

# **Report on Doctoral Researchers Working Conditions Survey at GSI/FAIR in November 2018**

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# 1. Introduction

This Doctoral Researchers Working Conditions Survey has been conducted at the GSI and FAIR centers in November 2018. The goal was to compare the current Situation with the Situation of Doctoral Researchers at the GSI in 2017. In order to gauge the situation in 2017 a Helmholtz wide Survey was Conducted by the Helmholtz Juniors. The respective report can be found here:

[https://www.helmholtz.de/fileadmin/user\\_upload/HeJu\\_survey\\_2017\\_results\\_report.pdf](https://www.helmholtz.de/fileadmin/user_upload/HeJu_survey_2017_results_report.pdf)

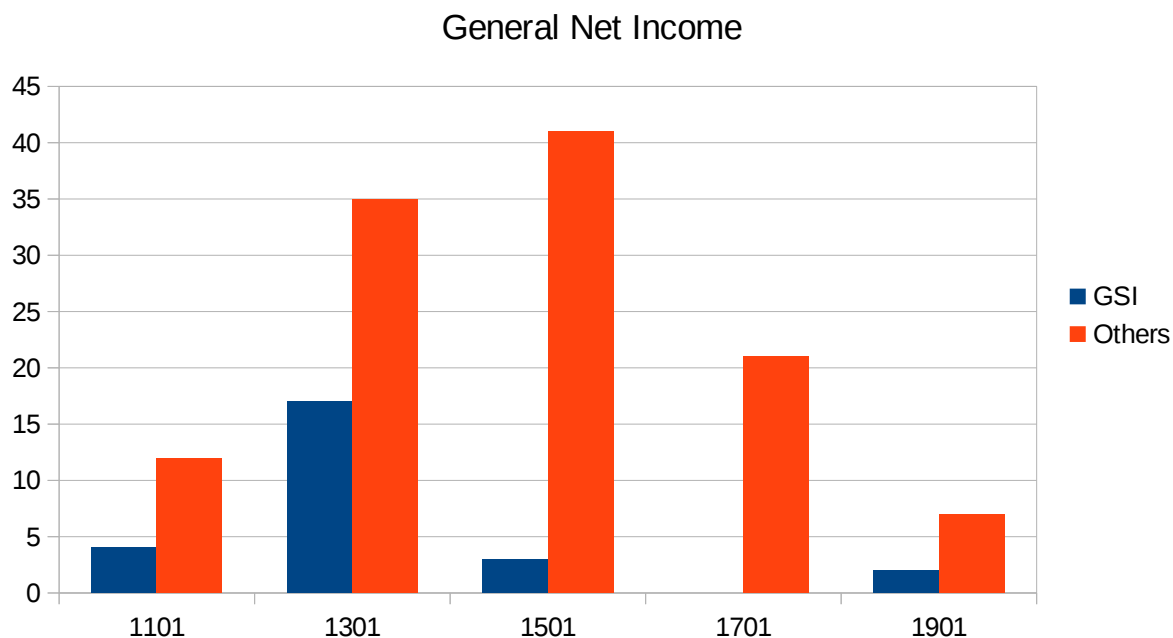
Excerpts from this report will be presented for comparison in chapter 7.

The following report comprises a sample group of 145 Doctoral Researchers within the HGS-HIRE graduate school. The total number of Doctoral Researchers at the GSI and FAIR centers was difficult to find out. Contradicting numbers were given (between 100 and 357) from different departments at the GSI. The representation team therefore decided to use 357, which is the number of participating Doctoral Researchers within HGS-HIRE. This decision was made to guarantee the best possible representation of all Doctoral Researchers whose research is focussed at the GSI and FAIR centers and therefore spend a substantial amount of time within these centers.

Given the number of participants from HGS-HIRE with 357 and the sample group size of 145 a participation rate of 40.6% in the survey and is therefore to be considered representative.

## 2. Income Situation at GSI

This paragraph discusses the Income situation at the GSI Helmholtzzentrum für Schwerionenforschung and compares it with the universities and other institutes that participate within the HGS-HiRe graduate school.

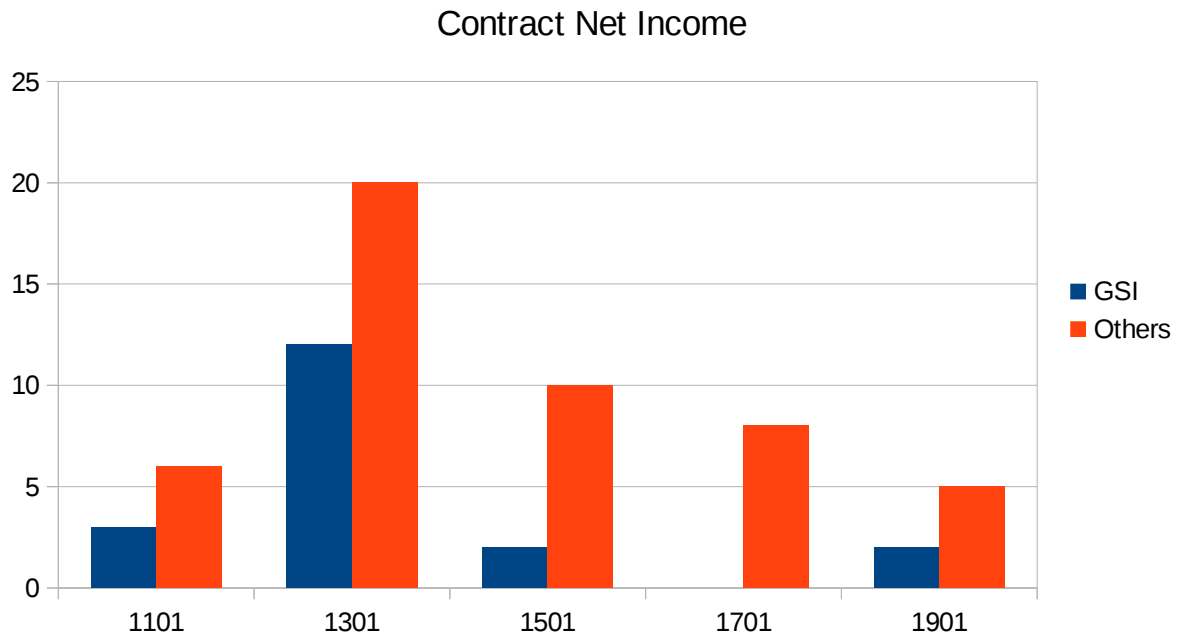


*Illustration 1: General Net Income of all doctoral researchers affiliated with GSI. GSI in the legend means directly employed by the GSI, whereas Others considers non GSI employment (i.e. universities).*

The first major aspect to consider is the general net income (after tax) of doctoral researchers directly employed by the GSI and employed by other institutions. The total number of directly employed doctoral researchers in this report is 26, compared to the number of doctoral researchers employed by other institutions is 116. Excluded is the number of people who did not specify their net income amount (3).

Illustration 1 shows the results for this aspect. GSI doctoral researchers are represented by blue graphs and other doctoral researchers are represented by red graph. It is easy to see that the average general net income of a GSI doctoral researcher is in the bracket between 1301 € and 1501 €. In contrast the mean general net income of a doctoral researcher not employed by the GSI is higher with a mean value between 1501 € and 1701 €. An exception to this case is one person with an income of 1901 € and more due being funded by a contract and a stipend in parallel.

Going into more detail, contracts and stipends are now considered independently, with contracts following first in Illustration 2. The total amount of doctoral researchers surveyed with a contract amounts to 68. This is 48.2 % of all doctoral researchers. The amount of contractually employed doctoral researchers at the GSI was surveyed to be 19. Therefore the relative percentage of contract holders (19) at the GSI is 73 % (compared to 26).

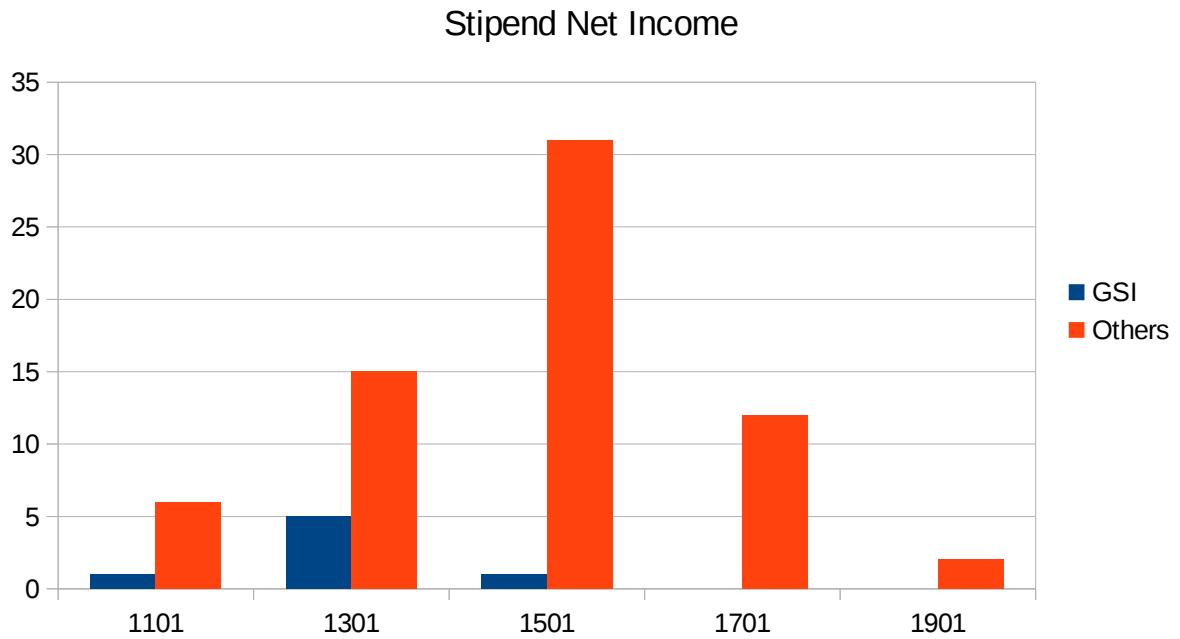


*Illustration 2: Contractual Net Income of all doctoral researchers affiliated with GSI.*

In comparison the total number of surveyed contract holders outside of the GSI is 49. This compared to the total number of surveyed external doctoral researcher (116) is 42.2 %. This concludes that the GSI has a relatively higher contractual employment than the average of all other institutions participating within HGS-HiRe.

Now comparing the contractual net income from illustration 2, it is easy to see that the mean income for a doctoral researcher lies in the bracket between 1301 € and 1501 €. Comparatively the maximum of the distribution for the net income of other doctoral researchers is also within the bracket of 1301 € and 1501 € but a considerable amount of doctoral researchers lies above the 1501 € mark (27 in total) resulting in a relative portion of 55.1 % compared to GSI's 10.5 %. Therefore the average contractual net income of doctoral researchers not employed by the GSI is higher.

Now the stipend situation is being considered. Compared to the average of doctoral researchers employed by stipends the rate at the GSI is the lowest with a total of 7 and a relative proportion of 27 %. This is considerably lower than the proportion of stipend holders within HGS-HiRe with 56.9 % (66 in total) representing the majority of doctoral researchers. It is important to note that even though the GSI vowed to transfer all doctoral researchers with a stipend into a contract, these stipend holders still exist and should have the possibility to transfer into contractual employment. Furthermore funds given by the GSI to other institutions (i.e. universities) via bilateral cooperation contract tend to be given to doctoral researchers as a stipend instead of a contract and therefore increase the amount of stipend holder outside of GSI significantly. A statement to the number of doctoral researchers funded by this cooperation contract and holding a stipend could not be given and remains unclear.

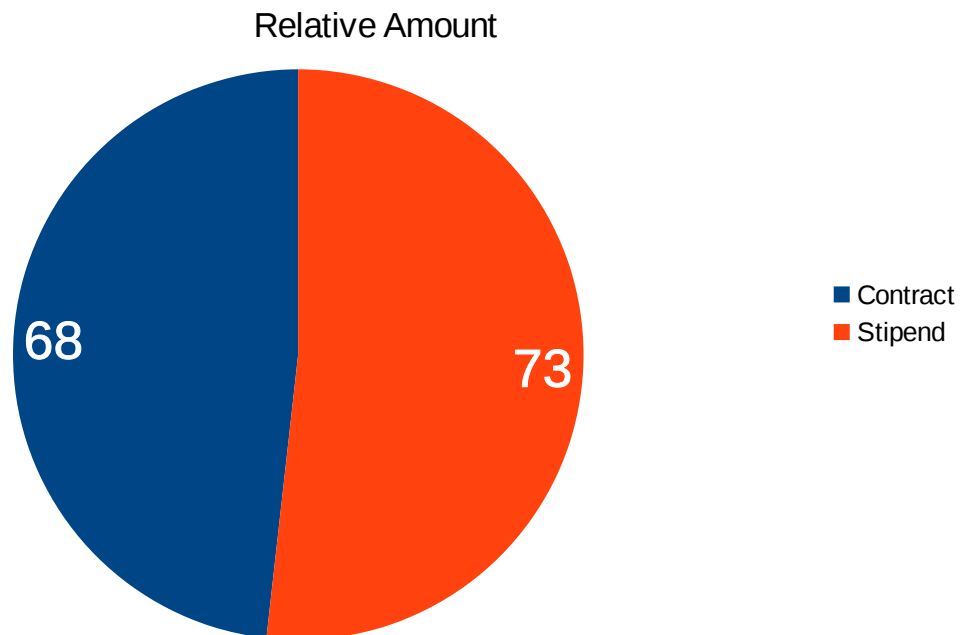


*Illustration 3: Stipend Net Income of all doctoral researchers affiliated with GSI. It is important to note that the cost of private health insurance and additional insurance comparable to german social insurances has not been included in this graph and is approx. 500€.*

The net income of stipend holders within the GSI is comparable to the net income of contractually employed doctoral researchers within the 1301 € and 1501 € bracket whereas the mean net income of stipend holders outside of the GSI lies within the 1501 € and 1701 € bracket and is therefore higher than the GSI stipend. In the case of stipends the required extra expenses to privately cover social insurances has been considered but it is to note that according to calculations from the Helmholtz Juniors these expenses amount to between 500 € and 600 € and therefore decrease the montly net income of a stipend holder significantly compared to a contract holder. Furthermore christmas bonuses are not being paid to stipend holders and vacation days are not legally guaranteed.

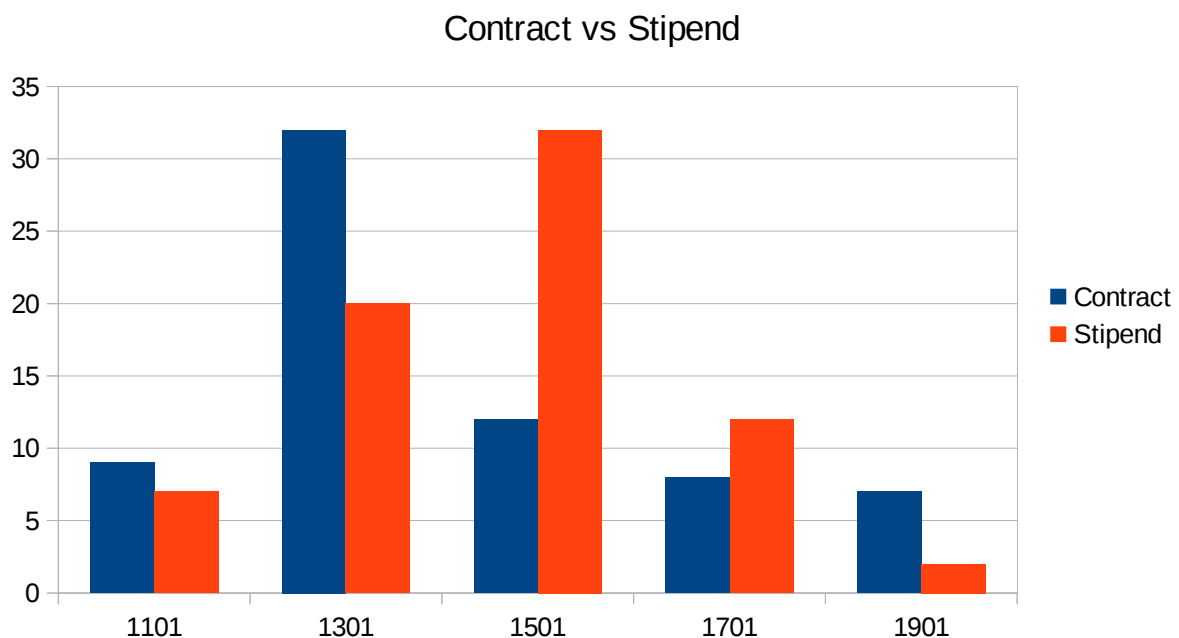
All things considered the employment situation for a stipend holder is therefore exceptionally worse than the situation of a contractually employed doctoral researcher.

### 3. Income Situation Contract vs Scholarship



*Illustration 4: Relative proportion of contract and stipend holders within HGS-HIRe.*

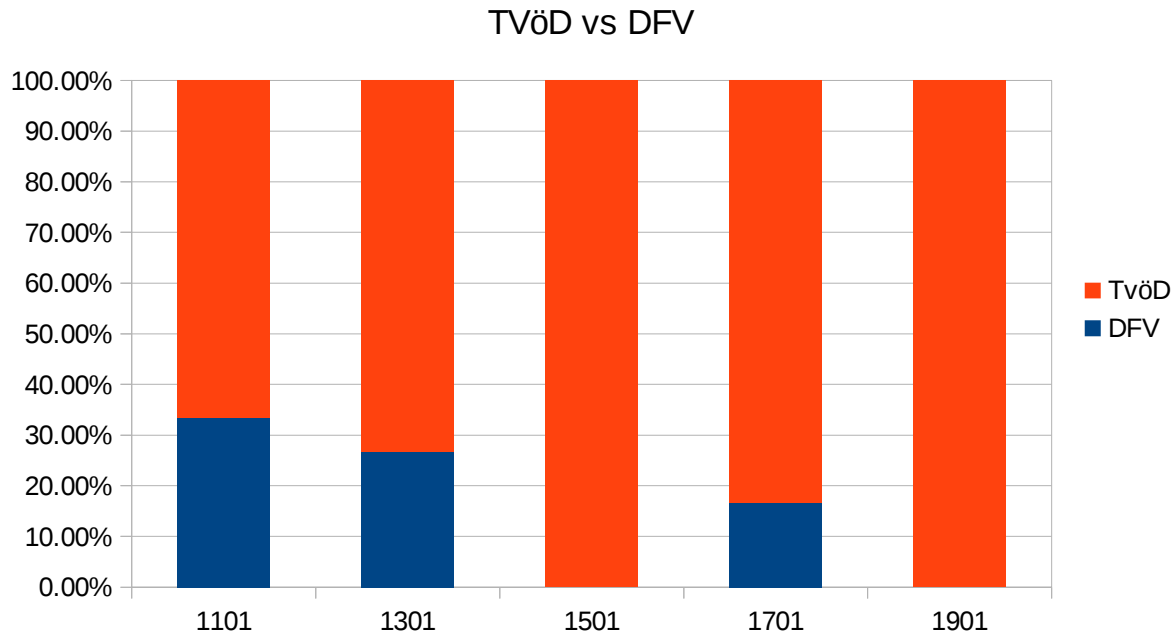
In chapter 2 it was already discussed that the total proportion of contract and stipend holders is 48.2 % and 52.8 % respectively, meaning that more doctoral researchers are employed by stipend than contract. This is represented in illustration 4.



*Illustration 5: Distribution of contracts and stipend across the different income brackets.*

In Illustration 5 the distribution of contracts and stipends across the different income brackets is represented. You can see that between an income of 1101 € and including

1501 € the contractual employment dominates with its mean value being between 1301 € and 1501 €. Compared to this the stipends dominate above 1501 € with a mean income between 1501 € and 1701 €. Again, this distribution does not take into account the disadvantages given by being a stipend holder. This is discussed in more detail in chapter 2.



*Illustration 6: Proportion of TVöD and DFV contracts across different income brackets.*

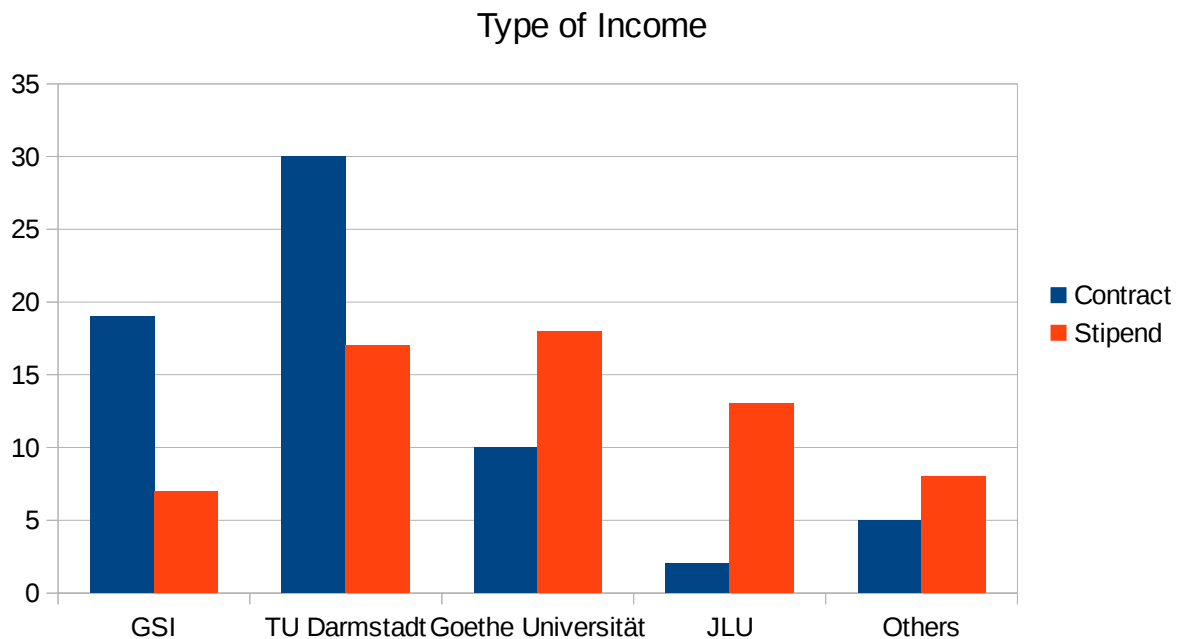
Considering now the details of contractual employment, it is now important to say that two kinds of contracts exist. The Tarifvertrag des öffentlichen Dienstes (public servant contract) (TVöD) and the Doktorandenfördervertrag nach TVöD (doctoral researchers support contract) (DFV). The details of these contracts are discussed in the “Report on Doctoral Researcher representation activity and goals at GSI/FAIR 2018”.

From the data it results that 12 doctoral researchers were surveyed to be employed by DFV, 50 by TVöD and 6 didn’t know. Consequently 17.6 % are employed by DFV, 73.5 % by TVöD and 8.8 % don’t know their contract type. Combining these results with the details discussed about DFV in the other report and the given proportion of different contracts given in Illustration 6, it puts a significant amount of doctoral researchers in a disadvantageous employment position due to the systemic inherent drawbacks of the DFV contract type.



## 4. Type of Income Across all HGS-HIRE Doctoral Researchers

In this survey doctoral researchers from the participating institutes of GSI, TU Darmstadt, Goethe Universität Frankfurt, FIAS, JLU Gießen, Helmholtz Institute Mainz, Max-Planck Institut, Helmholtz Institute Jena, JGU Mainz and Heidelberg University provided information about their funding situation.

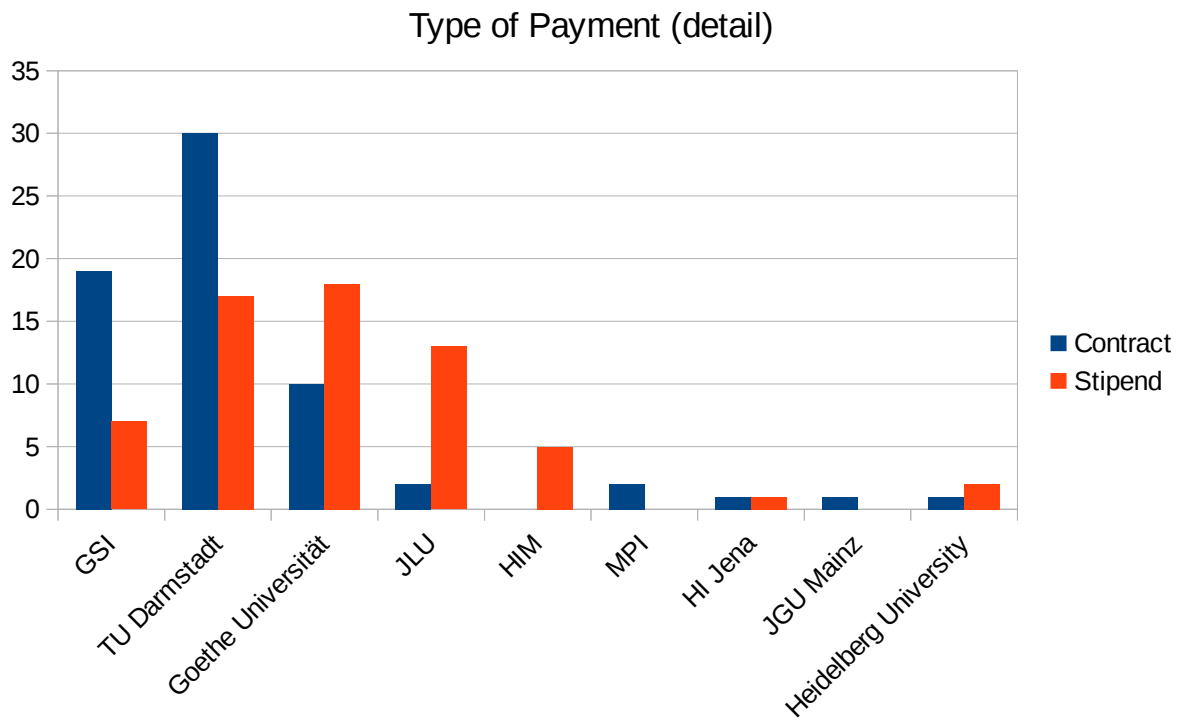


*Illustration 7: Distribution of contracts and Stipends across different institutes.*

Since the data from HIM, MPI, HIJ, JGU and Heidelberg has been low, these institutes have been summarized under Others in illustration 7. In illustration 8 these can be seen in more details.

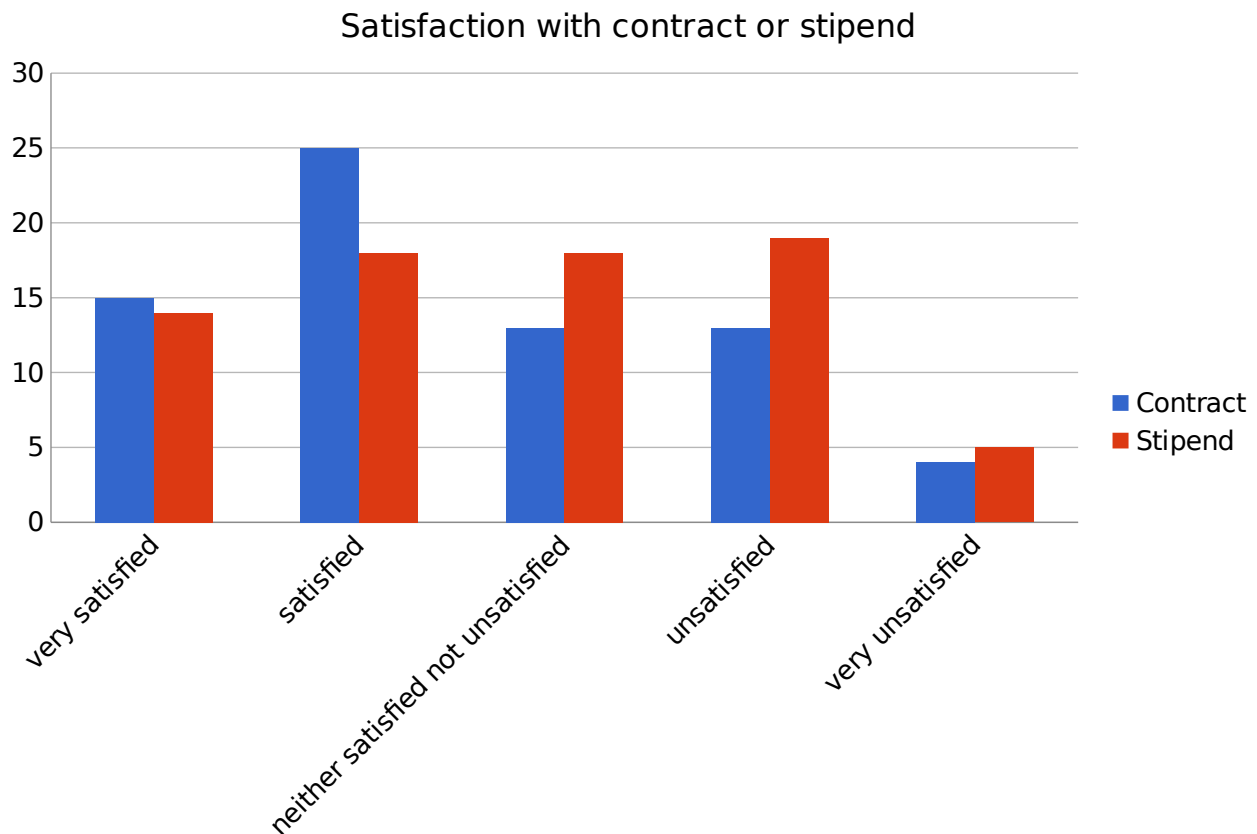
From the data one can see that the GSI institute has the best proportion of contractually employed doctoral researchers with 73.1 % and stipend holders with 26.9 %. This is followed by TU Darmstadt with 63.8 % and 36.2 % in contract and stipend holders respectively. After Darmstadt the proportion of stipend holders increases drastically whereas the number of contract holders decreases. Others shows a ratio of 38.5 % contractually employed doctoral researchers and 61.5 % of stipend holders. This is followed by Goethe University with 35.7 % and 64.3 % of contract and stipend holders respectively. The worst ratio in this survey has JLU Gießen with only 13.3 % being contractually employed and 86.6 % holding a stipend.

In this data it could not be distinguished which stipend outside of the GSI center was given as a result of cooperational contracts between the GSI and other institutes. Would these doctoral researchers have had a contract instead of a stipend then the number of stipends outside of the GSI should be lower.



*Illustration 8: Detailed distribution of funding types by institute.*

## 5. Satisfaction Contract vs. Scholarships

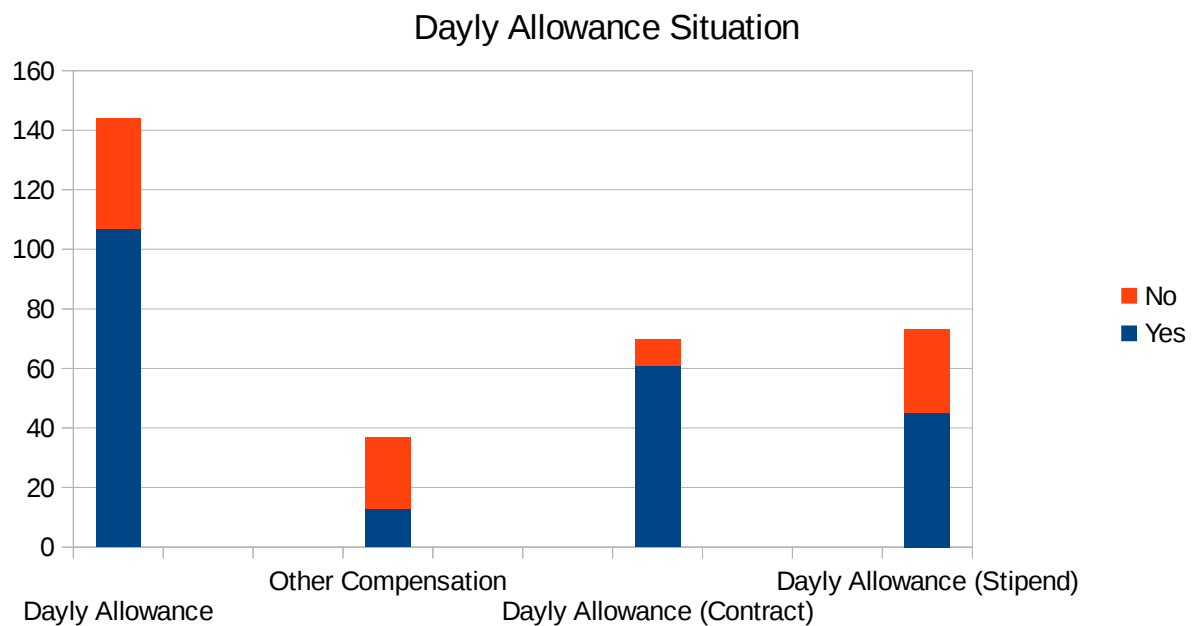


*Illustration 9: Satisfaction of doctoral researchers with their individual funding type.*

Besides their employment situation doctoral researchers were also surveyed about their satisfaction with their funding situation. The results are shown in illustration 9. For contract holders their satisfaction levels are better and in total higher than stipend holders. Similarly, less contract holders show dissatisfaction than stipend holders. For stipend holders it is important to note that the distribution in satisfaction is very broad showing less variety than contract holders. Comparing the proportion of satisfied/unsatisfied contract/stipend holders with each other shows clearer evidence. Of the surveyed doctoral researchers 57.1 % are satisfied or more with a contract, 15.6 % are neutral towards their contract and 24.3 % are unsatisfied or worse with their contract. For comparison stipend holders show 43.2 % of satisfaction or more, 24.3 % are neutral towards their stipend and 32.4 % are unsatisfied or worse. In the case of satisfaction this is a difference of 13.9 percent points and a difference of -8.1 percent points when it comes to dissatisfaction. Especially less doctoral researchers are indifferent towards their funding situation when employed via contract.

This leads to the conclusion that doctoral researchers are more satisfied when employed contractually than when holding a stipend.

## 6. Daily Allowance Situation



*Illustration 10: Daily allowance granted for different cases.*

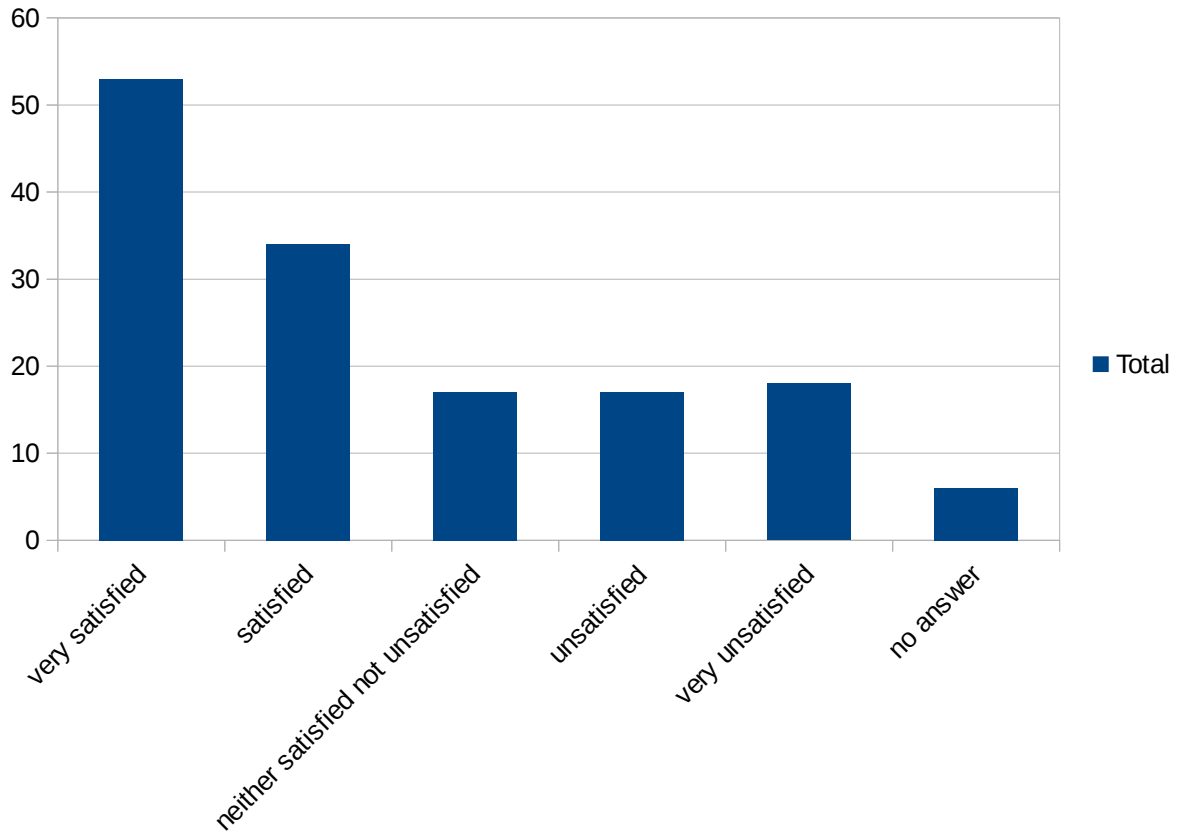
Another important working condition aspect to consider is travel reimbursement and daily allowance granting when traveling for work. Of all doctoral researchers surveyed 107 have reported that a daily allowance is granted for work trips directly by their respective institute (73.8 %). 37 (25.5 %) reported not receiving daily allowance by their respective home institute. Considering doctoral researchers that are not granted direct daily allowance 13 (35.1 %) reported that they receive compensation from other means whereas 24 (64.9 %) receive no compensation whatsoever.

Considering the difference between contract and stipend holders one can see that 61 of all contract holder (87.1 %) receive daily allowance without difficulties whereas 9 (12.9 %) do not receive daily allowances. Stipend holders comparably reported that 45 (60.8 %) receive daily allowances during work travel, although 28 researchers (39.2 %) receive no daily allowance. These results show that stipend holders are put at a systemic disadvantage compared to contract holders. Furthermore it shows that not even all contractually employed doctoral researchers receive a legally required daily allowance for work travel.

Looking at the general satisfaction of the daily allowance situation most doctoral researchers are satisfied or more with their situation (87 and 60%). Only 17 (11.7 %) reported to be indifferent and 24 (24.1 %) reported to be unsatisfied or worse with the current situation. These numbers coincide significantly with the proportion of doctoral researchers where a daily allowance is being granted or not.

In order to understand it better the different satisfaction levels are being compared between those doctoral researchers who get a daily allowance granted and those who don't in illustration 12.

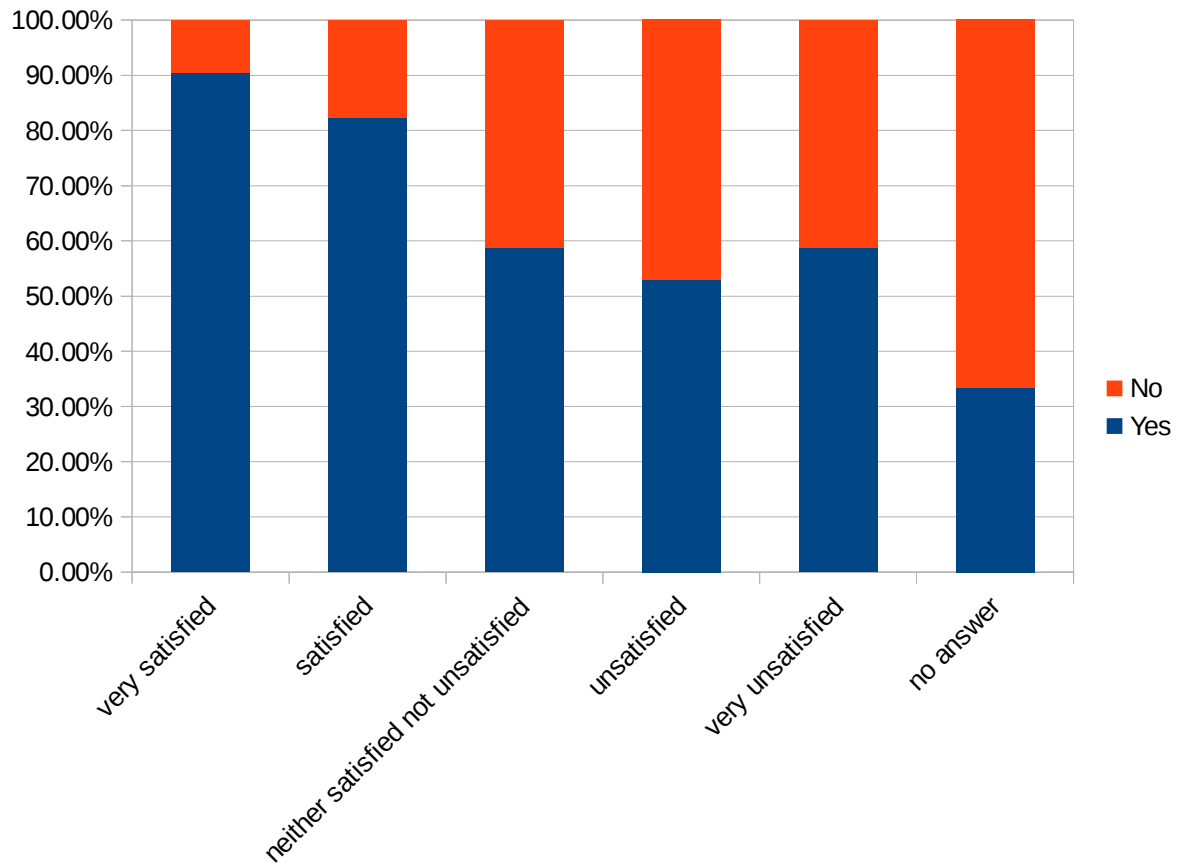
### General Allowance Satisfaction



*Illustration 11: General satisfaction with daily allowances granted to doctoral researchers.*

Of all the doctoral researchers that receive a daily allowance during work travel 76 (71 %) reported to be satisfied or more with their situation, 10 (9.3 %) reported to be indifferent and 12 (17.8 %) reported to be unsatisfied or worse. For comparison the doctoral researchers that are not granted a daily allowance during work travels reported that 11 (29.7 %) are satisfied or more, 7 (18.9 %) are indifferent and 15 (40.4 %) are unsatisfied or less. These results show a difference of -41.3 percent points in satisfaction, 9.6 % in indifference and 22.8 in dissatisfaction. Conclusively satisfaction of the allowance situation coincides with the granting thereof.

### Satisfaction Compensation vs. no Compensation



*Illustration 12: Satisfaction compared between doctoral researchers who get a daily allowance granted or not.*

## 7. Comparison with HeJu-Survey 2017

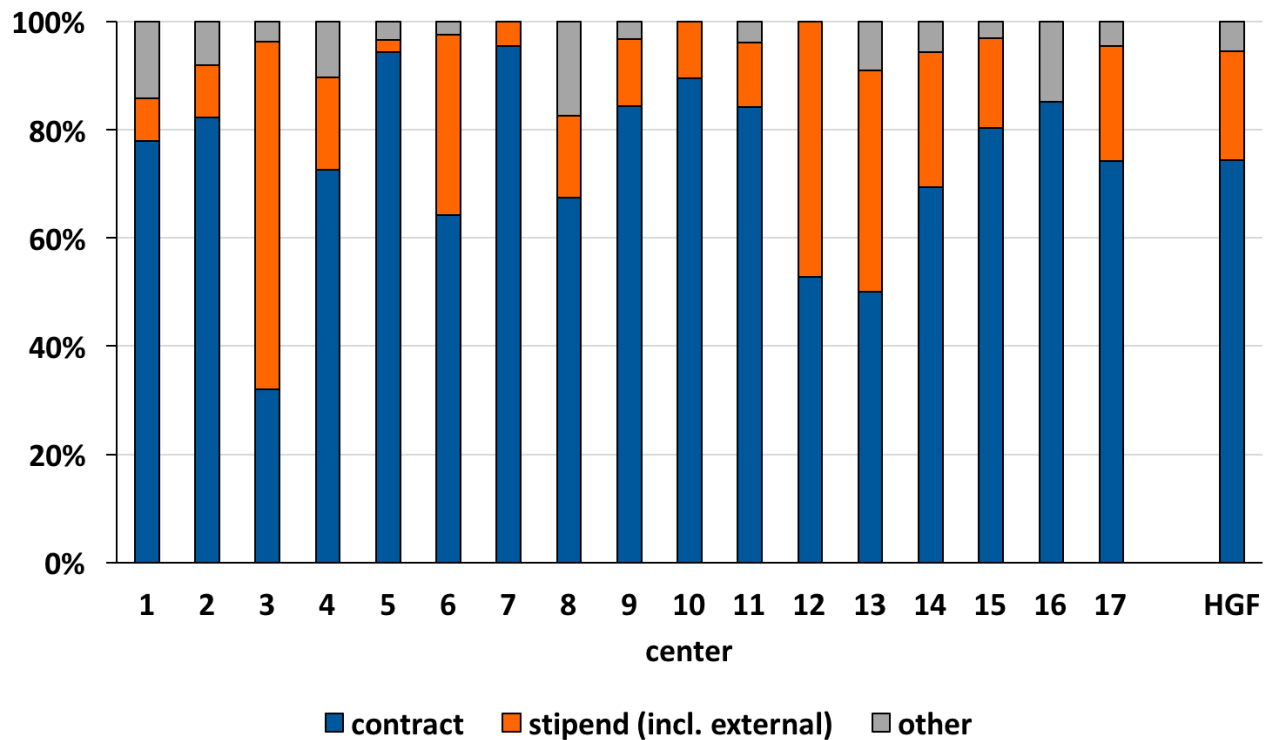


Illustration 13: Employment type for all Helmholtz centers.

This chapter is about the comparison of Helmholtz Juniors Survey 2017 results and the GSI PhD Working Conditions Survey 2018 results. Since the HeJu survey was conducted completely anonymous the respective centers only receive the key for their own center. For the GSI this means that the key is 3 and henceforth all data from the illustrations with the key 3 relates to the GSI.

In the HeJu survey 2017 59 doctoral researchers affiliated with the GSI participated. This leads to a participation rate 16% in the 2017 survey. This leads to a maximum of 368 doctoral researchers which could have been potentially addressed. This number is in accordance with the number of current participants in HGS-HIRE. In comparison, this report achieved a participation rate of 40.6 % (145).

Therefore all following comparisons are done in regards all HGS-HIRE participants and not GSI doctoral researchers alone.

The first aspect to compare is the change of funding types between the survey. Illustration 13 shows 31% of doctoral researchers employed by a contract and approximately 64% employed by stipends. These numbers have improved to 48.2 % and 52.8 % of contract and stipend holder respectively.

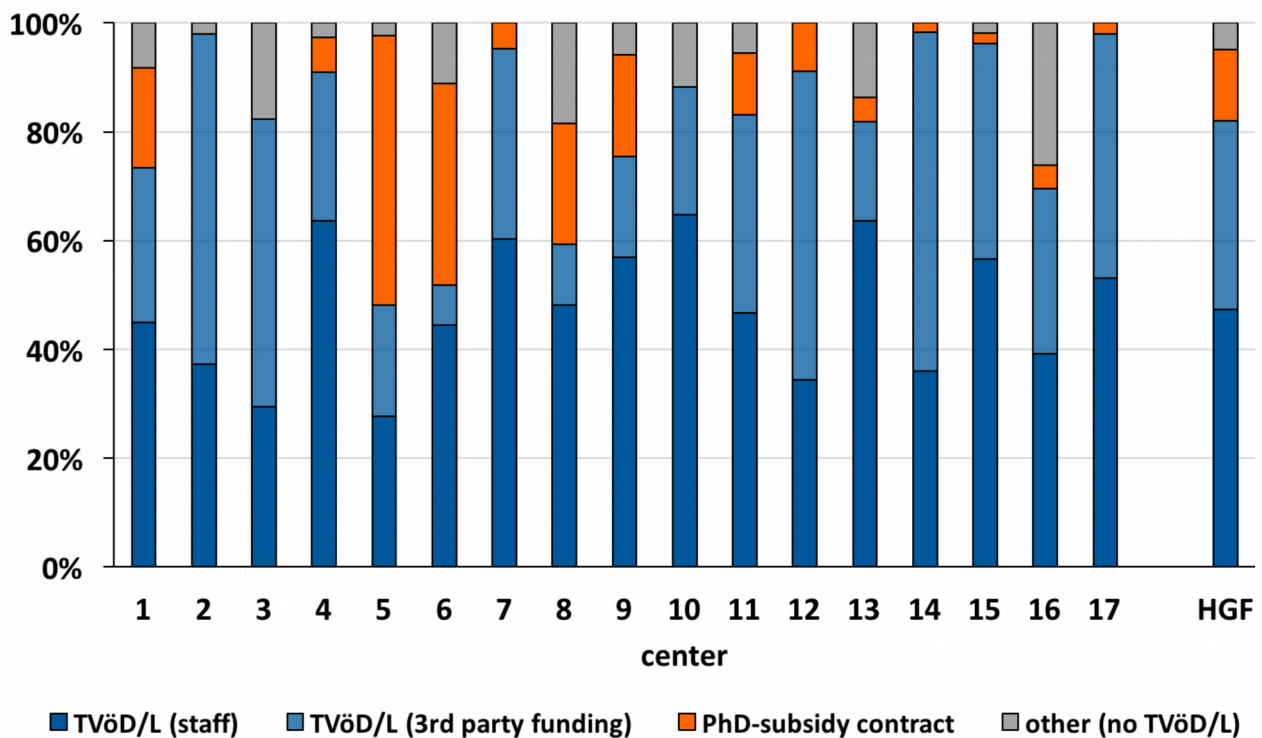


Illustration 14: Detailed contractual employment from 2017

Of all the doctoral researchers employed inside HGS-HIRe 81% were employed with a TVöD contract, no one had a DFV contract and 19 % were had another type of contract. This year the number are as follows: 17.6 % are employed by DFV, 73.5 % by TVöD and 8.8 % don't know their contract type. From these results one can see that the contractual has diminished by decreasing the number of TVöD contracts and increasing the number DFV contracts.

From illustration 15 one can see that 49% had an income lower than 1501 € and 51 % had an income of more than 1500 €. For 2018 the proportion of doctoral researchers with a net income of less than 1501 € is 48.2 % and the proportion of doctoral researchers with a net income of more than 1500 € is 52.8 %. The situation appears to have only slightly changed but can be considered positive as the number of stipends has decreased from 2017 to 2018 and more doctoral researchers are employed by contracts.

Illustration 16 shows now for the GSI center that of all stipend holders 42 % had a net income of less than 1501 € and 58 % of all stipend holders had a net income of more than 1500 €. The survey from 2018 shows that of all stipend holders 37% have a net income of less than 1501 € and 63% have a net income of more than 1500 €. This is a positive result showing that the net income of stipends has been slightly increased on average.



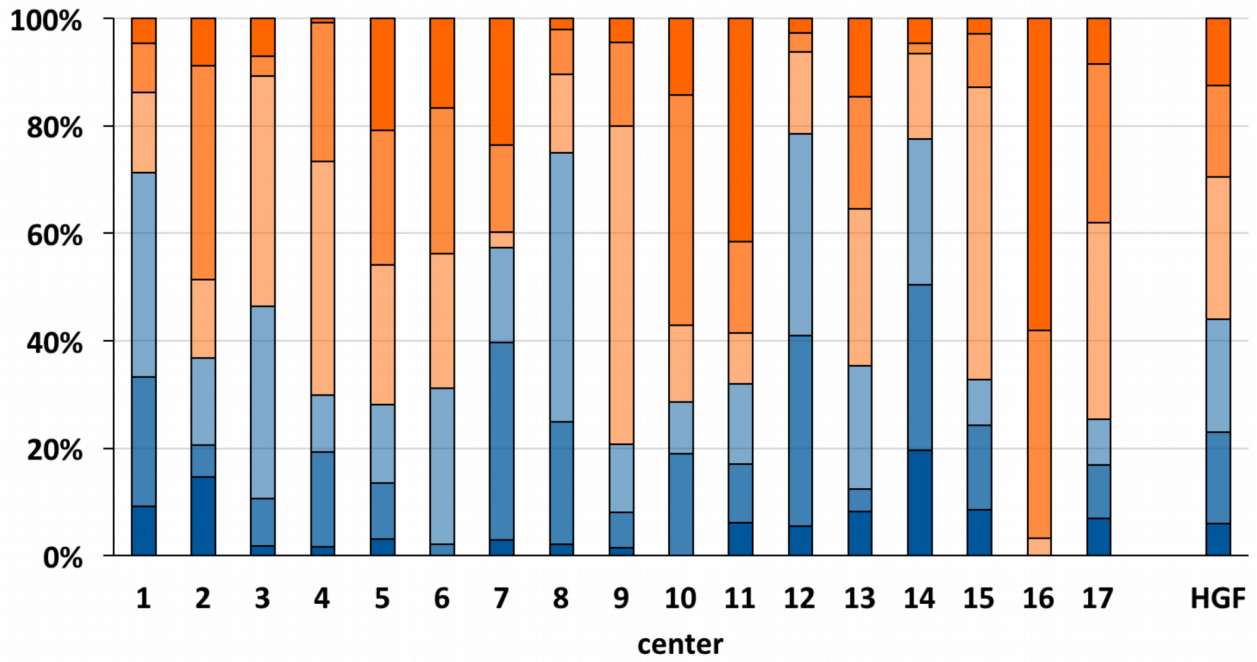


Illustration 15: Distribution of income regardless of funding type for all Helmholtz centers.

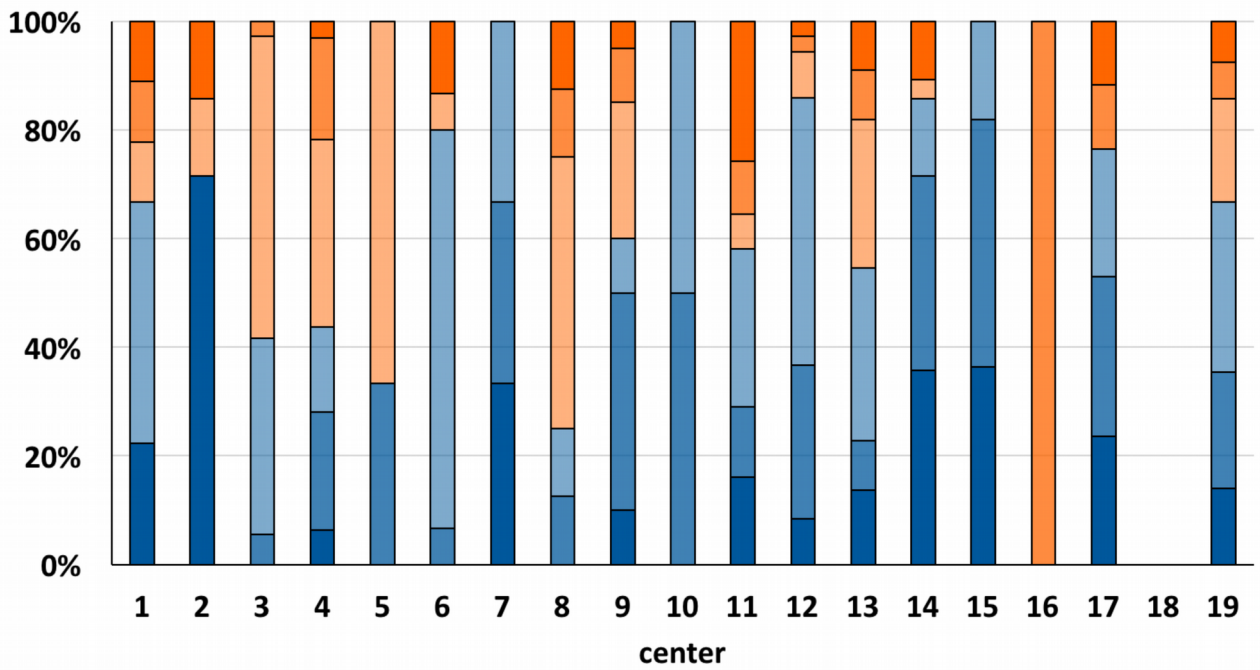


Illustration 16: Distribution of stipend net income for all helmholtz centers.

### d) satisfaction with payment

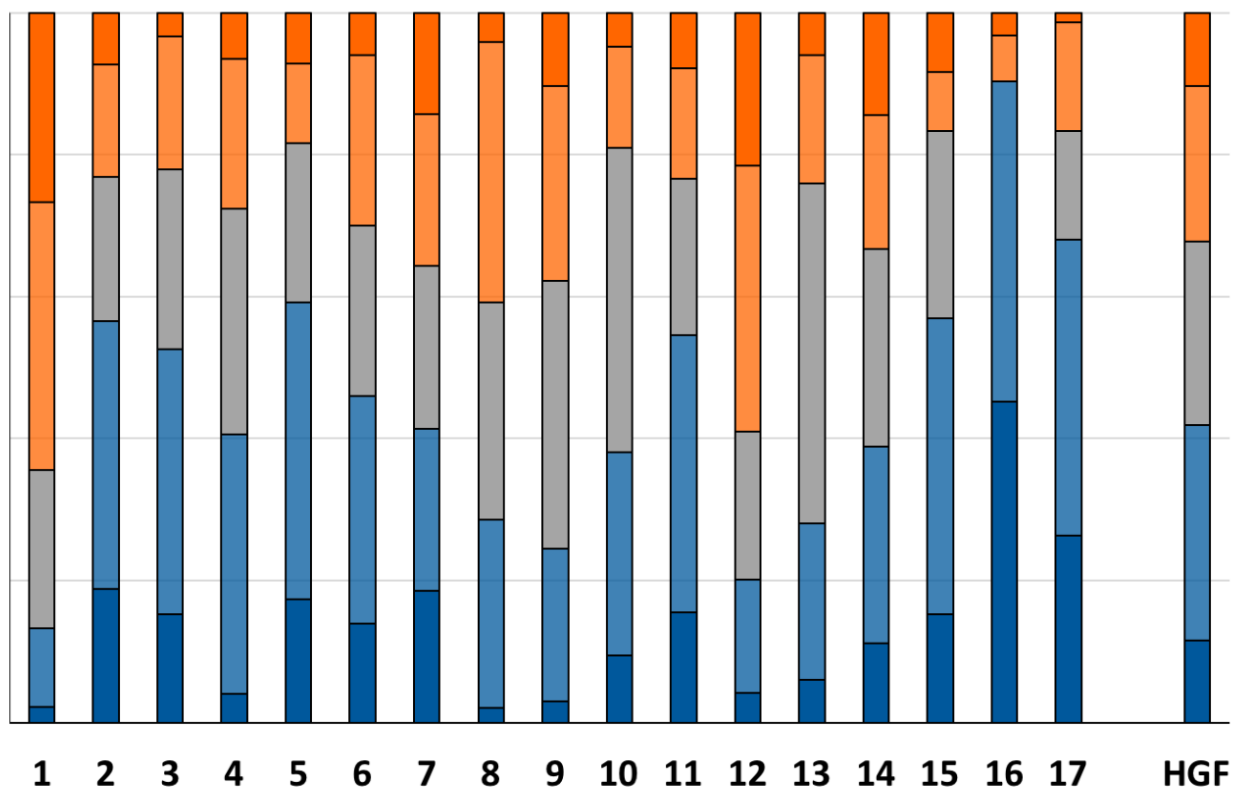


Illustration 17: Doctoral researchers satisfaction with payment across all Hemholtzcenters

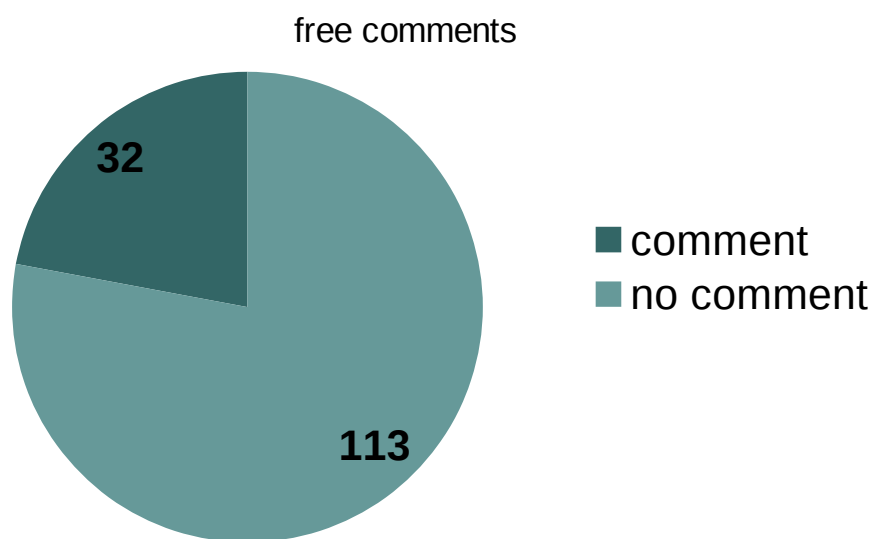
■ completely satisfied   
 ■ satisfied   
 ■ neutral   
 ■ unsatisfied   
 ■ completely unsatisfied

The last aspect that can be compared now between 2017 and 2018 is the general doctoral researchers satisfaction with the given funding. For doctoral researchers associated with the GSI a proportion of 51 % has been found to be satisfied or more with their current funding, 26% have been found to be indifferent towards their funding and 23% were unsatisfied or worse. The new data shows that 50 % are satisfied or more with their funding, 21.5 % are neutral towards their funding and 28.5 % are unsatisfied or worse with their contract.

The proportion of doctoral researchers that are satisfied or more with their funding has not really changed from 2017 to 2018. Interestingly the proportion of doctoral researchers with a neutral attitude towards their funding has decreased slightly by 4.5 percent point and the proportion of unsatisfied or worse doctoral researchers has grown to be 28.5 % with an increase of 5.5 percent points from 2017.

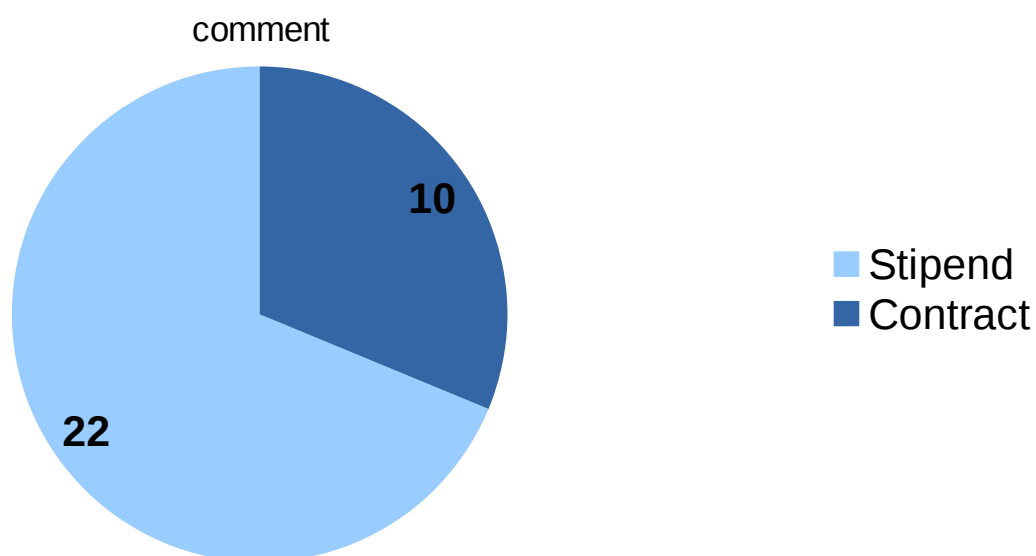
## 8. Comments

Not all doctoral researchers used the optional possibility to make a free comment.



*Illustration 18: About 22% of all participating doctoral researchers made a free comment.*

For a convenient weighting of these comments, the distribution of the two groups of commentators is depicted in illustration 19 and 20. It is apparent, that scholarship holders give more likely a free comment, compared to the doctoral researchers with a working contract.



*Illustration 19*

Illustration  
20:

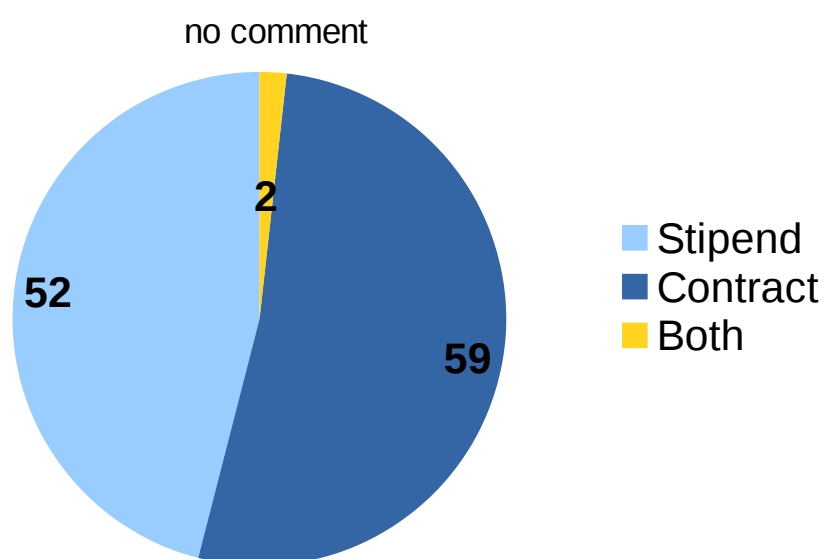


Illustration 19 and 20: A higher percentage of doctoral researchers with a scholarship gave a free comment compared to the relative amount within the amount of submitted questionnaires.

As the comments were free and more than one subject could have been mentioned in one comment, illustration 21 contains more than 32 contributions in sum. Comparable comments were grouped for a better presentation, though it is worthwhile noting that the range of urgency varies, citation: “Stop the stipend system please.”, “Equal payment for equal work!”, “Contracts instead of stipends!”.

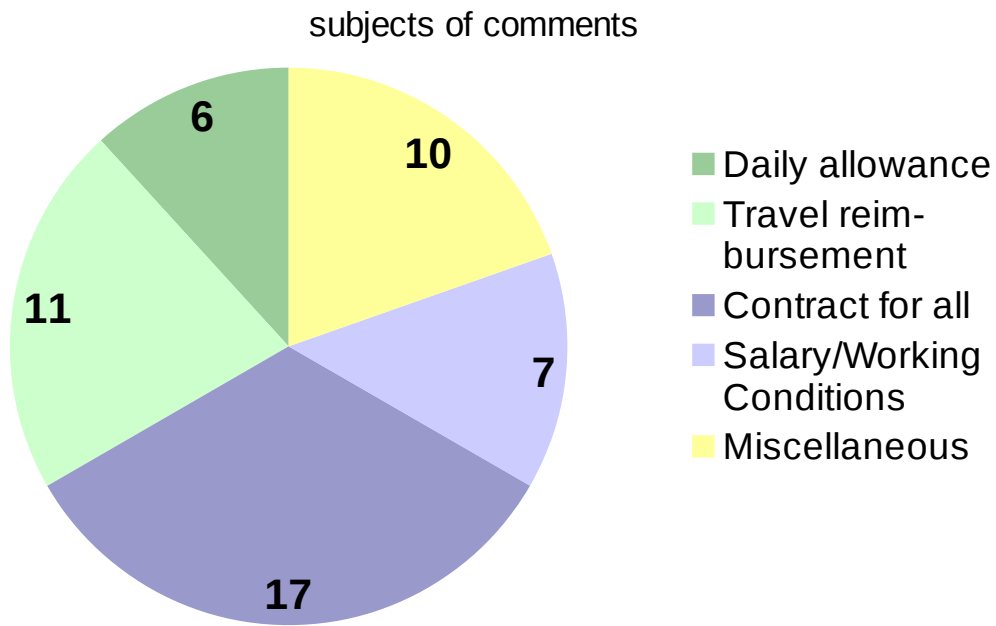
The subjects of the comments collected in *miscellaneous* are listed below illustration 21, showing the frequency of mentioned subjects.

#### Miscellaneous:

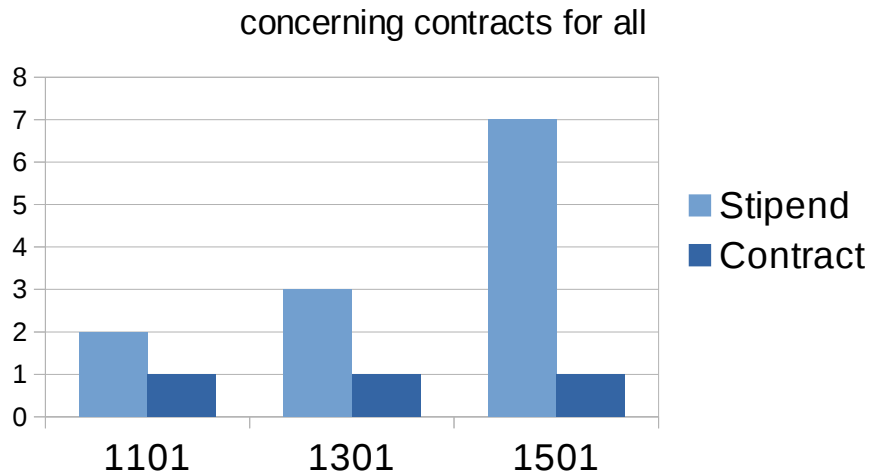
- online form for travel reimbursement requested
- information requested concerning the duty stroke insurance
- IT workshops requested
- travel: free-time compensation
- vacation days
- time spent on teaching
- duration of stipends (please 1x 3 y, instead of 3x 1 y), issues with visa application.

As the subject 'contracts for all' was highest mentioned, 17 comments of 51 in total.

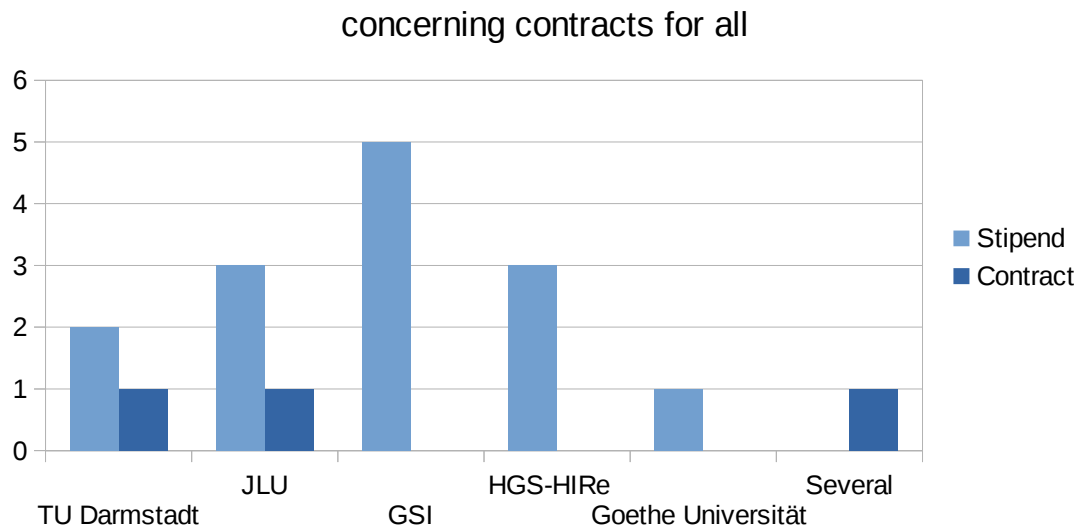
'Daily allowance' is the second most mentioned subject. It seems, that the group of scholarship holders in the income range of 1501 Euro per month are more aware of the daily allowance issues than the other income ranges. But, relating to illustration 5, this income group is the highest populated one among stipends, whereas those ones with an income of 1601 and more are underrepresented.



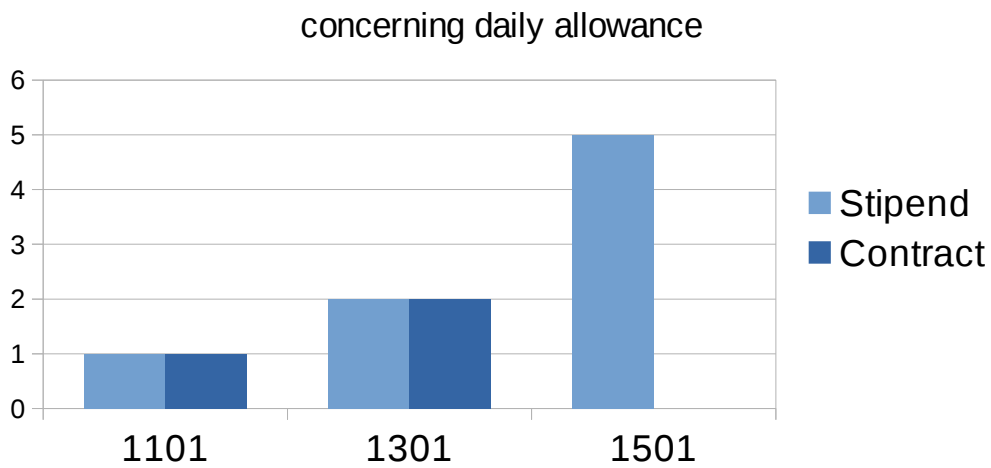
*Illustration 21: Subjects of the free comments and their absolute frequencies.*



*Illustration 22: Income distribution of doctoral researchers mentioning 'contract for all'. An interesting aspect is, that scholarship holders with a higher income mention this aspect more likely than those ones with a lower income. Also doctoral researchers with a working contract made comments concerning this subject.*



*Illustration 23: Institute affiliation of the doctoral researchers mentioning 'contract for all'.*



*Illustration 24: doctoral researchers mentioning of comments concerning daily allowance by income brackets.*

## 9. Conclusion

The results of this survey reveal pronounced differences between the individual employment possibilities of doctoral researchers participating in HGS-HIRE, leading to not equal working conditions for doctoral researchers across all institutes affiliated with the GSI and FAIR centers.

The purpose of the survey was to assess the current state of the employment situation of doctoral researchers within HGS-HIRE and its individual institutes. The doctoral researchers representatives promoted the survey extensively. Nevertheless, reaching all the doctoral researchers affiliated with the GSI and FAIR centers was structurally limited (e.g. mailing lists were nonexistent or did not contain all doctoral researchers) and sampling bias cannot be excluded; but, a total participation rate of 40.6 % shows a fair outreach and reduces the effect of internal sampling bias.

Enabling access to the survey with a non-personalized link has the advantage that participation is relatively easy but possesses the peril that the link might be misused by some receivers to participate in the survey multiple times or to make it available to persons not being part of the target group. It was not possible to guarantee that all potential participants received access to the survey with a personalized link.

This survey targeted all doctoral researchers, who were working on a project affiliated with the GSI or FAIR centers. This included participants being funded by the centers, participants with external funding, those working on collaborative projects or those with supervisors at a university. Thus, calculating a reference figure to determine the participation rate is difficult as the GSI and FAIR centers did not know how many doctoral researchers were affiliated with them at the time the survey was online. Consequently, the participation rate is based on the maximum number of doctoral researchers, which could have been potentially reached via the HGS-HIRE participants.

Despite the overall high proportion of contracts at the GSI, the majority of doctoral researchers were funded by stipends (illustration 4), and at some institutes, stipends were the predominant funding source. This is striking, especially considering that even though the net income of stipend holders appears higher on average the additional financial burdens for stipend holders drastically reduce the monthly income when compared to contracted doctoral researchers. From their monthly net income, stipend holders had to cover health insurance and other social insurances themselves, whereas contracted doctoral researchers share this with their employers. This inequality increases further for doctoral researchers with children as parental leave is lacking for stipend holders.

This situation is intensified by the fact that stipend holders do not have an employment status. Therefore, they lack social security; they do not get any unemployment insurance or pension savings, and are not insured for accidents when traveling to, from, or for work. Additionally, their general insurance status at work is often unclear.

As there may not be a working contract between a stipend holder and their center, stipend holders may not have equal access to infrastructure and facilities as peers who are contractually employed at the same center; this may result in (administrative) obstacles and/or slow the progress of their doctoral research.

Altogether, stipends are of significant social and financial disadvantage when compared to contracted doctoral researchers. Although stipend holders spent slightly more of their working time on their project and less on other tasks (teaching, supervision, equipment maintenance, etc.) than doctoral researchers with contracts, and although some stipend holders have longer-funded project durations than their peers with contracts, we doubt that the scientific reward stipends are commonly assigned to compensate for the structural inequality listed above.

Our results underline the existing demand to abolish stipends and to replace them with working contracts according to at least 65 % of the TVöD/L collective agreement to provide equal working conditions for all doctoral researchers affiliated with the GSI Helmholtz center and the FAIR facility for antiproton and ion research. This goal is in accordance with the goals of the Helmholtz Juniors of the Helmholtz association.