

"AdvanceHE

Juno Champion: Silver department award application form-University of Warwick Physics





Name of institution	University of Warwick			
Name of department	Department of Physics			
Date of application	January 2022			
Date of Juno Champion award	Renewal March 2020			
Institution Athena SWAN award	Date: November 2018 Level: Silver			
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List of abbreviations

CG Consolidated Grant E&D Equality & Diversity

ED&I Equality, Diversity & Inclusion

FTC Fixed term contract FTE Full Time Equivalent

GOTO Gravitational Wave Optical Transient Observatory

GTA Graduate Teaching Assistant

HoD Head of Department

ML Maternity leave

OEC Open Ended Contract

PDR Personal Development Review
PGR Postgraduate Research Student

PRES Postgraduate Research Experience Survey

PSS Professional Services Staff

PL Paternity Leave

R only Research only staff

RIS Research and Impact Services
SAO Senior Administrative Officer

T only Teaching only staff

T&R Teaching & Research academic staff

TSM Technical Services Manager

UG Undergraduate student

UG SSLC Undergraduate Staff Student Liaison Committee
WAMP Warwick Administrative Management Programme



1. Letter of endorsement



Athena SWAN Manager Advance HE First Floor, Westminster Tower 3 Albert Embankment London, SE1 7SP

26 March 2022

To whom it may concern:

I am delighted to submit this application for an Athena SWAN silver award.

Warwick Physics has a long track record of supporting Equality, Diversity and Inclusion and I have taken over responsibility for continuing this as Head of Department. Here we outline the most recent progress for your consideration, accompanied by our successful Juno Champion renewal.

This document focuses on the departmental efforts relevant to Athena SWAN, making strong cross-reference to our Juno Champion work alongside additional detail on support for Professional Services Staff. I would particularly highlight the following examples:

- Further increases in female research staff at FA6 and FA7
- Introduction of Equitea and Ethnic Minority Network
- Recent academic hires, of which 2 of the 7 are female and 6 of the 7 are non-UK
- Of the 27 current fellowships reported in REF2021, 6 held by female members of staff
- Of the 8 FA6 research fellow to FA7 Senior Research fellow/ Assistant Professor promotions in the last 5 years, 3 were female.
- 19/20 and 20/21 were excellent years for research awards, 16% and 14% respectively of PIs were female (not out of line with % of female staff) and in 20/21 24% by value was won by a female PI (but only 11% in 19/20 due to big CG, GOTO etc. awards with male leads).
- Increased flexibility in working arrangements for staff during Covid-19 pandemic to support caring and other responsibilities

I confirm that the information presented in the application (including quantitative and qualitative data) is an honest, accurate and true representation of the department.

I look forward to your feedback.

Yours Sincerely,

Professor Mark Newton, Head of Department Department of Physics

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Word count 296



2. Picture of the department

The Physics department was one of the founding departments when the University of Warwick was established in 1965 and has developed into a thriving modern community. We describe our organisational framework and committee structures on p1-2 of our Juno submission.

(i) Academic staff by contract function and gender: research-only, teaching and research or teaching-only

In Juno p3 we describe overall growth in academic staff numbers of 33% in the last 6 years, with increases in female academic staff in 3 of our 5 research clusters. We show categories of staff by gender, trends over the last 5 years and gender ratio of academic appointments.

Table 1 shows the current breakdown across all staffing groups. From this we note that since Juno there has been further growth in the proportion of women in all academic staff categories.

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

No staff or students are on a zero-hour contract. PGRs who teach (GTAs) are paid through a dedicated sessional teaching payroll with an overarching contract. Since 21/22 they are included in staff data; historically, approx. 20-25% of our GTAs have been female; this has risen to 34% for 21/22.

All our academic T&R staff are on open ended contracts (Table 2).

In 21/22, 71% of R-only staff are on FTCs (67 of total 94; 24 (36%) female). We have seen an increase in the number of female staff on FTCs across FA6 and FA7 (our pipeline), while the number of male staff is fairly steady (see Figure 1). For some years it has been part of our strategy to:

- i) encourage applications for promotion from FA6 Research Fellow to FA7 Senior Research Fellow/Assistant Professor.
- ii) to support fellowship applications from internal candidates.
- to make posts indefinite where staff have been on FTCs for many years or where there is a financially sound case to do so.

Redeployment within a research group is commonly used to ensure retention of staff when a FTC ends, usually without triggering the formal HR redeployment procedures. This of course depends on a post being available in a related research area. We have examples of staff moving between departments, recently including a female researcher moving between projects in Physics and Engineering and back again.



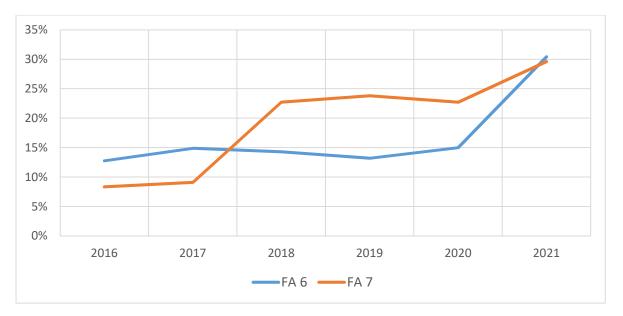


Figure 1: % research staff who are female- showing increases across FA6 and FA7

(iii) Professional and support staff by gender

Our PSS team supports administrative functions (student services, HR, finance) and technical functions (teaching labs, research labs, workshops). The PSS gender split looks very even at first glance (Table 3). However, there is an imbalance on both the administrative (2 of the team are male) and technical (2 of the team are female) categories. We are working to address this, with particular focus to increase numbers of female technical staff (Juno p14).

(iv) Where relevant, comment on the transition of technical staff to academic roles. We have two examples:

- A male technician joined Warwick as a trainee, was supported to obtain a BSc at a local university, completed a MSc at Warwick which was subsequently upgraded to a PhD by research. He worked in a research role until in 2015 he won a Marie Curie fellowship in Belgium. He took unpaid leave from his indefinite research fellow post to take this up, and then made the move permanent.
- A member of now academic staff completed his PhD at Warwick in 1992 and has been employed since in roles at the interface between research and technical support, first as Research Fellow, then Experimental Officer. In 2021 he was promoted to FA8 Associate Professor in recognition of his contributions to research and teaching.

Word count 566



Supporting and advancing women's careers

3.1 Key transition points

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

In REF 2008, 51 FTE Category A staff were submitted to the Physics panel, with a small number to Engineering. All female academic staff were submitted (13% of total).

In REF 2014, 54.6 FTE Category A staff were submitted to the Physics panel, with a small number submitted to General Engineering. All female academic staff were submitted (14% of total).

All eligible staff were submitted to REF2020; of the 84 staff submitted 16% are female.

One impact case study submitted to each REF2014 and REF2020 included a female lead.

(ii) Professional and support staff: Induction

We have an online departmental induction programme that aligns to the University induction and complements hands-on training. There are elements that are common for all staff and PGRs joining the department (Juno p8). Completion of induction, including mandatory training, is recorded through submission of a webform and collation of completions, including a field for feedback. The HR Officer ensures completion, chasing as required.

For PSS staff, additional elements include:

- welcome meeting with the SAO, in addition to the meeting with the HoD
- specific mandatory training (for example finance, health and safety, technical training)
- tour of the buildings (particularly useful for those not familiar with a lab environment)
- shadowing staff working in central functions (for example in university HR).

Uptake is 100%. The process is reviewed through invited feedback which is acted upon by the HR Officer. Effectiveness is monitored by the line manager during probation meetings though we recognise there is more we can do to evaluate the overall effectiveness of our induction process.

(iii) Professional and support staff: Promotion

The promotions process is not available to PSS. Instead, we support our staff to develop in their roles for example through pointing to formal and informal training, university mentoring schemes, work shadowing, involvement in different projects and initiatives, participating in internal and external events to build networks. As roles grow and evolve, we ensure they are re-evaluated. We support staff in applying for another opportunity at a higher grade in the department, within the University or in some cases externally.



Over the last five years, 6 roles have been successfully regraded at a job evaluation (100% success rate: 2 technical and 4 administrative). Two members of the PSS team are trained as Hay Job evaluators.

Word count 368

3.2 Career development

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

Support for staff applying for grants is provided by the University's Research and Impact Services (RIS). Two members of RIS staff spent significant time within the department (online during COVID-19) to meet with staff working on or considering grant applications.

Physics Research Committee circulates information on grant opportunities and actively provides peer to peer advice for applicants.

Cluster leaders and other knowledgeable academics offer peer to peer support and share advice and experience and make time to read and comment on applications in preparation.

Training on grant writing is provided by our Academic Development Centre, and specific sessions are delivered for research staff.

Mock interviews are given to staff invited to interview for fellowships and major awards; these are run internally and involve experienced staff who offer advice and share knowhow to help optimise preparation.

Staff whose grants are unsuccessful are supported through their line manager and peers to develop their research plans. Examples of successful applications are shared; this is rarer with unsuccessful grants since we find colleagues less keen to share these.

We have several long-running research projects where funding is applied for every 3-4 years. Where possible research staff are actively involved in writing the next bid for funding to ensure continuity of contracts, in which scenario they would be named as a Co-I research investigator.

'Physics Days at Warwick' are academic meetings funded by the department where research ideas can be exchanged across all disciplines, to encourage collaboration. These are open to all who and involve opportunities to network.

(ii) Professional and support staff: Training

It is departmental policy that all staff undertake five days of personal development training per year (Juno p12). We think this is an underestimate but find it difficult to capture when the scope of personal development includes staff attending conferences, meetings, practical training and shadowing, plus internal and external training online. We do not have a management information system that captures uptake across all training.

All PSS staff in line management positions have completed Warwick management programmes e.g. Introduction to Management (FA1-5), Warwick Administrative Management Programme (FA6-7) and/or the Warwick Leadership Programme (FA8-9). Across all roles,



18 staff (10 female) have completed these programmes. There is a suite of training courses available through Organisational Development and IT Services. We encourage feedback on courses and find that staff recommending courses to colleagues is one of the most effective ways to encourage others to attend.

Less formally, work shadowing is encouraged within the department and across the wider University, for example a female member of finance staff has shadowed a female senior member of the central finance projects team following discussion in PDR.

We have put considerable effort into developing a training programme for our trainee research technicians; each trainee has a tailored 2-year programme of 3-month rotations through research groups in the department with clear objectives and expectations for completion and regular progress meetings. 1 female and 1 male member of staff completed this program in summer 2021 and successfully applied for FA4 Research Technician positions. We paused the programme during COVID-19 but have two posts to advertise in 2022/23, with a focus on advertising in local papers and schools.

Trainee technicians are supported to carry out further study, with funding from the department. One (female) is studying BSc Physics here at Warwick, part-time (P/T) so that study is split across 6 years with her tuition fees paid and time given to attend taught elements. We have developed a bespoke programme of modules and personal tutor support that is balanced alongside her 'day job'. Another trainee completed a foundation degree in Engineering and is now studying for a degree at a nearby university, with financial support from the department for fees. Other PSS staff have additional leave to support study.

Identification of training needs is agreed by discussion with the line manager in a regular oneto-one or via the annual PDR. Uptake of training is similarly monitored via PDR.

(iii) Professional and support staff: Appraisal/development review

Annual PDR is held with the line manager and used to set objectives, discuss progress and support career aspirations. All staff have the option to request an alternative reviewer. PSS have a 6-month check-in to review progress and update objectives. There has been 100% uptake every year since 17/18; for 19/20 and 20/21 the full PDR has been replaced with a light-touch 'check-in' discussion due to COVID-19.

(iv) Support given to professional and support staff for career progression.

In Juno p14 we describe in detail our support for technical staff. There is strong support for the Technician's Commitment, and the TSM (male) sits on the steering committee. Attendance at events is encouraged, for example at the annual Facilities and Technician's showcase where technical staff demonstrate the latest developments in technology

Career progression is discussed in PDR and informally at other points of the year. All staff are proactively alerted to job opportunities within the department and beyond. Job openings are discussed in team meetings. We have had examples where the required expertise was within the team and in discussion with HR have advertised and filled a role internally, most recently two technical positions and one administrative.

We have a strong track record of staff development and supporting staff in applying for more senior roles. One example is our Mechanical Workshop Manager (female) who joined as an apprentice, worked as a research technician for many years, took a career break, returned



to a technical role, and was successfully appointed to the manager position which she has now held for 6 years.

Two female members of PSS were nominated and accepted to take part in the 2021 'Shine' university programme, which supports the university Talent Strategy. The scheme is designed for FA3-5 staff who are performing well in their current roles but would gain from having a greater awareness of their personal values and strengths, to gain confidence for future environments and roles.

Word count 961

3.3 Professional and support staff: flexible working and managing career breaks

(i) Cover and support for maternity and adoption leave: before and during leave, and on return to work

The University has a clear maternity/adoption policy which line managers and HR staff in the department discuss with individuals. In Juno p20/21 we describe the actions that we routinely take *in addition* to this and which equally apply to all staff.

Staff on leave continue to receive all departmental communications and invitations to departmental events. Line managers keep in touch with staff and ensure they are up to date with any changes. Staff are given an allowance of paid Keeping in Touch days which they are free to use if they wish and some staff have taken advantage of this.

On return, we support staff with flexible working requests and make arrangements to accommodate private space for feeding/expressing.

(ii) Maternity return rate

Our numbers of staff taking maternity leave are very small (Table 4).

No PSS staff have left following maternity leave.

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

In the last five years, 16 staff have taken paternity leave (14 Academic and Research, and 2 PSS) (Table 5). There have been four cases of shared parental leave (none of the partners have been employed by the university). We also have examples where paternity leave has been combined with annual leave, compassionate leave and unpaid leave to help manage a personal situation, and we are sympathetic and flexible in such circumstances on a case-by-case basis. We have seen an increase in staff taking paternity leave in the last few years in response to encouragement.

There have been no cases of adoption leave.



(iv) Flexible working

Flexible working is in all areas of the department with more formal arrangements for PSS staff. As well as arrangements outlined in Juno p20, informal arrangements are made to accommodate short term needs, for example emergencies at home or non-medical appointments.

During the pandemic, PSS staff were working more flexibly. Administrative staff were broadly working from home, and many had caring or other responsibilities that restricted their ability to work. The message from the department was clear that all staff should do what was manageable in such circumstances. Tasks were prioritised and duties and expectations were amended for those unable to deliver some aspects of their role. Technical staff required to maintain essential systems and equipment on campus worked flexibly to attend campus when they needed to. Other technical staff were put on furlough leave. Line managers maintained contact with all staff through Teams, including those on furlough leave.

When compared to other academic departments, the Physics PSS team has an unusually high number working part-time. We strongly support this continuing and have seen the benefits from both sides.

From summer 2021 hybrid working was introduced.

- (v) Transition from part-time (P/T) back to full-time (F/T) work after career breaks
 We look favourably on requests for a change in working hours and have many examples of agreeing changes in working patterns across all staff groups. Recent examples include:
 - Male member of the technical team reduced his hours to accommodate childcare. He
 worked this pattern for 12 months and then made a request to return to full-time which
 was agreed.
 - Female member of administrative team worked F/T prior to ML, reduced hours on return to accommodate childcare, worked this pattern for 4 years and her request to return to full-time was agreed.

We also have a strong track record of recruiting staff who have been out of the workplace for some time (more than 10 years in one case), with recent examples of staff returning to work after an extended period at home following maternity leave and another after a long period of sickness absence.

Word count 571

3.4 Organisation and culture

Warwick Physics was one of the first Juno Champions and E&D has long been embedded throughout the department. In Juno p15 we outline our inclusive culture, with social activities described on p16 and extensive outreach at a national level on p18.

During the pandemic we have:



- Shifted all meetings and events online, including group and team meetings and one-toones between staff
- Held virtual departmental graduation ceremonies for 19/20 and 20/21 online, including announcement of prizes and awards
- Held 2020 departmental Christmas speech and quiz online, open to all staff and PGRs.

We found that online events permitted more people to attend than would usually be able to, either because numbers are capped or because of childcare or other responsibilities that clash.

We were one of the first departments to return to campus in summer 2020 with a priority to provide opportunities for those needing to be on site, whether for research, mental health or other personal needs.

Since our Juno renewal, to further our inclusive activities, we have started a <u>Warwick Ethnic Minorities in Physics Network</u> and formalised <u>Equitea</u>, our monthly ED&I forum.

Word count 186

4. Action Plan

University of Warwick Physics Department Action Plan April 2020

Further action / action in progress/ deadline in 1st year of action plan	By April 2021
Deadline in 2 nd year of action plan	By April 2022
Deadline in 3 rd year of action plan	By April 2023
Deadline in 4th year of action plan	By April 2024

Action plan progress, colour scheme
On schedule/completed
Delayed
No action so far/not started

1:	A robust organ	isational fran	nework to de	eliver equa	lity of opportu	ınity and reward
	Title & Objective	Rationale	Person Responsible	Timeframe	Success criteria	Progress update



1.1	Proactively increase the pool of female applicants for research and academic posts. (High level coordination action of the tasks specified under Principle 2.)	We need to do more to encourage female applicants at all levels.	HoD	By April 2024	An increase in female research and academic staff in all clusters in the next 4 years. An overall 30% increase across the dept.	On schedule. Data are analysed and progress is monitored by Dept of Physics Welfare and Communication Group (WCG) each year.
1.2	Analyse data (applications, offers or acceptances, and degree classification) by gender and ethnicity for all new and existing UG and PGT courses to identify any gender differences with a view to understanding what additional measures may need to be put in place to address the issue.	Data analysis is required for new Physics with Astrophysics courses, and new PGT courses that will be introduced in the next 4 years.	Directors of Undergraduate and Graduate Studies	By April 2024	No significant differences present in our admissions, progression or awards data when analysed by gender or ethnicity. Action taken on any issues found.	Ongoing. The 2020/21 intake has showed no significant gender differences to previous years in regards to intake, however we will be analysing the data submitted to HESA by the University and will continue to analyse this through future intakes, reporting to WCG. A new attainment dashboard is now available at Warwick to facilitate analysis. In four of the last eight years (including 20/21) female students in physics were more likely to graduate with a good honours degree than male students. Where the sample sizes are large enough for an analysis of results by ethnic background (e.g. Indian students) in the last 4 years, there is no evidence for an attainment gap between these students and white students. In two of the last four years, Indian students were more likely to graduate with a good honours degree than other students. There have been no PGT courses launched due to COVID-19 delays.
1.3	Identify reasons behind gender gap in applications for our UG courses, in particular the 4-year MMathPhys, using feedback gathered through focus groups of our UGs and using decliners' survey.	To understand why women are less likely to apply for a four-year maths/physics degree.	Undergraduate Admissions officer/ Juno lead	By April 2022 (revised to April 2024)	Understand and address any application issues (by 2022) with a view to seeing a longerterm increase in female students accepted on MMathPhys (by 2024).	Some delays. Due to COVID-19, face to face focus groups have been put on hold, to be restarted 2022. Data analysis is impacted through the clearing systems from other departments and other universities, but we have looked at the data since 2019 and the gender gap for 4-year MMathPhys course has mostly disappeared.



	Seek to understand	There has been	Undergraduate	By April 2022	Understand what	Some delays. Due to COVID-
	why students do/do	a decrease in	Admissions	(revised to	our new students	19 we have not been able to
	not attend OHODs or	students	Officer	April 2024)	value in OHODs	run in-person Offer Holder
	virtual Open days.	attending			and other	Open Days and have held
	Identify the key	OHODs over			contact and	virtual open days instead. The
1.4	benefits for	the last few			increase	timeframe has been
	applicants of doing	years, and a			engagement by	amended to 2024 to allow us
	so, through feedback	sector-wide			10% from 19/20	to properly assess 2022, 2023
	and focus groups	issue with			figures.	and 2024 open days and offer
	with current first	virtual open				holder open days. OHODs
	year students.	days.				restarted January 2022.

2: Appointment and selection processes and procedures that encourage men and women to apply for academic posts at all levels

	women to apply for academic posts at all levels						
	Title & Objective	Rationale	Person Responsible	Timeframe	Success criteria	Progress update	
2.1	Establish search committees in all research clusters to proactively increase the pool of female applicants for research and academic posts.	Potential applicants need to be identified before we have posts available.	Delegated from HoD to each cluster leader	Creation of search committee for each research cluster by end 20/21. Results monitored by WCG, with report April 2024.	Search Committees established (2021). An increase in applications from female research and academic staff in all clusters by 2024.	On schedule. Search committees are now active across the research clusters and consist of both female and male academics. When academic and research posts are advertised, search committees advertise these posts within their networks and collaborations and posts are filled in line with the HR principles and the best candidate. We have recently launched a LinkedIn page aimed primarily at alumni to increase the reach of our job adverts and pool of potential applicants.	
2.2	Target advertising of new research and academic posts to potential female applicants, especially those identified by search committees.	Advertisements need to be more targeted when we do have posts available.	Delegated from HoD to each cluster leader	By April 2024	An increase in applications from female research and academic staff in all clusters by 2024.	On schedule. The department uses a template for job adverts that has been approved by HR to help eliminate any inherent biased language for all job opportunities. We follow the university's recruitment policy, and equality and diversity data is not shared with the recruiting department. This makes it difficult to analyse applications by gender, ethnicity and other characteristics, hence there is still some work to do. There have been 31 (8 female) new research/academic starters in 2020-21 and a further 19 (5 female) so far in 21/22.	



	Increase ethnic	Increase in	Chair of WCG	By April 2024	An increase in	On schedule, as 2.1.
	diversity of	diversity of	to coordinate		applications from	
	applications for	staff	input from the		ethnically diverse	
2.3	research and		search		research and	
	academic posts, by		committees		academic staff	
	similar process to					
	Action 2.2					
	Develop processes	More decisive	HOD	Policy	An increase in	Some progress. It is HR policy
	with HR to extend	action needed		implemented	applications from	not to share E&D data with
	recruitment period	to ensure		end 21/22.	female, and	recruiting departments,
	and/or re-advertise	diverse		Results	ethnically	making it difficult to analyse
2.4	for research and	shortlists		monitored	diverse, research	our current position or
	academic posts that			by WCG,	and academic	analyse by post. We are in
	do not generate a			with report	staff in all	discussions with HR/senior
	diverse shortlist.			April 2024.	clusters by 2024.	university management
						about this.
	Increase diversity in	To promote	Postgraduate	By April 2024	Two applications	Some progress. All award and
	the postgraduate	postgraduate	Admissions		made each year	scholarship opportunities are
	community, with	opportunities	Officer		requiring 50 %	made available to
	support for	to students			contribution	prospective students via the
	applications to	from under-			from	PG admissions webpages,
	schemes such as IOP	represented			department.	refreshed in 2021. There has
2.5	Bell Burnell	groups				been an application to the
	Scholarships.					IOP Bell Burnell scheme in
						each year the scheme has
						been running, with one
						successful award started
						October 2021 (with 50%
	Danastasastalas	1	11			contribution).
	Departmental s	tructures and	a systems w	nich suppo	ort and encoul	rage the career

Departmental structures and systems which support and encourage the career progression and promotion of all staff and enable men and women to progress and continue in their careers

	Title & Objective	Rationale	Person Responsible	Timeframe	Success criteria	Progress update
	To understand how	Only 39% of	Senior	By April 2021	Positive feedback	Delayed. Due to COVID-19, a
	the annual Personal	female and 29%	Administrative	(revised to	from reviewers	light touch PDR process has
	Development	of male	Officer	April 2023)	and reviewees	run in 2019/20 and 20/21 in
	Review (PDR)	respondents			from next PDR	the form of informal check-
	process can be made	agreed "that			cycle, indicating	ins. Uptake was good (see
3.1	more useful and put	the PDR assists			at least 50% of	main body text). Timeframe
3.1	this into practice,	me with long			respondents felt	for completion of this action
	using survey	term career			the PDR was	is delayed to April 2023.
	outcomes (e.g.	development"			useful to them.	
	PULSE) and focus	in PULSE survey				
	groups with different					
	staff groupings.					



			.			
	Relaunch formal	Current buddy	Director of	By April 2021	Positive feedback	
	mentoring/buddy	system not	Graduate		from PGSSLC and	now completed.
	system for PGRs	widely	Studies		postgraduate	We consulted with students
		adopted.			focus group.	to see what they wanted-
		Feedback from			Over 50% of new	there was a desire for a
		PGRs shows			PGRs having one	formal mentoring scheme,
		preference for			or more	but we did not find interest
		buddy in own			mentoring	when it was launched.
		group.			meeting.	Revisiting via PG-SSLC,
					Ü	feedback showed students
						prefer a buddy scheme
3.2						(assigning a student from a
						similar research area within
						the department); students
						are made aware of the
						scheme in their induction and
						via supervisors. This has had
						· · · · · · · · · · · · · · · · · · ·
						good uptake. We will
						continue with the buddy
1						scheme and review
						effectiveness. Focus groups
						will be held to capture
		a. cc 1			6 11 1	feedback.
	Encourage uptake of		Senior	By April 2022	Positive feedback	
	training	students report	Administrative		in PDR, from PG-	during COVID-19 and
	opportunities across	a lack of	Officer		SSLC and	suspension of training/ move
	all staff and student	training;	_		staff/surveys	of many opportunities online.
	groups.	however, we	Director of		about training	
		know training is	Graduate		availability.	
		available and so	Studies		20%	
3.3		need to			improvement in	
3.3		encourage			uptake, as	
		uptake and			measured by	
		identification of			data provided by	
		genuine gaps.			OD etc.	
					Responses for	
					next PRES above	
					University	
					average.	
	Increase support to	Perceived lack	Director of	By April 2023	Positive feedback	On schedule.
	postgraduates who	of support for	Graduate		from	Data show an increase in the
	teach, through	interacting with	Studies		postgraduate	number of PGRs obtaining
	training in co-	undergraduates			focus group.	AFHEA. We see that 75%
1	ordination with	was identified			Increase in	(33/44) of 3rd year PhD
1	PGSSLC	in focus group			numbers of PGRs	students have completed it,
1					obtaining AFHEA.	and 84% (36/43) of final year
3.4					Ostanning ArricA.	PhDs. We expect figures for
3.4						our current 2nd years to take
						The state of the s
1						longer due to limited
						opportunities with COVID-19.
1						A focus group will be run in
1						summer 2022, repeating
						questions from 2019 focus
						group.



	Improve information	More	Careers Officer	By April 2022	Positive feedback	
	and support to guide PGRs to next destination; create comprehensive directory of destinations of PGR alumni.	information requested from PG focus group			from postgraduate focus group. Alumni directory created and maintained.	Work is ongoing with the University Careers and Alumni teams to improve support and information. LinkedIn is being used to encourage networking, to share job opportunities and
3.5						news, we are providing training on use of social media (as part of our International Women's Day events) and have new web resources including alumni case studies and specific career support.
	Host Undergraduate Conference for Women in Physics, working with IoP	Promote careers of female physics students	Juno lead	By April 2023	Conference hosted with positive feedback from participants and attendees.	Some progress. The department applied to host CUWiP in 2023 and although not successful were encouraged to reapply to host in 2025. Our preparations for the bid
3.6						generated interest across the department. The National Astronomy Meeting will be hosted by Warwick in July 2022 and will be open to UG students with specific student rates and a small number of bursaries available.
	Follow Technician Commitment and TALENT project to improve training and recognition, implement Technician Job Families, and attract more female staff.	Improve recognition and prospects for technical staff	HOD	By April 2023	High levels of satisfaction from technical staff in PULSE survey. Increased female fraction of technical staff.	On schedule. Job families have been implemented and the department supported the technical team with this. All technicians have been encouraged to engage with the TALENT project, for example attending events (online during COVID-19) and signing up to receive the Midlands Innovation
3.7						newsletter. We continue to recognise excellence, through nominations for the Papin prize (one female nomination in 2021 in the Newcomer category) and IOP awards.



4: Departmental organisation, structure, management arrangements and culture that are open, inclusive and transparent and encourage the participation of all staff

	open, inclusive	arra tranopai		ourage are		
	Title & Objective	Rationale	Person Responsible	Timeframe	Success criteria	Progress update
4.1	Encourage and ensure nominations are made from the department for a wide range of research and teaching awards.	Increase visibility and recognition, esp. of female staff	HoD	By April 2022	The balance of nominations is in line with staff and PGR gender balance.	On schedule. The department is better coordinating information on nominations for internal and external awards, with details held by the HoD. Staff and PGRs who teach continue to be nominated for teaching awards, with online teaching awards in 19/20 and 20/21.
4.2	Encourage research staff and PGRs to publish their own Research Nuggets, and ensure appropriate recognition in academic-led nuggets.	Lack of recognition felt by PGs and ECRs	Cluster leaders	Ongoing, with analysis April 2023	Positive feedback from PGGSLC and PGR/ECR reps on WCG. At least 25% of Research Nuggets produced by PGR/PDRA.	Ongoing. We think submission of research nuggets has decreased due to pressures of COVID-19 and this is being encouraged as we return to normal teaching and research activities.
4.3	Ensure full acknowledgment of contributions to research from all staff, including technicians and students, in research papers and other publicity; challenge where this is not being done.	Technicians' Commitment. Lack of recognition felt by PGs and ECRs	Cluster leaders	Ongoing, report April 2024	Increased level of satisfaction recorded by technical staff in PULSE survey. Increased fraction of research papers with technician as author.	On schedule. We are monitoring this closely following encouragement from HoD and Cluster leaders. Data will be analysed by WCG. A yearly call has been put in place to track increase in acknowledgements
4.4	Develop a strategy to capture and track the long-term impact of our outreach activities.	Need to better understand impact of extensive outreach programme in order to focus effort	Outreach Officer	By April 2024	A well-developed mechanism to capture and analyse feedback from our outreach events. Case studies published on the website. Potential REF2028 Impact Case Study.	Delayed. Outreach activities and events have been majorly impacted by COVID-19.
4.5	Build a series of resources to help student transition from GCSE to A-level and A-level to university	We identified a need for this in March 2020 and uptake has been high.	Outreach Officer/ lead academic for journal club	By April 2022	Consistently high uptake of resources. Positive feedback from students and teachers, linked to action 4.4.	To be reviewed. Uptake of journal club was high during summer 2020, we do not currently have a member of staff able to lead on this specific activity.



5: Flexible approaches and provisions that enable individuals, at all career and life stages, to optimise their contribution to their department, institution and SET

J.	stages, to optim	nise their cor	ntribution to	their depar	rtment, institu	tion and SET
	Title & Objective	Rationale	Person Responsible	Timeframe	Success criteria	Progress update
5.1	Review of arrangements for remote and flexible working for all staff and students	To take positive opportunities from changes in working patterns forced by COVID-19, while ensuring operational objectives can still be met.	Senior Administrative Officer	By April 2021	High level of staff satisfaction in PULSE survey. Positive feedback to PG-SSLC.	completed. During COVID-19 staff and students have been working more flexibly than ever. Hybrid working has been introduced in line with the University scheme, feedback will be sought in spring 2022 via a University-level survey. Further analysis will be done at a departmental level once embedded, seeking feedback from staff and students, alongside PULSE and feedback from PGSSLC.
5.2	Expansion of conference care fund to PGRs	We identified a need to provide PGRs with the same support that staff can apply for in support of childcare costs associated with conference attendance.	Senior Administrative Officer / Director of Graduate Studies	Implemented April 20, ongoing monitoring	Uptake in line with uptake of the staff fund for Physics. Positive feedback from PGSSLC.	Completed. The University staff conference care fund was paused in 19/20 and 20/21, now re-opened. The departmental PG conference care fund is in place although we know most conferences continue to run on-line and hence there have been no requests to access it yet. Feedback will be sought annually.
5.3	Increase diversity of staff nominated to University committees	Provide opportunities for staff at all levels to develop outside of dept. Improve perception of University management within dept.	HOD	By April 2024	Increased diversity in Physics representatives on central University Committees, incl. more ECRs, administrative and technical staff. Higher levels of satisfaction with central functions recorded in PULSE.	On schedule. This is reviewed annually and as vacancies on committees arise.



6: An environment where professional conduct is embedded into departmental culture and behaviour

	Title & Objective	Rationale	Person Responsible	Timeframe	Success criteria	Progress update
6.1	Continuous improvement in reporting and handling of non- professional behaviour (bullying, harassment, disputes, research misconduct etc.)	While instances of non-professional behaviour are thankfully low, any that do occur need to be easily reported, acted on swiftly, and lessons learned from each case.	HOD	By April 2024	100% of staff and students know how to report non-professional behaviour. All cases resolved in a timely fashion.	On schedule. Training delivered in the October 2021 all-staff meeting on 'Report & Support' to report sexual misconduct, bullying and harassment and discrimination.
6.2	Improved signposting to support mechanisms from our own internal webpages and communications, including Wellbeing, Togetherall and EAP.	Support is available for staff and students from a range of services, but we know they are difficult to locate.	Senior Administrative Officer	By April 2021	> 90 % of respondents in next departmental survey report that they know where to find wellbeing support	On schedule. We have done some significant work to improve our internal and external facing webpages and communication within the department and externally via social media e.g. Twitter and LinkedIn. We are currently focusing on our E&D pages (visible internally and externally) to provide clear information and signposting to any member of staff or student.



Appendix 1: Tables

Staff category	Grade	Female headcount	Female Proportion	Male headcount	Male proportion
Teaching and Research	FA 7	3	30%	7	70%
	FA 8	3	12%	23	88%
	FA 9	4	15%	23	85%
Research Only	FA 5	0	0%	7	100%
	FA 6	14	30%	32	70%
	FA 7	8	30%	19	70%
	FA 8	0	0%	6	100%
	FA 9	2	29%	5**	71%
	NON FA GRADE*	0	0%	1	100%
Teaching Only	FA 6	1	100%	0	0%
	FA 7	2	100%	0	0%
	FA 8	0	0%	1	100%
	NON FA GRADE*	24	34%	46	66%
Professional and Support Staff	FA 1	1	100%	0	0%
	FA 3	1	50%	1	50%
	FA 4	4	50%	4	50%
	FA 5	4	40%	6	60%
	FA 6	5	50%	5	50%
	FA 7	1	50%	1	50%
	FA 8	1	100%	0	0%

Table 1: Summary of staff as of 1 October 2021

^{*}Non-FA grade are staff not on the salary scales; for Research-only this is a KTP Fellow, for Teaching only these are PhD students who teach as Graduate Teaching Assistants.

^{**} The data include a small number of emeritus staff (all male) employed as a recognised researcher to work on a specific project.



2017		2018				20	19			20	20			20	21						
		F	TC	0	EC	FTC OEC		FTC OEC		FTC C		0	DEC F		TC OEC		C				
Role	Grade	F	M	F	M	F	M	F	M	F	М	F	M	F	M	F	M	F	M	F	M
T&R	FA7	0	0	0	3	0	0	0	6	0	0	3	5	0	0	3	7	0	0	3	7
	FA8	0	0	3	24	0	0	3	24	0	0	3	25	0	0	3	23	0	0	3	23
	FA9	0	0	3	21	0	0	4	21	0	0	3	22	0	0	3	23	0	0	4	23
R	FA5	0	3	0	0	1	2	0	0	1	6	0	0	1	4	0	0	1	7	0	0
only	FA6	7	38	0	2	7	40	0	2	7	43	0	3	6	30	0	4	13	30	0	2
	FA7	1	3	0	7	3	8	2	9	3	7	2	9	2	6	3	11	6	6	2	13
	FA8	0	0	1	5	0	0	0	5	0	0	0	6	0	0	0	5	0	0	0	6
	FA9	0	3	1	0	0	3	2	0	0	3	2	0	0	3	2	2	0	3	2	2
	Non-FA	0	3	0	0	0	1	0	0	0	1	0	0	0	2	0	0	0	1	0	0
Т	FA6	1	0	0	0	1	0	0	0	1	0	0	0	1	1	0	0	1	0	0	0
only	FA7	0	0	2	1	0	0	2	1	1	0	2	1	0	0	2	0	0	0	2	0
	FA8	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	1	0	0	0	1
	Non-FA	-	-	-	-	-	-	-	-	-	•	-	-	-	•	•	-	0	0	24	46

Table 2: Academic, research and teaching staff by grade on fixed term (FTC) and permanent open-ended contracts (OEC) for the last 5 academic years

PSS Staff	2017			2018			2019			2020			2021		
Grade	F	M	Total												
FA 1	1	0	1	1	0	1	1	0	1	1	0	1	1	0	1
FA 3	3	0	3	2	1	3	2	1	3	4	1	5	1	1	2
FA 4	3	4	7	3	4	7	2	4	6	2	4	6	4	4	8
FA 5	5	7	12	5	7	12	4	6	10	4	6	10	4	6	10
FA 6	5	5	10	5	4	9	7	4	11	5	5	10	5	5	10
FA 7	0	1	1	0	2	2	0	2	2	1	2	3	1	1	2
FA 8	1	1	2	1	0	1	1	0	1	1	0	1	1	0	1
Total	18	18	36	17	18	35	17	17	34	18	18	36	17	17	34

Table 3: Professional Services Staff by gender over the last 5 years



Staff group	Year	No. of staff	Left due to FTC before end of ML	Left before end of ML	Left within 6M of ML end	Left within 12M of ML end	Left within 18M of ML end	Total left
R&T	16/17	1	0	0	0	0	0	0
	17/18	3	0	0	0	1	0	1
	18/19	2	0	0	0	1	0	1
	19/20	0	0	0	0	0	0	0
	20/21	1	0	0	0	0	0	0
PSS	16/17	2	0	0	0	0	0	0
	17/18	0	0	0	0	0	0	0
	18/19	1	0	0	0	0	0	0
	19/20	0	0	0	0	0	0	0
	20/21	0	0	0	0	0	0	0
	Total	10	0	0	0	2	0	2

Table 4: Staff maternity leave data 2016-2021

Staff group	Year	No. of staff	Left due to FTC before end of PL	Left before end of PL	Left within 6M of PL end	Left within 12M of PL end	Left within 18M of PL end	Total left
A&R	16/17	2	0	0	0	0	0	0
	17/18	4	0	0	0	1	0	1
	18/19	5	0	0	0	1	0	1
	19/20	1	0	0	0	0	0	0
	20/21	2	0	0	0	0	0	0
	16/17	0	0	0	0	0	0	0
	17/18	0	0	0	0	0	0	0
PSS	18/19	0	0	0	0	0	0	0
	19/20	0	0	0	0	0	0	0
	20/21	2	0	0	0	0	0	0
	Total	16	0	0	0	2	0	2

Table 5: Staff paternity leave data 2016-2021

Word count 51