

Equity, Diversity and Inclusion Action Plan of the Instituto de Física Teórica UAM/CSIC

Elaborated by the Equity, Diversity
and Inclusion committee¹

Madrid, June 2021



**Approved by the IFT Assembly on 17 June, 2021, and endorsed by the IFT
Director L. E. Ibáñez Santiago**

¹ ift-ed@listas.csic.es

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A. Introduction

The Instituto de Física Teórica (IFT) is a joint research center belonging to the Spanish National Research Council (CSIC) and the Autonomous University of Madrid (UAM). It is the only Spanish center dedicated entirely to research in Theoretical Physics. IFT members develop research in the frontiers of Elementary Particle Physics, Astroparticle Physics, Cosmology and Quantum Matter, searching for the fundamental laws of Nature and the Universe. The IFT is part of the strategic line *Theoretical Physics and Mathematics* of the International Excellence Campus (CEI) UAM+CSIC established in 2009. Since 2012, it is credited as Severo Ochoa Center of Excellence. Besides its purely scientific activity, the IFT is also conducting intensive training activities for young researchers and professionals through the graduate program in Theoretical Physics, which has received the mention of excellence from the CEI and the Ministry of Education. In addition, the Institute carries out the important task of transferring knowledge to society through several high-impact outreach programs.

The IFT is deeply committed to the principles of non-discrimination and equal opportunity in all research, training or outreach activities, and in all policies ruling the internal workings of the institute. The Institute does not discriminate based on personal factors including (but not limited to) race, color, national or ethnic origin, alienage, age, religion, creed, sex, sexual orientation, gender identity or expression, marital status, functional diversity, political affiliation or philosophy. In its programs, on its campus, and among its participants and members, the Institute does not tolerate actions that constitute discrimination or harassment.

The effective implementation of this compromise corresponds to the Equity, Diversity and Inclusion (EDI) committee, composed of elected representatives of all IFT research and administrative bodies. The initiative to create an EDI Committee at IFT took off in 2019. Its mission started on March 2020. It is integrated by 13 members (<https://projects.ift.uam-csic.es/ed/about-us/>): one representative of the Administrative staff, one of the Information Technology staff, three representatives of the postgraduate researchers, two of the postdoctoral researchers, three of the junior research staff (RyC and CAM Talento) and three of the permanent research staff.

One of the first tasks of the committee has been to prepare this EDI Action Plan, reflecting the commitment of IFT with the implementation of policies that establish the principle of equal treatment and opportunities for all as a strategic guide of our institution. Being a joint research center between UAM and CSIC, the IFT abides by their corresponding equality plans, as well as the plan elaborated by the Spanish Research Agency (AEI), see <https://projects.ift.uam-csic.es/ed/equality-plan/>. While the present plan adheres to these, it also considers more specific measures designed to correct those issues inherent to the theoretical physics community and, in particular, those affecting the IFT.

To elaborate this plan, an analysis phase of the current state of play in the institution has taken place, including a historical and statistical analysis in order to diagnose the IFT status quo, detect biases, in particular with regard to gender inequalities, and guide future actions.

The first conclusions of the assessment stage are presented in section B of this document. A key observation is that within STEM areas, Theoretical Physics has a particularly severe gender gap issue, starting at the undergraduate level. In 2017 the proportion of female science students at UAM was 53%, only 26% in Physics. In our Master in Theoretical Physics it is even lower, 10% in 2019. According to the 2020 report by the MyC CSIC Committee, only 23% (26,5%) or the predoctoral (doctoral) researchers in Physics hired by CSIC in 2019 were women. The IFT is seriously committed with taking decisive actions to address this issue from the very early stages of education.

The Action Plan includes a set of policies, presented in section C, designed to guarantee gender equality and to promote a balanced, diverse and inclusive environment at the IFT. The degree of implementation of these policies and the evolution of the various indicators presented in section B, will be monitored by the EDI committee on a yearly basis.

This EDI Action Plan will be revised within a 4 year period starting from the moment of its approval.

B. Diagnostics of the current situation regarding gender balance at the institute

This section contains the statistics gathered regarding gender balance among IFT personnel. Attention will be paid to our visiting programs, including the Severo Ochoa (SO) visitor program, as well as to the current status in governing boards and committees.

B-1. Governing boards and committees

Figure 1 indicates the proportion of female/male researchers who have been appointed as IFT Director, Deputy Director, Head of Department, members of the IFT Board, Scientific Advisory Board and Severo Ochoa Steering Committee since the institute was officially created in 2003 (the data for the IFT Board and heads of department is restricted to the period 2006-present).

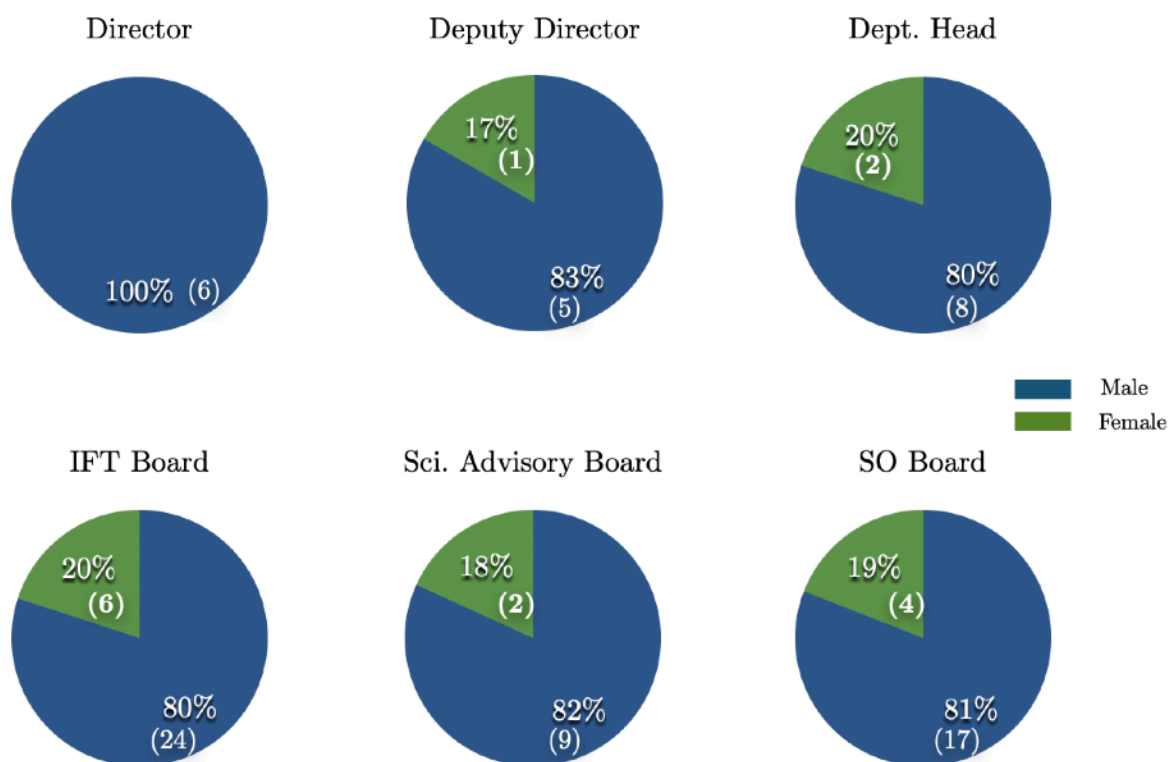


Figure 1: Gender statistics corresponding to the governing boards and committees since the IFT was officially created in 2003. The data for the IFT Board and department heads is restricted to the period 2006-present.

For reference, the current proportion of female researchers among the permanent staff at the IFT is shown in Figure 2. As can be seen from the comparison between the Figures 1 and 2, while for other IFT governing boards the proportion of female researchers is similar to the one among permanent staff members, they are clearly underrepresented in the position of Director of the institute. Figure 3 corresponds to the current situation. The presence of female researchers has risen above the proportion of female staff members at the IFT governing boards, except again at the top positions of Director and Deputy Director.

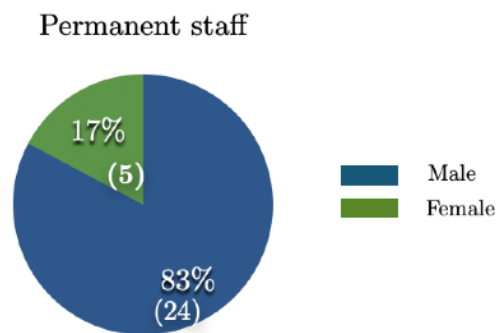


Figure 2: Proportion of female researchers at the institute (permanent staff members only) as of June 2021.

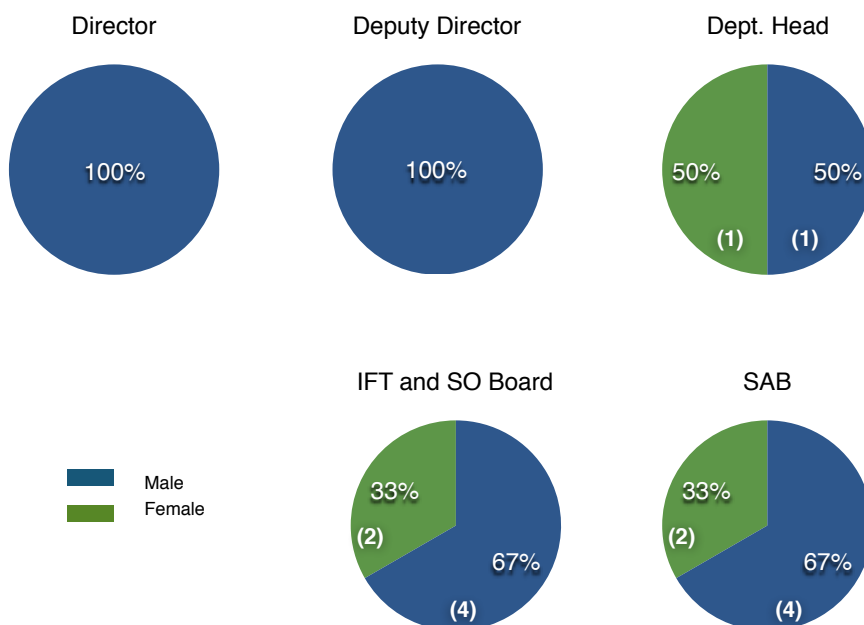


Figure 3: Proportion of female researchers at the IFT governing boards as of June 2021.

B-2. IFT personnel (per position category)

Figure 4 indicates the percentage as well as the absolute numbers of female/male personnel across different job categories: PhD students ("predoc"), postdoctoral researchers ("postdoc") and permanent researchers ("staff"), as well as the aggregate number.

The IFT participates in the master on Theoretical Physics at UAM since 2006. While female researchers are clearly underrepresented at all levels (with percentages below 20%), the situation is particularly worrisome at the master student level, as shown in Figure 5. Specifically, note that within the past four academic years the number of female students has been at most two (out of around 20 students on average) and, in the years 2018/19 and 2020/21 no female students at all enrolled in the specialization of Particle Physics and Cosmology.

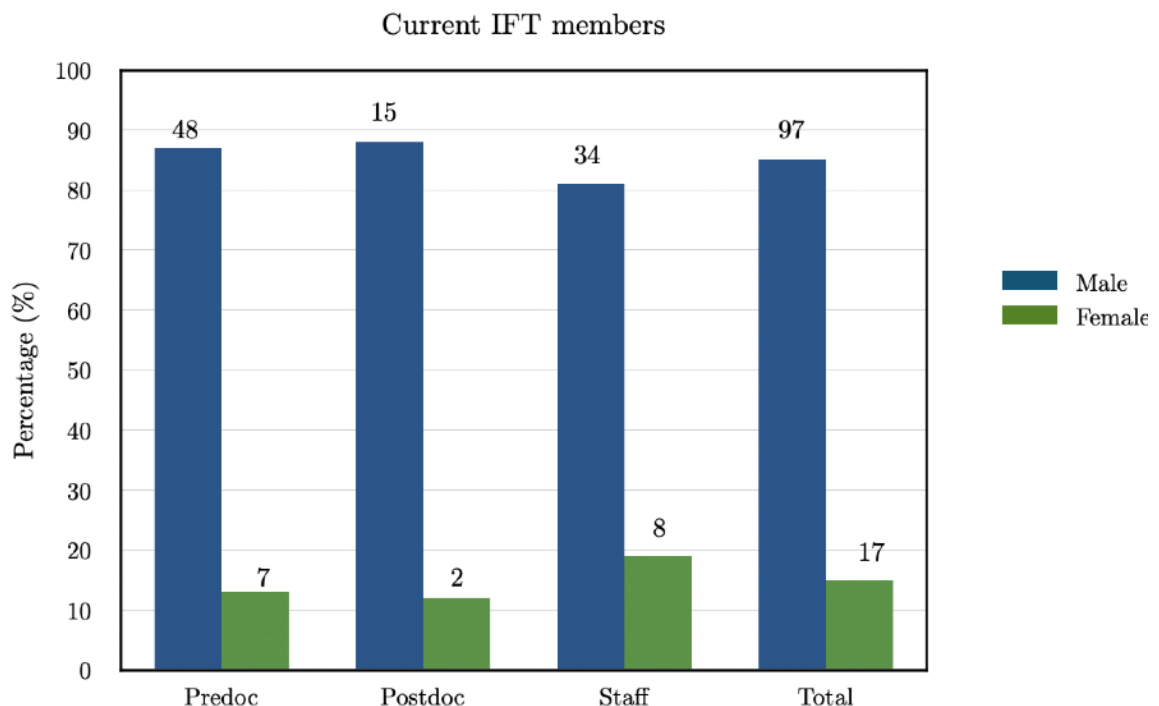


Figure 4: Percentage of female/male researchers, grouped by job categories. The total number of researchers in each case is indicated at the top of each color bar.

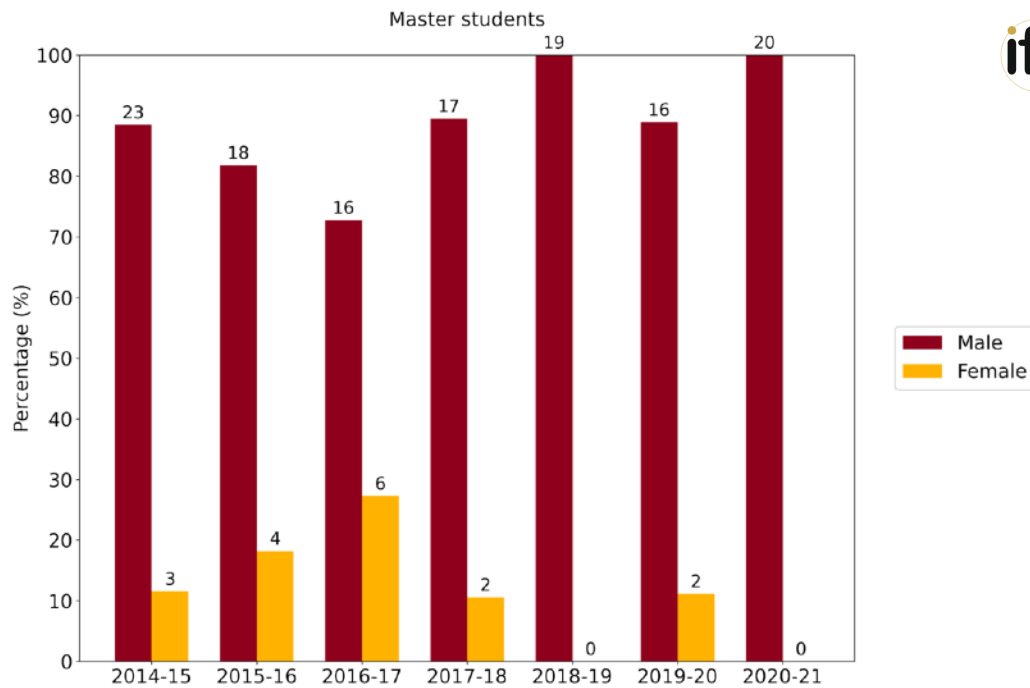


Figure 5: Gender balance among students enrolled on the Master on Theoretical Physics at UAM in the specialization of Particle Physics and Cosmology, divided by gender and by academic year. The numbers on top of each bar indicate the absolute numbers, while the percentages are indicated in the y-axis.

B-3. Visiting programs

Figure 6 shows the percentages and absolute values for the total number of IFT short-term visitors since 2016, divided by gender and year. While the total number of visitors has increased considerably (with the exception of 2020 due to the COVID pandemic), from 194 in 2016 to 273 in 2019, the percentage of female visitors was kept more or less at a constant level of about 15%. The year 2020 shows a slightly larger percentage of female visitors, above 20%; however, this should be taken with a grain of salt given the exceptionality of the circumstances and the much lower number of visitors compared to previous years.

Finally, Figure 7 shows the gender balance among those visitors which have benefited from the SO visiting program at the IFT. Results are shown by gender separately for the two categories of Distinguished Professors and Associate Researchers. There does not seem to be a significant difference between the two categories, which show very similar percentages of female/male visitors. The data shown in Figs. 6 and 7 roughly reflects the gender gap in the field.

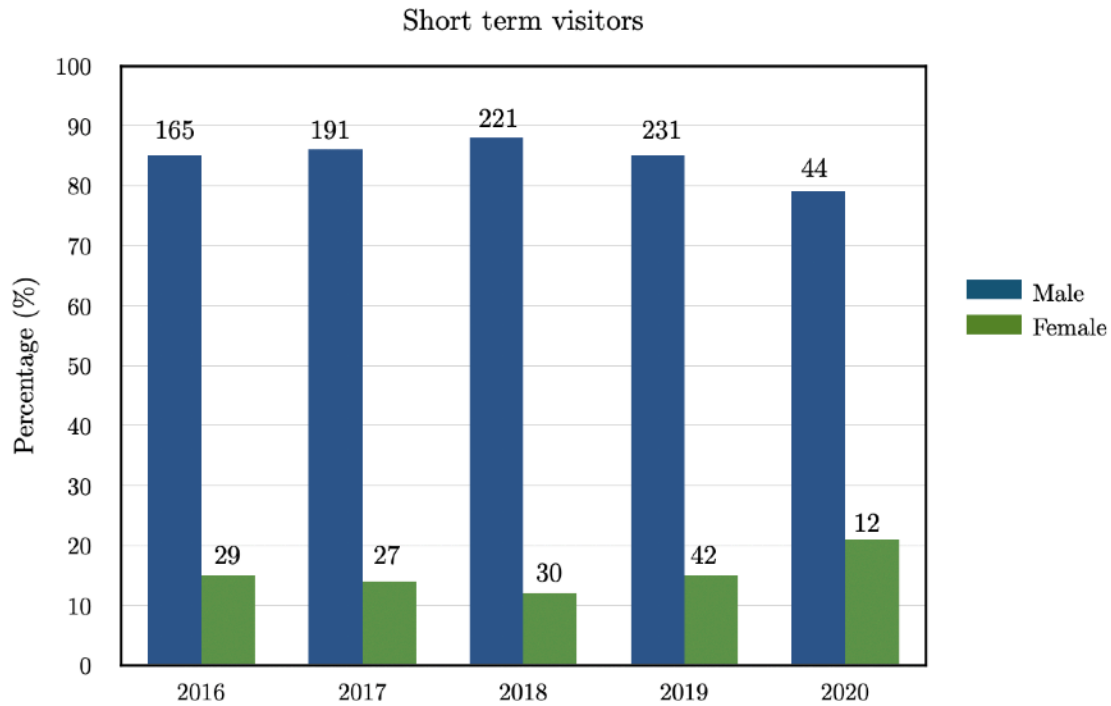


Figure 6: Gender balance among all short-term visitors at the IFT, divided by year. The numbers on top of each bar indicate the absolute numbers, while the percentages are indicated in the y-axis.

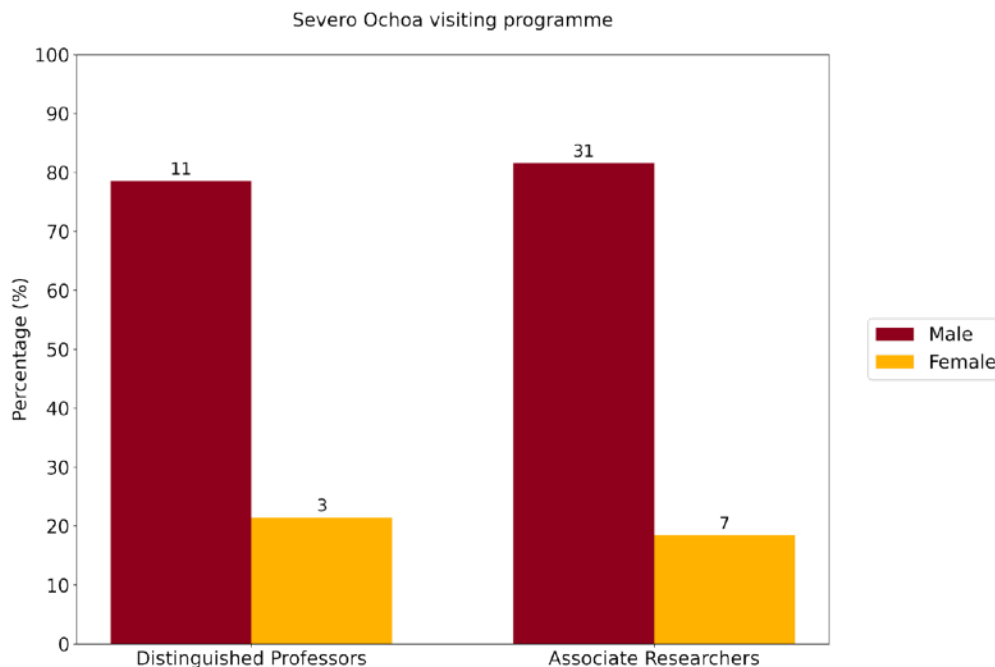


Figure 7: Gender balance among researchers who have visited the IFT as part of the Severo Ochoa visiting program since 2013. The numbers on top of each bar indicate the absolute numbers, while the percentages are indicated in the y-axis.

B-4. Seminars and Colloquia

The gender balance for colloquia and seminar speakers is shown in Figures 8 and 9, respectively, highlighting the trend for recent academic years. The data for colloquia speakers is particularly worrisome, with only two female speakers over the past six years (out of a total of 28 speakers). The data for seminar speakers shows a more positive trend, with an increasing percentage in the number of female speakers over the past three years; however, the percentage of female speakers is only around 10-12%.

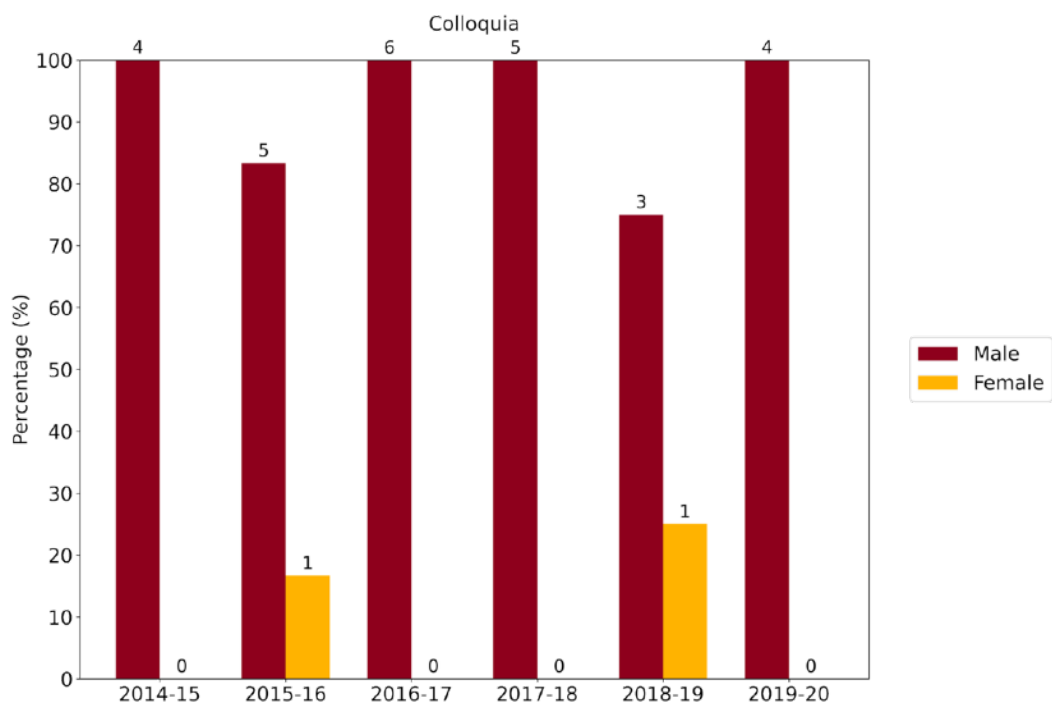


Figure 8: Gender balance among colloquia speakers at the IFT. The numbers on top of each bar indicate absolute values, while the percentage of speakers is shown in the y-axis.

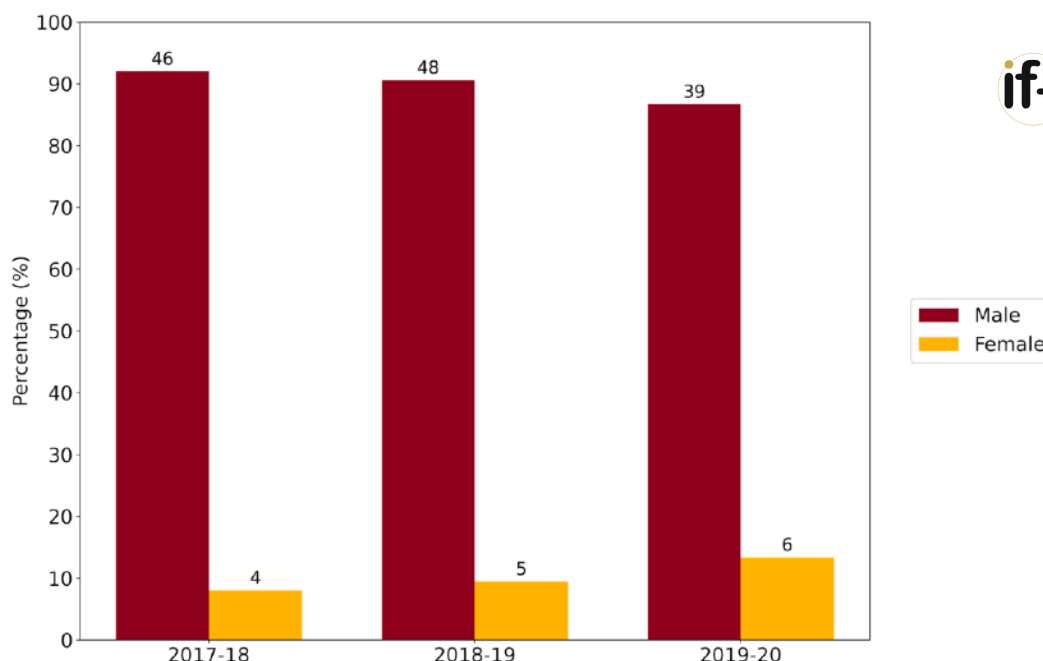


Figure 9: Gender balance among seminar speakers at the IFT. The numbers on top of each bar indicate absolute values, while the percentage of speakers is shown in the y- axis.

C. Policies and activities designed to encourage and promote a balanced, diverse and inclusive environment at the institute

This section outlines the main measures in the Action Plan designed to promote and encourage gender balance and inclusiveness across all personnel categories at the institute.

The implementation of the policies detailed below will be monitored and assessed by the EDI committee on a yearly basis.

C-1. Policies regarding Human Resources at the institute

C-1.1. Governing boards and committees

The objectives of the Equality plan in this respect will be:

1. To promote the principle of balanced representation between men and women in the composition of highest governing boards, with special emphasis on the appointment of the most representative positions (Director and Deputy Director).

2. The representation of female researchers in all governing boards of the IFT will be promoted above the ratio according to the staff composition in order to take a positive action against gender bias.

C-1.2. Recruitment policies

In what concerns policies related to the recruitment, promotion and selection of personnel, the IFT equality plan is divided into several major points:

1. Disaggregated quantitative data will be collected for the composition of committees for all recruitment activities at the IFT. Data will also be collected for selection processes, keeping track of the candidates presented and selected. The analysis of the information will allow to identify best practices and identify critical gaps.
2. The principle of balanced representation between men and women in the composition of the selection panels for all positions will be enforced, whenever possible, respecting the principles of professionalism and the specialization of its members.
3. The EDI committee will regularly organize training activities for the IFT members in equality matters, to raise awareness about unconscious bias, and to avoid discriminatory attitudes in the selection and hiring processes. The committee will advertise within the institute any courses which become available to the IFT personnel, and encourage their members to enroll (such as, e.g., those available through the CSIC internal resources webpage).
4. The IFT is committed to guarantee that the principle of non-discrimination and equal opportunities is respected in all hirings and promotions. When evaluating two candidates with similar qualifications, positive discrimination will be encouraged.
5. Continue improving gender balance in faculty positions. In fact, after a search for the most competitive candidates, the last two Ramón y Cajal (RyC) fellows at the IFT were awarded to two female researchers, increasing the ratio from 16% to 20% among the staff.
6. The IFT will try to raise funds for new PhD and visiting positions specially targeted to candidates from underrepresented and traditionally disadvantaged backgrounds.
7. Percentages of women at IFT in their early stages in the career are consistently worse than those at faculty positions, demanding a positive action policy at that stage. New affirmative action fellowships for the Master, targeting female students with an excellent academic record, will be widely publicized at the

national and international levels. The IFT will try to raise funds to open at least one full-board position per academic year, with the aim to reach the 15%-20% ratio among master students.

8. Review and, if necessary, correct the language, images, text and content of job advertisements and job descriptions, to ensure that they do not contain sexist terms, images or stereotypes.
9. Incorporate a commitment to equal opportunities in all job advertisements. All candidates will be evaluated based on their merits and qualifications, without regard to gender, sexual orientation, race, disability, or any other circumstance. Candidates from underrepresented and traditionally disadvantaged backgrounds will be particularly encouraged to apply. A special effort will be put on job advertising to ensure that it reaches underrepresented communities in theoretical physics and that the pool of candidates is as diverse as possible.
10. All selection committees at the IFT will be conscious about parental leave periods. This will be explicitly stated in all job advertisements, and taken into consideration when evaluating the scientific performance of the candidates.

C-2. Policies regarding the organization of scientific activities, awareness and outreach

C-2.1. Organization of colloquia, seminars, workshops and conferences

Regarding this issue the IFT equality plan is divided into the following actions:

1. A balanced representation between men and women among the invited speakers will be actively searched for, respecting the principles of professionalism.
2. Special attention will be paid to have a proper gender balance in the highest profile seminar series, the IFT colloquia, as well as in the plenary sessions of events organized by the IFT. In these cases the opportunity of a positive action will also be considered. As a target, we aim to increase the percentage of female speakers in the IFT colloquia up to at least 30% within the upcoming 3 years.
3. In order to recognize and avoid a possible gender bias, a list of female specialists in the research topics of interest at the IFT will be elaborated. This list will be accessible to all IFT members through the intranet, and we encourage everybody to contribute to it. The aim is that all seminar and colloquia organizers have

access to it as well as workshop organizers and members of scientific advisory committees for other events.

4. The principle of balanced representation between men and women in organizing committees of workshops and conferences to take place at the IFT will be enforced whenever possible.

C-2.2. Activities to raise awareness on diversity and inclusion

The Equity, Diversity and Inclusion (EDI) committee will promote activities addressing general aspects related with the inclusion of minorities in a broad sense, e.g. underrepresentation of women, under-performing countries, mobbing and discrimination (e.g. racial attitude, LGBTQI+ community, people with disabilities or reduced mobility, etc).

These activities aim to raise awareness of the gender gap in STEM and to shed light on possible unconscious biases, by providing - at the same time - tools and instruments which can be useful in our daily life at the institute. Any activities on this regard will be advertised within the institute and on the webpage "<https://projects.ift.uam-csic.es/ed/training-events/>", actively encouraging their members to enroll and participate.

Such activities will include:

- A. **Video projection:** international movies, documentaries and biopics, represent a huge source of knowledge. They are proof of historical issues - e.g. racial attitude, gender issue, religion conflicts in science - that can be shared in public projection and/or online events. The first EDI@IFT training activity on gender issue already took place during the quarantine, with the online free screening of the documentary "Picture a scientist", provided by the European Research Council. Next projections may include, e.g. the movies "Hawking", "Einstein and Eddington" and "Radioactive" among others.
- B. **Unconscious bias activities:** Unconscious biases are social stereotypes about certain groups of people that individuals form outside their own conscious awareness. Everyone holds unconscious beliefs about various social and identity groups, and these biases stem from one's tendency to organize social worlds by categorizing. Unconscious bias at work has profound implications. When we make decisions on job applications, who gets disciplined or promoted, who we see as a confident or as a suitable mentee, or whose ideas we give consideration to, we may be adding our own subliminal and emotional criteria to that decision (criteria we might not even be aware of, and which may have no basis on facts). Biases can also contribute to hostile workplaces, bullying, and discrimination. In order to shed some light on possible unconscious biases, the EDI@IFT committee will propose:
 1. *Implicit Association Test:* available on the EDI@IFT webpage dedicated to online-training events: "<https://projects.ift.uam-csic.es/ed/training-events/>" .

Any visitor of the webpage will be able to test themselves with an Implicit Association Test (IAT) on a different topic, e.g. gender, religion, age, sexuality, etc. following the link <https://implicit.harvard.edu/implicit/takeatest.html>.

2. *Training and dedicated workshops*: Unconscious bias training is necessary, but in itself not sufficient, for eliminating workplace bias. Some unconscious bias training programs are more effective than others. Specifically, unconscious bias training is most effective when it: (i) incorporates bias awareness, or ‘a-ha’ activities² and (ii) transfers evidence-based bias reduction and mitigation strategies. More information can be found, e.g. visiting the website <https://cultureplusconsulting.com/2018/08/16/a-ha-activities-for-unconscious-bias-training/>. Project Implicit also provides consulting services, lectures, and workshops on implicit bias, diversity and inclusion, leadership, applying science to practice, and innovation.

The EDI committee intends to organize (at least) one activity per year, and recommend attendance to all members of the IFT.

The IFT will coordinate at both national and international level with EDI committees of different institutions. This will allow to keep the IFT-EDI committee informed about the development of activities, talks, speakers, statistics and general information abroad and to improve the EDI@IFT activities in a broad sense. At present the IFT participates in the SOMMa Gender and the Igualdad Intercentros Committee of the CSIC centres on the UAM Campus. The IFT will also promote the involvement in research networks with a clear gender sensibility. This has been the case for the EU ITNs Invisibles and Elusives, coordinated by IFT member Belen Gavela, and the EU COST Action "The String Theory Universe", which included gender&STEM special talks in all its network meetings.

C-2.3. Gender-neutral language and code of conduct

All visitors and members of the IFT are expected to behave in a professional manner and to create and maintain an environment that is scientifically productive and enjoyable for everyone at the institute, regardless of their personal attributes including but not limited to: age, career stage/path, disability, ethnicity, gender, marital status, medical condition, nationality, physical appearance, political affiliation, pregnancy, physical or mental disability, race, religion, or sexual orientation.

Verbal, non-verbal, and/or physical harassment of any kind will not be tolerated. Harassment includes verbal or physical abuse, offensive comments, inappropriate and/or unwanted physical contact, sexual attention or innuendo, deliberate intimidation, stalking, retaliation, as well as taking pictures or video of an individual

² *A-ha* activities help participants to see how their subconscious preferences and beliefs drive their responses. Cognitive dissonance refers to the uncomfortable emotional state experienced when individuals are made aware of an inconsistency in their beliefs, attitudes, or behaviors.

without their consent. For further details on our harassment protocol please see the dedicated section on this Action Plan.

All communication (oral or written) should be appropriate for a professional audience which includes people of very diverse backgrounds. Sexist, racist, or exclusionary language, comments, images, music or jokes are not appropriate at any time. Respect for others should be present at all times. This is especially important for senior personnel since less experienced researchers may be reluctant to express their objections or discomfort regarding unwelcome or disrespectful behavior.

Finally, the IFT encourages the use of a non-sexist and inclusive language for all oral and written communications.

C-2.4. Outreach

The IFT is extremely active in the organization and participation on outreach activities addressed to the general public. We organize masterclasses for high-school students, outreach talks and seminars, and training activities for high-school teachers, among other activities. The IFT Youtube channel is an exceptional educational platform, with over 570K subscribers; but, as in most science channels, with a very low female ratio: 9-10% in 2015, now increased to 13% thanks to specific initiatives. We plan to continue pushing for improvement, with activities tied to February 11th (International day of women & girls in science), as started in 2020 with the thriving [#YoFisica](#) challenge, and continued in 2021 with [#YoutubersPorUnDia](#), addressed to high-school students.

The EDI committee will coordinate with the Outreach Committee at the IFT to ensure a fair representation of minorities in the different outreach activities, as well as the organization of special dedicated initiatives with the aim to reduce the gender gap in STEM.

These actions will include:

1. An analysis of the participation of IFT members in outreach activities will be carried out in order to detect and correct any gender bias.
2. A balanced representation between men and women among the participants in outreach activities will be strongly recommended. This will be particularly emphasized in the context of activities with targeted to young public (e.g. videos in the IFT YouTube channel) or in elementary or high schools (outreach talks by IFT members, and/or visits and activities for high schools at the IFT).
3. Organization of special outreach activities to commemorate February 11th (International Day of Women and Girls in Science), continuing the dedicated

activities organized in previous years, such as the [#YoFisica](#) initiative started in 2019.

4. Similarly, organization of special outreach activities for other special dates in order to raise awareness of minorities, specially in the scientific context, for instance November 18th as LGBTQI+ STEM Day, and other similar dates.
5. Organization of educational activities for the general public to raise awareness on EDI aspects in Science, along the lines of the round table [Quiero ser científica](#), co-organized by the IFT at the UAM campus in 2018.

C-3. Protocol against harassment

The IFT is committed in the fight against harassment in the workplace, be it due to gender, race, functional diversity or any other individual characteristic. Being that the case, we hereby attach several protocols that would apply whenever harassment is detected, aiming to protect the victim effectively in case it were to happen, as well as to prevent it and keep the workplace as a safe environment. Since the IFT is a joint research center, these protocols are the ones designated by the University and by the Spanish Research Council, which can be found respectively in the following two links:

[https://projects.ift.uam-csic.es/ed/wp-content/uploads/2020/06/Protocolo de acoso.pdf](https://projects.ift.uam-csic.es/ed/wp-content/uploads/2020/06/Protocolo_de_acoso.pdf)

[https://projects.ift.uam-csic.es/ed/wp-content/uploads/2020/11/protocolo frente al acoso sexual y por razón de sexo en el csic-1.pdf](https://projects.ift.uam-csic.es/ed/wp-content/uploads/2020/11/protocolo_frente_al_acoso_sexual_y_por_razon_desexo_en_el_csic-1.pdf)

What do we consider as harassment? Harassment can present itself in many forms, and can be classified according to the attacked characteristic, which can as well manifest itself in several ways:

1. Sexual harassment is one of the most common important types of abuse in the workplace, especially targeted against women. This harassment can present itself very explicitly, through unwelcome sexual advances or even direct request for sexual favors (be it in exchange for something or not), as well as through more aggressive displays like verbal or physical attacks. However, there are subtler executions of sexual harassment, like the creation of a hostile environment by the perpetrator, gaslighting (making someone doubt themselves, taking away their confidence and credibility) towards the attacked person, power abuse or stalking and cyberbullying.
2. Racial or ethnic harassment appears when an individual is attacked simply based on their race or ethnicity. This abuse is usually displayed through demeaning comments or jokes and public humiliation; the situation may also reach the point

of racists making direct threats to people due to their origin, getting even to physical abuse.

3. Functional diversity is also often targeted by abusers. People with functional diversity may experience harassment in the workplace through insults or degrading comments, isolation or, again, through aggressive behavior.
4. These are just three types of harassment that can easily be detected in the workplace, but the IFT remains vigilant, considering all abusive behavior that can be targeted to other characteristics (like sexual orientation, gender identity, age, beliefs, etc) and can manifest itself in any of the ways previously displayed or any other not explicitly stated there.

Harassment may be reported in several ways: (1) via the anonymous inbox physically present at the IFT; (2) through the web form which has been made available through the EDI webpage (<https://projects.ift.uam-csic.es/ed/about-us/>); (3) by sending us an email directly to ift-ed@listas.csic.es; or (4) talking to any of the members of the committee directly. Additionally, members of the committee pledge to be on the watch for discriminatory behaviors. At all times, and regardless of the means chosen to report the abuse, the committee will ensure anonymity of the victim and the relator.

Once a case of harassment has been reported or brought to the knowledge of the committee, the general procedure will be the following:

1. The committee will look into the issue to clarify the details, always ensuring the safety of the possible victim. At the same time, the committee will activate the mediation protocols of the corresponding institutions, either UAM or CSIC, avoiding the aggravation of the situation and/or preventing it from becoming chronic. A member of the committee will act as intermediary with the institutions whenever it is needed, providing all the support required in the process.
2. In the event that the report is not solved in the mediation process, the committee will also provide support in the phase of investigation, that will be handled following the institutional protocols.
3. In the case harassment would be confirmed, the necessary actions will take place, be them legal, disciplinary or of any other kind.

Apart from this, we also specify some actions to be taken by the committee to provide for protection for the victim suffering harassment.

1. Availability of an anonymous inbox, both physical at the IFT and through the EDI committee webpage, where people under harassment may contact us without the concern of the case spreading.
2. Offer a safe environment as well as administrative and any other kind of support the attacked person may require. For example, if the person under harassment

asks for it, the committee will support any request for a change in their working conditions, like changing office or working schedule.

3. Offer contact support with lawyers, law enforcers or any other required service that may be difficult for people under harassment.
4. As institutional protocols are not available in English, the members of the committee will serve as a mediator whenever it is needed, providing for language support.