



LABORATÓRIO DE INSTRUMENTAÇÃO  
E FÍSICA EXPERIMENTAL DE PARTÍCULAS

# LIP Gender Equality Plan

[Approved in October 2022]

This is an English version of the original document. In case of divergence, the Portuguese document prevails.



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## List of Acronyms:

APPEC – Astroparticle Physics European Consortium

CERN – Conseil Européen pour la Recherche Nucléaire (European Council for Nuclear Research)

ECFA – European Committee for Future Accelerators

GENERA – Gender Equality Network (in Physics) in the European Research Area

NuPECC – Nuclear Physics European Collaboration Committee

SAGE – Systemic Action for Gender Equality

SDG – Sustainable Development Goals

UN – United Nations

## 1. Why are gender equality and diversity important?

Gender Equality is one of the Sustainable Development Goals (SDGs) established by the United Nations (UN) Agenda 2030. This goal is related not only to the fundamental right of each person to the full realisation of their potential but also to the improvement of the living conditions of the entire population, including the reduction of poverty and the promotion of a healthier society, starting with the youngest, being also demonstrated the positive correlation between the equality index and the innovation capacity of countries.

Diversity contributes to better institutions, more capable of facing new challenges and also with better working conditions, in which everyone can achieve their full potential. Besides gender, diversity naturally encompasses other factors that must be considered. This document focuses mainly on gender equality, noting that women are slightly over 50% of the population and only around 30% of the LIP community.

## 2. Gender Equality in the Portuguese and European scientific context

Women now represent the majority of university students in Portugal and Europe (see Table 1), with apparent differences between subjects. In the exact sciences and engineering, the percentage of women is lower than the average for all areas in Portugal and Europe (Table 2). This difference is particularly evident in Physics, where Portugal has a higher gender equality index than most other countries.

Table 1 - Number of students enrolled in higher education in 2020 and 2021. Source: <https://www.pordata.pt/en/db/portugal/search+environment/table>

Years	Sex		
	Total	Males	Females
2020	396,909	182,178	214,731
2021	411,995	191,144	220,851

Individual  
 Students enrolled in higher education: total and by sex  
 Data Sources: DGEEC/ME-MCTES - DIMAS/RAIDES  
 Source: PORDATA  
 Last updated: 2022-10-03

Table 2 - Female students as % of those enrolled in higher education: total and by area of education and training. Source: <https://www.pordata.pt/en/db/portugal/search+environment/table>

Proportion - %									
Education and training areas									
Years	Total	Education	Arts and Humanities	Social Sciences, Business and Law	Sciences, Mathematics and Computing	Engineering, Manufacturing and Construction	Agriculture	Health and Social Protection	Services
2020	54.1	77.7	60.1	60.5	43.1	28.0	57.2	76.9	42.3
2021	53.6	77.0	60.0	59.8	42.5	27.1	57.8	77.0	40.5

Females as a % of students enrolled in higher education: total and by area of education and training  
Data Sources: DGEEC/ME-MCTES - DIMAS-RAIDES  
Source: PORDATA  
Last updated: 2022-10-20

In recent years, the topic of gender (un)equality and diversity has been addressed in many forums to which the field of Physics has not been unrelated. In particular, CERN has played a relevant role in monitoring and creating tools to promote gender equality and diversity. In addition, many extensive international collaborations have commitments regarding gender representation and even specific committees to address these issues.

Note the example of the "Diversity Charter"<sup>1</sup> and its monitoring, proposed jointly by ECFA, NuPECC and APPEC, with LIP researcher Patricia Conde Muiño being appointed as scientific secretary of ECFA in May 2021.

### 3. LIP promotes Gender Equality and diversity

The need to create proactive mechanisms to promote equality and the institutional awareness that diversity is fundamental for the current social, economic and political challenges has globally generated the definition of equality promotion plans in public and private structures. LIP has followed this evolution and participates in the GENERA network, having signed the SAGE agreement.

The GENERA network is a project under Horizon 2020. It aims to continue, monitor and improve the Gender Equality Plans of Research Institutions and Organizations, specifically in the area of research in Physics (<https://genera-project.com/>), and SAGE (Systemic Action for Gender Equality) is also a project funded by the EU-Horizon 2020, aiming concrete actions on gender equality in higher education and research, seeking to eliminate barriers in recruitment, retention and career progression of female researchers, and also to strengthen the role of women in decision-making (<https://www.sage-growingequality.eu/>).

The elaboration of the LIP's Gender Equality Plan led to the creation of an internal working group to better diagnose the current situation and propose measures to minimise inequality

<sup>1</sup> [nupecc.org/jeena/?display=diversity](https://nupecc.org/jeena/?display=diversity)

and promote and value diversity at LIP. This group is composed of elements from different working areas of the laboratory. It has the mission of helping to promote and value gender diversity in LIP through a set of actions to reinforce inclusion in general.

In drawing up this document, the Working Group thus seeks:

1. identify possible imbalances in gender equality in the LIP;
2. encourage reflection on practices leading to an improved gender balance at LIP and its effect on the institution;
3. propose concrete actions to redress and improve the gender balance at LIP;
4. promote the implementation of the measures to be adopted;
5. propose ways to measure and monitor progress in their work area.

#### 4. Diagnosis of Gender Equality at LIP

There is still gender inequality in LIP, which cannot be seen separately from the country and the scientific areas in which LIP operates and is primarily explained by a traditional view of the area of physics and engineering and by the prevalence of the male gender in these areas.<sup>2</sup> However, this inequality can be reduced, so we will propose measures that allow us to do so. To this end, we began by surveying specific data that allowed us to make this diagnosis.

##### 4.1. Human Resources

We can take a first snapshot of the Human Resources hired and associated with LIP by compiling the data referring to 2021, disaggregated by gender. This compilation is presented in Table 3 and Table 4, and it can be seen that the LIP has **about one-third of women**. However, with an unequal distribution between professions and specialities, drawing attention to the fact that there is some annual variation in these values, considering admissions and leavings of new students and researchers with fixed-term contracts.

Based on these data, minimum and precise targets can be defined, as well as concrete objectives to improve the gender balance within the institution, prioritising the reduction of gender asymmetries where they are more pronounced.

The Statutes of LIP, the Internal Regulations of LIP and the Regulations of the Scientific Council of LIP establish a balance in representation by pole, as well as by internal and external members. In the set of these documents, gender representability is only referred to in the

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<sup>2</sup> <https://view.publitas.com/cig-comissao-para-a-cidadania-e-igualdade-de-genero/boletim-estatistico-2017/page/50-51>

internal regulations of LIP in the point related to preparing lists of candidates for the LIP Board of Directors by the search committee<sup>3</sup>. This plan fills the current needs in the institution regarding the promotion of gender balance.

The LIP Statutes, the LIP Internal Rules and the LIP Scientific Council Regulation establish a balance in representation by pole, as well as by internal and external members but in the entirety of these documents, gender representativity is only referred to in the LIP internal rules, related to the process of preparing lists of candidates for the LIP Board by the Search Committee. This document fills the current needs in the institution regarding the promotion of gender balance.

*Table 3 List of Human Resources of the LIP: Staff and Researchers, disaggregated by gender, relative to the year 2021 in absolute number and percentage.*

LIP Members	Total	Women	Men	% Women
<b>Staff</b>				
Scientific staff	17	5	12	29%
Technical staff	32	3	29	9%
Admin staff	9	8	1	89%
<b>Total Staff</b>	<b>58</b>	<b>16</b>	<b>42</b>	<b>28%</b>

<b>Researchers</b>				
<b>Fixed-term researchers</b>				
Dec. Law 57/2016 (*)	17	2	15	12%
FCT Investigators	3	1	2	33%
Projects	16	6	10	38%
<b>Total Fixed-term researchers</b>	<b>36</b>	<b>9</b>	<b>27</b>	<b>25%</b>
<b>Unpaid researchers</b>				
Academics	35	10	25	29%

<sup>3</sup> "Art. 13 - Preparation of lists of candidates, [...] 3. In preparing the lists, the merit and adequacy of each candidate to the functions and, whenever possible, parity should be taken into account, with the CP being able to decide to hear the nominees and/or other LIP members informally."

Former academics	8	4	4	50%
Other	8	3	5	38%
<b>Total Unpaid researchers</b>	<b>51</b>	<b>17</b>	<b>34</b>	<b>33%</b>
<b>All PhD researchers</b>	<b>104</b>	<b>31</b>	<b>73</b>	<b>30%</b>

Table 4 List of LIP Students and Trainees, disaggregated by gender, relative to the year 2021 in absolute number and percentage.

LIP Students & Trainees	Total	Women	Men	% Women
<b>Students</b>				
PhD FCT grant	30	13	17	43%
PhD other (**)	15	6	9	40%
<b>Total PhDs Students</b>	<b>45</b>	<b>19</b>	<b>26</b>	<b>42%</b>
<b>Master Students</b>	<b>51</b>	<b>19</b>	<b>32</b>	<b>37%</b>
Other students(***)	12	3	9	25%
Total Other students	12	3	9	25%
<b>Total Students</b>	<b>114</b>	<b>41</b>	<b>73</b>	<b>36%</b>
<b>Trainees</b>				
Total Trainees 2021 (****)	87	30	57	34%
Total Trainees 2020	71	24	47	34%

(\*\*) PhD other includes other types of grants and no grants

(\*\*\*) These are students in research projects at any level other than to obtain a degree

(\*\*\*\*) Figures for trainees are approximate



#### **4.1.1. Women in leadership positions**

Concerning leadership and decision-making, it should be noted that, since December 2017 and in the last two mandates, the LIP's Board of Directors has been composed of five people, two of whom are women, corresponding to 40% of the number of members. Concerning LIP projects, in 2021, 7 out of the 25 projects under execution were led by women, corresponding to 28% of the total.

#### **4.1.2. Equal Pay**

The analysis of the salaries of LIP personnel did not reveal significant salary differences concerning the employee's gender.

#### **4.1.3. Visibility of Women in LIP Events**

An analysis of the number of women participating in events held by LIP or in which LIP participated in the organisation revealed no gender balance, particularly in the presence of women as speakers or discussion panels. It was verified that although women have been participating in the organisation of events, they have yet to have the desired visibility. Therefore, this plan must address this matter as one of the concerns and priorities of the organising committees of future events.

### **4.2. Priority Action Areas**

In order to ensure a culture and practice that enables equal opportunities between men and women, the LIP's gender equality plan is developed based on a strategy in priority areas of intervention: Communication and Institutional Culture; Recruitment, Selection and Retention; Visibility, Leadership and Career Progression; Balance between professional and personal life; and also the continuous monitoring of gender equality indicators.

#### **4.2.1. Communication and Institutional Culture**

LIP has been celebrating international days dedicated to women, such as women and girls in science. These celebrations have included debates on the theme and initiatives aimed at giving visibility to the role of female researchers. Nevertheless, this practice still needs to be generalised to the different events of LIP. However, there are still many gaps in the institution's daily life, such as in the use of inclusive language or the composition of the organising committees of events, the people invited or as speakers, where there is still a muscular gender imbalance. It is thus essential to raise the awareness of the LIP community on the issue of gender balance, for example:

- promoting the use of inclusive language in internal and external communication;

- promoting with event organisers a balance in women's participation in events with three or more speakers.

On the other hand, noting that gender inequality differs between the various LIP poles, professional categories and groups, it is proposed to carry out training actions on gender equality issues dedicated to the different contexts, including encouraging the integration of these subjects in the *soft-skills* training of students, also guaranteeing access to reference personalities of both genders.

#### **4.2.2. Recruitment, Selection and Retention**

LIP should promote the balanced representation of men and women in work teams within research and technical staff, administrative staff, fellows, trainees and students. To this end, it should encourage applications from women or men in areas where they are under-represented and, of course, ensure that the criteria and procedures for recruitment and selection of human resources take into account the principle of equality and non-discrimination on a gender basis.

Examples of good practice in this respect are using inclusive or neutral language in advertisements, promoting gender equality in tender juries, or publicising LIP policies that promote work-life balance.

#### **4.2.3. Visibility, Leadership and Career Progression**

LIP must foster the balanced representation of men and women in its decision-making chains and the professional development of each one. To that end, transparent procedures that guarantee equality, including gender, and allow for their monitoring, must be ensured.

#### **4.2.4. Balance between Professional and Personal Life**

LIP should promote a balance between the family and professional life of the LIP community and the sharing of parental responsibilities.

Measures should therefore be taken to promote the reconciliation of work, private and family life, particularly in the organisation of events by the LIP community, where family responsibilities and the protection of family time should be considered.

The different forms of support to achieve an adequate balance in the promotion of equal opportunities should also be disseminated, namely the legal rights that help to protect parenthood, paternity, maternity and family assistance, as well as the resources available for this purpose, such as the possibility of telework.



## 5. Objectives and Strategies

### 5.1. Communication and Institutional Culture

Objectives	Actions	Timetable	Indicators	Responsible for implementation
Disseminate the LIP's policies on gender equality and diversity.	<p>Communicate this Gender Equality Plan to the whole LIP community and publication on the website after the annual review.</p> <p>Include this document in the information sent to new LIP members.</p> <p>Translate this Gender Equality Plan into English.</p>	<p>Annually, in the last quarter.</p> <p>Whenever new members are integrated</p> <p>the second half of 2022</p>	<p>no. of annual dissemination actions</p> <p>% of new integrations, including communication on GEP</p>	<p>Board of Directors, Communication</p> <p>Human Resources/Secretariat</p> <p>Working group</p>
Raise awareness of the LIP community on the issue of inequality, particularly gender inequalities in scientific careers.	Offering courses and awareness-raising activities for the whole community, such as workshops on implicit bias and inclusive language.	Annual	no. of annual training sessions and no. of people in attendance	Gender Equality Working Group
To make LIP communication more inclusive.	Promote gender-inclusive or neutral language in internal and external communication.	Ongoing	No. of new internal and external LIP documents that use inclusive or neutral language	Gender Equality Working Group, Board of Directors, Scientific Council, LIPECO



	Survey and amendment of internal documents that require updating.	Ongoing	no. of copies modified to use inclusive or neutral language	Working group and departments/groups responsible for the document
Increasing the visibility of under-represented groups.	To promote a gender balance in events organised by LIP, both in speakers and participants, paying particular attention to training events aimed at students. Organise activities in the International Day of Women in Science framework or other related events.	Whenever there is a new event organised at LIP or by people from LIP  Annual	the ratio of women/men among invited speakers and participants in events  no. of annual events	Gender Equality Working Group, Board of Directors and event organisers
Ensure resources and knowledge for implementing the LIP policies on gender equality and diversity.	Create and formalise a Working Group to implement and monitor this GEP.	The first half of 2023		Board of Directors
Dissemination of the LIP code of conduct.	After the annual review, communicate the code of conduct to the LIP community and publish it on the website.  Include this document in the information sent to new LIP members.  Translate the code of conduct into English.	Annually, in the last quarter.  Whenever new members are integrated  first half 2023	no. of annual dissemination actions  % of new integrations, including communication on code of conduct	Management, Communication  Human Resources/Secretariat  Working group



## 5.2. Recruitment, Selection and Retention

Objectives	Actions	Timetable	Indicators	Responsible for implementation
<p>Ensure gender balance in recruitment processes and promote the application of people of under-represented genders in vacancies opened by the LIP.</p>	<p>Use inclusive or neutral language in advertisements for recruitment. Where appropriate, primacy can be given to under-represented genders.</p> <p>Include information on institutional diversity policy, directly encouraging applications from gender and other under-represented groups, and on LIP policies promoting work-life balance in job vacancies.</p> <p>Promoting gender equality in the selection boards, which should tend to be parity-based, and at least representative of the gender diversity of the LIP community. Exceptions must be justified by email to the Board.</p> <p>Publicise job vacancies and doctoral programmes inclusively and comprehensively.</p>	<p>Whenever a new tender is opened by LIP</p>	<p>% of job advertisements where the language is appropriate and information on institutional policies has been included.</p> <p>% of juries with at least 1/3 women</p> <p>the ratio of women/men recruited per year (researchers and technical and administrative staff)</p>	<p>Gender Equality Working Group, Board of Directors, Human Resources</p>



### 5.3. Visibility, Leadership and Career Progression

Objectives	Shares	Timetable	Indicators	Responsible for implementation
<p>Promote gender balance in decision-making bodies.</p>	<p>To create conditions for all genders to be represented in a balanced way in the decision-making bodies, which should tend to be parity-based, and at least representative of the gender diversity of the LIP community.</p> <p>To ensure this, people from under-represented genders may be invited directly to apply for positions of responsibility where their profile is suitable.</p> <p>Review evaluation processes to include gender and diversity issues, parenting, and family support.</p>	<p>Ongoing</p> <p>First semester 2023</p>	<p>% of women in leadership and executive positions</p>	<p>Gender Equality Working Group, Board of Directors, Scientific Council</p> <p>Board of Directors, Scientific Council</p>



## 5.4. Work-Life Balance

Objectives	Actions	Timetable	Indicators	Responsible for implementation
<p>Disclose the LIP's policies regarding parental leave, family support, flexible working hours and the possibility of remote working</p>	<p>Consolidate information on institutional policies and make it available on the website/intranet</p> <p>Include this document in the information sent to new LIP members</p>	<p>first half 2023</p> <p>Whenever new members are integrated</p>	<p>% of new integrations that include communication on the LIP's work-life balance policies</p>	<p>Gender Equality Working Group, Board of Directors</p> <p>Human Resources/Secretariat</p>
<p>Facilitating the participation of the whole community in meetings and events organised by IPL</p>	<p>Adjust the schedule of events held by LIP to make attendance compatible with family responsibilities and share tasks as much as possible.</p> <p>Create conditions to support the family during events outside working hours or organise activities where several family members can participate.</p>	<p>Ongoing</p>	<p>% of events held during working hours</p>	



## **6. Term Objectives and Monitoring**

Progress in the four priority areas should be monitored annually, together with the update of the Gender Equality Plan, namely its Specific Objectives. This monitoring should be done collaboratively, with the participation of the group that prepared the GEP, the Management, the Scientific Council and the Workers' Commission.

It is proposed that the monitoring strategy of the GEP be discussed and improved to find the most effective model for the consolidation of gender equality policies in the LIP and the implementation of the measures explained herein.

The update of the plan should reflect a broader vision and, where necessary, the spectrum of action of this plan should be broadened, not only concerning gender issues but also to other human diversities, on the path to full equality of opportunities that do not discriminate against anyone based on any factor, be it gender, ethnic or national origin, age, social origin or being disabled.

The LIP Gender Equality Plan will therefore be a document under permanent construction on the path to equity and inclusion.