



Early Career Researchers perspective

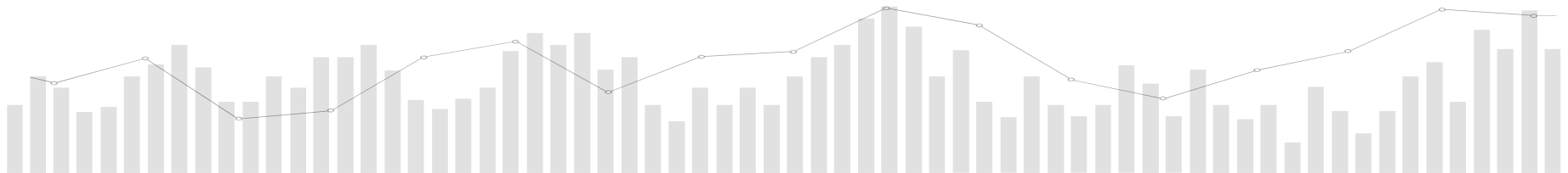
Dr. Eirini Tziaferi
**Senior Postdoctoral researcher NKUA-
Greece**





Outline

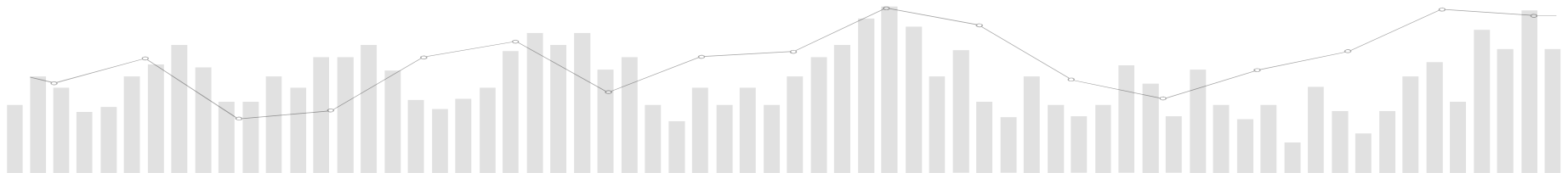
- › Details on the Survey
- › Demographic Data
- › Current Affiliation
- › Field of Research
- › Work Load
- › Work Satisfaction
- › Future Plans & Career Opportunities





Survey

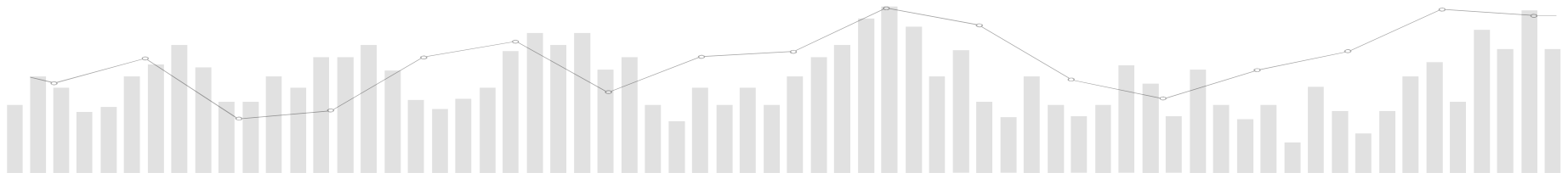
- **Presentation based on an anonymous survey.**
- It was developed by the Hellenic Society for the Study of High Energy Physics (HSSHEP)
- Survey sent to more than 150 early career researchers (ECR)
 - finally **37 participants.**
- These researchers are currently working or used to work during the last 7 years with a Supervisor that has a permanent position in a Greek University or Institute.





About us

Who answered this survey?

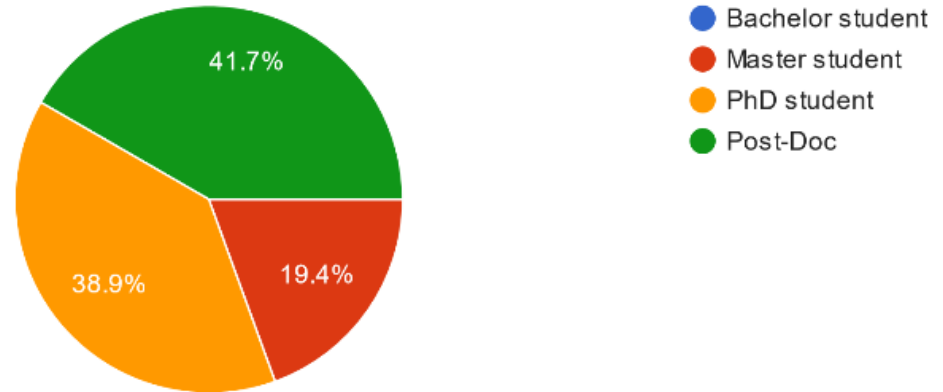




Demographic data

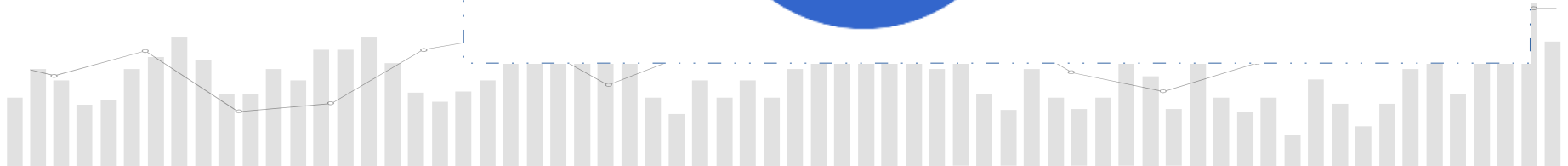
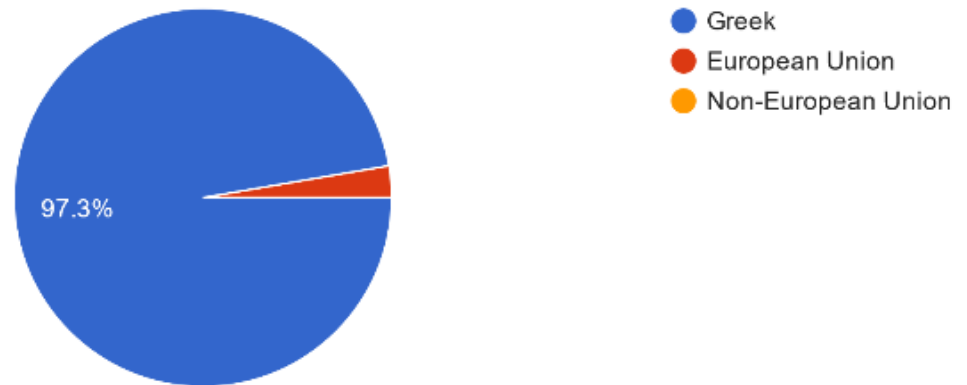
What is your current academic status?

36 responses



What is your Nationality?

37 responses



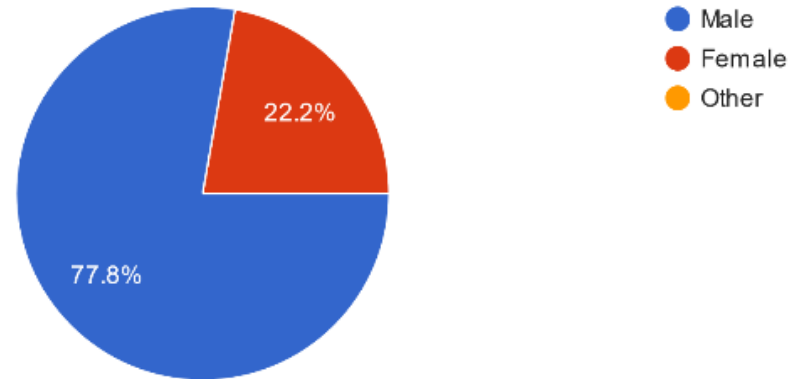


Demographic data

- Very few women in Physics although at the undergraduate level they are ~50%.

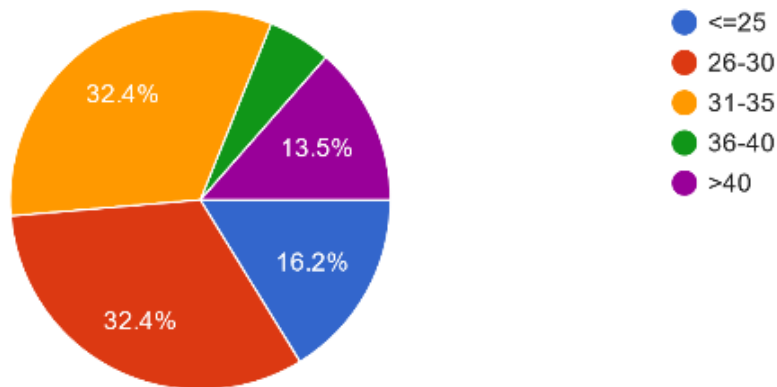
What is your gender?

36 responses



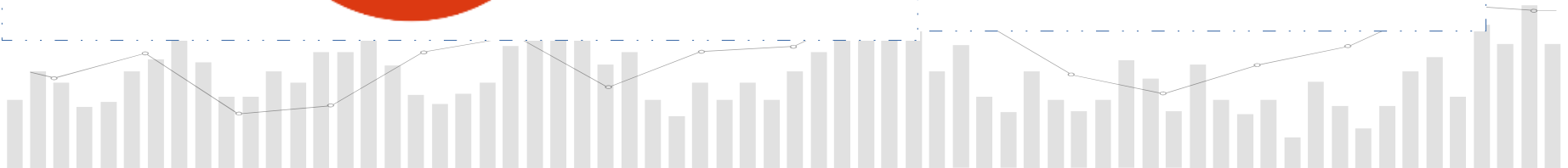
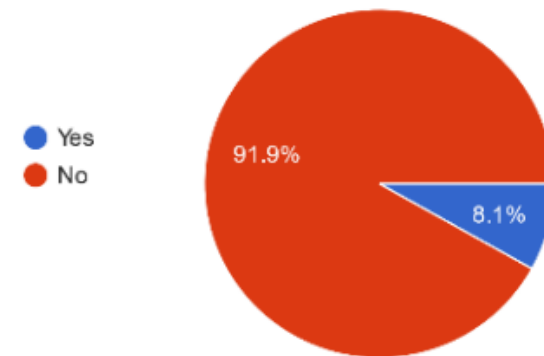
What is your age?

37 responses



Do you have children?

37 responses

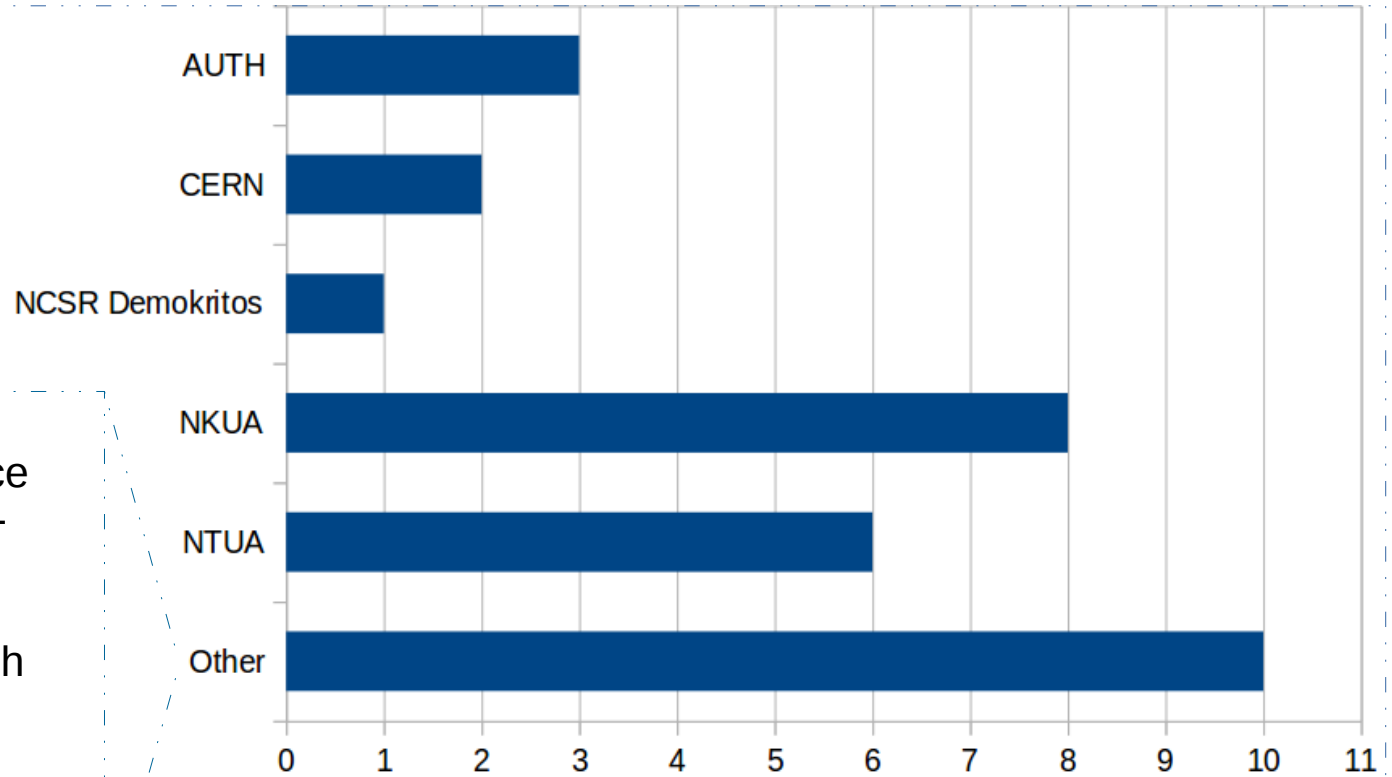




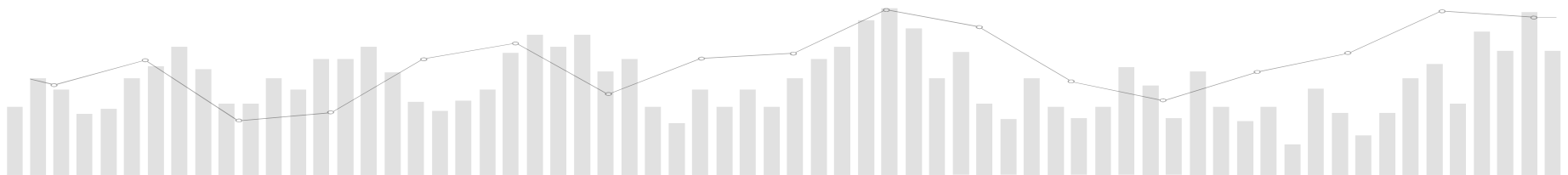
Affiliation

What is your affiliation?

➤ 27% of ECR are now employed abroad.



1. Nikhef (NL)
2. European Spallation Source
3. INAF- Astronomical Observatory of Rome
4. Oregon
5. Technical University Munich
6. University of Birmingham
7. University of Copenhagen
8. University of Jyväskylä
9. Warsaw University
10. Weizmann Institute of Science

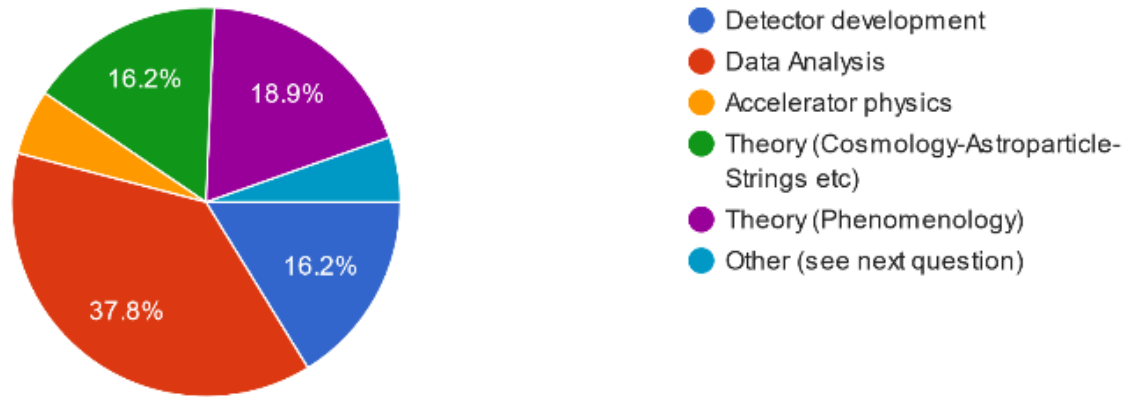




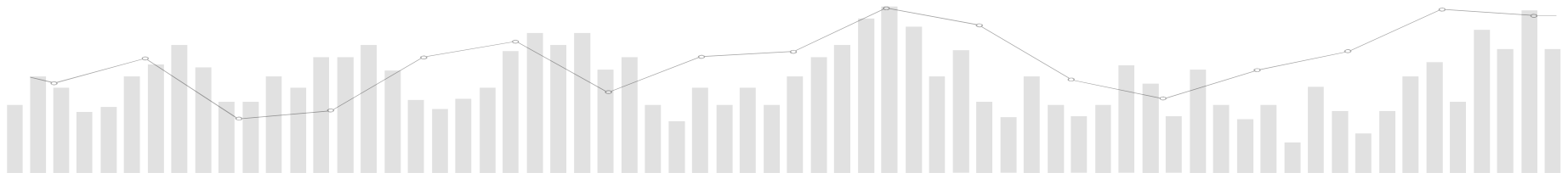
Research Field

What is your primary field of research?

37 responses

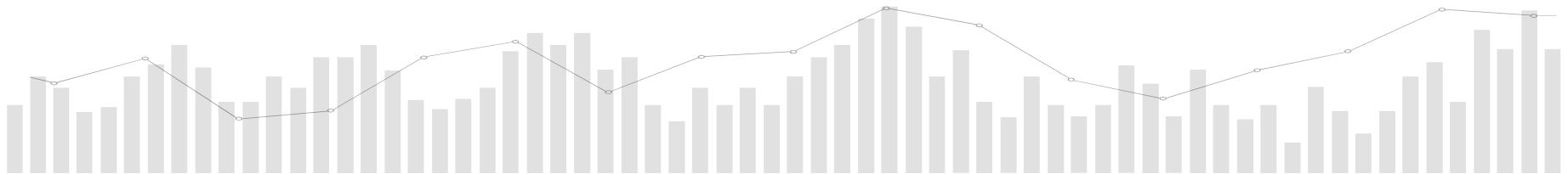


- Almost 40% of the ECR work on **Data analysis**.
- Relative large fraction, ~35%, working on **Theory**.
- Sizeable fraction, ~20%, working on **Detector development & Accelerator physics**.





Work load – Work satisfaction



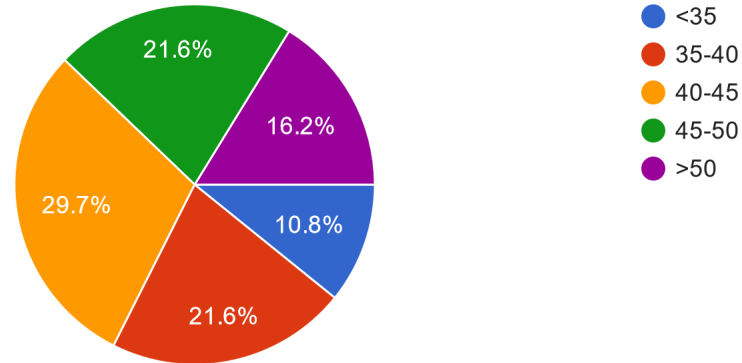


Work load

➤ ~70% work overtime once / twice per week or every day.

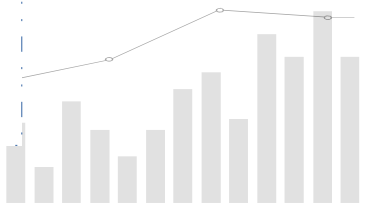
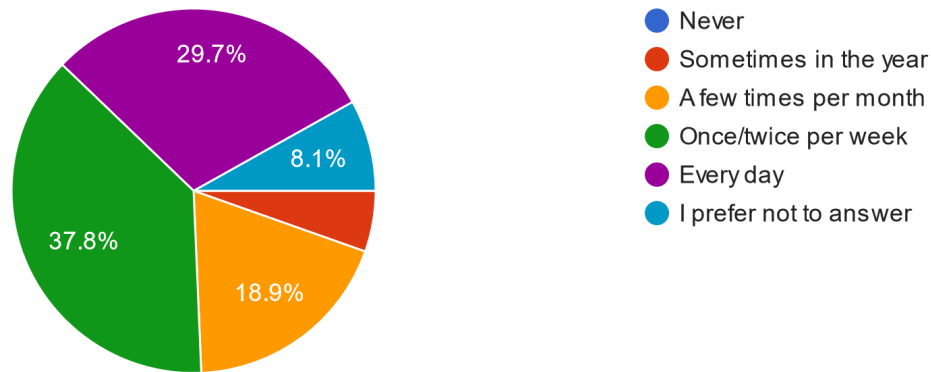
How many hours a week do you work?

37 responses



Do you work overtime?

37 responses



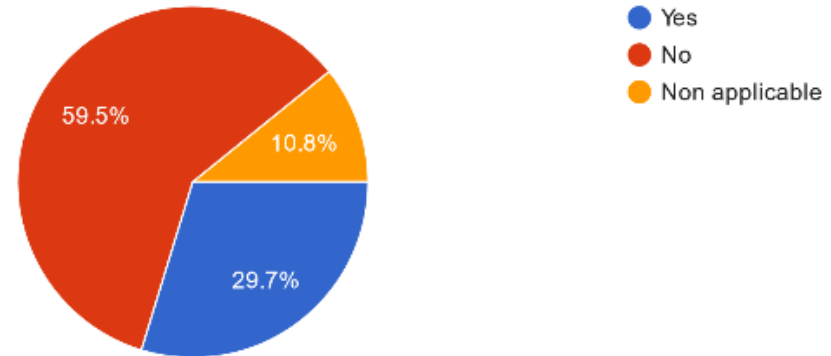


Work load

- 60% do not have to do duty work for their institute.
- 57% do not have to do service work for their collaboration but keep in mind that 35% work in Theory.

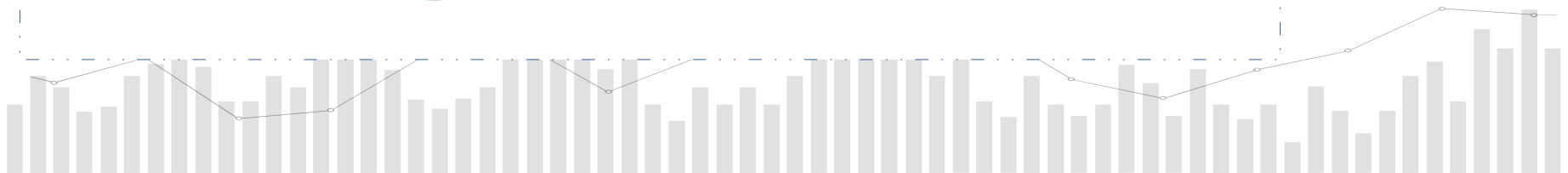
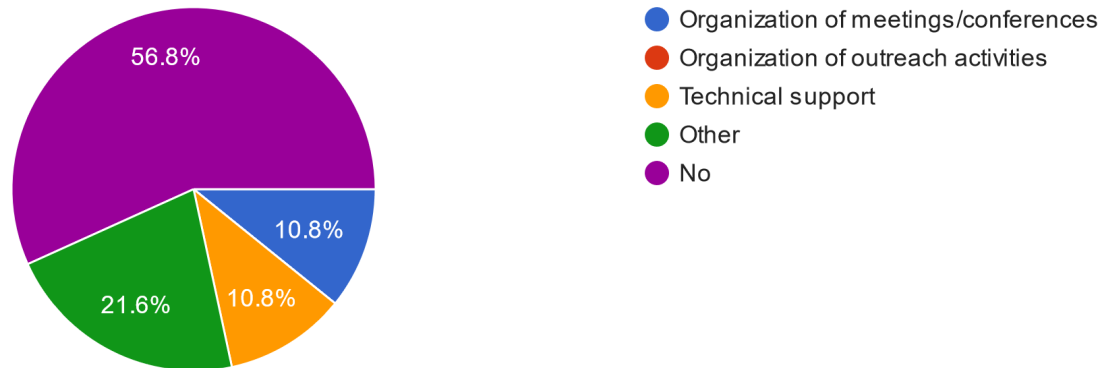
Do you have to do duty work for your institute?

37 responses



Do you have to do service work for your group or collaboration

37 responses

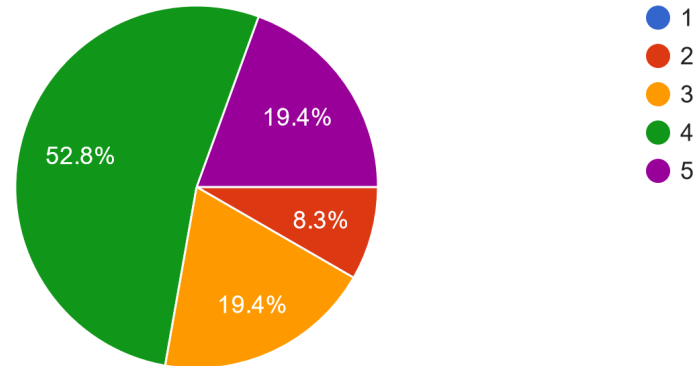




Work satisfaction

Are you satisfied with your work or studies? (1->Strongly disagree up to 5->Strongly agree)

36 responses

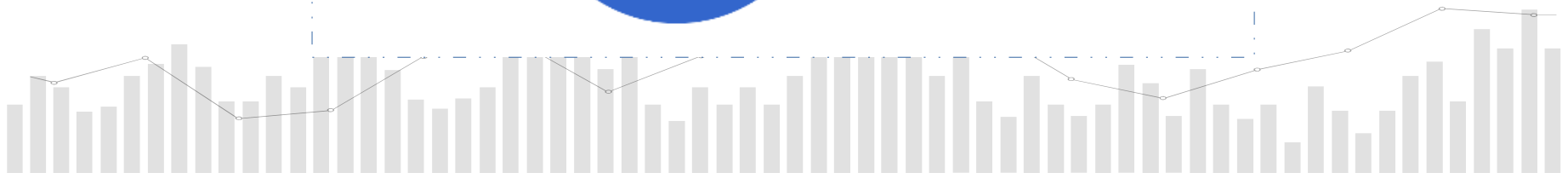
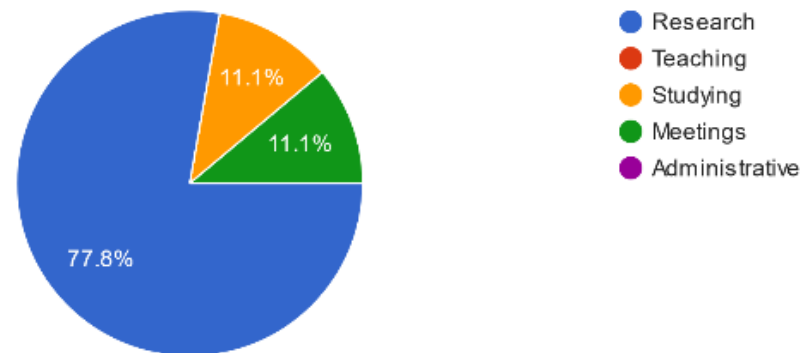


➤ In general there is very high satisfaction, 90%, from work and studies.

➤ ECR spend most of their time doing research, ~78%.

What takes the most time in your work?

36 responses



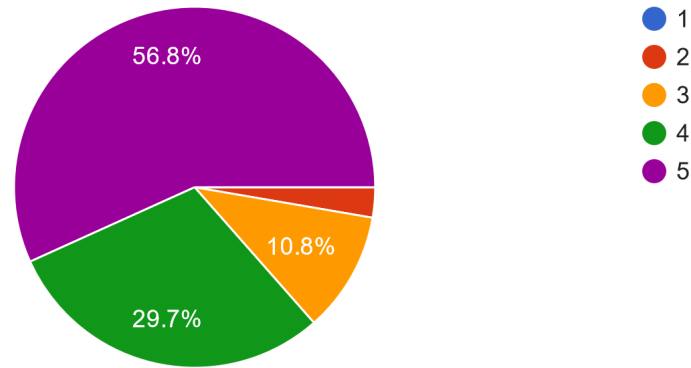


Academic research environment & visibility

- Overwhelmingly large fraction has the opportunity to communicate widely their ideas and present their work in international conferences.

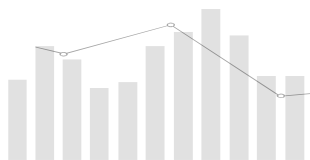
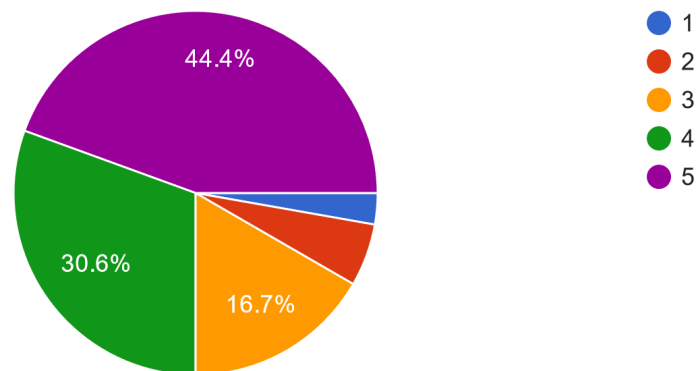
Do you have the opportunity to express your ideas within the group or collaboration? (1->Strongly disagree up to 5->Strongly agree)

37 responses



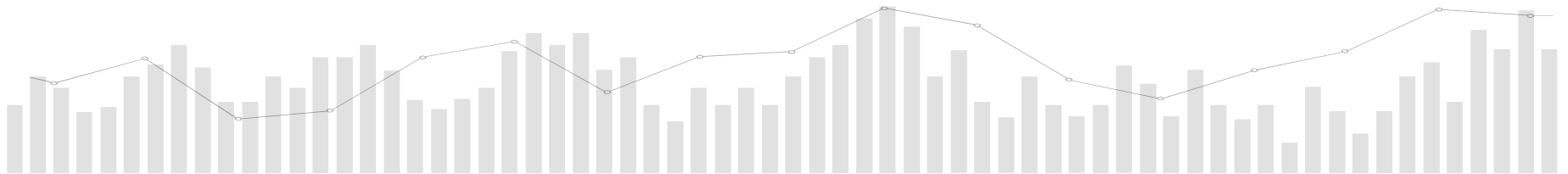
Do you have the opportunity to present your work in international conferences/meetings? (1->Strongly disagree up to 5->Strongly agree)

36 responses





Future plans

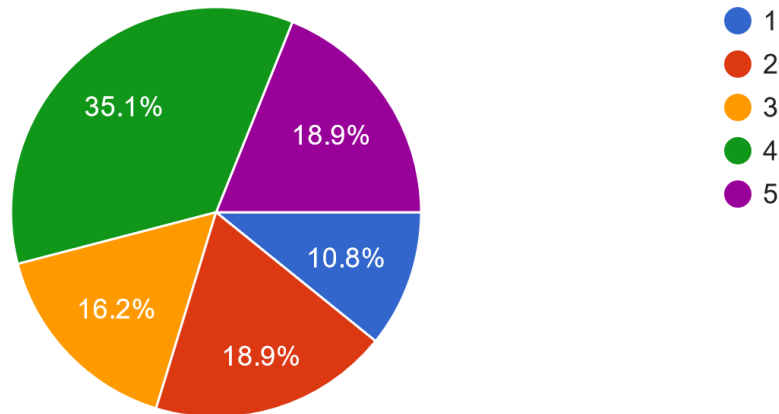




Career opportunities

Do you feel that you have career opportunities in your field? (1->Strongly disagree up to 5->Strongly agree)

37 responses



70% believe that there are several career opportunities in the field (index ≥ 3).

**Anything you have to say about career opportunities?
10 responses (see next slides)**





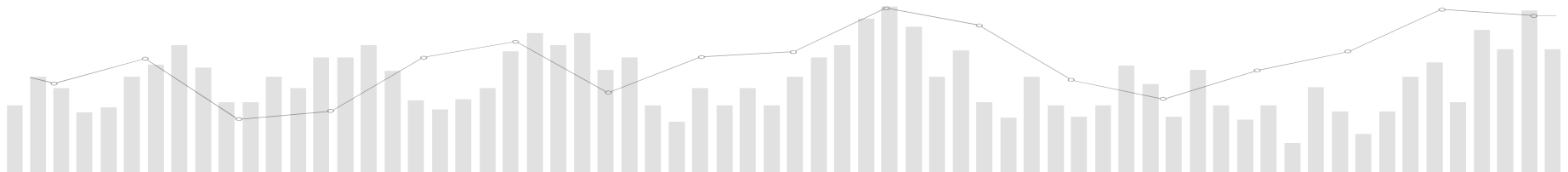
Career opportunities

Some remarks within Greece

- “Not great opportunities within the greek academic system.”
- “There are opportunities, but not in Greece.”
- “Career opportunities within Greek Universities cover extremely limited areas.”
- “Greek/Greece-affiliated list of HEP positions in a website/ mailing list should be established.”

Greece and Abroad

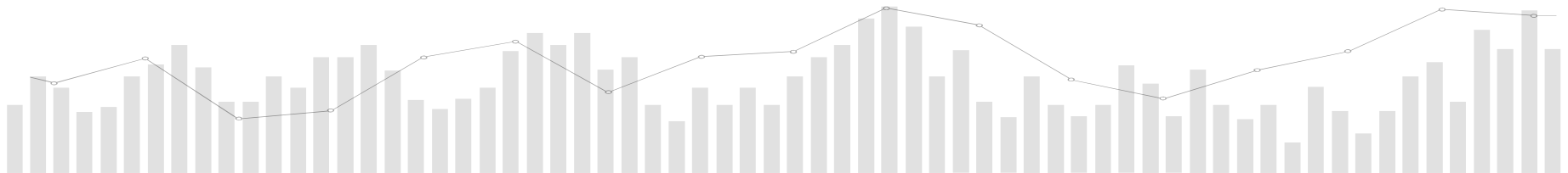
- “My answer related to the academic field. Outside academia things are much better. The vast majority of my coevals (not only Greeks) have quit physics after 1 or 2 post docs.”
- “I just feel that the Experimental Particle Physics Sector is kinda full.”





Difficulties encountered

- “You need to be ready to change countries every 2-3 years.”
- ‘It's tough to find a permanent position.’
- “There are many openings for postdocs every year worldwide, but very few new tenured or tenure-track positions. The pressure for constant relocations for postdocs is counter productive.”
- “My field of research is High Energy Theoretical physics and is or better seems less applicable on everyday life matters (which actually is completely true). Hence, society and governments devote less money on basic research which means that there are less career opportunities in my field compared to other field of research.”



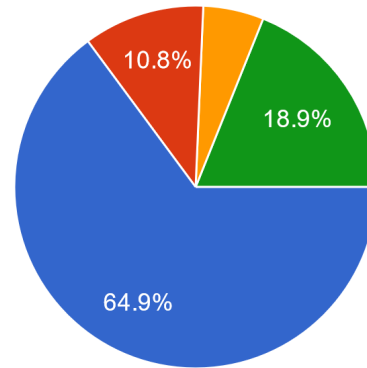


Future directions

- Strong interest to continue in academia.
- High flexibility to relocate.

Plans for future?

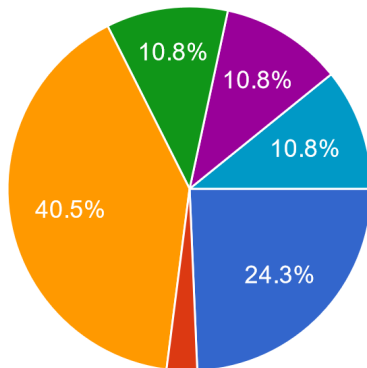
37 responses



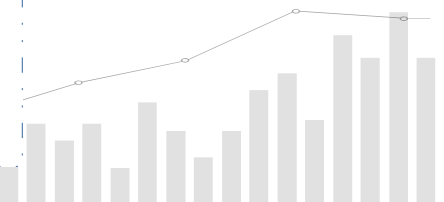
- Interested in continuing in academic field
- Interested in going to industry
- Interested in competitive salary
- I am not sure

Will you be willing to relocate?

37 responses



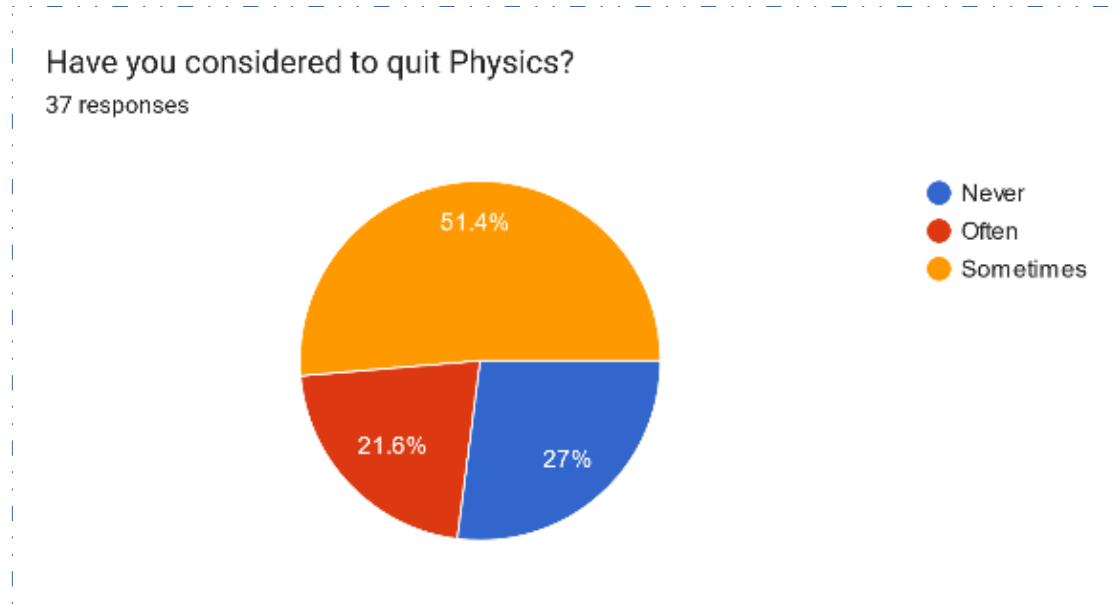
- Yes, to another country
- Yes, to another city in Greece
- Yes, depending on the new position
- Yes, depending on the new location
- Yes, depending on family needs
- No



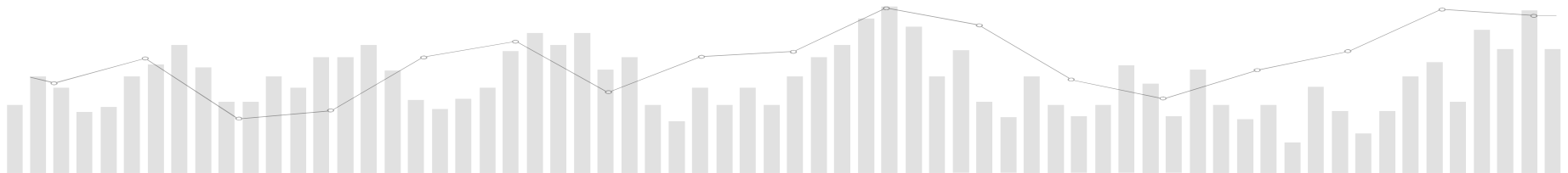


Desire to stay in the field

- Large percentage of participants have occasionally considered quitting Physics but only 22% do so often.
- ~30% has never consider quitting



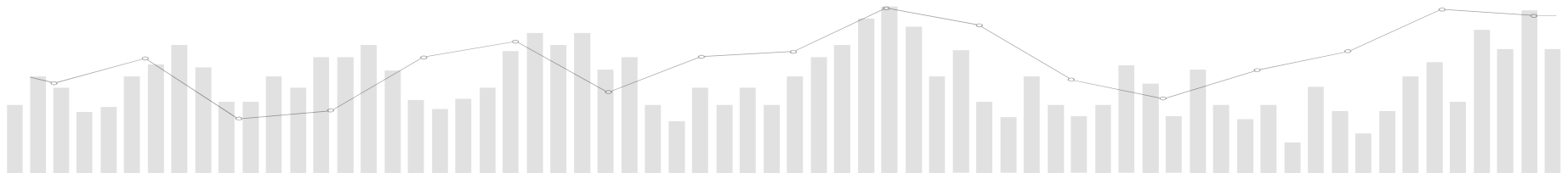
Reasons to quit?
18 responses (see next slide)





Reasons to quit

- “Other interests, gaining industry perspective and coming back to physics, salary.”
- “Unemployment in Greece and scarce opportunities.”
- “Feeling that I do not contribute to society.”
- “Early-career academics (postdocs) often have to relocate every 1-3 years to a new country to continue their work in physics. If I continue along this path, I might end up with no family, no stable job or income, and no place to call home by the time I'm 35-40 years old.”
- “The salary in this field is too low considering the risks one takes to stay in it.”
- “The community does not seem to be very supportive.”
- “Physics is a highly challenging field which can sometimes be mentally tiring.”
- “Large amount of pressure, stress and anxiety, with minimal free time. Always having multiple projects to work on, and having to attend many meetings at the same time. Lower salary than in industry. Lastly, I am not sure I would enjoy teaching as much as I enjoy doing research.”





Main message

- The survey was answered mainly by **male post-docs** and PhD students. They have Greek nationality and do not have children in their vast majority.
- 35% work in theory
- 70% work overtime either once/twice per week (40%) or everyday (30%).
- 50% do not have to do duty/service work for their institute/collaboration.
- Most of their time is devoted on research (70%).

- **There is a general sense of high satisfaction**, regarding work/studies, opportunities to express ideas, and present their work in international conferences/meetings (70-80%).

- In what **concerns future plans, things may differ:**
 - **70% feel that there are career opportunities.** Those that don't feel that way are mainly commenting about the situation in Greece.
 - **65% want to stay in academia** and are willing to relocate with their main criterion being the new position. A significant amount of participants have stated that they are willing to leave the country for a new position.
 - **Half of the participants have occasionally considered to quit Physics.** Main reasons are often relocation uncertainty, low salary and stress.