and fellowships.	1. Organise regular interactions between academic staff and the University's Research Development team to develop proposals for upcoming opportunities. Research Development team to discuss upcoming opportunities. 2. Encourage academic mentors to discuss and review potential grant and fellowship applications with their junior academic mentees.	Jan 2020	HoS, Research Director	a. Bi-annual meetings with the Research Development team. b. Include details of prospective grant applications within the staff review process.	Mid

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
A6	Improve uptake and quality of Staff Review for academics.	To ensure that all academic staff set effective and appropriate objectives for each year, to help them to develop, grow, and prepare for progression and promotion.	Produce new, clearer guidance for staff reviews, assign a peer staff reviewer to every academic and monitor MyReview statistics.	Oct 2019	HoS, Executive Admin Manager, Staff Reviewers	100% of academic staff will have started their MyReview form and 75% will have completed it in 2019.	High
A7	Use staff review and workload model to help the promotions group target and support candidates more effectively	To ensure staff are approached by the promotions committee promptly when they reach an appropriate career stage to apply for promotion, including accelerated promotion if applicable.	Include guidance to reviewers to feed back to the promotions committee following reviews. Reviewers will use information from the workload model on citizenship and teaching duties to inform the discussion.	Aug 2019	HoS Workload Group Promotions Group Executive admin manager	a. Survey data in 2020 show that staff find the promotions process clear and transparent b. Survey data in 2020 show that all staff reviews (where applicable) include promotion.	Mid

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
A8	Gather information from PIs to help understand why female PDRAs are more likely on fixed term contracts	The School policy has moved away from fixed term contracts, even for positions with limited grant funding (which have high turnover). Nevertheless, female PGRAs are much more likely to be on fixed-term contracts than male PGRAs.	Ask PIs for reasons and circumstances for recently issued fixed term contracts to build up a picture of why they are used and how this could correlate with gender.	1 Jan 2021	EDI chair EDI group	A written summary analysing the use of fixed term contracts in the school, and its implications on gender bias.	High

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
A9	Improve exit data for staff that leave	Understand better the reasons for differences in the number of leavers based on gender. To ensure we capture reasons why a person has decided to leave and their intended destination I.e. academia, industry, or other.	1. Include a question at exit interviews around an employee's reason for leaving and their intended destination if known i.e. academia, industry, other. 2. The information will be used to design retention strategies to mitigate leaver numbers to a more balanced state by gender.	Oct 2019 Sep 2020	HoS	a. Form changed b. We will have first set of data from exit interviews which will be reviewed annually by Chair of SAT and HoS.	High
Career transition and Career development Related Actions							

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
C1	Offer childcare on interview dates as default, and add this to all job adverts	This would remove barriers for anybody with childcare responsibilities (more often women than men) from applying or attending interviews. Adding this to the job advert will send a strong signal that we welcome people with caring responsibilities. We hope this will increase applications from women (and others who care).	1. Include information in all job adverts. 2. The School will contribute towards childcare costs up to £50 per day, that can be claimed as part of the expenses for attending an interview using the expense claim form.	In place by start of 2019/20 Academic year	School Manager	All job adverts will contain information on childcare cover.	High

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
C2	Feedback to University teams on data collection and provision	To improve the quality of data and the ease of gathering it for future Athena SWAN applications.	1. Feedback to relevant teams (HR, Finance, RED etc.) on issues encountered during data gathering and interpretation during the current Athena SWAN application. 2. Assist central teams in improving data provision, where appropriate.	May 2019 Ongoing	Administrative Lead	a. A meeting with the University central data team to provide feedback on challenging areas. b. To have improved the provision of data for other Schools preparing Athena SWAN applications.	Mid

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
C3	Roll out the School's mentoring scheme more widely.	To ensure that staff in all areas and groups have access to the opportunity to be mentored.	1. Review the performance of the mentoring scheme for junior academics through a survey 2. Use lessons learned to adapt the mentoring scheme for a wider audience for all academic and Professional Services staff who want a mentor.	Jan 2020 Sep 2020	HoS, School Manager	Have assigned mentors for all staff within the School who opt to have one.	Mid
C4	Request that feedback about staff training is provided to the School from the staff development team.	Feedback is currently only collected in an ad-hoc manner through staff surveys. Receiving full, coherent feedback will help to identify areas which can be improved.	Improve understanding of what training is seen as useful. Use this to inform our own training programme.	Apr 2021	School Administrator	Feedback will have been analysed, and changes will have been made to School training program.	Mid

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
C5	Increase the visibility and prevalence of EDI topics within School events	To ensure that a wide range of staff are involved in EDI-related activities within the School, rather than just a select few.	1. Organise at least one new EDI-specific event per term. 2. Introduce EDI topics to existing seminar series, starting with the School Colloquia.	2019/20 Academic Year	EDI Chair and Colloquia organisers	a. At least 3 specific EDI events will have taken place and have been well-attended. b. An EDI colloquium will have been trialled	Mid
C6	Offer more in-school EDI training, especially on implicit bias	To ensure that staff have the opportunity to attend training on EDI related issues, such as implicit bias, so that they are more aware of the risks involved, e.g. when recruiting.	1. Organise training sessions on implicit bias offered at different times to allow all staff to attend. 2. Record attendance and collect feedback. 3. Use feedback to inform next set of events.	Termly, starting in 2019/20 Academic Year	EDI Chair and Committee	a. Have on average one training event per term over the next 3 years. b. Review and report of attendance to EDI committee	Mid

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
C7	EDI covered during PhD induction	2018 survey data showed that only a small number of PhD students currently receive EDI training.	Develop an EDI training programme aimed at PhD students to be included as a mandatory part of their induction.	Sep 2019	PGR Director CDT Directors EDI committee	Higher numbers of PhD students who have completed EDI training	Mid
C8	Ensure that work-life balance is discussed with every member of staff as part of the Staff Review Process.	To ensure that staff are able to raise any concerns with their line manager and identify actions to remedy problems.	Add work-life balance to all School staff review guidance documents and publicise its new inclusion in launch emails.	May 2019	HoS, School Manager	Staff survey data will indicate that work-life balance has been discussed by all staff that complete the Review Process.	Mid

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
C9	Encourage new PDRA staff to join the Bristol Physics LinkedIn group during their induction	Provide PDRAs, on short-term funding, a network with staff who built careers from the same starting position. Expose PDRAs to different career paths, and possibly help PDRAs find the next position inside or outside academia. It will also provide long-term destination data.	Include the LinkedIn group in induction pack.	1 Oct 2019	Executive Admini-stration Manager	a. The LinkedIn link and benefits for joining this group will have been added to the induction pack. b. The LinkedIn group will have increased in size by 20%.	Mid

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
C10	Trial allowing undergraduate students to request a female tutor (or a male one)	Some students may feel more comfortable with a female tutor. Low numbers of available women who can be a tutor, however, prevent us from committing to this permanently until we can assess uptake on the offer.	1. Inform incoming students that they may request a female tutor if there is one available. Every effort will be made to meet requests. 2. Keep anonymous records of the number of students requesting a female tutor. Evaluate uptake vs. availability at the end of three years.	Oct 2020 July 2022 (allowing for a 2 year trial period)	Tutors Senior Tutor SAT team	a. Students will have option to request a female tutor b. 2 years of data collected, which will be used to decide on the feasibility of long-term implementation of this action.	Mid

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
C11	Increase the number and success rate of grant applications by early career staff.	A substantial fraction of funding applications is by senior staff. Better support of junior staff will enhance their career prospects and will also increase funding applications from women (who are underrepresented at senior level).	Organise drop-in sessions for ECRs with our Research and Enterprise Team at least biannually.	2019/20 Academic year	Director of research	a. Increase in applications / person for ECR staff. b. Increase in number of successful applications	High

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
C12	Work with our research and enterprise development (RED) team on addressing gender difference in funding application and success rate.	Women are less likely to apply, apply for less funding and are less often successful. RED are aware of this issue, which is not limited to Physics. They have unique expertise. In a recent visit to Physics, we agreed with a RED representative to jointly tackle the problem.	1. Develop an action plan in conjunction with RED, to understand and address lower funding application and success rate for female staff members in Physics. 2. SAT members will attend centrally organised Gender Equality Conference on 04/07/2019, which will be attended by UKRI, and where bias in funding allocation will be discussed.	1 Apr 2020 1 Apr 2021	EDI Chair RED SAT members	a. Have developed an action and implemented the first actions from within in successfully. b. Obtain feedback from applicants on how useful the action plan has been from their perspective.	High
Flexible Working and Career Break Related Actions							

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
F1	Formalise role of Maternity, Paternity and Adoption Advisor	This role has been de-facto created by the current Deputy Technical Manager. We feel it is so useful that it should be formalised, in such a way that others could step into the role if needed.	1. Create a role description, including work load allocation and training requirements 2. Collect statistics on uptake of service and feedback from users	Apr 2020	Deputy Technical Manager, School Manager	a. Role description exists with allocated workload. b. Feedback and statistics collected demonstrating effectiveness of role	Mid
F2	Better promote flexible working in the School.	To ensure that those who would benefit from flexible working arrangements are clear on how they can apply for them and how likely they are to be approved.	Regularly promote flexible working policy at School assemblies (yearly), in Newsletters (termly) and at Staff Review (yearly).	Ongoing, from Sep 2019	HoS, School Manager, Staff Reviewers	a. Records will be in place and maintained of how and when flexible working was advertised. b. Satisfaction rates with flexible working arrangements will increase	Mid

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
F3	Redistribute workload more evenly and transparently between academic staff.	To ensure that women and those on temporary and/or teaching only contracts are not disproportionately affected by workload issues.	Use the newly developed workload model (WAM) to make decisions about workload allocation.	Aug 2019	HoS, Chair of the WAM	a. Have allocated duties for 2019/20 such that the distribution of hours between staff is as close to flat as possible. b. Staff consider the workload allocation fair and transparent in 2020/21 EDI survey	Very High

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
F4	Reduce workload	The new workload model showed that academics work on average 1.3 FTE. Excessive working hours are bad for all, and very bad for those with caring responsibilities. Clearly, the best solution is to employ more staff. In the meantime, the School will try to reduce workload.	1. Discuss ways to reduce workload at the School Away Day. 2. Use above to devise workload reduction plan 3. Implement plan	May 2019 Oct 2019 Oct 2021	HoS + workload group	a) Document prepared and disseminated summarising outcome of Away Day discussion b) Plan exists c) Workload measurably reduced in 2020/21 academic year compared to 2019/20.	High
Organisation & Culture Related Actions							

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
O1	Develop a code of conduct for staff and students in the School.	To encourage shared responsibility for upholding the values of the School and build on success of recent partnership working initiatives.	1. Discuss principles of a code of conduct at the 2019 staff away day (which student reps will be invited to) 2. Turn into a document for circulation in the School. 3. In an iterative, consultative process, turn into code of conduct supported by all staff	May-Dec 2019	HoS, EDI Chair, all staff and students in the School.	Have a code of conduct on the School intranet and in the School induction pack.	Very High
O2	Increase awareness of how to report unacceptable behaviour	Unacceptable behaviour will go unreported and unaddressed if it is not easy to report and/or people do not know how to report it	1. Develop a poster campaign, outlining the main ways to report unacceptable behaviour 2. Remind yearly in newsletters	Sep 2019	School Manager	Staff survey responses demonstrating high levels of awareness of how to report unacceptable behaviour (above 80%)	Mid

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
O3	Increase female representation in powerful roles and important committees	Structural changes need to be made at a high level in order to provide active leadership and remove obstacles.	Using EDI survey data to decide which committees must have female representation, implement reorganisation of School structure.	Sep 2019	HoS, School Manager	Have increased female representation on all relevant committees and have females in a number of powerful roles in School.	High
O4	Instigate School-wide practice concerning membership on external committees	Sharing best practice within the School will help to create diverse representation from the School on external committees	1. Discuss external committee membership at School Assembly 2. Meeting between theme leaders to share best practice	Jan 2020	HoS, School Manager, Theme leaders	Staff survey data demonstrating an improvement in external committee representation	Low

O5	Design and implement a formal strategy to encourage appropriate gender balance at School of Physics events such as seminars and conferences.	To ensure that staff who organise School events have expectations around gender balance clearly laid out to them and deliver on the School's aims in this regard.	1. Review the speaker policy for school-related events, using 2019 BQIT as positive example. Identify good practice and identify challenges. 2. Develop and publicise a new policy, along with guidance, on gender balance at seminars, conferences and other events. 3. This will include guidance on gender balance in seminars, and a separation of roles of the slowly rotating organiser of the series, and the chairs. 4. Create an online system to record diversity data on attendance, chairs, and speakers in school events.	Oct 2019 Oct 2020	BQIT organising committee, Head of School, EDI Chair, School Manager EDI Committee	Have document with EDI advice for conference organisation Have at least 20% of all invited speakers at events be female. Have female seminar chairs.	Mid

Ref.	Action	Rationale	Objectives/Milestones	Dates	Person(s) Responsible	Measurable	Priority
O6	Design and Install a new photo gallery in a much frequented space of the main Physics building.	To promote and celebrate the diversity reflected in the staff, students and alumni of our School.	1. Identify suitable people, images and quotes for inclusion. 2. Produce the physical display and install in in the building.	Dec 2019 July 2020	EDI Committee School Manager	Have a professional and exciting display installed in the building.	Mid
O7	Schedule Colloquia to end before 5pm	Currently Colloquia are scheduled 5-6pm. Many staff with caring responsibilities cannot attend them. The problem is the availability of large lecture theatres as student teaching gets priority.	Put pressure on central timetabling team to find an earlier colloquium slot.	June Annually	Colloquium organisers School Administrator Timetabling team	Colloquia at 4-5pm or earlier	Mid

LANDSCAPE PAGE

If you require a landscape page elsewhere in this document, please turn on SHOW/HIDE  and follow the instructions in red. This text will not print and is only visible while SHOW/HIDE is on. Please do not insert a new page or a page break as this will mean page numbers will not format correctly.

test