





# The Gender Equality Plan of the Max Planck Institute for Meteorology

**Equal Opportunities for MPI-M Staff** 

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## Max Planck Institute for Meteorology

Bundesstr. 53 20146 Hamburg Germany

Phone	+49 - (0)40 - 41173 - 0
Fax	+49 - (0)40 - 41173 - 298
Email Web	firstname.lastname@mpimet.mpg.de www.mpimet.mpg.de
Directors	Prof. Dr. Martin Claussen Prof. Dr. Jochem Marotzke Prof. Dr. Bjorn Stevens
Research Coordinator	Dr. Ulrike Kirchner
Equal Opportunities Officers	Dr. Hongmei Li Dr. Dian Putrasahan Dr. Andrea Schneidereit
Design	Norbert P. Noreiks

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## 1 Preface

The MPI-M has always endeavoured, at least while the current directors have been in office, to encourage female scientists. One reason for this is the quite self-interested notion that our institute should always seek to attract the best scientific personnel from the available international pool of talent. Another reason is that the experience of many professional fields teaches that an even-handed balance between the genders is good for the working atmosphere. And it is only in a good working atmosphere that creative ideas thrive and science blossoms.

The fact that promoting equal opportunities in the natural sciences is a difficult path is documented by numerous studies – the figures in this report also speak for themselves. Nonetheless, our institute continues to give these issues its full attention and we are proud to have been able to take some positive steps forward, for instance by attracting three out-standing female scientists to group leader positions within our institute. The lack of female scientists at more senior levels remains a concern, but is one that we can finally begin to address through the opening and creation of a new department. This process of renewal, and the chance it offers us to address historic gender disparities is welcomed.

Through and beyond this forthcoming process of renewal, the equal opportunities concept articulated by this report identifies a number of additional fields of action and measures that will strengthen our institute's commitment to equality of opportunity. These actions should help us tap the full creative potential of the human population. For this we are especially thankful to the Equal Opportunity Officers for their resolute commitment and constructive input to this process.

# 2 Focus

In this Gender Equality Plan (GEP), the Max-Planck-Institute for Meteorology (MPI-M) documents the current employment situation with regards to gender (section 3 and 4) and formulates fields of action (section 5), objectives (section 6) and measures (section 7), enabling the promotion of even-handed employment for both genders, equality of opportunity for women and men, as well as better reconciliation of family life and research.

The present GEP of the MPI-M documents the key figures of employees in the individual salary groups and employment relationships for the years 2018, 2019 and 2020. Following the previous GEP (implemented in 2017), the personnel statistics have been updated since 2015 and recorded in the GEP in order to account for long-term development of female-to-male employment at the institute and evaluate support for women in various salary groups, leadership positions and career developments. In addition, new statistics have been intro-duced, particularly in relation to the hiring process, for record keeping and ensuring gen-der-equitable recruitment. As we have been experiencing a special period due to the COV-ID-19 pandemic since in the beginning of year 2020, the impacts on our work and life are reflected in some statistics, e.g., status of employees in taking extra leaves for taking care of young children is included.

The GEP is created by the Gender Equality Officers together with the Board of Directors of the MPI-M, the research coordinator and the head of the administration, and will apply for the period from 2021 to 2023. Subsequently, the GEP will be updated every 3 years, although it can also be adjusted in the interim if need be.

## 3 Status report

Following the previous GEP, the MPI-M has been annually collecting gender statistics based on salary groups, scientific groups and non-scientific groups within the MPI-M workforce. The statistics were taken with reference to Dec. 31<sup>st</sup> of the respective years. The stock check reveals the basis of the GEP and documents the key figures relating to the workforce in the separate salary groups and employment types for the years 2018, 2019, 2020. The intention at the MPI-M is to have a continuous statistical evaluation of the annual employment relationship and to update the findings in the GEP. Such record keeping enables long-term evaluation of gender balance developments, as well as identification of areas for improvement with respect to gender equality. Based on the results report on the "Arbeitskultur und Arbeitsatmosphäre in der Max-Planck-Gesellschaft", the composition of MPI-M employees by nationality was also surveyed for the first time this year. The personnel statistics collected at the MPI-M are described in more detail below. We inquired and no employees identified themselves as non-binary or mixed gender and so this could not be tracked and is not discussed further in this report.

#### 3.1 General distribution of MPI-M employees

Since its foundation in 1975, all five former directors and the three current directors of the MPI-M have been men. On 31.12.2020, the MPI-M had a total workforce of 208, of whom 45% are female (Figure 1.1). During the last 6 years, the percentage of women has increased from 38,6% (in 2015, 97 women) to 45,2% (in 2020, 94 women). However, the total number of all employees has been decreasing over the last 3 years mainly due to an upcoming retirement of a MPI-M director in autumn 2021 (Figure 1.1, Table 1.1). At MPI-M, 32% of the total workforce in February 2021 was of international origin from 30 different nations.

In the following, the work force is divided into scientific and non-scientific groups and each is considered separately. It should be noted that scientific programmers, scientific service and student assistants are treated as scientific employees for the year 2020, thus all figures that only show for 2020 are treated as such. However, the scientific programmers and scientific service staffs were counted as non-scientific staff in previous years. Hence all figures that show some evolution will have scientific programmers and scientific service staffs treated as non-scientific for the year 2020 in order to be consistent.

Figure 1.2 shows the gender distribution for fixed term contracts vs permanent positions effective as of December 31, 2020, for scientific and non-scientific employees respectively. Amongst scientific employees, 81% are on fixed term contracts (Figure 1.2), out of which 46% are female (Table 1.2). The gender imbalance for scientific employees with permanent contracts is stark: a factor of 6 imbalance with only 4 female and 24 male (Figure 1.2), which



31 Dec 2015				
	154	97	251	61%   39%
31 Dec 2016	151	111	262	58%   42%
31 Dec 2017	158	116	274	58%   42%
31 Dec 2018	138	104	242	57%   43%
31 Dec 2019	124	99	223	56%   44%
31 Dec 2020	114	94	208	55%   45%

translates to only 14% for women (Table 1.2). Among the non-scientific employees, 72% are on permanent contracts (Figure 1.2), out of which 60% are female employees (Table 1.3). The remaining 28% of non-scientific employees on fixed term contracts is more-or-less gender balanced. The proportion of female-to-male scientists with fixed term contracts is consistently slightly imbalanced over the past 6 years, with approximately 10% more men than women (Figure 1.3). However, the gender imbalance among scientists with permanent contracts remains extremely skewed, with only about 20% held by women (Figure 1.3). In the non-scientific area, the gender proportion has been quite balanced for both permanent and fixedterm contracts. The proportion of female employees keeps at around 48% (figure 1.3).



Contracts	Male	Female	Male %   Female %
Fixed-term	65	55	54%   46%
Permanent	24	4	86%   14%
Total	89	59	60%   40%

Table 1.2: Contract terms for scientific employeesas of the reporting date 31 Dec 2020.

Contracts	Male	Female	Male %   Female %
Fixed-term	8	9	47%   53%
Permanent	17	26	40%   60%
Total	25	35	42%   58%

Table 1.3: Contract Terms non-scientific employeesas of the reporting date 31 Dec 2020.



Figure 1.3: Evolution of gender distribution for fixed term contracts vs permanent positions during 2015 - 2020 for a) scientific employees; and b) non-scientific employees.

#### 3.2 Salary groups

In 2020, the gender distribution amongst scientific employees for salary group for doctoral candidates and W2 level is quite even-handed (Table 1.4). The percentage of female in E14 and E15 decreases, and is 0% at W3 level since directors are all male. Of the 60 non-scien-tific employees in 2020, 58% are female. Despite the slight preponderance of female employees among the non-scientists, it is clear that on average female employees hold posts in considerably lower salary groups than male employees (Figure 1.4, Table 1.5).

Figure 1.4 shows the gender distribution over the past 3 years, separated into scientific and non-scientific groups. The gender distribution amongst doctoral candidates (salary group E13 1/2) has improved, from 33% in 2018 to 47% in 2020 (Figure 1.4). Percentage of female scientific employees in salary group E14 (Postdocs, research scientists, some group leader) is quite balanced and in E15 is roughly 33%. These percentages have minor fluctuations in 2018-2020. As for W2 and W3 salary groups, the percentage of female has remained un-changed at 50% and 0% respectively. Amongst the non-scientific employees, we consistently see more men in all salary groups, and substantially skewed female percentage in E14 (Figure 1.4). This maybe be attributed to the inclusion of scientific programmers as non-scientific employees over the past couple of years.

Salary levels	Male	Female	Male %   Female %
W3	3	0	100%   0%
W2	1	1	50%   50%
TVöD E 15	8	4	67%   33%
TVöD E 14	57	32	64%   36%
TVöD E 13	0	0	-
Funding contract (PhD)	16	14	53%   47%
Scholarship (specify)	0	1	0%   100%
Student assistants	4	7	36%   64%
Total	89	59	60%   40%

Table 1.4: Salary levels for scientific employees as of the reproting date 31 Dec 2020. Scientific programmers are included.



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counted as non-scientific staff.

1 2 2 0 4 1 12 7 7	50%   50% 60%   40% 60%   40% 100%   0% 60%   40% 0%   100% 25%   75% 42%   58% 0%   100%
2 2 0 4 1 12 7 7	60%   40% 60%   40% 100%   0% 60%   40% 0%   100% 25%   75% 42%   58% 0%   100%
2 0 4 1 12 7 7	60%   40% 100%   0% 60%   40% 0%   100% 25%   75% 42%   58% 0%   100%
0 4 1 12 7 7	100%   0% 60%   40% 0%   100% 25%   75% 42%   58% 0%   100%
4 1 12 7 1	60%   40% 0%   100% 2 25%   75% 42%   58% 0%   100%
1 12 7 1	0%   100% 2 25%   75% 42%   58% 0%   100%
12 7 1	2 25%   75% 42%   58% 0%   100%
7	42%   58%
1	0%   100%
2	0%   100%
2	0%   100%
1	0%   100%
0	-
0	100%   0%
0	-
0	100%   0%
35	42%   58%
	1 0 0 0 0 35

# 3.3 Functions/Career Levels

The functions/career levels (according to the MPG's guideline for the preparation of a GEP) are included in these statistics for the first time in 2020 and are listed in detail in Table 1.6. In the earlier career steps (student assistants, PhDs, Postdocs, research scientists), the ratio between women and men is relatively balanced (Table 1.6), with the proportion of female scientists starting to decrease with the level of experience. The reduction in percentage of women is most pronounced in the number of scientific programmers as well as in higher academic career levels such as project leaders, group leaders and directors. Note that project leadership of third-party funding is not listed separately in Table 1.6, but have been equated with the distribution in group leadership. In the non-scientific area, leadership positions (research coordinators, head of communication, head of administration, unit and project lead) are roughly equally distributed among the genders (Table 1.7). However, there is a preponderance of female non-scientific employees in the group of office assistants.

Functions / Career Levels	Male	Female	Male %   Female %
Directors	3	0	100%   0%
(Research) Group Leaders	13	7	65%   35%
Scientific Programmer	13	2	87%   13%
Research Scientists	19	14	58%   42%
Postdocs	20	14	59%   41%
PhDs	16	15	52%   48%
Student assistance	4	7	36%   64%
Scientific service	1	0	100%   0%
Total	89	59	60%   40%

Table 1.6: Functions/career levels for scientific staff as of the reporting date 31 Dec2020. Note that project leadership have been equated with group leadership.

Functions / Career Levels	Male	Female	Male %   Female %
Coordination Research and Communication	0	3	0%   100%
Head of Administrations	1	0	100%   0%
Unit and Project lead	3	3	50%   50%
Office Assistants	1	20	5%   95%
Secretary	0	4	0%   100%
Technical services (CIS)	7	1	87%   13%
Graphic	1	2	33%   67%
Library	0	1	0%   100%
Trainees	1	0	100%   0%
Facility manager	1	0	100%   0%
Interns	0	0	-
Other employees	10	1	91%   9%
Total	25	35	42%   58%

Table 1.7: Functions/Career levels for non-scientific staff as of the reporting date 31 Dec 2020. The Central IT Service is abbreviated with CIS.

The 80% of the members of the extended Directors board are male and 20% are female (Table 1.8). The management conference (here at the institute management committee) consists of 13 in total, in which 61.5% are male and 38.5% are female. The gender equality commission consists of 3 female equal opportunity officers.

The gender distribution for project leads of the two modeling pillar projects (Sapphire and Ruby) at MPI-M is illustrated in Table 1.9. While there is a preponderance of male technical leads, gender parity is approximately attained for scientific leads (~40% female). Here, 40% female is highlighted as an achievement given that currently we only have ~30% female group leaders.

Prior to 2020, there was only a limited categorisation in relation to the function/career levels. Therefore, only the trend for the category group leadership including directors can be shown. The directors have not changed over the past few years, with 3 male directors of MPI-M. The proportion of female in project leadership positions is relatively low, however, there has been an increase in the number of female group leaders over the past 4 years from 23% to 30% (Figure 1.5).



Figure 1.5: Evolution in percentage of female group leaders from 2017–2020 for all scientific groups. The directors are included here as group leaders.

#### 3.4 Bonuses

The MPI-M has awarded incentive bonuses since 2009. The incentive bonuses are in recognition of special scientific achievements and the maximum value of bonuses that can be awarded is dependent on salary. Since 2016, the MPI-M has been able to award BLBV bonuses (bonuses according to the Bundesleistungsbesoldungsverordnung), which recognise special (scientific or non-scientific) achievements. In previous years, bonuses were always recorded for all employees together, i.e. without a separation into scientific and non-scientific staff. In addition to BLBV and AT bonuses, there are also other incentive systems such as recruitment incentives and retention incentives, early promotion to higher salary levels and upgrade of remuneration group. The gender distribution for the various bonuses for the years 2018-2020 is shown in Table 1.10.

On a 3-year average, the gender distribution with regard to performance bonuses is relatively balanced, with a slightly higher proportion of women (Figure 1.6, Table 1.10). On an annual basis, significantly more women benefit from the bonuses in 2019 and 2020 than in 2018. However, the recruitment incentives, retention incentives as well as the upgrade of remuneration group in the year 2018 and 2019 went exclusively to male employees, this changed in 2020 (Figure 1.6).

Committees and boards	Male	Female	Male %   Female %
Extended Directors Board	4	1	80%   20%
Management Committee	8	5	62%   38%
Gender Equality Commission	0	3	0%   100%

Table 1.8: Composition of committees and boards for non-scientific matters as of the reporting date 31 Dec 2020.

Internal project leads	Male	Female	Male %   Female %
Sapphire Scientific	10	7	59%   41%
Sapphire Technical	11	4	73%   27%
Ruby Scientific	3	2	60%   40%
Ruby Technical	3	1	75%   25%

 

 Table 1.9: Internal project leads for MPI-M twin-pillars modeling strategy (Sapphire and Ruby). All running and closed projects are included.

Bonuses	Male	Female	Male %   Female %
Performance bonuses	16	20	44%   56%
Recruitment incentives	2	1	67%   33%
Retention incentives	3	0	100%   0%
Early promotion to higher salary levels	1	1	50%   50%
Upgrade of remuneration group	1	2	33%   67%

Table 1.10: Bonuses: Accumulated over 2018-2020 for scientific and non-scientific staff.



### 3.5 Fluctuations/Duration of stay at the institute

The survey of the duration of stay at the institute is with respect to the reference date, 31.12.2020. In general, male scientists tend to stay longer at the institute (Table 1.11). This is consistent with the number of permanent positions held by male scientific employees such as scientific programmers and higher academic career levels. Generally, for non-scientific staff, the gender distribution for the duration of stay at the institute is roughly balanced except for between 10–15 years (Table 1.12).

Fluctuation/Duration of stay at the Institute	Male	Female	Male %   Female %
More than 20 years	12	5	71%   29%
Since 15-20 years	12	7	63%   37%
Since 10-15 years	13	9	59%   41%
Since 5-10 years	20	6	77%   23%
More than 4 years	6	8	43%   57%
More than 3 years	2	4	33%   67%
More than 2 years	10	7	59%   41%
More than 1 years	6	2	75%   25%
1 year or less	4	4	50%   50%

Table 1.11: Duration of stay at the institute for the scientific staff. The student assistants are not included in the table as of the reporting date 31 Dec 2020.

Fluctuation/Duration of stay at the Institute	Male	Female	Male %   Female %
More than 20 years	8	7	53%   47%
Since 15-20 years	4	5	44%   56%
Since 10-15 years	3	9	25%   75%
Since 5-10 years	5	6	45%   55%
More than 4 years	1	2	33%   67%
More than 3 years	0	2	0%   100%
More than 2 years	3	1	75%   25%
More than 1 years	0	1	0%   100%
1 year or less	1	2	33%   67%

Table 1.12: Duration of stay at the institute for the non-scientific staff.Reporting date: 31 Dec 2020.

### **3.6** Measures of participation in training courses

The non-scientific employees in MPI-M have actively participated in training courses in recent years. Due to the regulations from the COVID-19 pandemic, attendance was largely reduced in 2020. A large proportion of the female employees in the non-scientific area work predominantly in administration, where the need for further training exists due to continuous new rules/regulations. For this reason, the proportion of female employees with further training is 3-4 times greater than in comparison to male employees (Table 1.13).

Year	Male	Female	Male %   Female %
2018	13	50	21%   79%
2019	14	44	24%   76%
2020	5	9	36%   64%

### 3.7 Parental leave

Over the last 3 years, more female employees took parental leave than the male employees. There is a tendency that the ratio of female and male employees who took parental leave is approaching gender-balance (Table 1.14).

Year	Male	Female	Male %   Female %
2018	2	5	29%   71%
2019	3	6	33%   67%
2020	3	4	43%   57%

## 3.8 Extra leave during COVID-19 pandemic in 2020

2020 was a special year because the whole world faces the pandemic. For employees who are eligible to take the extra leave (i.e., with children under 12 years) at the MPI-M it was and is still possible to take extra leave. In this group 24% of the female employees and 33% of the male employees took the extra leave during 2020 (Table 1.15). All the 5 female employees who took the extra leave hold limited contracts, while the majority of the male employees hold unlimited contracts.

COVID-19 extra leave	Male	Female	Male %   Female %
Eligible employees	18	21	46%   54%
Claimed employees	6	5	55%   45%
Claimed/eligible in %	-	-	33%   24%
Extra leave days	45	43	51%   49%

Table 1.15: Employees who took extra leave due to COVID-19. The eligible refers to employees who have young children under 12 years and a lack of care options.

### 3.9 Scientific publication

The total number of first author papers have increased over the last few years even though the number of scientific employees have decreased (Table 1.16). This is reflected with a general increase in first author papers per scientist from roughly 0.35 to 0.65 over the past 4 years (Figure 1.7). Throughout this trend, the relationship between female and male first authorship has remained almost the same (Figure 1.7).



<b>⁄ear</b>	Total	First author	Male	Female	Male %   Female %
2017	164	64	39	25	61%   39%
2018	179	70	37	33	53%   47%
2019	178	80	50	30	63%   37
2020	195	77	43	34	56%   44%

#### 3.10 Press releases

Press releases serve as channels to reach the public and disseminate our highlighted projects and scientific findings. MPI-M has published 4 press releases in 2019 and 1 press release in 2020. In general, the female scientists are underrepresented in the fields of first authors and quoted persons, and even with 0% of female scientists as last authors (Table 1.17). Note that in our field, the last authorship is not particularly meaningful, since, for example, the order of the co-authors after the first author can be alphabetical. However, this further suggests the necessity to promote female scientists in leadership positions.

In addition to the press releases, the "News" releases from the Institute's website are also included here to give a more comprehensive picture of the Institute's public image. In addition to noteworthy scientific publications (Table 1.19), the "News" reports also include announcements, honours or appointments (Table 1.18). Both tables indicate an imbalance in the self-representation of female employees, whereas the discrepancy is greater in the area of announcements (Table 1.18) than in scientific publications (Table 1.19).

Press releases	Male	Female	Male %   Female %		
First authors	3	1	75%   25%		
Last authors	4	0	100%   0%		
Quoted persons	9	2	82%   18%		
Table 1.17: F	Table 1.17: Press releases over the last 3 years from 2018-2020.				

Announcements	Male	Female	Male %   Female %
2018	12	6	67%   33%
2019	12	3	80%   20%
2020	14	4	78%   22%

Table 1.18: Gender distribution of announcements in "News" releases of the years 2018–2020.

Publications	Male	Female	Male %   Female %
2018	4	3	57%   43%
2019	17	7	71%   29%
2020	14	6	70%   30%

### 3.11 Hiring process

Statistics with regards to the hiring process has recently been introduced. The recruitment procedure monitored by the Equal Opportunity Officers show for 2020 that 28% of all applications were from women, while 32% of all shortlisted applicantions were female. Nevertheless, of all scientists recruited, only 10% were female (Table 1.20).

Hiring	Male	Female	Male %   Female %
Applicants	218	84	72%   28%
Shortlisted	17	8	68%   32%
Hired	9	1	90%   10%

## 4 Analysis

The Max-Planck-Society aims for the CPTS section to have a proportion of women of: 20% for W3, 25% for W2, and 36.3% for TVöD scientists. Except for W3 (0% female), the MPI-M fulfils these goals, i.e. 50% for W2 and 38.2% for TVöD female scientists. Overall, the surveys of the current employment situation shows that a desired, "balanced employment of both genders" (Gender Equality Principles) at the MPI-M has not yet been completely achieved.

In the area of scientific staff, the survey clearly shows that women are still underrepresented, especially in higher positions "such as group leadership and position of director (Table 1.6)." Historically and even presently, all directors at MPI-M are male. However, approximate gender parity is attained for MPI-M internal scientific project leads (Table 1.9). Additionally, through intensive efforts and support, the proportion of female group leaders has increased from 23% to 30% over the last 4 years (Figure 1.5). Indeed this shows good progress, while there is still room for improvement to achieve true gender parity. In light of these surveys, there is a strong need to recruit and promote female leadership.

The statistical survey shows a preponderance of male scientific employees with permanent contracts, which is also reflected in the duration of stay at the institute. A substantial portion of the imbalance results from the scientific programming positions, which are heavily male-dominated (15 male : 2 female). Furthermore, the recruitment process for 2020 reflects a pronounced gender imbalance in the applications received, candidates interviewed and actual recruitment. Therefore, there is a strong need to address and rectify such propensity lest future female representation further diminishes. One aim at the MPI-M is to increase the number of female applications and candidates for scientific positions.

The non-scientific employees as office assistants and technical services in MPI-M are dominated by female and male, respectively. All were actively participating in training courses in the last years, however, due to different professional functions and requirements, participation in training courses is 3-4 times higher among female employees compared to male employees. A large proportion of female employees in the non-scientific area held positions with lower salary groups on average.

MPI-M endeavored to ensure the employees have a good work-life-family balance by means of various practical supports. For employees with fixed-term contracts who took parental leave, it is possible to extend the duration of the contracts by the parental leave from the institute's budget if this is not possible within the framework of the projects. The proportion of female and male employees on parental leave is approaching gender-balanced, although the duration of the parental leave is not recorded here. During the COVID-19 pandemic year 2020, the proportion of male employees taking extra leave is about 10% higher than for female employees. Reconciliation of family life and work is an important component for working at the institute. The good resonances encourages further family support for balanc-ing work and family life.

The first author publications from MPI-M employees were increasing dramatically in the last years, the first author publications per capita in 2020 is almost twice as in 2017. The female

and male first authorship has remained almost the same throughout these years. However, the press releases show a preponderance of male scientific employees, especially for the last authors with only male scientists. This indicates under-representation of female scientists and hence requires promotion of women in leadership position.

The 2019 report on the work culture and working atmosphere at the Max-Planck-Society is based on an online survey of all MPG employees and on selected individual interviews. It states: "Scientists with EU citizenship more often praise the support in career development by their supervisor, their rule orientation and more often state that they have received a feedback interview than German and non-EU academics. On the other hand, one in two EU researchers said they had felt ignored or excluded at least occasionally (45.2% vs. 28.1% for Germans and 37.3% for "non-EU foreigners)." This shows that every second foreign employee has experienced exclusion. At the end of 2020, records show 32% of the total work force and approximately 50% of the scientists at the MPI-M are of international origins from 30 different nations. Furthermore, each year there is generally a huge flux of scientists, with postdocs that have contract positions of 2-3 years. Encouraging scientists to work in different institutes/facilities and locations is generally important to build networks and raise one's scientific profile. Even without the pandemic, starting a new job and living in a new city is challenging, and harder still to attain work-life balance. The establishment of a buddy program that enables a smooth transition for the new employees, mitigate the experience of exclusion and also helps the buddies themselves to develop leadership skills is extremely beneficial to the employees of the institute.

In summary, the analysis reveals that some measures from the past worked very well at MPI-M. These include:

- i) support for female scientists (bonuses, parental leave, flexibility with contracts to allow parental leave, workshops)
- ii) PhD student recruitment that has approximate gender balance
- iii) support for female group leaders that has seen an increase over the past 4 years from 23% to 30%, and if we exclude the directors, the proportion increases to 35%
- iv) approximate gender parity (~40% female) for internal scientific project lead
- v) proactive efforts to survey female candidates for a new director
- vi) gender balance for first author publications per scientist
- vii) myriad measures for reconciliation of family life and research balance (see chapter 7.4) are well established at MPI-M and continue to be promoted

Nevertheless, there are areas that MPI-M can improve on and to which we focus our efforts. These include:

i) no female director at the MPI-M (field of action 3)

- ii) low number of female applicants indicate to attract qualified female Postdocs (field of action 1 and 3)
- iii) low number in female applicants and female Postdocs indicate to retain outstanding female scientist in science (field of action 1 and 3)
- iv) further strengthen the existing female academic staff (field of action 1 and 3)
- v) preventive measure to reduce the feeling of exclusion and to improve the working environment (field of action 2 and 5)

We recognise that there exist gender disparity in the following areas listed below, with external factors playing a major role in driving this disparity and thus extremely challenging to achieve gender balance. For example:

- i) a skewed gender-distribution amongst scientific programmers (predominantly male)
- ii) administrative support is predominantly female, technical support is predominantly male

The following chapter defines the fields of action that would ensure the continuation of positive developments at MPI-M and new additions to tackle challenges we have chosen to focus on.

## 5 Fields of action

While the gender targets of the CPTS were met, these do not reflect the gender balance of the general population. In a number of places in this report the latter may be interpreted as the implicit goal when referring to gender parity. This is not necessarily intended. The extent to which each employment category should mirror the general population is unclear, but is being assessed in light of the broader demographics of these different categories.

Here, we identify various action fields to cover a diverse range of areas in equal opportunity. In particular, they are defined to ensure the continuation of the positive developments and to improve upon the deficits identified in the analysis (see section 4). Each field of action is followed by several objectives that we focus in MPI-M and accordingly, measures that are on-going as well as new measures where they are need.

The six fields of action at the MPI-M are:

- 1. Correcting under-representation of female scientists/gender-equitable recruitment and development of personnel
- 2. Encouragement of partnership-based conduct at the workplace
- 3. Promotion of women in leadership positions
- 4. Balancing work and family life

- 5. Reduce discrimination/Increasing gender awareness
- 6. Structural integration of equal opportunity

## 6 Objectives and target groups

Following each field of action, objectives and target groups are defined to focus on in MPI-M. Each new objective is marked with an asterisk (\*).

#### 6.1 Correcting under-representation of female scientists/genderequitable recruitment and development of personnel (career progression of female scientists)

- Increase number of female scientific applicants/candidates \*
- Development of a gender equal recruitment procedure
- Gender balance in the conferral of speakers for institution-organised workshops/ events
- Continuation of gender-sensitive personnel statistics

# 6.2 Encouragement of partnership-based conduct at the workplace

- Establish a buddy system and knowledge-sharing platform for new employees \*
- Provide safe space for confidential advice in cases of discrimination and sexual harassment

#### 6.3 **Promotion of women in leadership positions**

- Flexible target quota at the MPG
- Career development for female scientists
- Promotion of funding programmes and networking

#### 6.4 Balancing work and family life

- Provide support for parents
- Flexibility for individual working time and place of work arrangements

#### 6.5 Reduce discrimination/Increasing gender awareness

- Promotion of gender-sensitive language
- Raise awareness of discrimination and sexual harassment

### 6.6 Structural integration of equal opportunity

- Promotion of (STEM) scientific jobs to female pupils
- Increase visibility of the gender equality work

## 7 Measures

Following each field of action and their respective objectives/target groups, this chapter describes the corresponding new measures already in place at the MPI-M and those that have been further developed.

### 7.1 Correcting under-representation of female scientists/genderequitable recruitment and development of personnel (career progression of female scientists)

#### Increase number of female scientic applicants/candidates \*

At the forefront of the hiring process are the job postings. While we recognise the historical and societal influences that have generally contributed to the existing smaller pool of female scientific candidates, in accordance with the "Ausführungsvereinbarung Gleichstellung MPG 2019", the job advertisements can be formulated to address both genders. The following website (EN: http://gender-decoder.katmatfield.com/ ; DE: https://genderdecoder.wi.tum. de/) provides an evaluation if the job description is gender fair formulated. In this way, words/terms can be specifically revised in order to obtain a more gender-fair formulation and to address members of both genders. Additionally, family services and female-scientists career development opportunities supported by MPG/MPI-M can be highlighted in these postings (AV-Glei).

### Development of a gender equal recruitment procedure

A new institutional guideline on the procedure for job advertisements came into effect in autumn 2020. It was agreed that the goal is to have gender parity in the scientific selection committee for filling positions. This measure strengthens female academic staff, increases the diversity of the selection committee and serves as a positive example for young female scientists. The equal opportunity officers are also part of the selection process and are included in the whole procedure. In the selection process, a gender-balanced shortlist of qualified interview candidates is always sought.

#### Gender balance in the conferral of speakers for institutionorganised workshops/events

For conferences, colloquiums, and workshops organised by the MPI-M, the attention of session convenors is explicitly focused on the ratio of male to female scientists who have

submitted an abstract in their sessions. The session convenors are asked to focus on gender balance with respect to both the invited speakers and the regular conference talks.

#### Continuation of gender-sensitive personnel statistics

Each year on 31st of December the personnel administration will record the employment situation for women and men, as set out in Chapter 3, and provide the Gender Equality Officers with this information. This is to enable a quantification of developments in the employment situation at the MPI-M. In addition to the personnel statistics indicated in Chapter 3, the Gender Equality Officers document the number of applications received for advertised posts, the number of applicant interviews conducted, gender of the new employee and the number of female and male staff with leadership roles, and for each category the gender distribution.

# 7.2 Encouragement of partnership-based conduct at the workplace

# Establish a buddy system and knowledge-sharing platform for new employees \*

We recognize that starting a new job and living in a new city is not easy for new employees, the COVID-19 pandemic and home office has made it even more difficult for the first several weeks to months. In addition, the 2019 report on the "Arbeitskultur und Arbeitsatmosphäre innerhalb der MPG" that every second foreign employee has experienced exclusion. To facilitate a smooth transition for new employees and to prevent experiences of exclusion, we are going to establish a buddy program at MPI-M. A buddy from volunteers will be assigned for each new employee to provide support in matters such as contact person to link the new colleagues with other colleagues, share information about structure of the institute and experiences of working at MPI-M and living in Hamburg. Good familiarisation lays the foundation for long-term success. A formal buddy system can also contribute to an unstructured exchange of knowledge. Both the buddy and the new employee can benefit. Through interaction with new staff, the buddies also learn new tools and techniques used by other organisations, establish collaborations, develop mentoring skills, and improve their leadership skills. This strengthens both the staff and the institute.

# Provide safe space for confidential advice in cases of discrimination and sexual harassment

The Gender Equality Officers are committed to putting into practice the notion of partnership-based conduct at the workplace and are available in this regard as contact persons. In particular, the Gender Equality Officers are also available in instances of discrimination and sexual harassment as contact persons for all employees. In order to ease the way for employees to report violations, the recruitment paperwork that each MPI-M member receives is accompanied by a Memorandum for Employees on the General Equal Treatment Act, which addresses forms of discrimination and harassment. This is intended to raise awareness of discrimination and to create a basis for discussion.

## 7.3 Promotion of women in leadership positions

#### Flexible target quota at the MPG

By analogy with the ,research-orientated gender equality standards' of the German Research Foundation (DFG), the MPG has introduced flexible target quota in the sense of an organisation-specific cascade model. It has been implemented specifically to the organisation in its second voluntary commitment phase. The MPI-M aligns itself with the MPG guidelines and endeavours to raise the number of women in leadership positions according to the cascade model. As well as promoting equality of opportunity in general, the MPI-M encourage and support women in particular who aim at leadership positions or who already hold them. This enables to increase the proportion of women on later scientific career level (see Section 3.3).

#### Career development for female scientists

In order to promote the career development of young female scientists, conferences on networking and career development of female scientists, such as I,Scientist, are announced and participation is supported.

#### Promotion of funding programmes and networking platforms

In order to encourage women in leadership positions, the MPI-M takes part in various funding programmes. In particular, employees with personnel responsibilities are urged to draw attention to these programmes and to propose suitable female candidates from the staff. The MPI-M participates in the following funding programmes:

- Elisabeth Schiemann Kolleg: The college addresses outstanding female scientists with their own research experience at the end of their postdoc phase, who already support doctoral students in their roles as group leaders or who are junior professors or who are qualifying as professors. The essential programme components are mentoring, network building, scientific exchanges and regular plenary sessions.
- Sign Up! Career building: The programme addresses outstanding female scientists in their postdoc phase. The participants are selected in a competitive procedure with a view to preparing them for leadership roles in the sciences by training them in management skills and by communicating knowledge, all underpinned by an explicitly career-orientated network. The aim of the programme is to encourage and motivate women in their postdoc orientation to pursue a scientific career and to support them as they plan their individual careers.
- Minerva FemmeNet: Minerva FemmeNet is a network for female scientists in all research disciplines on all hierarchical levels within the MPG. It is intended to pass on to the next generation of women the experience from talented women scientists – including former members of the institute – in the form of mentoring relationships.
- **Minerva fast track:** The pilot project of the Chemical Physical Technical Section of the MPG supports outstanding female scientists a long-term career perspective after their PhD. Immediately after completion of their dissertations or after the first

postdoc year, funding is given to these scientists for up to 3 years. If they receive a positive evaluation after the postdoc phase, they may then apply for an open-topic Max-Planck-Research Group or Minerva W2 Research Group.

- Lise-Meitner-Gruppen: Since 2018, the Lise-Meitner Excellence Program has estab-lished up to ten Lise-Meitner groups per year within the MPG to attract and support exceptional female scientists. After successful completion of a multi-stage, competitive selection process, the Lise-Meitner groups are endowed with their own resources for a total term of five years.
- **Christiane Nüsslein-Volhard Foundation:** The Foundation supports talented young female scientists (doctoral students and postdocs) with children and offers them monthly financial support to help with budgeting and additional child minding. The aim is to relieve young female scientists of their domestic tasks.
- **Pro Exzellenzia:** Among the services provided by the Hamburg Career Competency Centre for Women are grants for doctoral students and postdocs, coaching, work-shops for career and management competencies and lecture events.
- Dual Career Hamburg \*: In May 2019, the network "Dual Career Hamburg + der Norden" was founded under the patronage of the 2nd Mayor and Science Senator of Hamburg. The MPI-M was among the 35 founding members. The central goal of the Network is to help scientific and cultural institutions as well as businesses in the Hamburg metropolitan area and northern Germany attract highly qualified employees. In dual career situations, the network facilitates exchange among network members, allowing them to identify possible job vacancies quickly. Together, the network members will shape and advance dual careers in the metropolitan area of Hamburg.

The Institute plans for more active promotion of existing funding programmes from MPG for women in science.

### 7.4 Balancing work and family life

By means of the following measures, the MPI-M encourages the reconciliation of family life and work for employees in all career phases.

#### Provide support for parents

#### Parent-and-child office

There has been a parent-and-child office the MPI-M building (Bundesstrasse 53, 20146 Hamburg) since 2016. The parent-and-child office is intended to relieve short-term periods when childcare is not available or difficult. As well as facilitating care for employees' children, the parent-and-child office can also be used as a retreat for breastfeeding and as a quiet room for mothers-to-be. The room is fitted with a fully equipped computer workstation and a play corner and can be used by all MPI-M employees. Prior booking is necessary. The parent-and-child office is also available to members of the University of Hamburg and to guest scientists provided it is not already in use. The parent-and-child office was welcomed by employees and is in regular use.

#### Breastfeeding room

Because not all the MPI-M workplaces are in the same building, a breastfeeding room has been set up in the Geomatikum (Bundesstrasse 55, 20146 Hamburg) in addition to the parent-and-child office (Bundesstrasse 53, 20146 Hamburg). This room is specially designed to meet the needs of breastfeeding mothers and can be used at any time by all MPI-M employees without prior reservation.

#### Contract extension after parental leave and maternity protection

'Under section 2 §5.3 Academic Fixed-Term Contract Act [WissZeitVG] a contract of employment is extended under paragraph 1 (qualifying phase) with the agreement of the employee by the periods equating to parental leave taken under the Parental Allowances and Parental Leave Act and by the periods in which mothers are prohibited from working under the Maternity Protection Act to the extent that gainful employment did not take place. This statutory regulation does not apply to fixed terms under Section 2 §2 WissZeitVG (employment mainly from external funding) because here the funding is generally only available for a limited period. It is MPI-M policy that in those instances of fixed terms under Section 2 §2 WissZeitVG, a contract should be extended, if required and when the project management cannot provide funding, with resources from the basic institute funding.

#### PME Familienservice

MPI-M employees can avail themselves of the services provided by PME Familienservice. This service provides specially qualified advisers to assist with questions or problems relating to child minding (for children between the ages of 0 and 14) and care (homecare and eldercare). The MPG bears the cost of the consultancy and of arranging the provision of services by PME Familienservice, whereas employees assume the cost of any care provided.

#### Family-friendly scheduling

The MPI-M endeavours to schedule events and discussions in ways compatible with family life. For this reason, internal discussions within the institute take place on weekdays in the early afternoon. The timing of working group sessions and other meetings is arranged by each group leader. Negotiations about these times are held such that timing difficulties (e.g. end of crèche hours) are avoided.

#### Care funding during travel on company business

When MPI-M employees are travelling on company business or attending further training, they can receive funding to cover additional care costs, subject to availability, for the care of their children up to the age of 14 and of family members in need of care. This applies to all employees working under a contract of employment. It covers care costs incurred at the place of residence of the person to be cared for, at the work site or at the location of the person providing care. Care costs incurred abroad can also be claimed.

#### Allowance for toddler minding from Max Planck Foundation funds

Since 2017 the MPG provide for a period of one year an allowance for toddler minding, initially as part of a pilot project. This amount is intended to help young scientists fund the care of children aged between three and twelve months. The relevant application can be made to the MPI-M.

# Flexibility for individual working time and place of work arrangements

#### Individual solutions to challenges concerning work hours and location

With regard to the working hours code in the MPI-M is flexible. In the scientific area, flexible work arrangements can be implemented in consultation with the group leaders within the framework of the existing regulations. Non-scientific employees have the option of working in flexible hours. Non-scientific employees who support or care for children (or other family members) can apply for remote work. In substantiated exceptional cases, employees can negotiate the use of an external workplace. The model of flexible working hours for parents has expanded, especially in times of the pandemic.

#### 7.5 Reduce discrimination/Increasing gender awareness

#### Promotion of gender-sensitive language

With immediate effect, all documents and statements issued by the MPG (in the 42nd session of the MPG Presidential Council) are to be couched in gender-equitable language. This also includes the institute's own documents (for example, information material, strategic plans, website, agreements). Existing documents are edited using gender-equitable language at the institute.

#### Raise awareness of discrimination and sexual harassment.

In order to raise awareness of discrimation in the work environment, two "Unconscious bias" workshop were held at MPI-M in 2018 and 2019. Since last year, there has been a large increase in unconscious bias workshop organized by MPG and other groups. The institute actively promotes and supports these workshops. With regards to raising awareness of sexual harassment, the institute support GEOMAR's initiative for "Dealing with sexualised violence on expeditions".

### 7.6 Structural integration of equal opportunity

#### Promotion of (STEM) scientific jobs to female pupils

Each year, the MPI-M takes part in the Girls' Day, in order to familiarise young girls with the field of environmental sciences and climatology. Since 2004, up to 15 girls visit the institute each year. They come to learn about career development and working environments of female scientists at the MPI-M. Female scientists from the institute actively serve as role models, i.e. by being visible in their capacity as scientists. Thus, they can help swell the numbers of female students in the STEM subjects. Unfortunately, Girls' Day for 2020 and 2021 had to be cancelled due to the COVID-19 pandemic. However, the institute plans to reintroduce Girls' Day in 2022.

#### Increased visibility of gender equality work

The work of the Gender Equality Officer and her deputies is described on the institute's web page and is integrated into the Institute by means of this Gender Equality Plan. The institute's gender equality work is also specified in key documents such as the report for the Board of Trustees or the report for the Scientific Advisory Board (SAB). The gender equality officers are involved in several committees at the MPI-M, e.g., the hiring committees, the management conference, the institute budget meeting, committee for outstanding achievements award, the workers meeting and, additionally, the Corona Task Force established in 2020.

## 8 Evaluation procedure

A brief evaluation for each measure is provided here. Unless otherwise noted, annual personnel statistics will be continuously collected and internal interviews/feedbacks are conducted in order to be able to evaluate the individual measures in a targeted manner.

- Increase number of female scientific applicants/candidates \*
   For job postings, the gender-decoder program will be applied and the effectiveness
   of this measure will be monitored and adjusted if necessary.
- Development of a gender equal recruitment procedure
   The new institute guideline introduced gender parity in the composition of the Pro fessional Selection Committee, for which the statistics will be gathered in the follow ing years.
- Gender balance in the conferral of speakers for institution-organised workshops/events In 2019, the KlimaCampus Kolloquium (a joint colloquium of the KlimaCampus institutions) had 6 female and 5 male speakers. For 2020, the statistics are not meaningful due to the begin of the corona pandemic. The colloquium was adapted to a virtual format so that the statistics are continuously collected from 2021 and after the pandemic.
- Continuation of gender-sensitive personnel statistics
   Not only has the personnel statistics in the current GEP been extended from the previous GEP, new personnel statistics has been introduced per MPG suggestions such as duration of stay at the institute, incentives, measures in participation in training courses and press release, as well as MPI-M initiated personnel statistics such as hiring processes, scientific publications and extra leave during Covid-19. Since the personnel statistic is taken annually, further development will be observed and objectives as well as measures will be adjusted if needed.
- Establish a buddy system and knowledge-sharing platform for new employees \*
  Newly introduced measures such as the buddy system are being further developed
  and evaluated through internal interviews by gathering feedbacks from the buddies
  themselves and the new employees.
- Provide safe space for confidential advice in cases of discrimination and sexual harassment
   No evaluation procedure rather the availability of GE officers to provide confidential discussion.

• Flexible target quota at the MPG

MPI-M fulfils the Max Planck Society aims for the CPTS section to have a specific proportion of women in W2 and TVöD scientists position, but not for W3. Figure 1.5 shows that the number of female group leaders have gradually increased over the past 4 years from 23% to 30%, but there's still more room to go to achieve gender balance. Historically and even presently, all directors at MPI-M are male. Continual monitoring of personnel statistics, especially female at higher career levels and will be compared to MPG target/quota.

- Career development for female scientists In order to evaluate the career development of women, the annual personnel statistics are reviewed for changes in this regard.
- Promotion of funding programmes and networking platforms
   The participation and application of funding programs through appropriate nominations will be continued and actively communicated.
- Provide support for parents

The myriad measures for balancing work and family-life have continued on in MPI-M and provided support for parental employees. One highlight is the MPI-M policy and institute funding has provided assurance for contract extension of parental employees should the project funding run out. This has helped retained good scien-tists at MPI-M and strongly promote work and family-life balance. Additionally, extra leaves were ensured for MPI-M employees in the pandemic year 2020 to support them for taking care of young children.

- Flexibility for individual working time and place of work arrangements
   Last year, at the beginning of the pandemic, special attention was paid to a flexible
   working time and place solution, which was especially important for all staff mem bers with and without children.
- Promotion of gender-sensitive language All existing documents and webpages are reviewed and revised to ensure that the formulation is gender-sensitive, both in German and in English.
- Raise awareness of discrimination and sexual harassment In 2018 and 2019, "Unconscious Bias Workshop" was held in MPI-M and received positive reviews. Since more virtual workshops are now available, these workshops will continue to be promoted and supported.
- Promotion of (STEM) scientific jobs to female pupils
   The Gender Equality officers at MPI-M have continually organised Girls' Day in this
   reporting period. Unfortunately, Girls' Day had to be cancelled in 2020 and 2021 due
   to the COVID-19 pandemic. However, the institute plans to reintroduce Girls' Day in
   2022.
- Increase visibility of the gender equality work
   Since GE officers are involved in various institute committees, e.g. hiring committee, the Management Conference, the workers council meeting, etc, proposed GE initia-tives are actively discussed and heard by the institute, measures can be adjusted and efficiently implemented to promote various GE goals.

This GEP will apply for the period 2021 to 2023. After this period, the GEP will be evaluated and updated. After implementation, the gender equality plan will be available to all employees on the institute's intranet. This gender equality plan was adopted by the Board of the Directors of the Max Planck Institute for Meteorology on 31.03.2021.

<sup>0</sup>Prof. Dr. Bjorn Stevens Managing Director MPI-M

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Prof. Dr. Jochem Marotzke Director MPI-M

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Prof. Dr. Martin Claußen Director MPI-M

Illale Kirduls

Dr. Ulrike Kirchner Research Coordinator

Reiner Letscher Head of Administration

Dr. Dian Putrasahan Gender Equal Opportunity Officer

my Ч

Dr. Hongmei Li Gender Equal Opportunity Officer

Aldnude

Dr. Andrea Schneidereit Gender Equal Opportunity Officer