

We are physicists

Results of the IOP member
diversity survey 2019



October 2020

iop.org

IOP Institute of Physics

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Foreword

This survey is one of the most important pieces of research the IOP undertakes. It provides an unalloyed picture of the progress we are making – or striving to make – towards one of our core goals: that of making the IOP, and the physics community, truly representative of society.

We are committed to this goal as a matter of social justice – it is a question of simple fairness – but also because we know introducing greater diversity will improve physics. Copious research shows that diversity of background leads to diversity of thought and that leads to greater innovation and better problem-solving. Supporting people from under-represented backgrounds to feel welcome and engaged in the physics community is a powerful antidote to the groupthink that can prevent otherwise bright minds from successfully tackling our most difficult challenges. The more we can support a wide range of people to advance in physics, the more other people from non-traditional backgrounds considering a career in our discipline will see there is a place for them in our community

This survey allows us to see how far we have come towards this goal, and it makes clear that despite our longstanding commitment, our progress has been too slow as a community. That is why we are seeking to tackle this issue in greater depth and breadth than previously, with a series of wide-ranging programmes.

We will shortly launch a public influencing campaign to address the barriers which prevent young people from under-represented backgrounds choosing physics as a career. We want to change the way parents, schools, the media and social media influencers talk about physics, so it is no longer seen as ‘hard’ or ‘for boys’, and students from all backgrounds can see people like themselves making a success of physics.

We are also going to be taking action in our ecosystem programme to improve the experience of life as a professional physicist for all wherever they learn and practise physics, ensuring that our community makes clear that it values new voices and approaches and helps them to progress.

We will look internally at how we are governed and whether our structures give our members sufficient voice in our decision-making processes. We will also look at how we as the IOP identify, recognise and reward achievement in physics, so we can signal to our community how much we value the widening of our talent pool.

The impact of these programmes will not be immediate, but they will give us the best chance of achieving real progress towards the goal we have set out so clearly. Future surveys of this type will continue to track how far we have come, and how far we have still to go.

October 2020

Background to the survey

The Institute of Physics (IOP) is the professional body and learned society for physics in the UK and Ireland. We seek to raise public awareness and understanding of physics and support the development of a diverse and inclusive physics community. As a charity, we are here to ensure that physics delivers on its exceptional potential to benefit society.

This survey report is part of a **time series of reports** that provide invaluable information for both the organisation and our membership. We collect demographic data about our membership to understand the profile of our members.

The responses provide information that will help us to continue our commitment to making our services accessible to all, and to implement policies and practices that are fair, inclusive and effective. It also helps to inform our strategic priorities by ensuring equality of opportunity for everyone engaging with the discipline. It enables us to work towards our aim of being a fully inclusive organisation, where all staff and members are valued, and to ensure that all members, and potential members, can participate fully in our activities.

For further information about diversity and inclusion at the IOP visit iop.org/about/IOP-diversity-inclusion

Our membership survey

This survey report shows the responses to the anonymous survey of IOP members carried out in October 2019. This was the third survey we have undertaken, with previous surveys conducted in 2011 and 2015. This report aims to make comparisons on the previous two, drawing conclusions where possible taking into consideration the revision of the membership structure in 2017. As a result of this restructure, only some comparisons between the surveys are possible, but where we are able to, they have been included.

In the survey question relating to membership category, members only had the option of replying Fellow/Honorary Fellow, Member or Associate Member. It was decided that Honorary Fellow numbers were too low to separate them for the purpose of the survey.

Please note percentages are rounded to the nearest 1%. As a result, some breakdowns do not add to 100% and 0% does not mean no responses.

Our strategic priorities for diversity and inclusion

Diversity and inclusion is a core theme running through the IOP's strategy, *Unlocking the Future*. Our commitment to diversity and skills are identified as one of our three challenges:

1. **Diversity and skills:** We want to build a thriving, diverse physics community and play our part in solving the STEM skills shortage by ensuring that people, no matter their background or where they live, have access to world-class physics education and training.
2. **Unlocking capability:** We want to ensure that the UK and Ireland are able to realise the full societal and economic benefits of the new industrial era.
3. **Public dialogue:** We want to show the impact of physics on people's lives, enabling informed public debate about funding and policy in areas including healthcare, climate change and cybersecurity.

To see the full strategy visit iop.org/strategy

Work and study environment

The 2019 survey included for the first time, an additional section of questions to gather information from our members about their working or studying environment. This is part of our commitment to developing and promoting professional conduct and behaviours across our membership and wider community.

The survey

We surveyed our membership against the following characteristics: gender, gender identity, sexual orientation, ethnicity and nationality, age, religion or belief, disability and socio-economic background. We modelled the data category options provided by the 2011 ONS Census¹ across our survey, ensuring that 'prefer not to say' or the option to skip was included for each question. We also surveyed the employment of respondents.

Just over 9% of the total current membership responded (2,066 responses) to the 2019 survey and it is, therefore, a snapshot of our membership. All respondents were given the option of 'prefer not to say' for all questions, although there was low uptake of this.

¹ www.ons.gov.uk/census/2011census

Gender

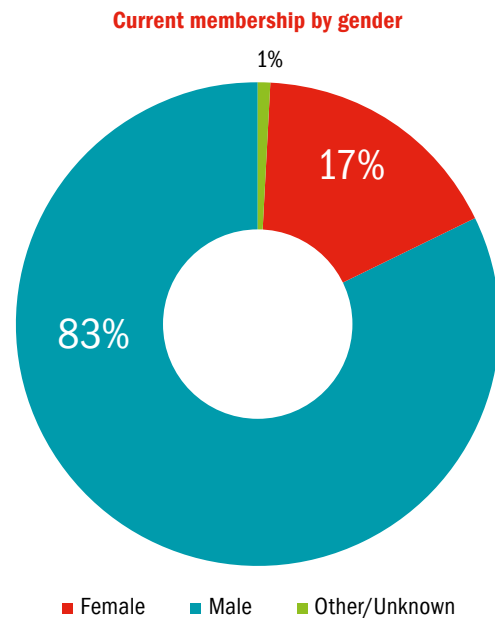
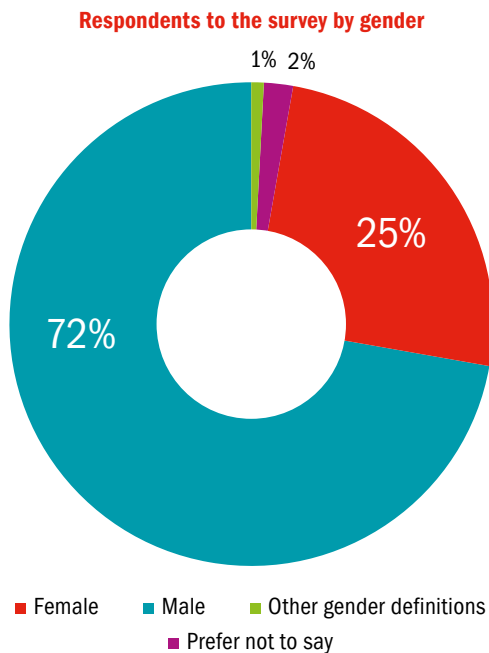
Under the **Equality Act 2010**, sex is a recognised protected characteristic. In this report we are using gender identity descriptions in widespread use, but we recognise these are imperfect descriptions and conflate gender and sex.

We looked at the gender representation of our responding members, asking them to choose the gender they best identified with. We reserved a separate question to ask whether their gender identity was the same as the sex they were assigned at birth.

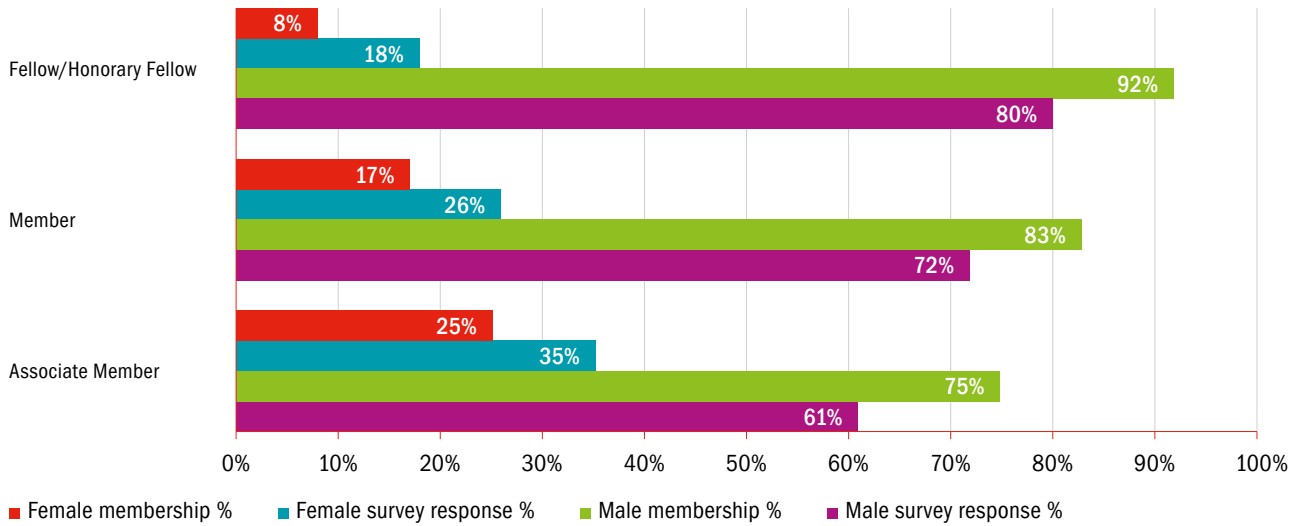
Whilst the majority of the 2019 survey respondents chose male or female for their gender, the free answer responses covered a variety of gender descriptions including gender fluid, non-binary and agender. For data rounding purposes in this report, genders other than male or female have been grouped to 'other gender'.

Comparing 2019 data with the previous surveys reveals that in 2011 73% of the survey respondents were male and 26% were female. In 2015 70% of respondents were male, 28% were female and 1% stated other gender identities. In 2019 we can see a small decrease in the number of female respondents; 72% were male, 25% were female and 1% stated other gender identities.

From the 2011, 2015 and 2019 surveys, as a proportion of our membership, the numbers of females responding to these surveys has increased. In 2019 25% of respondents were female whilst 17% of our membership were female.



Comparison of 2019 survey responses to membership by gender and membership category



For 2019 the membership category with most variation in gender identity was the Member category. However, focusing on male and female responses only shows that female respondents were disproportionately present in the Associate Member category and disproportionately absent from the Fellow category. Comparing membership category to gender, we see that there is best male to female gender balance in the Associate Member category, with fewer women seen in both the Member and Fellow categories.

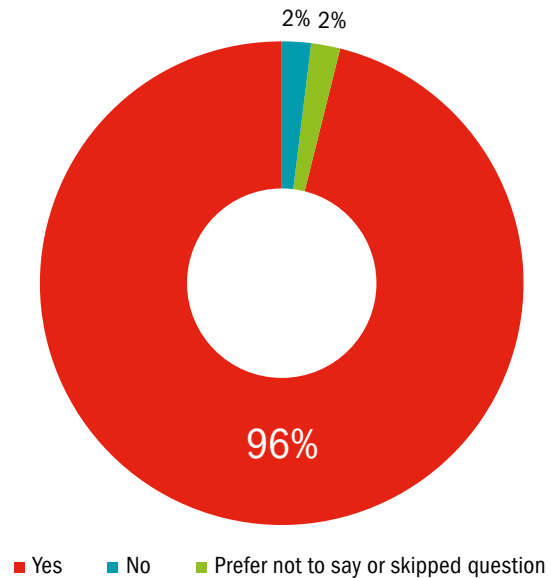
Gender identity

Gender reassignment is a protected characteristic under the Equality Act 2010. We support our members and any member who is proposing to undergo, is undergoing or has undergone a process (or part of a process) for the purpose of reassigning their sex. Although the LGBT+ community covers a range of identities, we have asked gender identity and sexual orientation separately.

The 2019 survey was the first survey to include a question relating to gender identity, so we are unable to compare this with our previous survey reports. We have used the UK population data for comparison (estimates were not available for the Republic of Ireland).

Just under 2% of respondents stated that their gender identity was not the same as the sex they were assigned at birth. This is higher than the estimated percentage of 1% for the UK population. This data is from the Government Equalities Office report, ***Trans people in the UK (2018)***.

Is your gender identity the same as the sex you were assigned at birth?



Sexual orientation

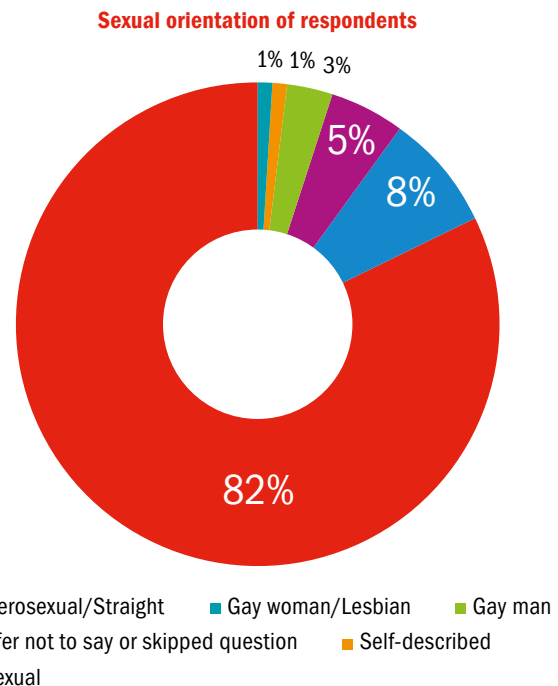
Sexual orientation is a protected characteristic under the Equality Act 2010. It defines sexual orientation as:

- orientation towards persons of the same sex (lesbians, gay women and gay men)
- orientation towards persons of the opposite sex (heterosexual), and
- orientation towards persons of the same sex and the opposite sex (bisexual).

We also included the option of 'self-described' to be inclusive of the proportion of people who recognise their sexual orientation as other than the above definition.

Our 2015 survey included a question on sexual orientation, which was the first opportunity for the LGBT+ community to be recognised in our findings. We saw a large percentage of responses from LGBT+ members and, as a result, worked with the community to create an LGBT+ network for physical scientists. To become involved in this network see [our website](#) for more information. The network went on to survey the LGBT+ community working in physical sciences, leading to the publication of the 'Exploring the Workplace for LGBT+ Physical Scientists' report in 2019. You can find the report and the recommendations for individuals, employers and learned societies [here](#).

Overall, the sexual orientation of members in 2019 matched that presented in the 2015 survey. There appears to be a slight, but not a statistically significant rise in the number of respondents who recognised themselves as bisexual or heterosexual. The free text box saw a wide array of responses including hybrid romantic and sexual identities that indicate future surveys could explore categories of attraction and relationship building separately.



Ethnicity and nationality

Ethnicity and nationality both fall under the protected characteristic of Race in the Equality Act 2010. The Equality Act defines race as:

- Colour
- Nationality, and
- Ethnic or national origin

Ethnicity refers to ethnic or national origin, so an individual's ethnic group is who they identify with most based on a common descent or belief. An individual's ethnicity or national origin may not be the same as nationality.

Nationality, on the other hand, refers to the status of belonging to a nation and is usually the recognised state of which the person is a citizen. Often this is what the person has on their passport, for example, British citizen.

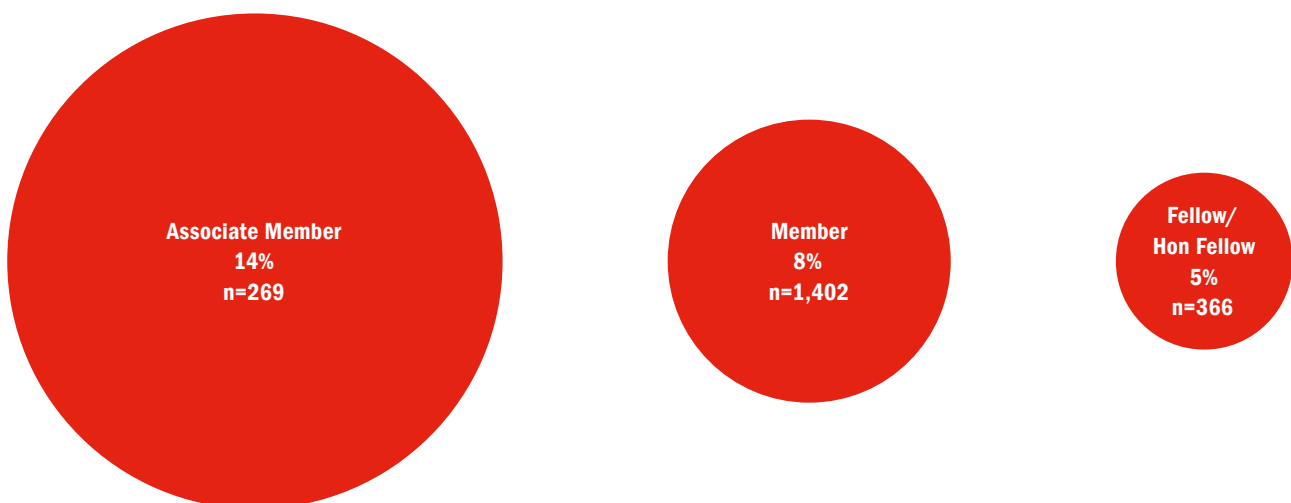
An individual's identity can be made up of two or more of the elements above. For example, Asian and British. Both of these are key factors in an individual's identity, which is why it is important to separate these definitions and give them each the consideration they deserve.

The IOP is the professional body and learned society for physicists covering the UK and Ireland and with membership internationally, which can be seen reflected in the responses to the survey.

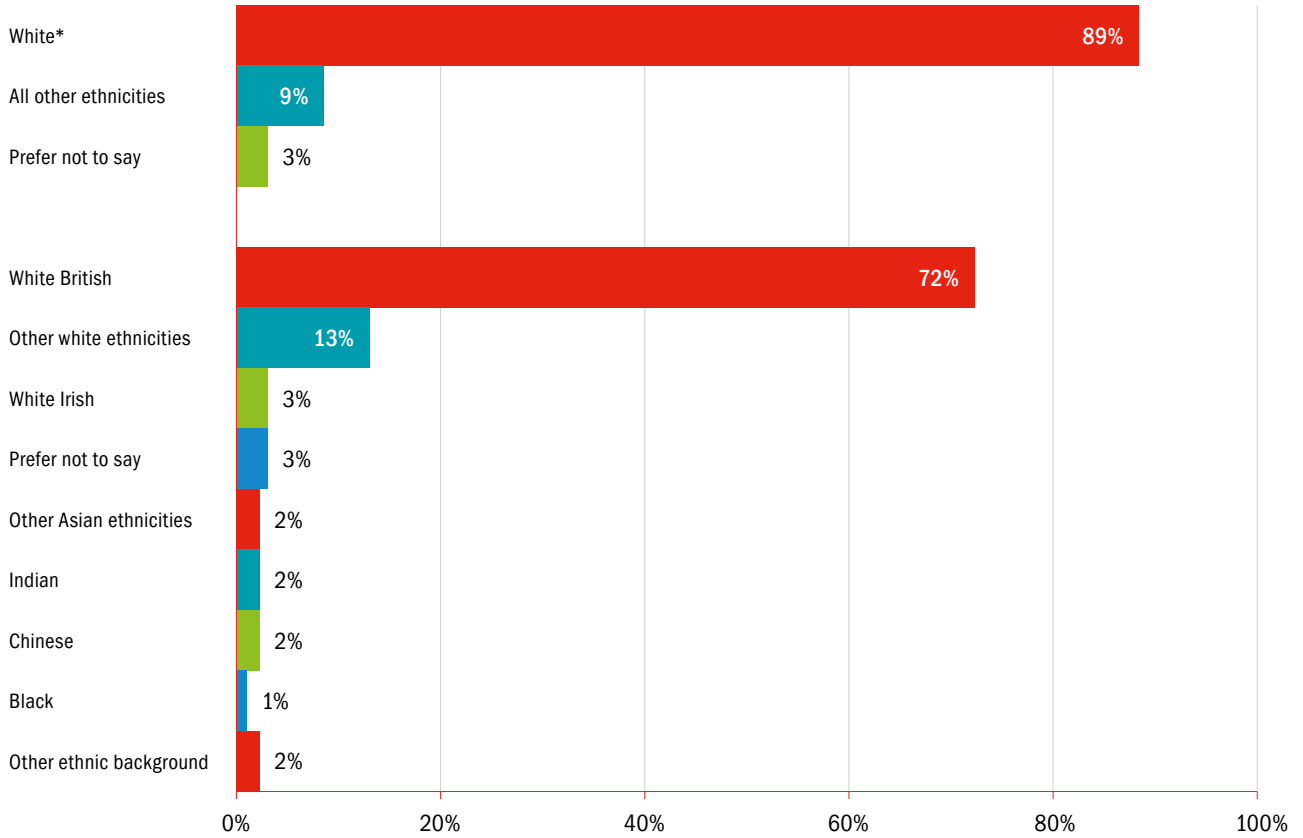
The respondents to the 2019 survey were overwhelmingly from the UK (78%) and of White ethnicity (89%), much in keeping with previous surveys. The next largest group was Asian, Asian British or Asian Irish (6%). In 2015 the Black and minority ethnic respondents represented 10% compared to 9% in 2019.

Additionally, many chose to respond to the notion of ethnic origin with their own categories. There were also many mixed ethnicities volunteered, showing the diverse nature of backgrounds our membership represents.

The former 16-19 Affiliate Member category in 2015, which was for anyone with an interest in, but no formal background in, physics, was the most ethnically diverse with 21% of those respondents being from Black and minority ethnic groups. We no longer have this category, although four years later in 2019 the most ethnically diverse membership category by percentage was Associate Member which formed 14% of 269 responses, although the highest number of responses from Black and ethnic minority groups came from the Member category, i.e. 8% of 1,402 responses.

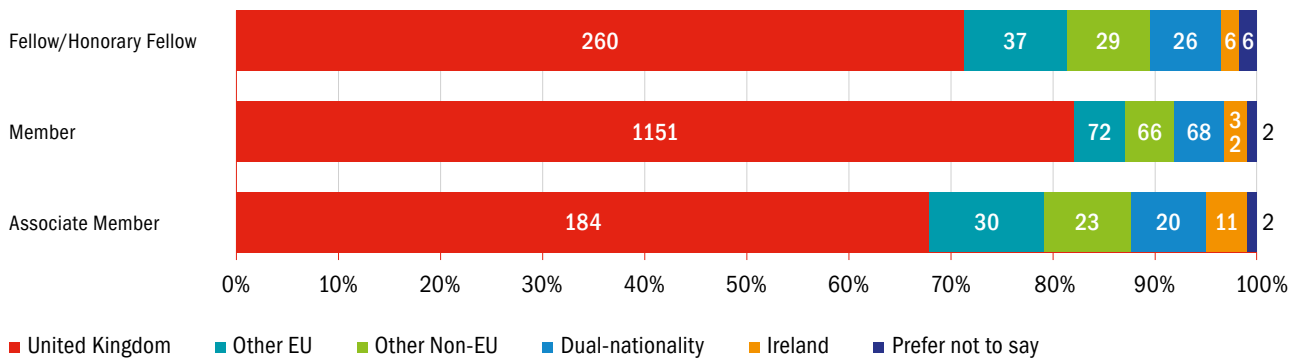


Ethnicity of respondents



*Including white British, white Irish, and other white backgrounds

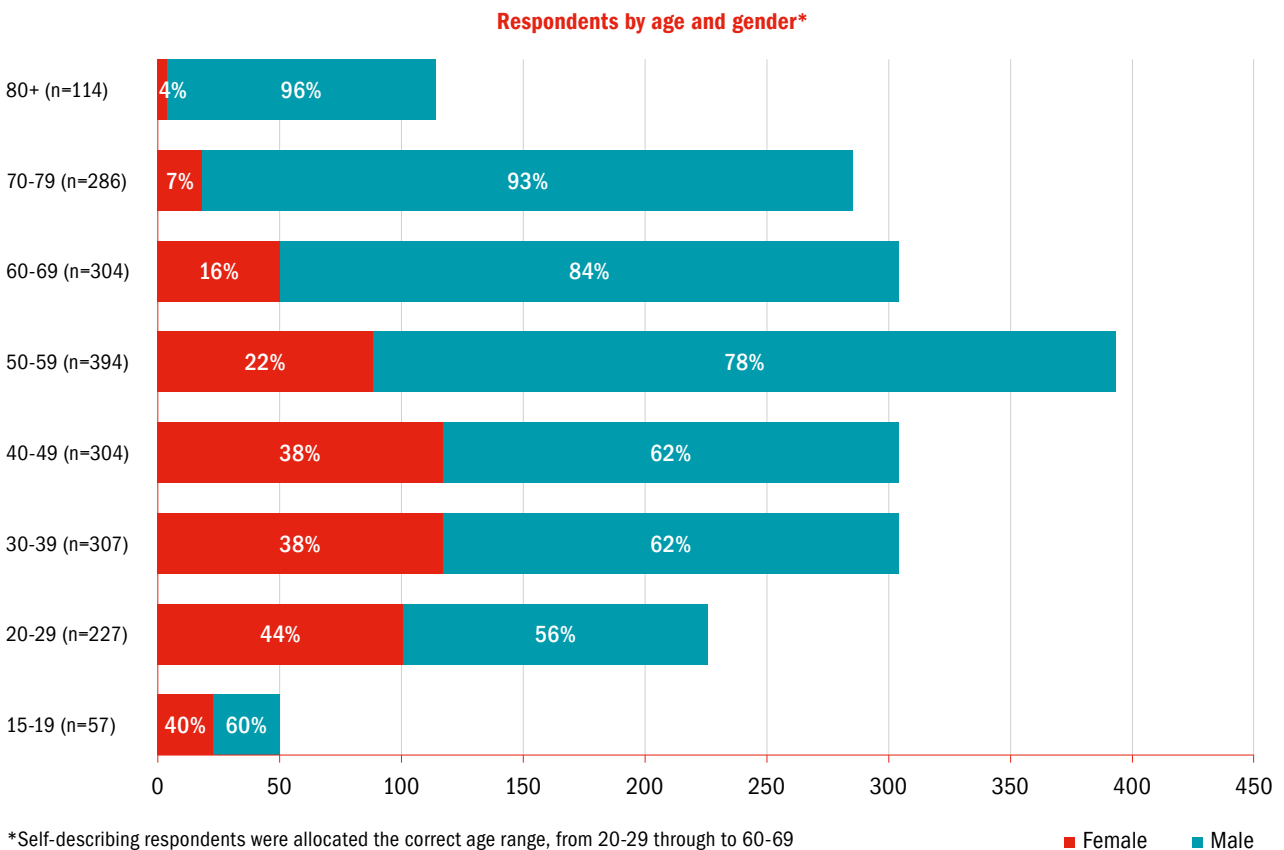
Membership category responses by nationality



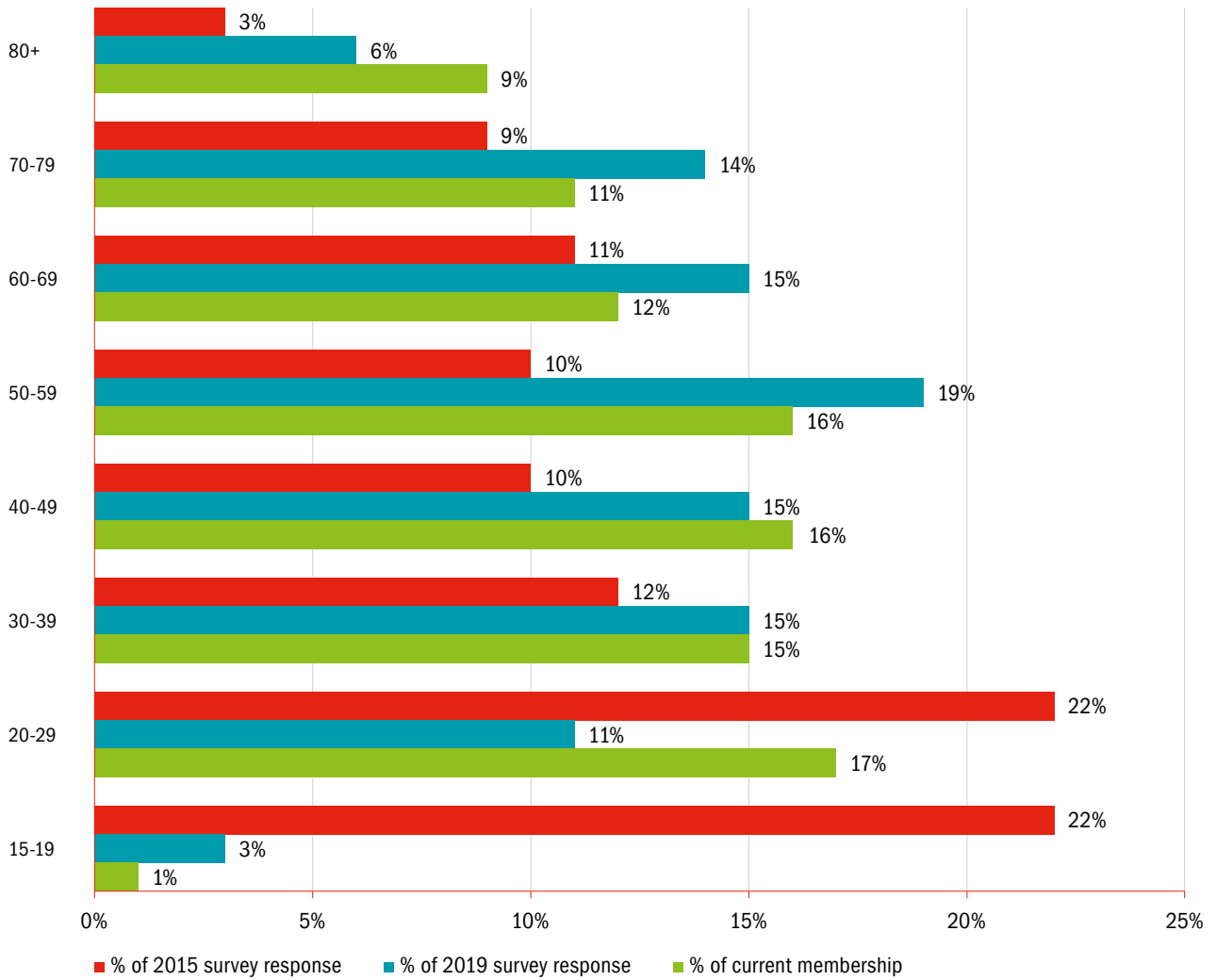
Age

Age is a protected characteristic under the Equality Act 2010. We collected this data as it enables us to understand the age make up of our membership, but also the diversity of our membership across different age groups, helping us to spot trends in the data.

The data here shows that there is a positive correlation between younger age groups and more proportionate female representation in our membership. Our age brackets have changed since the membership restructure. However, historically, we have always seen a large response rate from the under 30 age bracket, although in 2019 we saw far fewer respondents from both 15-19 and 20-29 age groups. This could relate to the restructuring of the membership where undergraduate students are no longer automatically registered at university and now are required to pay a small fee to join the IOP. The distribution of responses matches the membership age profile although slightly higher percentages of females aged between 20 and 69 responded to the survey.



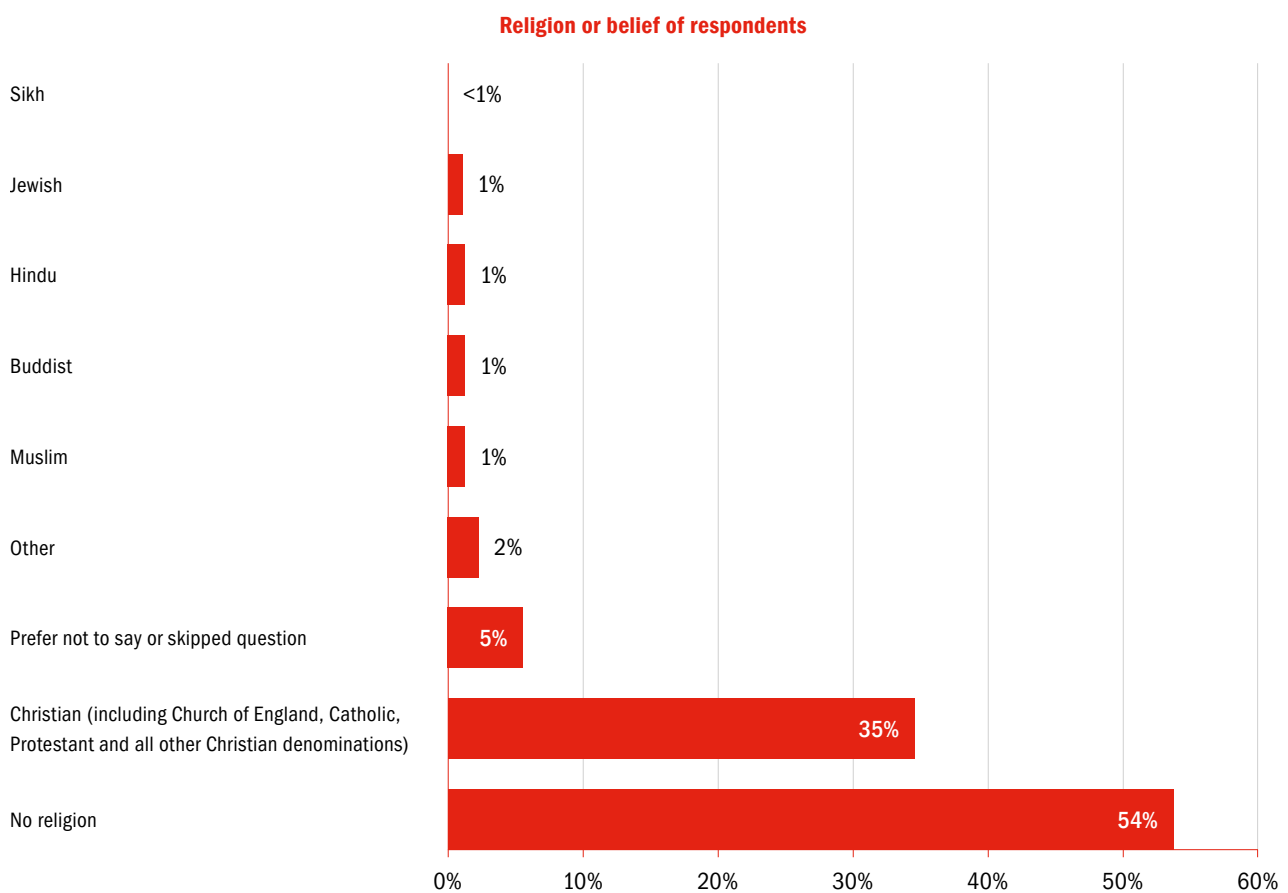
Comparison of responses by age in 2015 and 2019 with current membership



Religion or belief

Religion or belief is a protected characteristic under the Equality Act 2010. This includes all major religions, less widely practiced religions and philosophical beliefs. Religion is defined to include a reference to a lack of religion while belief is defined to include a reference to a lack of belief.

As in the 2015 survey, over half the respondents report no religion, identifying as atheist or agnostic. Compared to national UK statistics² the respondents report a far higher proportion of people of no religion, and fewer from Muslim or Sikh backgrounds than when compared with national statistics. Those respondents whose religion was Christian have remained the second highest response in this and the previous two surveys; 35% in 2011, 29% in 2015 and 35% in 2019.



² Office for National Statistics, Research report on population estimates by ethnic group and religion, www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/articles/researchreportonpopulationestimatesbyethnicgroupandreligion/2019-12-04#population-estimates-by-religion, 2019 [last accessed 17 Feb 2020]

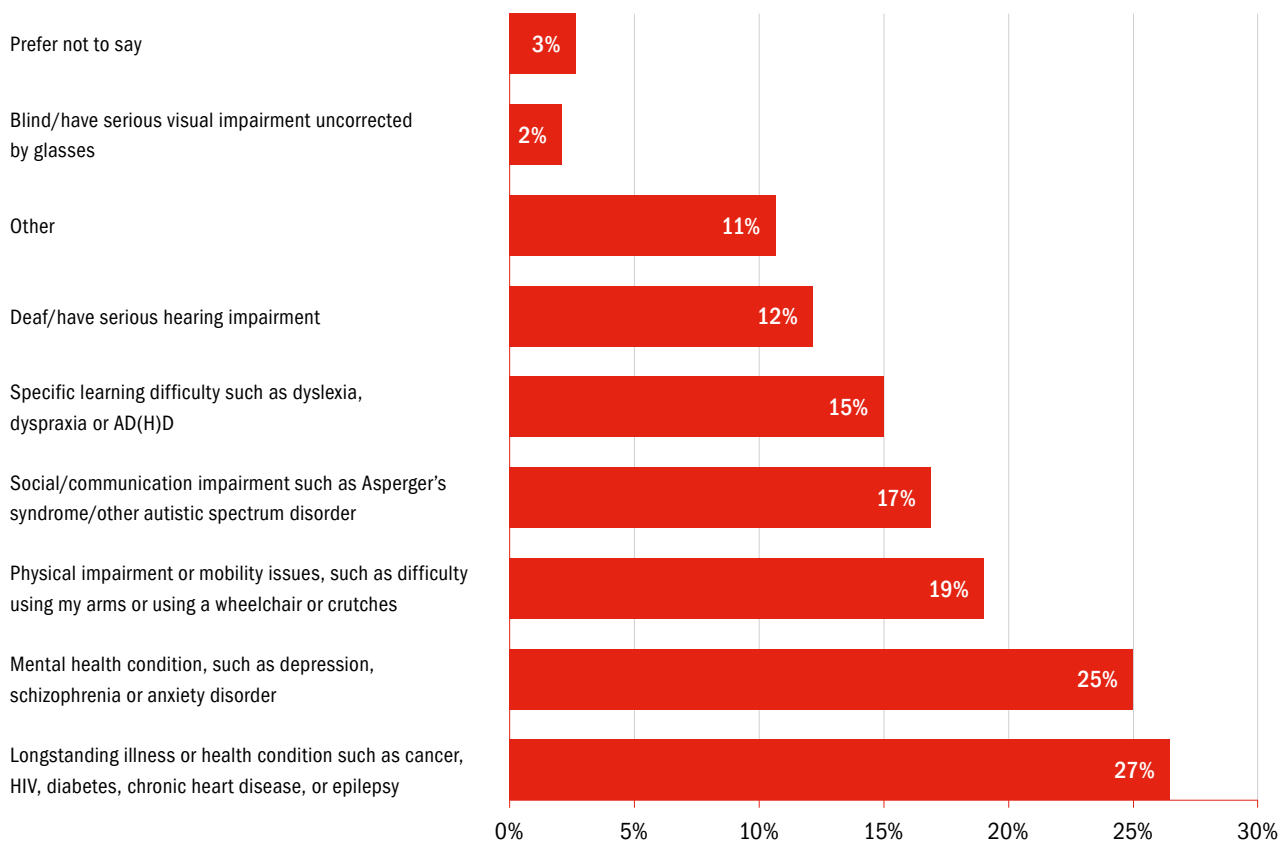
Disability

The Equality Act 2010 defines the protected characteristic of disability as a mental or physical impairment that has a substantial and long-term adverse effect on an individual's ability to carry out normal daily activities. This means that:

- Physical impairment includes both long-term conditions (e.g. diabetes, asthma, etc) and progressive conditions (e.g. motor neurone disease, etc).
- Substantial means the impairment is neither minor nor trivial.
- Mental impairment includes mental health conditions, such as depression, learning difficulties and learning disabilities.

The IOP HESA³ data briefing for undergraduate students in 2017/2018 indicated that around 13% of undergraduate physics students reported a disability or impairment, with 33% of these students reporting a specific learning difficulty, 26% a mental health condition and 12% a social communication/autistic spectrum condition. The data briefing, *Students in UK physics departments*, can be accessed at iop.org/sites/default/files/2020-07/Student-characteristics-2017-18.pdf

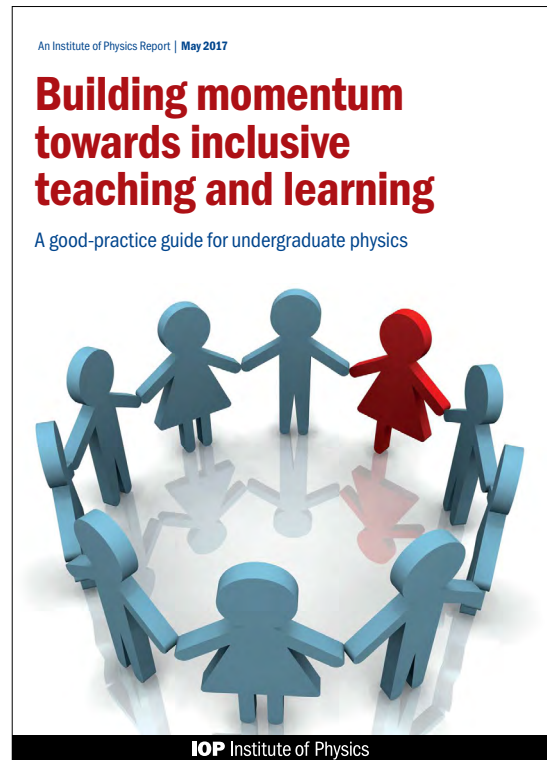
Health condition or impairment of respondents



3 Source(s): HESA Student Record 2017/18. Copyright Higher Education Statistics Agency Limited. Neither the Higher Education Statistics Agency Limited nor HESA Services Limited can accept responsibility for any inferences or conclusions derived by third parties from data or other information supplied by HESA Services

Compared to the 2011 and 2015 reports, mental health remained one of the highest reported conditions with 25% of respondents reporting a disability, compared to 17.2% in 2011 and 18.3% in 2015. Additionally, in 2019 of those who reported having a disability, 26% of respondents reported a longstanding health condition.

Since the 2015 survey report, the IOP, with support from several UK universities, has been involved in producing a good practice guide to support an inclusive learning environment in university physics departments, particularly for disabled students. The report, *Building momentum towards inclusive teaching and learning*, can be accessed at <https://d25f0oghafsja7.cloudfront.net/sites/default/files/2019-03/building-momentum.pdf>



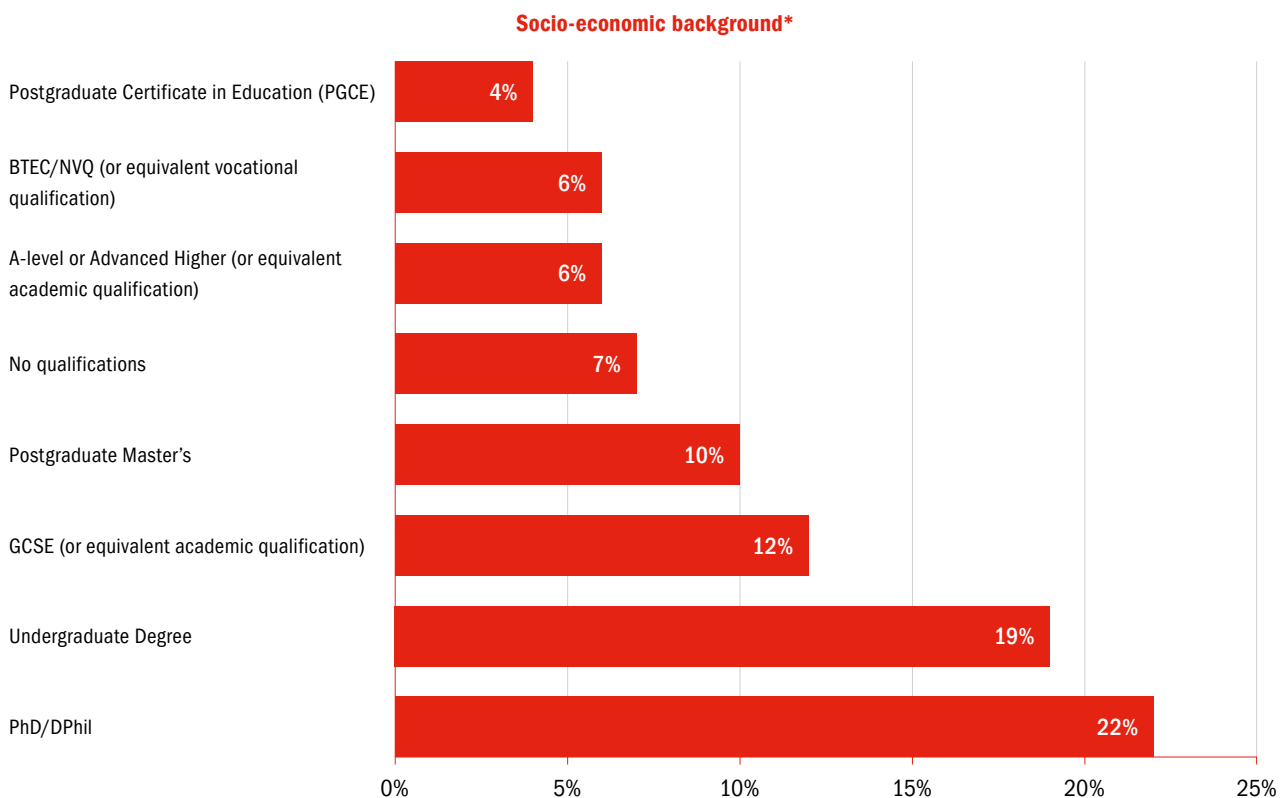
Socio-economic background

There are currently nine characteristics which are protected under the Equality Act 2010; however, socio-economic background is not one of them. It can be difficult to accurately measure an individual's socio-economic background as a variety of proxy measures are frequently used. For the 2015 and 2019 surveys we used highest parental qualification as a proxy for the socio-economic background of respondents.

There is no data for 2011, but in 2015 11% of respondents reported that their parents held no

qualifications and 53% had a first degree or higher, compared to 2019 where 7% of respondents' parents held no qualifications and 55% had a first degree or higher. For many, particularly older respondents, their parent's qualifications were not known to them.

Although not directly comparable with the data we collected in the survey, the ONS 2011 UK census reported that 27% of the UK population aged 16 and over had achieved a Level 4 or above qualification such as a degree or other higher qualification or equivalent, whilst 23% held no qualifications.



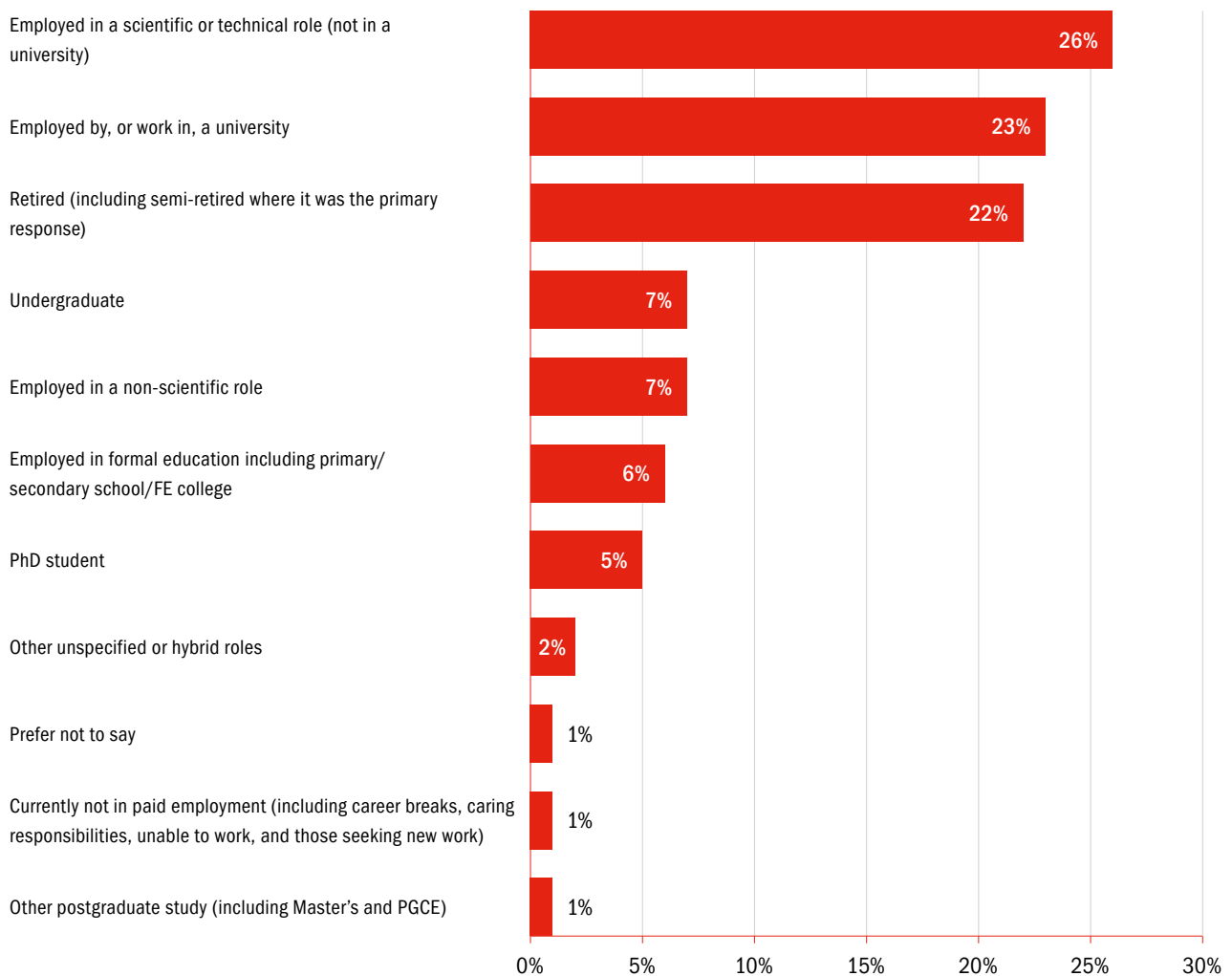
*Highest level of parental qualification was used as a proxy measure

Employment

For us to gain an idea of the kind of roles physicists are employed in, we can look at the **Prospectus Luminate survey** of 2018 (which is a survey of graduates shortly after graduation) that looked at what physics students move onto after graduation. The results showed that further study is a popular destination, although for those moving into employment, 21% of graduates with a physics degree go into business, HR and finance professions, and 21% go into information technology roles.

This was the first year that we have included a question on employment of our membership, so we do not have data for 2011 and 2015. However, for 2019 we saw that the largest category was for members who were employed in a scientific or technical role that was not in a university at 26%, with the second largest category of employment for members employed by or working in a university at 23%.

Current employment of respondents



Caring responsibilities

The question related to caring responsibilities was first included in the 2015 survey following the introduction of the IOP Carers' fund. The fund is available to help members with caring responsibilities for children, partners and other relatives and can be used towards financing that care in order to be able to attend physics-related meetings, events or conferences that they might not otherwise be able to attend. For more information, contact carersfund@iop.org

Of the 587 members who reported caring responsibilities in 2019, 35% were female, and 26% were male. The percentage of female and male respondents reporting caring responsibilities has approximately doubled since the 2015 survey where it was 16% and 13%, respectively.

“587 respondents indicated that they had caring responsibilities (28%)”

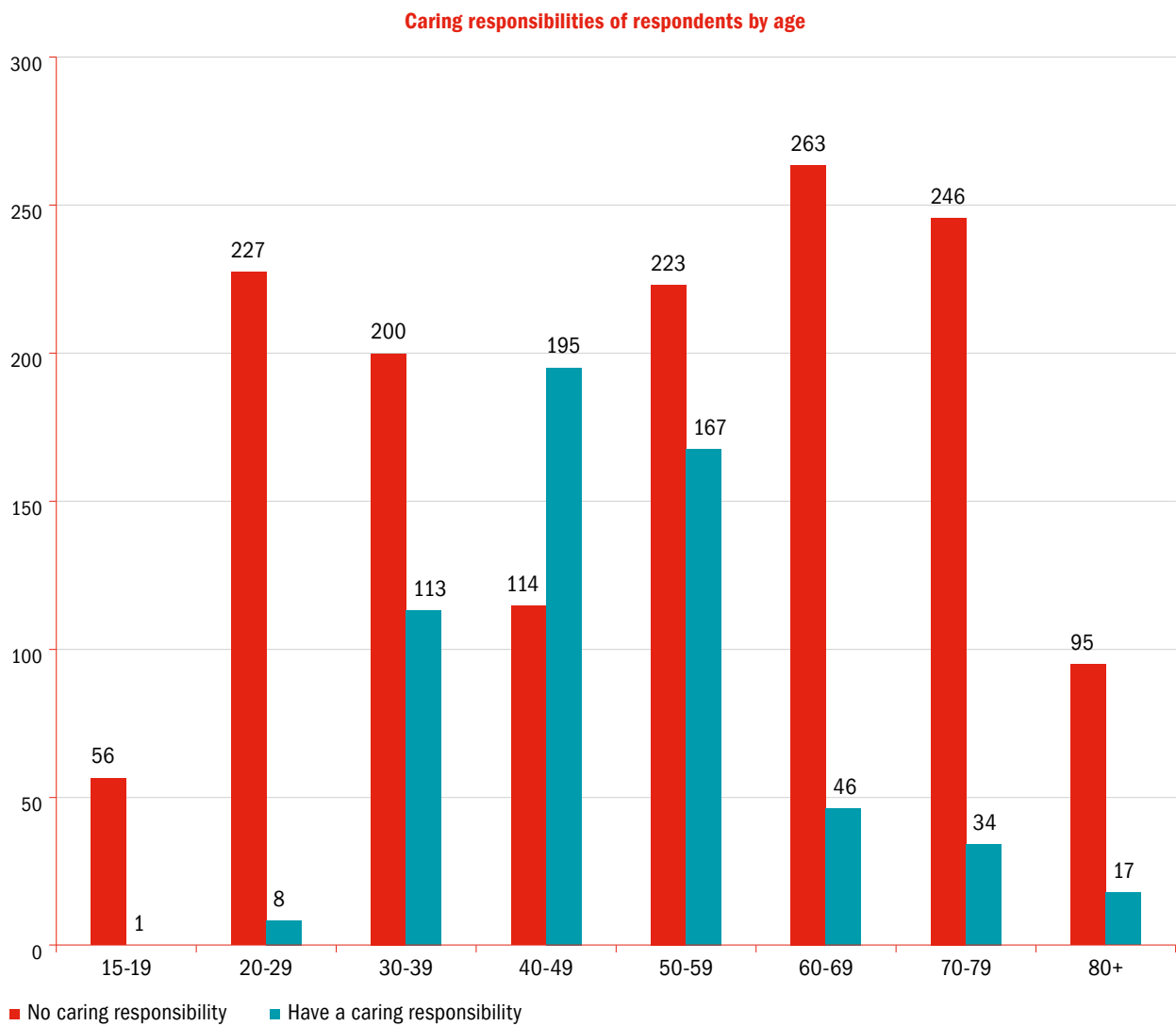


**35% of female respondents
had caring responsibilities**



**26% of male
respondents
had caring
responsibilities**

The data shows that members across all age ranges (except 15-19) reported caring responsibilities, which was particularly the case for members aged between 30 and 59.



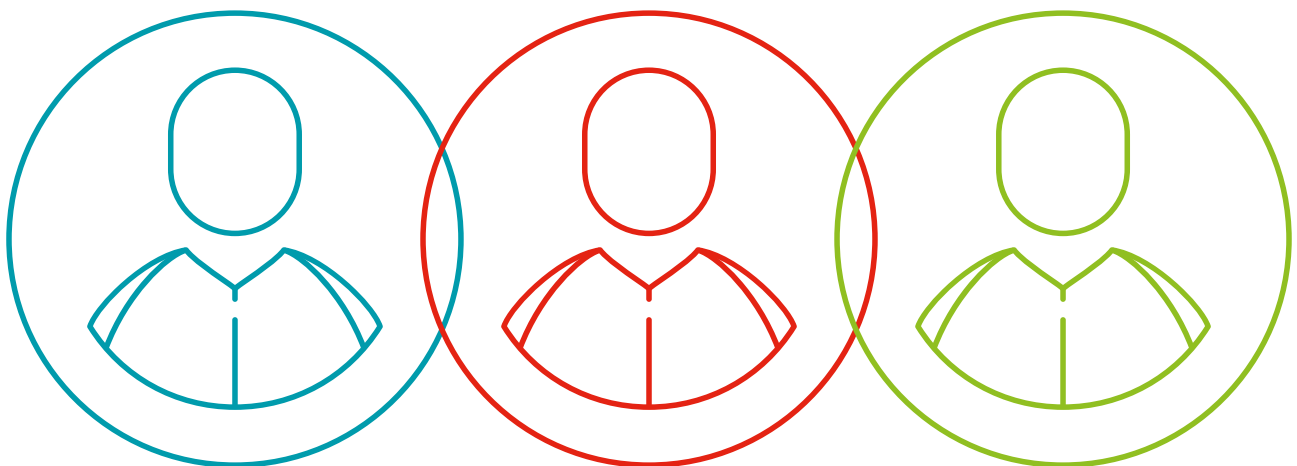
Institute of Physics: Our membership

This section will present our most up-to-date membership data on different aspects of our membership, governance, branches, special-interest groups and awards.

Our membership

Those applying to become members of the IOP are asked for some demographic information such as age and gender, where there is the option of stating other or preferring not to give that information. It is this data that is included in the graphs below and for comparisons with the data survey where a broader range of demographic data is collected, based on the anonymous nature of the survey. We currently collect data on age and gender as part of the member application process for monitoring purposes. For broader demographic data we undertake anonymous diversity monitoring surveys.

Those preferring not to state their gender or indicating an option other than male or female form about 0.3% of the IOP membership as a whole and around 1% of the Associate Member category.



Categories of membership

In consultation with the membership, we restructured our membership categories in 2017 to become a more inclusive organisation. Now our membership is more reflective of our active members we can better analyse those who are active in the physics community. From January 2018 we now have four membership categories.

Associate Member

Associate Members are undergraduates studying for a physics or related qualification, apprentices and trainees working towards a career in physics, and professionals with an interest or experience in physics but without sufficient knowledge or experience to qualify for the Member category.

Member

Our largest category of membership in terms of numbers includes graduates through to experienced career professionals in a range of sectors. Members have either an honours degree in physics or a cognate subject, or an equivalent level of professional competence acquired through a combination of education, training and experience.

Fellow

Fellow is the highest level of membership attainable within the IOP.

It is for those with an honours degree in physics or a cognate subject, or have an equivalent level of professional competence acquired through a combination of education, training and experience, and are able to demonstrate a significant contribution to their profession over a sustained period.

We encourage applications from all those that meet the aforementioned criteria.

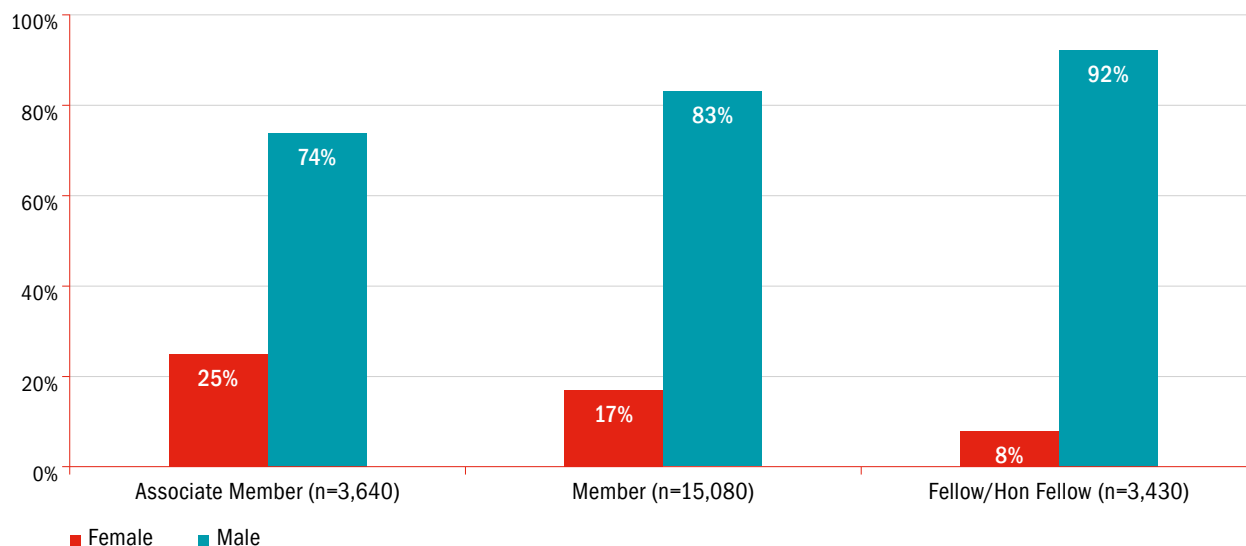
Honorary Fellowship

An Honorary Fellowship is the highest accolade presented by the IOP to reflect an individual's exceptional services to physics. Our community of Honorary Fellows have contributed to the advancement of physics through a range of means and serve as ambassadors for physics, physicists and the IOP.

New Honorary Fellows are announced on an annual basis and we encourage nominations that reflect the diversity of physics and are representative of our community.

Our bylaws state that the total number of Honorary Fellows shall not exceed 100 at any one time.

The number of IOP members by category and gender



Professional registration

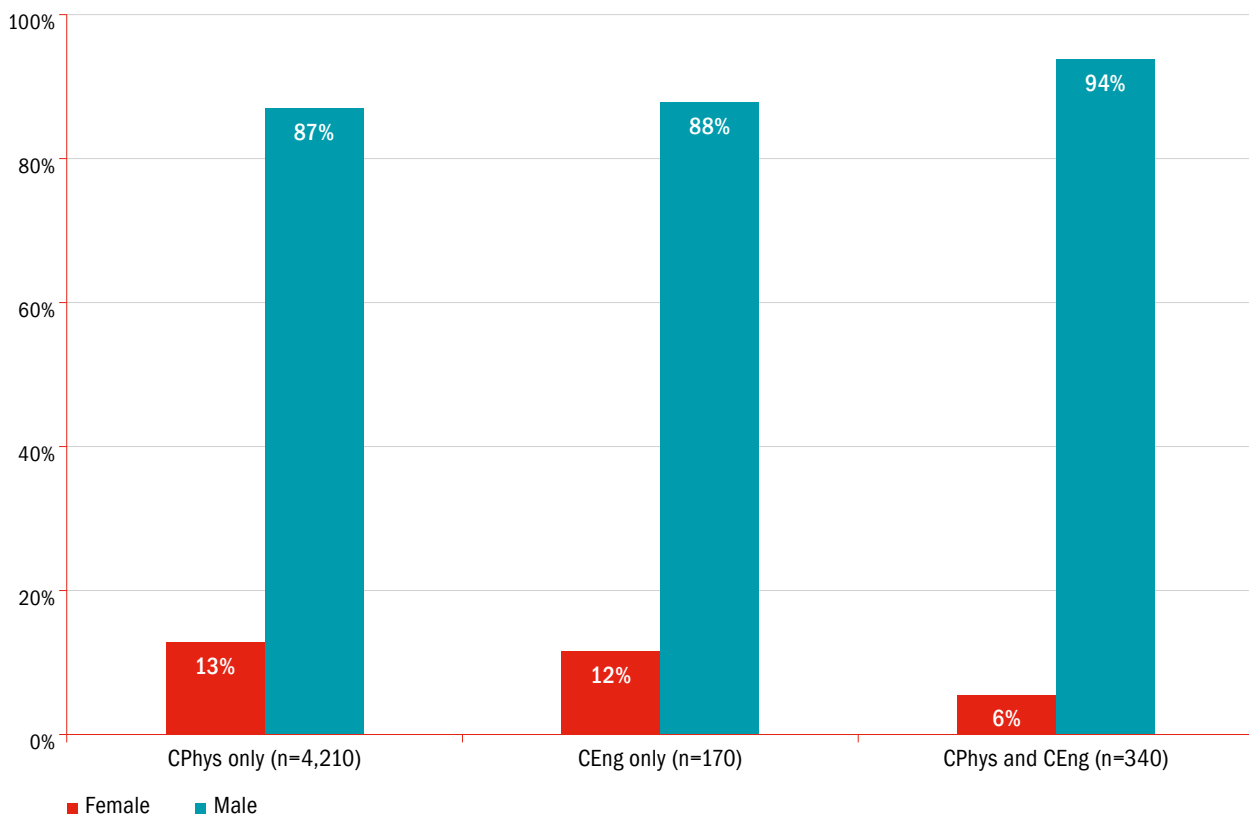
The professional registrations offered through the IOP are a mark of commitment and professionalism and are rapidly becoming vital prerequisites for continued employability.

The IOP has seven professional registrations ranging from chartership with Chartered Physicist (CPhys), Chartered Engineer (CEng) and Chartered Scientist (CSci), to intermediary registrations with Registered Scientist (RSci) and Incorporated Engineer (IEng), and technical registrations with Registered Science Technician (RSciTech) and Engineering Technician (EngTech).

Compared to the 2015 data, female CPhys registration has increased to 13% from 10% and for CEng increased to 12% from 6%.

To find out more about professional registration and for guidance and application forms, please see our [website](#).

The number of members holding CPhys and/or CEng by gender



Our nations and branches

All IOP members are linked by their place of work or home address to a national or regional branch. These member-led local branches enable members to connect with other members locally and attend events and talks. Members are encouraged to become actively involved with their branch and activities are open to all IOP members.

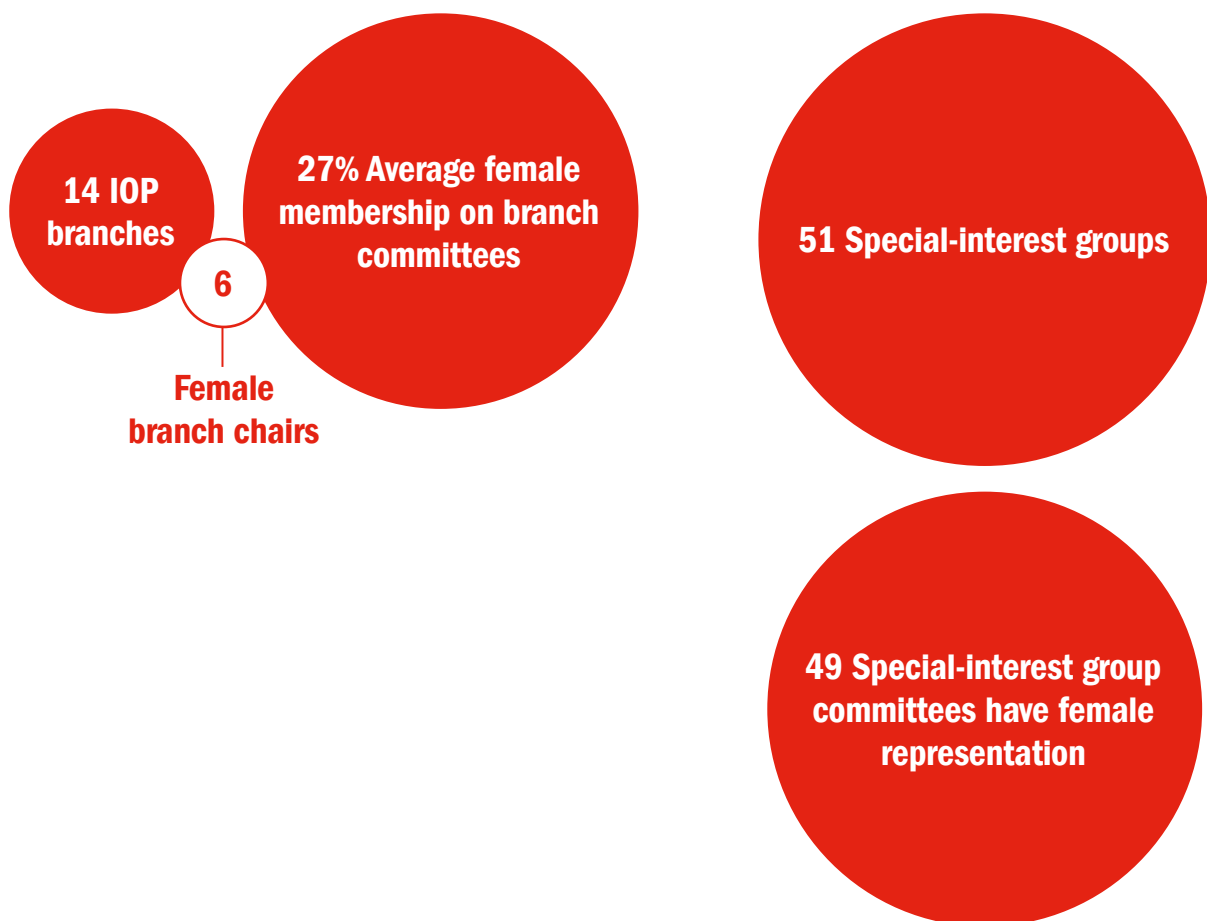
There are 11 branches in England, some of which have local centres, as well as our three national branches: IOP Ireland, IOP Scotland and IOP Wales. Since 2015 the average female representation on branch committees has risen from 19% to 27% and the proportion of female branch chairs has increased from 14% to 43%.



Our special-interest groups

An IOP special-interest group is a community of IOP members with a shared interest in a particular discipline, application or area of interest. Groups are an important part of the IOP's commitment to support a thriving physics ecosystem. Special-interest groups allow members to connect and share knowledge and ideas. The IOP supports groups to deliver a range of activities including events, prizes and bursaries. All of our groups are driven by IOP members.

In 2015 14% of the special-interest group committees were without female representation; this has now reduced to 4%.



Institute of Physics: Our organisation

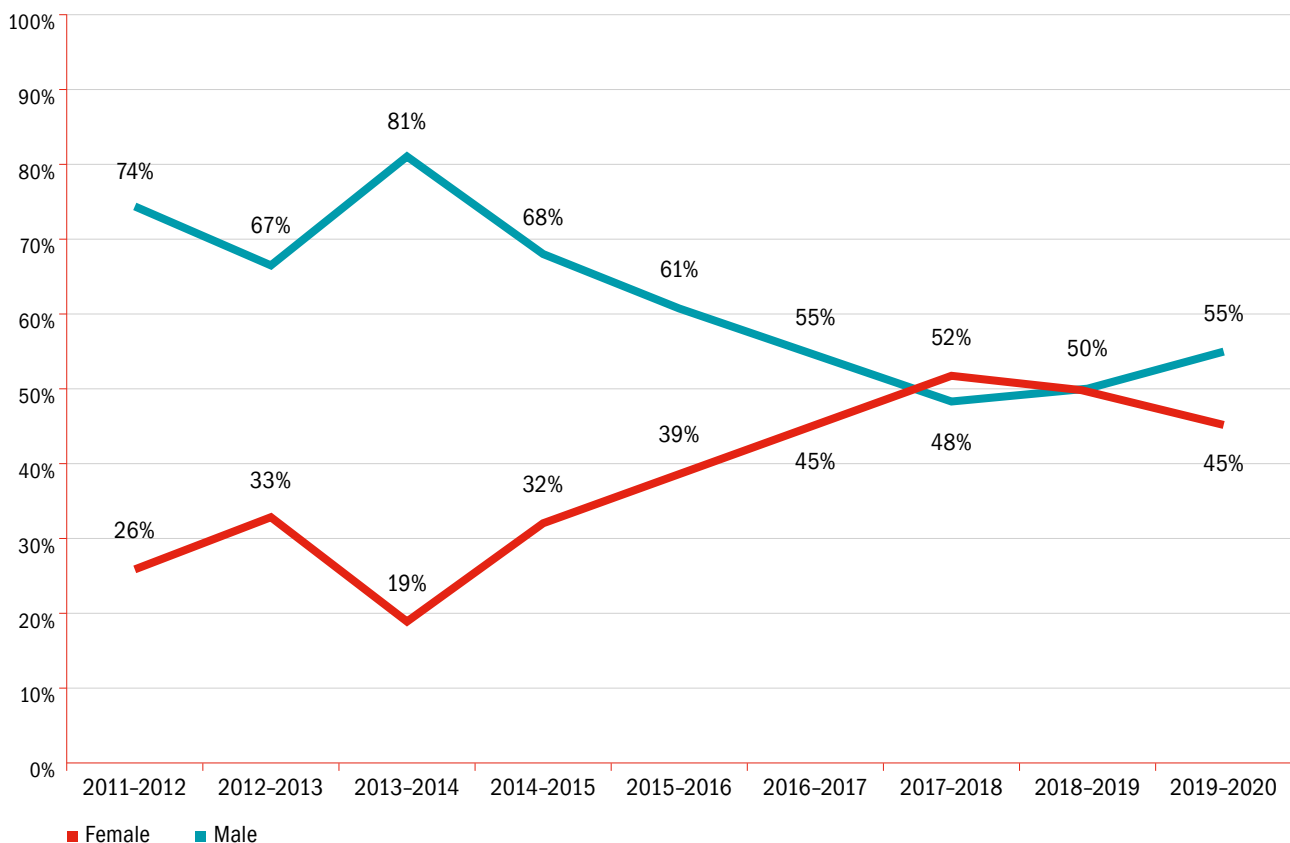
The IOP is governed by Council, which consists of 18 trustees elected from and by the membership, coupled with up to three co-opted members who are appointed by Council itself. Our Council has the ultimate responsibility for directing the affairs of the IOP, mainly by setting and monitoring the IOP's strategy which drives all activity, ensuring that we are solvent, well-run, and deliver the charitable outcomes for which we were set up. All Council and committee members give their time voluntarily and serve four-year terms.

In carrying out their work, Council and its committees consider the IOP's vision for diversity and inclusion, working towards an inclusive, sustainable, diverse and vibrant physics community, and enabling all members to participate fully in our activities. Council reviews the diversity of its committees twice yearly, especially focusing on the diversity of skill and gender on each committee.

The IOP's Diversity and Inclusion Committee was established to advise Council and the IOP generally on the formulation and implementation of strategies to widen access to physics by under-represented groups.

In 2014, we amended our Council election process to allow for self-nomination and this has resulted in significantly more women self-nominating and subsequently being elected. We are proud that in 2019/2020 we have a 55:45 male to female gender balance on Council, and over the last six years we have had a steady increase in the number of women serve on Council.

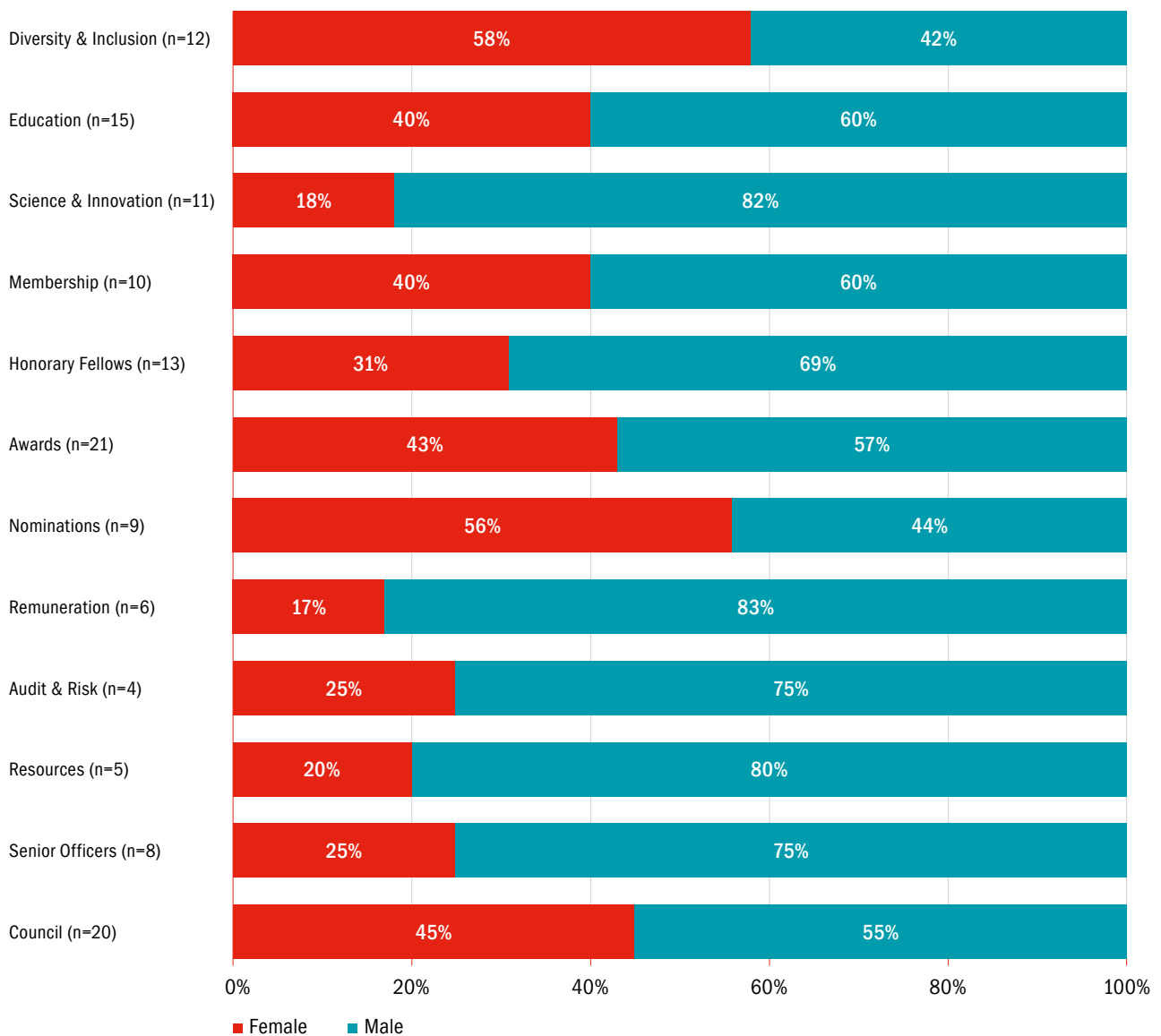
Representation on Council by gender



Our committees

The data for our committees shows that women are represented on all of our standing committees and we achieve a 50:50 gender balance on some of these. Some of our committees are chaired by our president and, therefore, the gender of our president is one of the factors that affects the gender balance of these committees.

The gender of members on Council and its committees 2019/2020



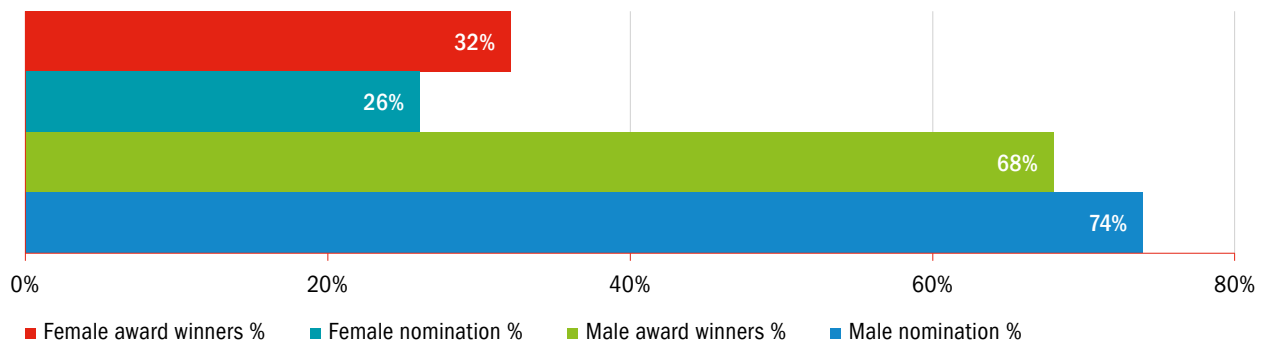
Our awards

The IOP awards play an important role in forming a sense of community, celebrating and promoting excellence, as well as providing role models for the next generation of physicists; diversity and inclusion is at the heart of this. The awards span all areas of physics, as well as contributions made to physics outreach, education and the application of physics-based technologies.

We monitor gender, geographical and institutional inclusion, so that we can address barriers with the aim that our community will reflect the demographics of our

society. We have worked with the physics community and IOP special-interest groups to bring about a substantial increase in female nominations from 13% in 2006 to between 22-27% in recent years. While recognising that positive steps have been taken, we believe that more needs to be done particularly around gender inclusion and ethnicity. To see the full list of awards, visit iop.org/about/awards

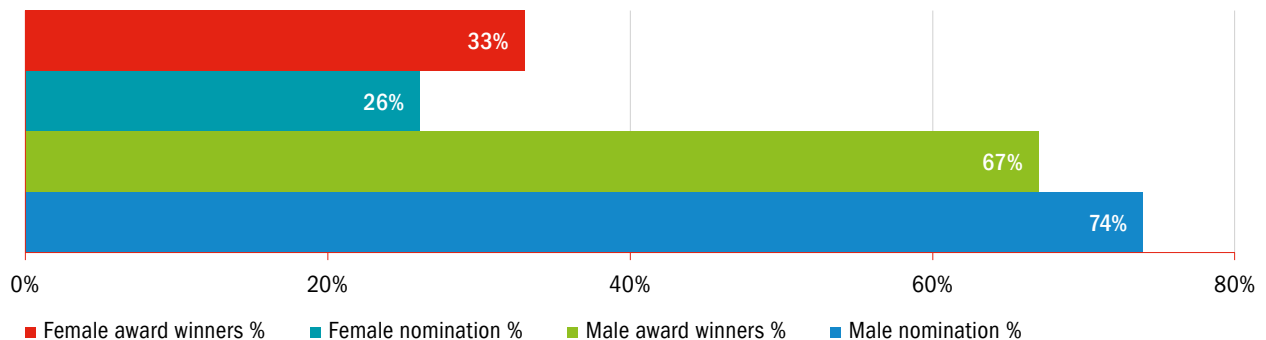
Nominations and award winners for all medals and prizes by gender



Between 2016 and 2019, 129 Gold medal nominations were received (26% female and 74% male) and 18 Gold medals were awarded to 33% female and 67% male

winners. This is positive progress from 2010 to 2015 when there were no nominations for female physicists for the Gold medal awards.

Nominations and award winners for gold awards by gender

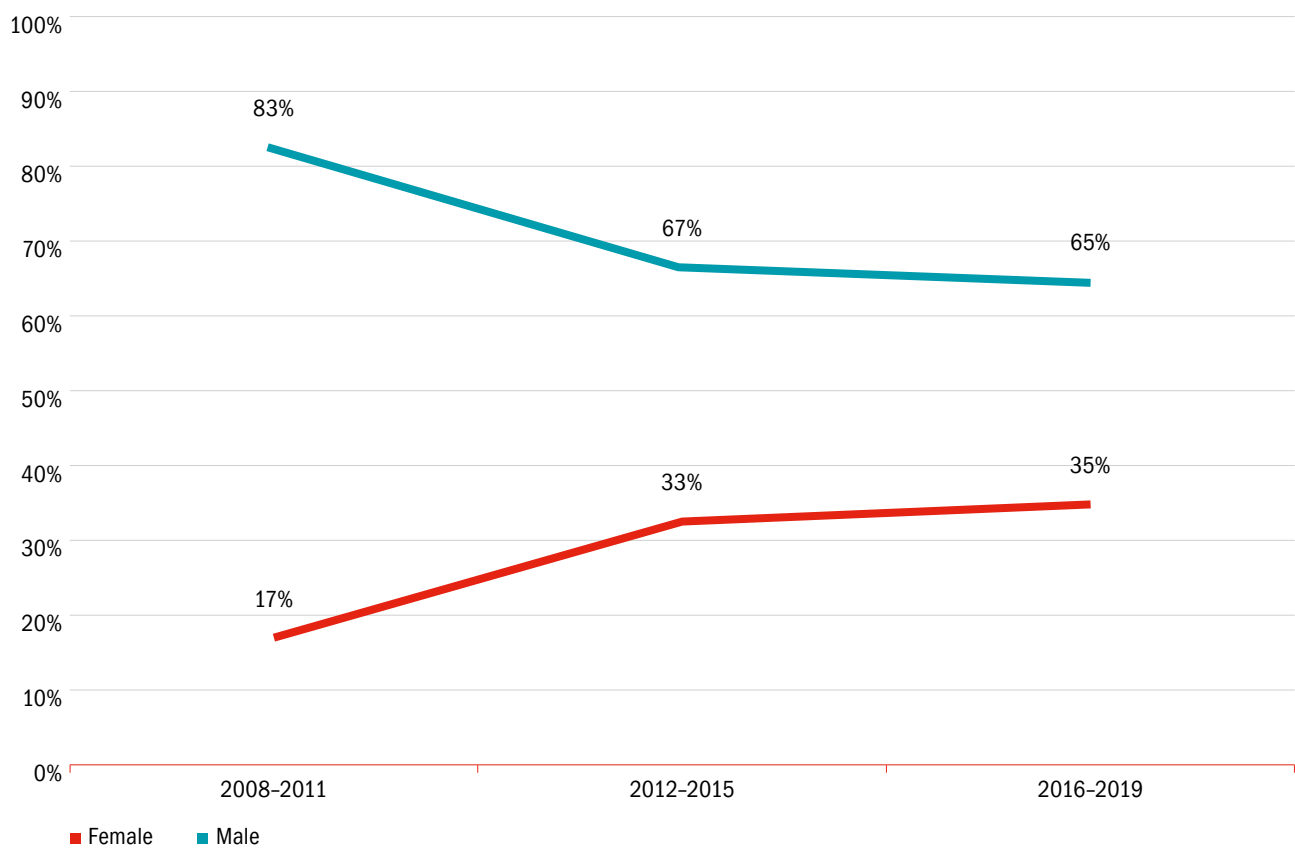


Honorary Fellowship

An Honorary Fellowship is the highest accolade presented by the IOP to reflect an individual's exceptional services to physics. As the graph below shows, we have increased the number of awards made to women over the years but we recognise there is more for us to do in terms of both the gender balance of awardees, as well as diversity in its broadest sense for this category of membership.

Visit the awards page to find about the awards and nominations process iop.org/about/awards

Gender balance of our Honorary Fellows over time periods



Support and grants

We offer funding in the form of grants, awards and exchange schemes for physicists, teachers, students, schools and colleges.

We support:

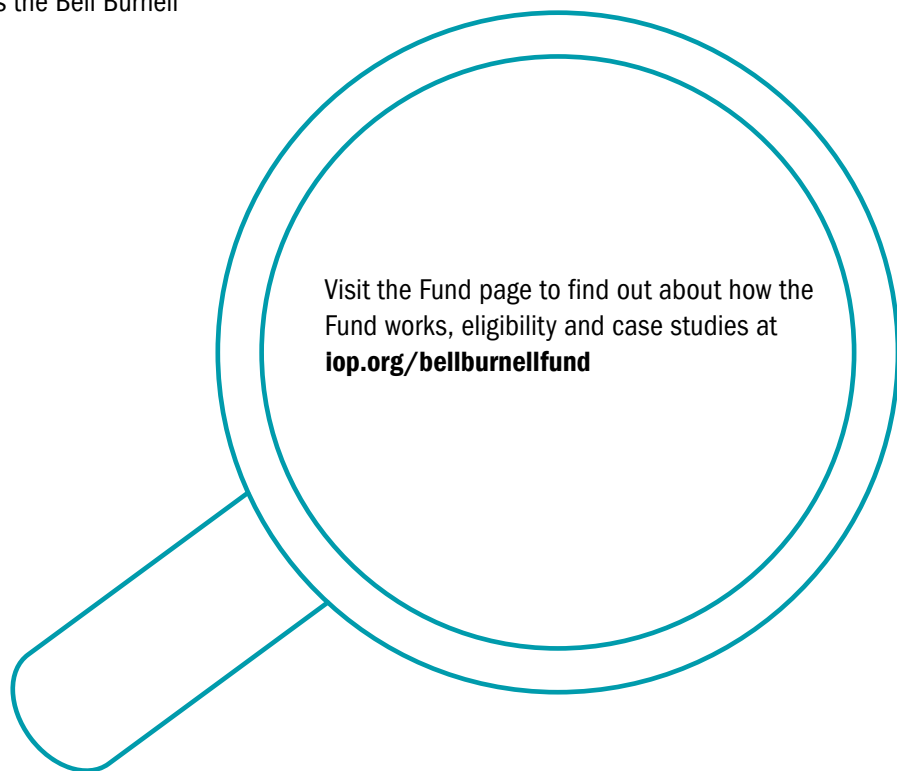
- education at all levels
- research of new and developing ideas
- events in the UK and overseas
- travel for networking and sharing ideas
- physicists in times of need
- care of children and dependents

The complete list can be found on this page iop.org/about/support-grants and one of the most recent funds to be introduced is the Bell Burnell Graduate Scholarship Fund.

Bell Burnell Graduate Scholarship Fund

In March 2019, the IOP launched the Bell Burnell Graduate Scholarship Fund to encourage greater diversity in physics by supporting students from groups currently under-represented in physics who wish to study towards a doctorate in physics.

The Fund was made possible thanks to the generosity of Professor Dame Jocelyn Bell Burnell, who won the prestigious Breakthrough Prize for physics in 2018 for her role in the discovery of pulsars. Dame Jocelyn chose to donate her £2.3m prize award to the IOP to set up the Fund.



Our teacher training scholarships

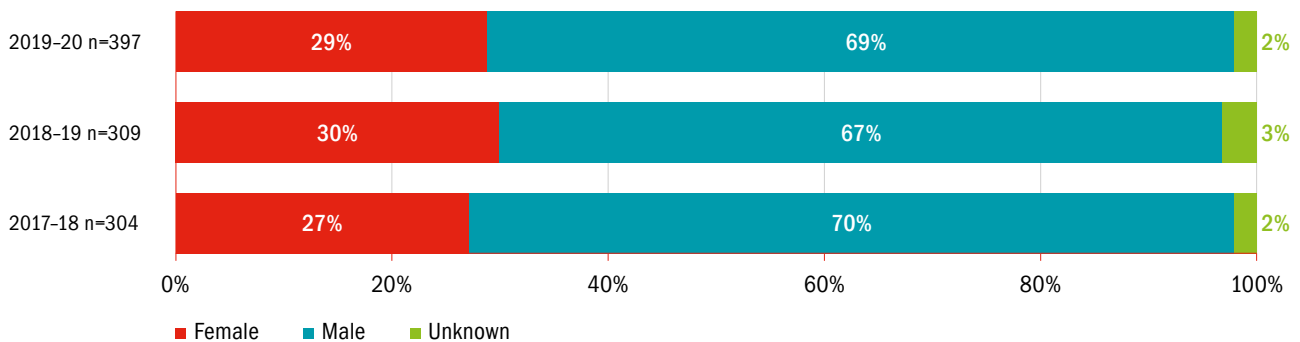
The IOP awards around 150 teacher-training scholarships each year, in partnership with the Department for Education. The scholarships of £28,000 (2019-20) are awarded to talented individuals entering physics teacher training in England. More information on the scheme can be found at iop.org/scholarships

The graphs below show that the number of applicants and awardees for both male and females, over the past few years, has more or less remained the same with a

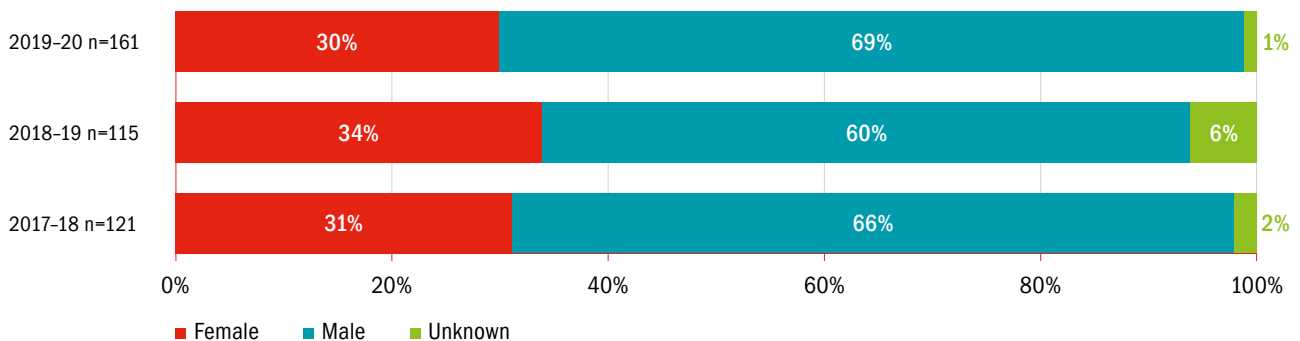
roughly 70:30 split in favour of males to females. We continue to make concerted efforts both to attract good physics graduates to apply and to increase our reach to attract people from diverse backgrounds.

We regularly review our assessment days, debiasing the processes where possible. We operate a blind application process, removing identifiable data for the shortlisting panel, and slow down decision making on assessment days to avoid bias and rotate assessors. We regularly monitor our data and feedback surveys to review and improve the process.

Scholarship applicants by year and gender



Awarded scholarships by year and gender



The working and studying environment

IOP Code of Conduct

The IOP Code of Conduct helps to support our members professionally and guide them to ensure that our work allows physics to deliver on its exceptional potential to benefit society.

In 2019 members of the Membership Committee and the Diversity and Inclusion Committee met to update the Code to protect members from bullying and harassment in their workplace, and to also reflect on how the Code could be extended to cover all of the IOP's events and activities, which often include many non-members. The revised Code, which reflects these changes, was also benchmarked with those of other professional bodies.

Every member when renewing their annual membership subscription is reminded to agree to the Code. And every member and non-member when registering for an IOP event must agree to abide by the Code, which is in place to ensure all of our events and activities, whether they are physical or online, are a safe space for all participants to engage without fear of being bullied and harassed by others.

The IOP Code of Conduct can be seen in full at iop.org/code-conduct

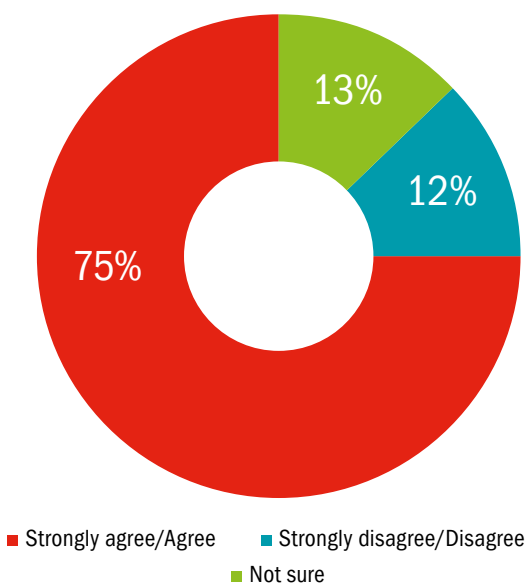
The work and studying environment

For the first time, we gathered information from our members on their working or studying environment as part of our commitment to developing and promoting professional conduct and behaviours across our membership and the wider community. These questions again were anonymous and optional. Around 84% female, 72% male and 50% of those who responded giving other gender identities responded to these questions.

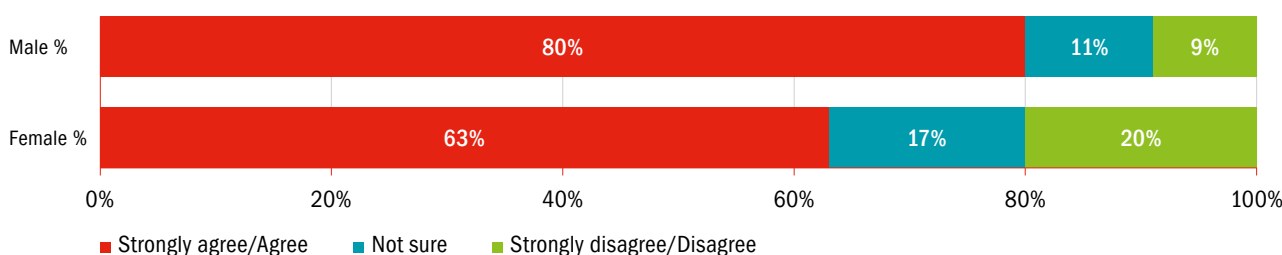
I believe that all staff or students have access to the same opportunities, regardless of sex, ethnicity, disability, socio-economic status, sexual orientation or any other personal characteristic.

In response to this question, 75% of the respondents agreed that the opportunities available were equally accessible no matter what personal characteristics staff and students might have. Men were more confident that this was the case, with 80% of male respondents reporting agreement, as opposed to 63% of female respondents. There was very little variation in the responses from each membership category.

Overall responses to the question on equal opportunities



Responses to the question on equal opportunities by gender



Have you observed or personally been made aware of any conduct directed toward a person or group of people in your workplace (or place of study) that you believe has created an exclusionary, intimidating, offensive and/or hostile (harassing) working or learning environment because of their personal protected characteristics?*

When asked about awareness of discriminative actions, 17% of respondents reported observing or being made aware of discriminative actions towards others over the last two years and 19% over the last five years.

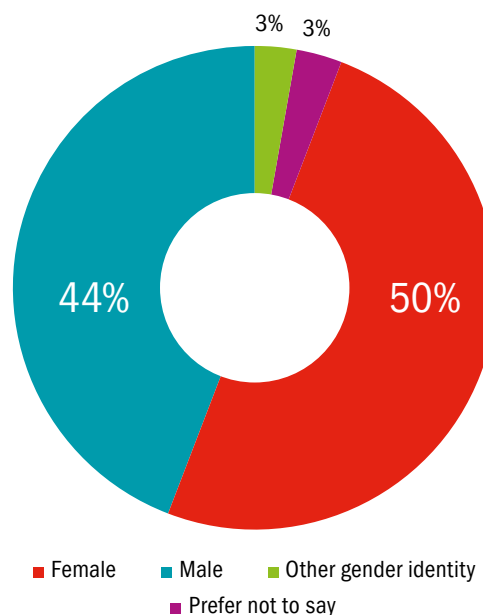
Around a third of the respondents who had observed discrimination mentioned gender issues in their response. These included mentions of harassment, bullying, assault and exclusion based on perceived gender difference, primarily towards women.

Have you personally experienced exclusionary (e.g. shunned, ignored), intimidating, offensive and/or hostile conduct (harassing behaviour) that has interfered with your ability to work or learn on your campus or workplace because of personal protected characteristics?*

Over the last two years, 9% of respondents reported personally experiencing discriminative actions, with 11% over the last five years.

Half of those who reported experiencing discriminatory behaviour in the last two years were female (50%), making up 18% of the total female respondents to the survey. Additionally, 50% of transgender respondents reported having experienced discrimination.

Gender breakdown of respondents who experienced discriminative action in the last two years



*Gender, age, sexual orientation, ethnicity, disability or any other characteristic

Bullying was the prevalent behaviour reported by respondents. It was felt that managers did not know enough about how to handle situations, how to report, monitor or reprimand such behaviours, and placed too much of the burden for resolving the situation on the victim. Much of the bullying mentioned was observed to happen from those in senior roles to those more junior whether for gender, sexuality or ethnicity.

The types of actions mentioned that contribute to a bullying or harassment environment for our respondents included:

- Aggressive or abusive emails
- Discriminatory statements on social media or personal blog posts
- Shouting and raised voices
- Other verbal assault, including derogatory remarks, slurs, and ill-placed humour
- Physical or sexual assault
- Overlooking individuals, accidentally blocking access to opportunities or not hearing their needs
- Deliberately withholding access to relevant information
- Plagiarism
- Exclusion through lack of access for events and conferences, including lack of safe spaces, poor timings, or physical access issues

Whilst gender discrimination dominated the comments, racism, homophobia, transphobia and ageism were all reported, as well as discrimination against those with different beliefs, and those with disabilities, often in conjunction with one-another. For racism, some actions are pervasive and structural or institutionalised, such as the lack of diverse representation included in marketing materials. But recent changes to the political climate have manifested in the workplace, with respondents based in the UK stating they had been told to go home, experiencing lots of stereotyping due to nationalities, and feeling tensions rise against those not from the UK. Some explicitly mentioned Brexit and described hostility against those coming from EU countries, as well as those from further afield.

Section 3.1 of the IOP Code of Conduct states that: “Members shall treat everyone with dignity and respect, not using their position or personal belief/opinion to bully, abuse, victimise, harass or unlawfully discriminate

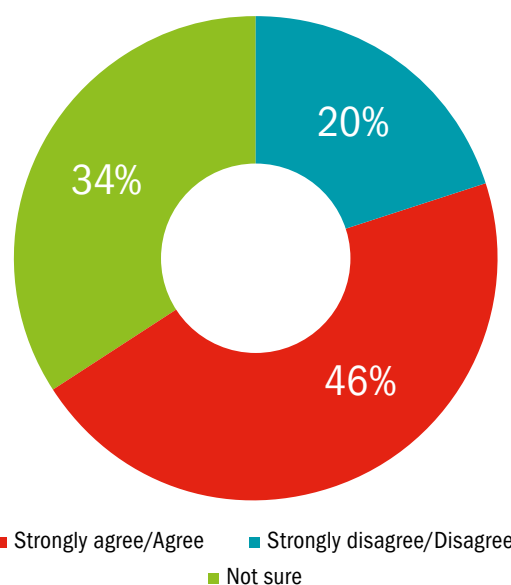
against others. Under the Equality Act 2010, harassment is defined as unwanted conduct related to a relevant protected characteristic, which has the purpose or effect of violating an individual’s dignity or creating an intimidating, hostile, degrading, humiliating or offensive environment for that individual. It can be physical, verbal or non-verbal conduct and includes, but is not limited to, abusive spoken or written words, offensive emails, tweets or comments on social networking sites, offensive images or graffiti, and physical gestures or jokes. It also includes treating someone less favourably because they have submitted or refused to submit to such behaviour in the past.”

Awareness of the IOP processes for addressing complaints

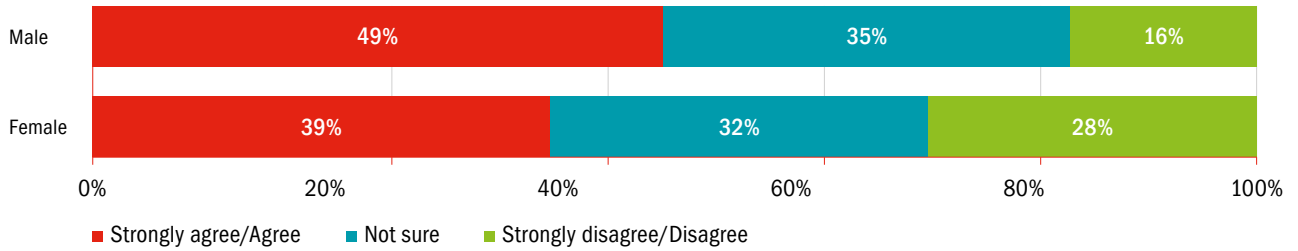
The following section includes data that represents awareness of the IOP processes for addressing complaints. Since the survey was carried out in 2019, based on these responses, the processes and IOP Code of Conduct have been placed in a more prominent section of the new IOP website.

I am aware of the Institute of Physics process for addressing complaints of harassment and bullying or other offensive behaviour about members.

The awareness of respondents to the IOP’s process for addressing complaints

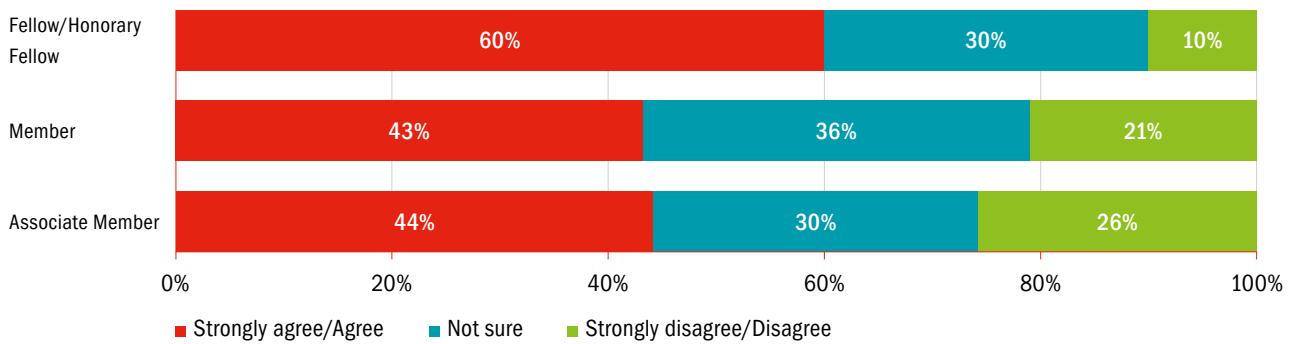


The awareness of respondents to the IOP's process for addressing complaints by gender



Awareness of the complaints process is highest amongst Fellow/Honorary Fellows at 60%.

The awareness of respondents to the IOP's process for addressing complaints by membership category



Sources of support and information

To submit a complaint about an IOP member please visit our website at **iop.org/submitting-complaint-about-member**

If you are experiencing harassment or bullying in your place of work or study, the following list of professional organisations has been compiled that can offer support and further information. Additionally, if you have any concerns, do contact the advisors and counsellors at your university/place of study or workplace.

Equality and Human Rights Commission
equalityhumanrights.com/en

MIND charity
mind.org.uk

Prospect Union information and advice
prospect.org.uk/article/getting-help

Rape Crisis England and Wales
rapecrisis.org.uk

Rape Crisis Scotland
rapecrisisscotland.org.uk

Rape Crisis Network Ireland
rcni.ie

Stonewall Help and Advice
stonewall.org.uk/help-and-advice

The Advisory, Conciliation and Arbitration Service (ACAS)
acas.org.uk

The National Bullying Helpline
nationalbullyinghelpline.co.uk

University and College Union (UCU) support and advice
ucu.org.uk/support

