



ECFA

European Committee for Future Accelerators



A survey about the Italian Early-Career Researchers (ECR) situation

108° Congresso SIF

Milano, 16.09.2022

Francesco Brizioli - francesco.brizioli@pg.infn.it

On behalf of the italian members of the ECFA-ECR panel:

G. Benato (INFN-LNGS), F. Brizioli (INFN-PG and CERN), E. Diociaiuti (INFN-LNF),
G. Mancini (INFN-LNF), V. Zaccolo (University and INFN Trieste)



- The European Committee for Future Accelerators (ECFA) Early-Career Researchers (ECR) Panel was formed in late 2020, in order to represent European ECR members in ECFA-related discussions
- Diverse range of individuals (from students to non-tenured academics) with backgrounds ranging from engineering to physics
- Currently about 70 members from 27 countries and 3 major laboratories
- Plenary Panel: 3-4 meetings per year
- Working groups structure:
 - Networking for ECRs in Instrumentation
 - Career prospects: getting out of the limbo
 - Electron-Ion Colliders
 - Diversity in Physics Programme

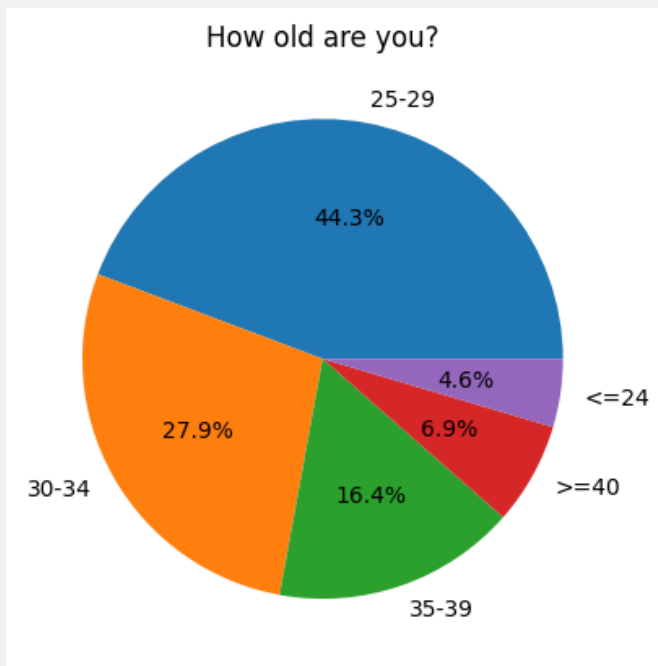
<https://ecfa.web.cern.ch/ecfa-earlycareer-researchers-panel>

- The results of this survey were firstly presented during the R-ECFA representatives visit to Italy (INFN) on March 4th 2022
- Interest in understanding the ECR perspectives about their work, their working conditions, the areas of interest, etc
- Addressed to **non-permanent researchers working at or associated to INFN**
- Impressive number of answers (**305**) in only 10 days
 - Sufficiently spread around the different INFN divisions and laboratories
 - 32.8% of the participants is INFN (non-permanent) employees
 - 65.2% is associated with INFN but works for University
 - 2% is associated with INFN but works for other institutions
- This means that non-permanent researchers are interested in these issues

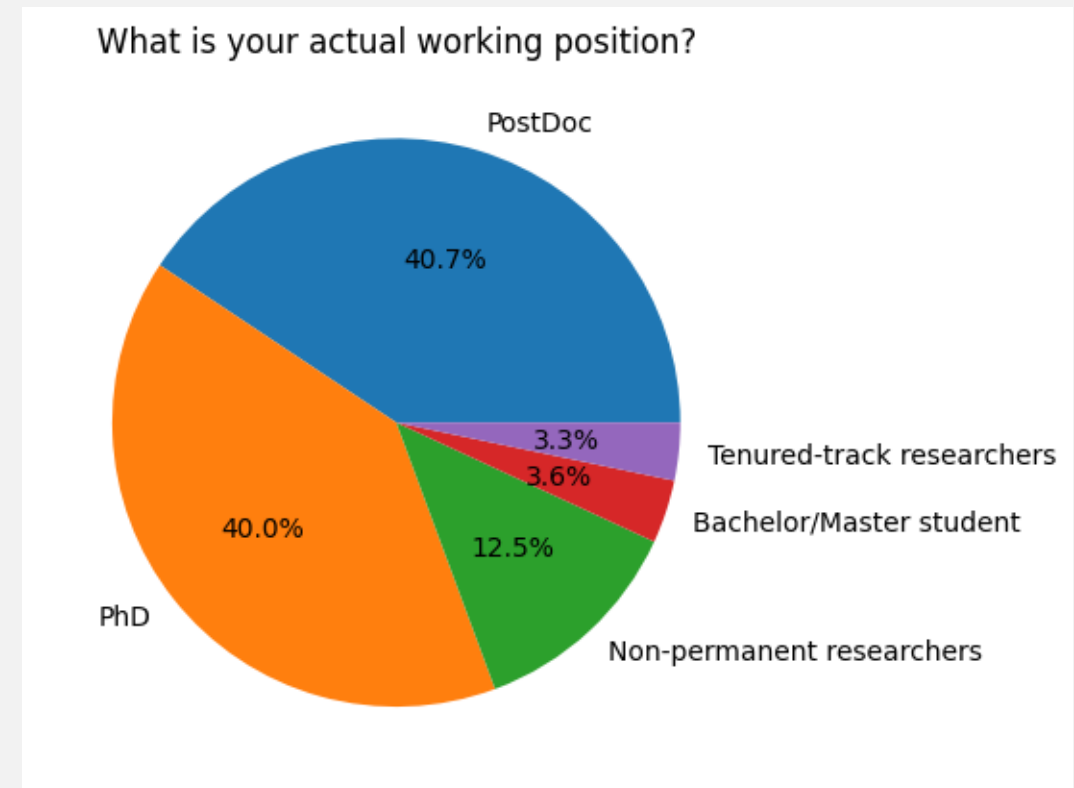
General information about the sample

3

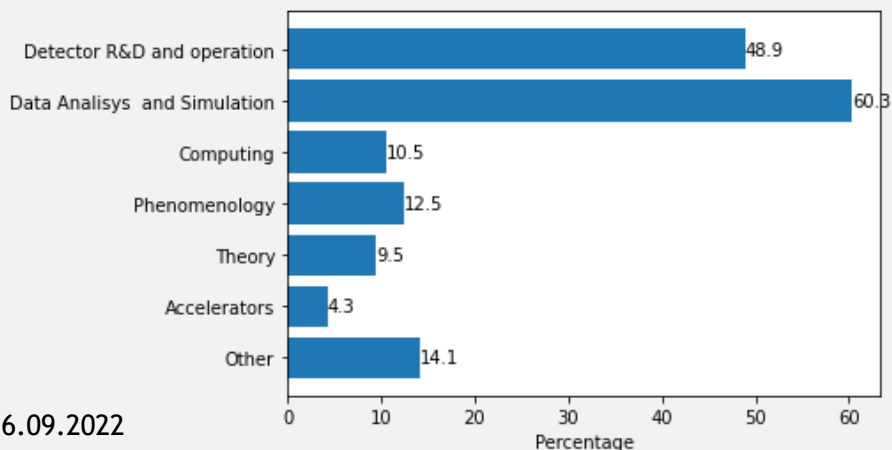
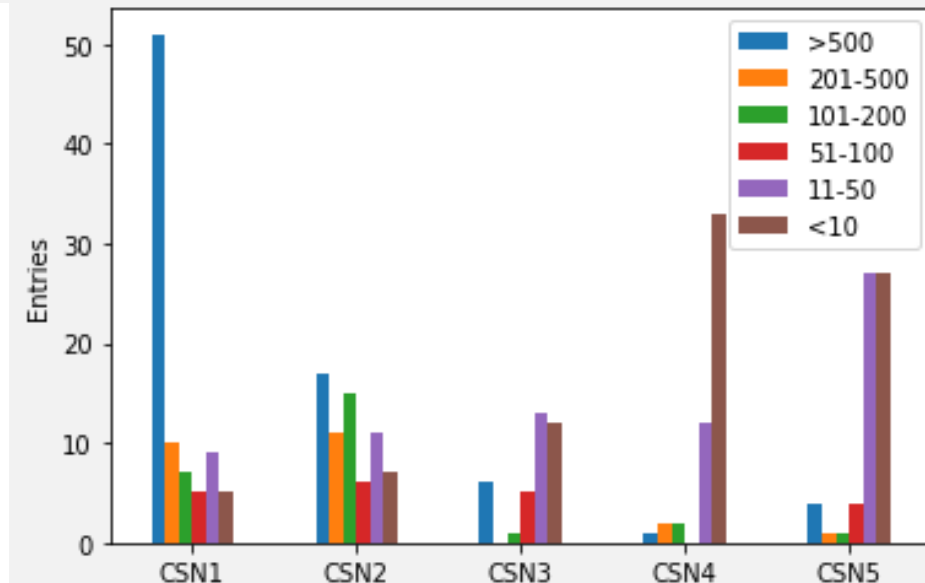
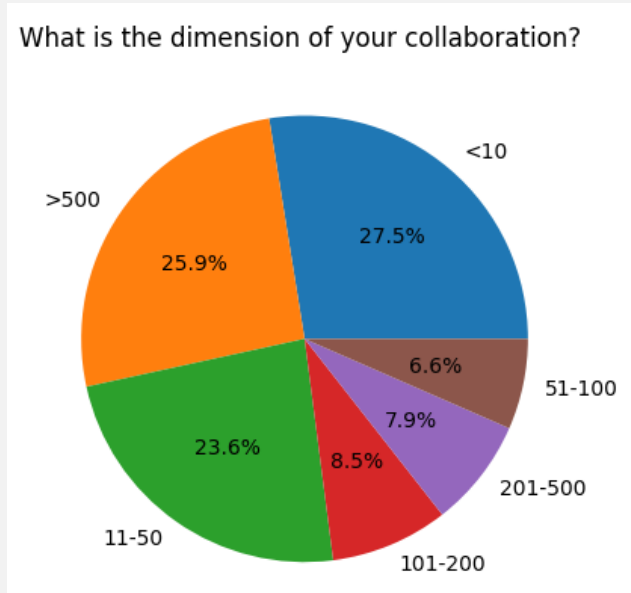
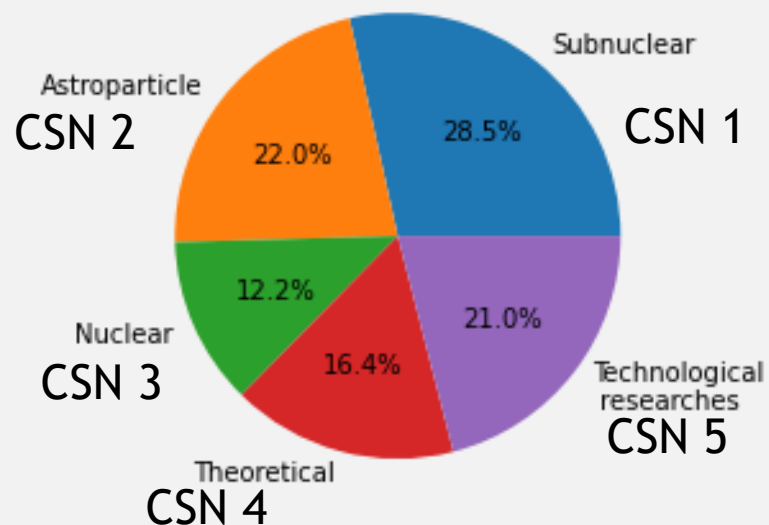
- 65.9%: men, 31.8%: women, 2% prefer not to answer, 0.3% other
- 94.1%: Italian, 3.3%: non-European, 2.3%: European but not Italian, 0.3%: prefers not to answer



- >50% of nonpermanent researcher is older than 30
- ~ 7% is older than 40!!!



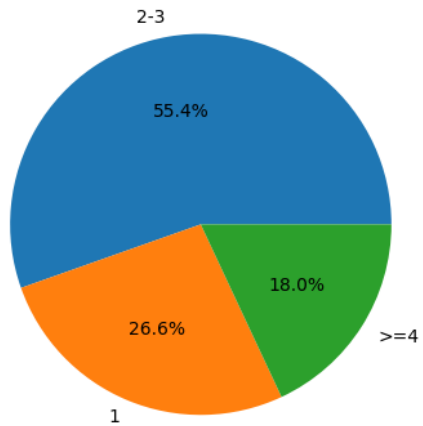
Well spread between the different CSN and different kind of activities



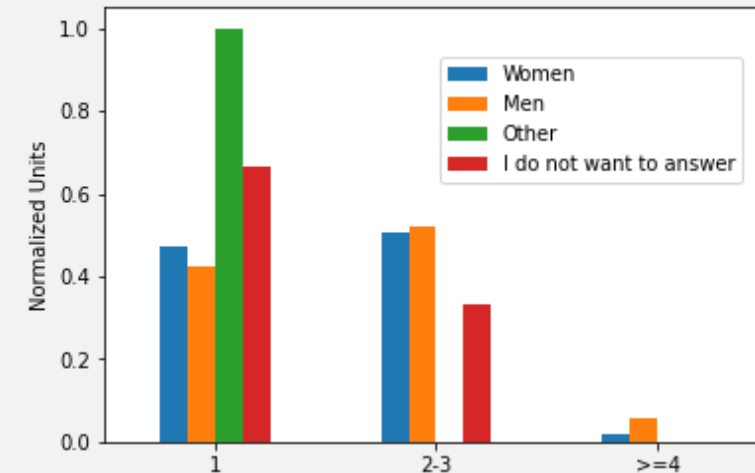
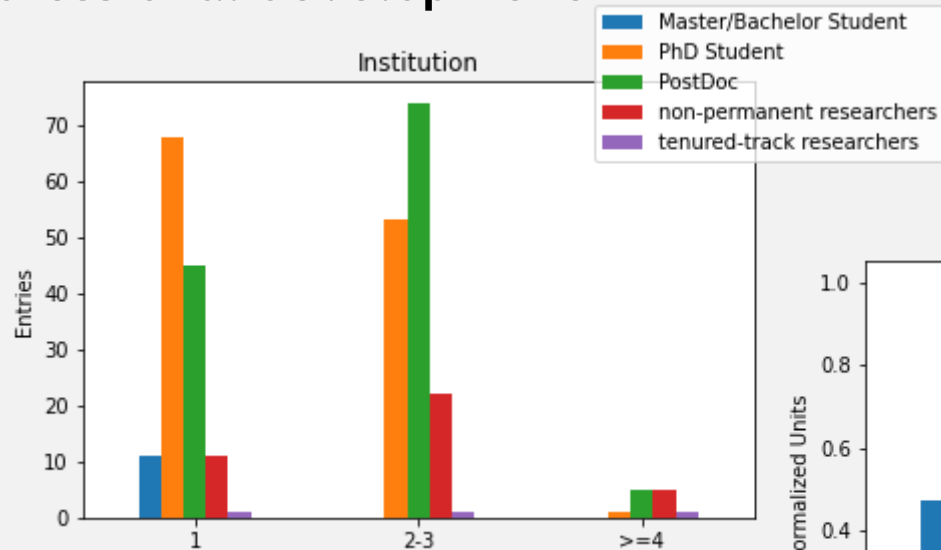
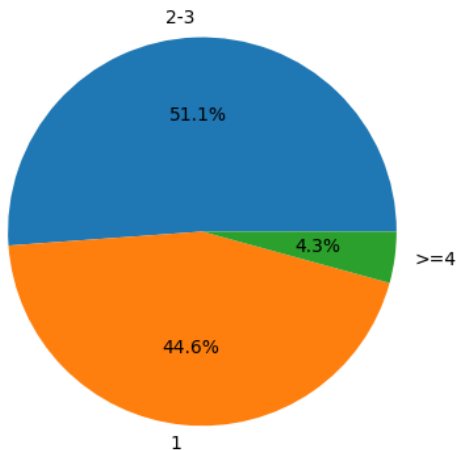
- 26% (~51%) is part of a collaboration with >500(<50) scientist
 - Surprisingly low (high) number
- Majority (64.6%) works weekly with <5 colleagues, 32.8 % with 6-15 colleagues

Researchers' mobility → Promote interactions and strengthen research collaboration and support professional development

how many Institution have you worked for since your BSc?



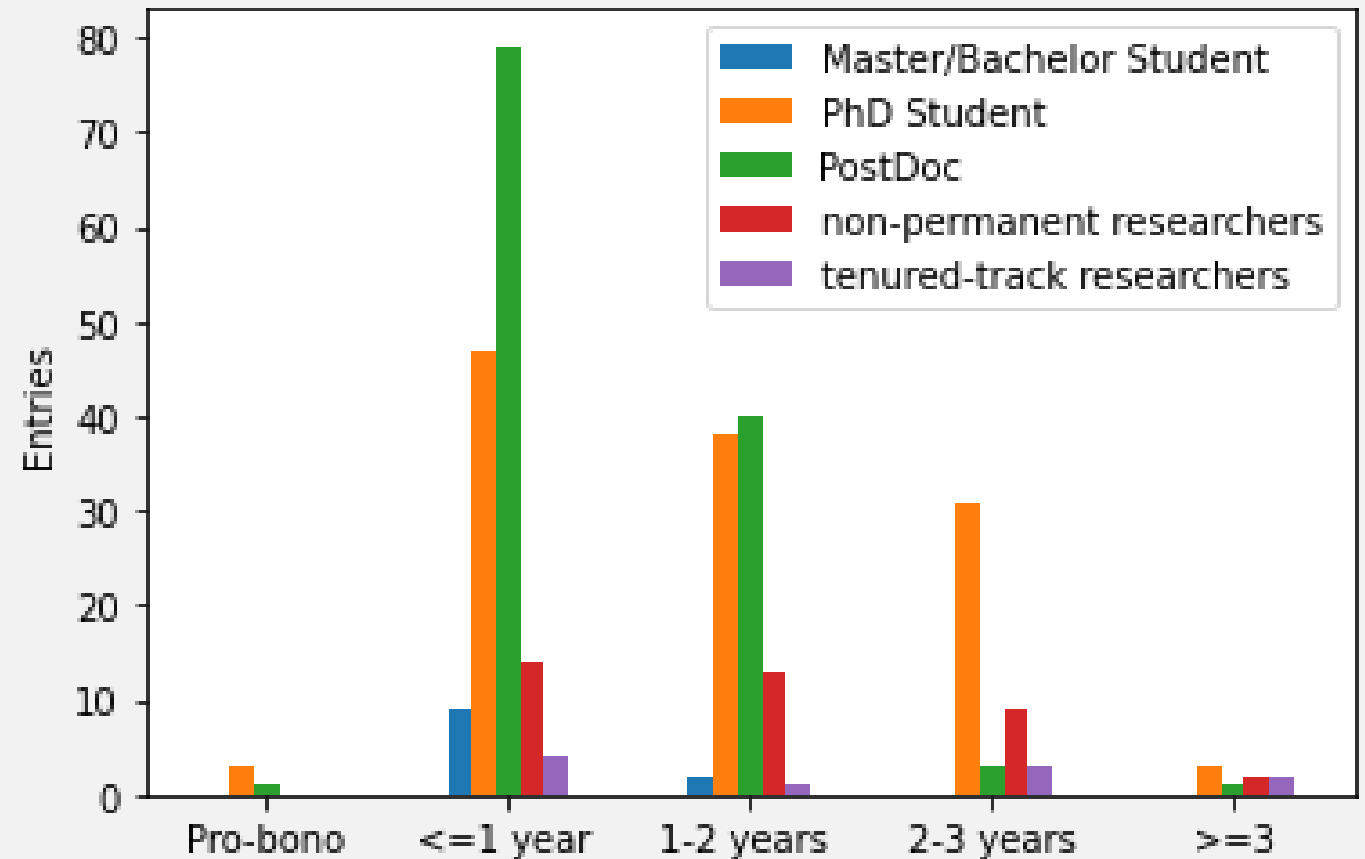
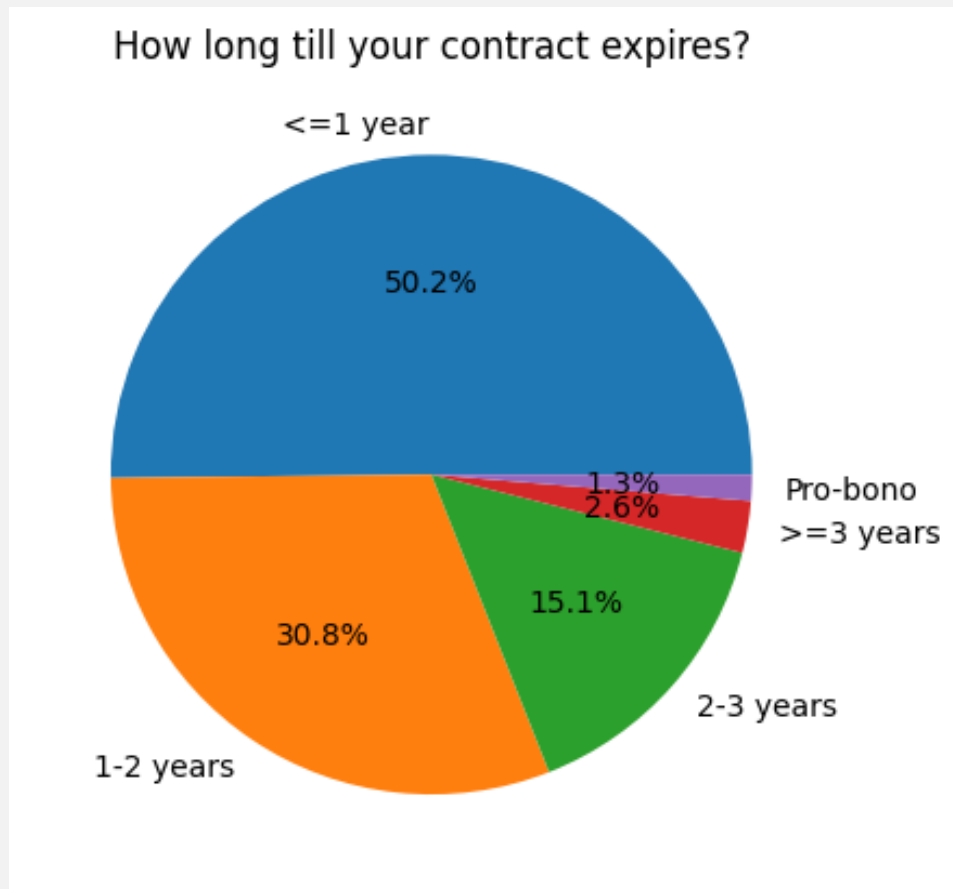
How many nations have you been working in since your BSc?



- More than 50% have been working in more than one country and for more than 1 Institution
- “1 institutes only” statistics is affected for 3.6% by bachelor/master degree students
- **!!! underestimation of “1 institutes only” statistics** not considering people working in the same place for both University and INFN (2 fake institutes)

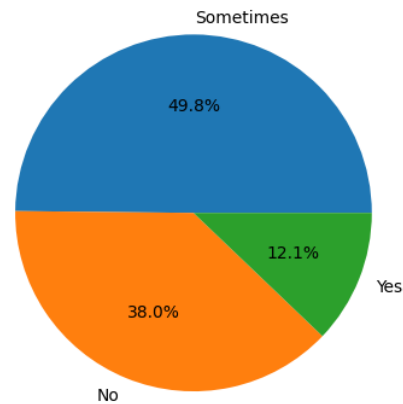
- Correlations with respect to position and gender is low (gender plot is normalized for each entry)

Very short-term perspectives for non-permanent researchers...

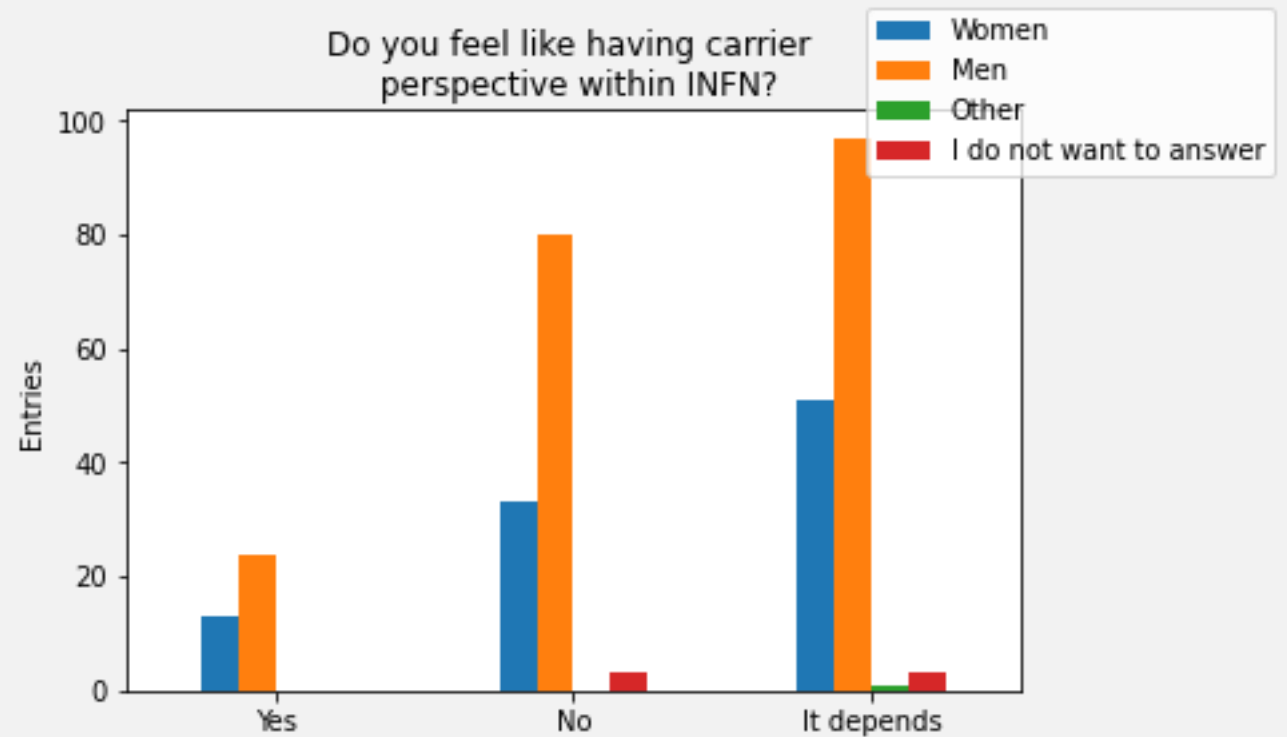
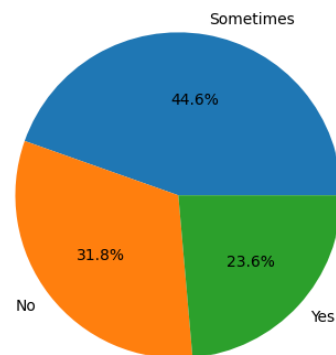


Discourage about their future carrier perspective within both INFN, Universities and Other Research Institutes

Do you feel like having carrier perspective within INFN?



Do you feel like having carrier perspective within University?

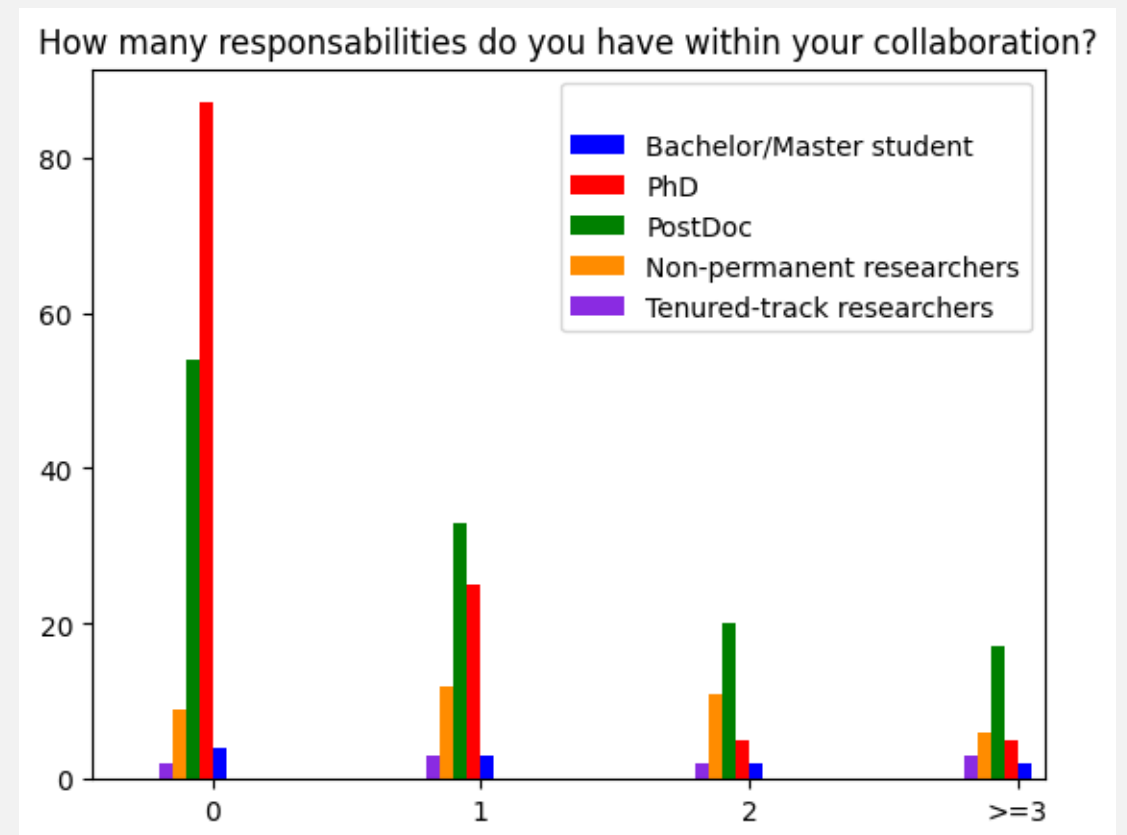
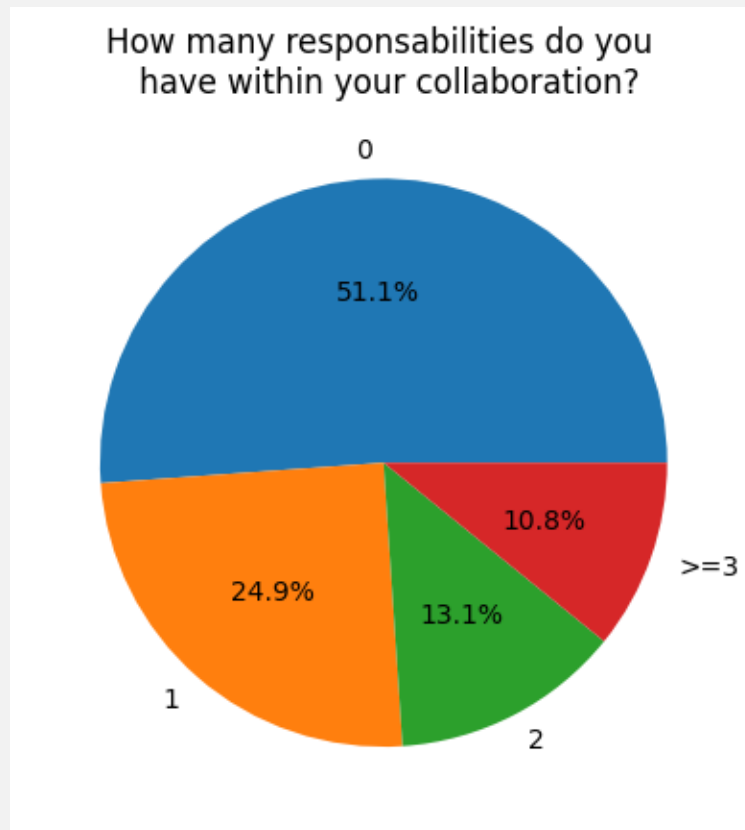


- No gender correlation, small bias for INFN scientists with respect to University/Other Institutes

Having “official” responsibility is fundamental for ECR (great boost to cv)

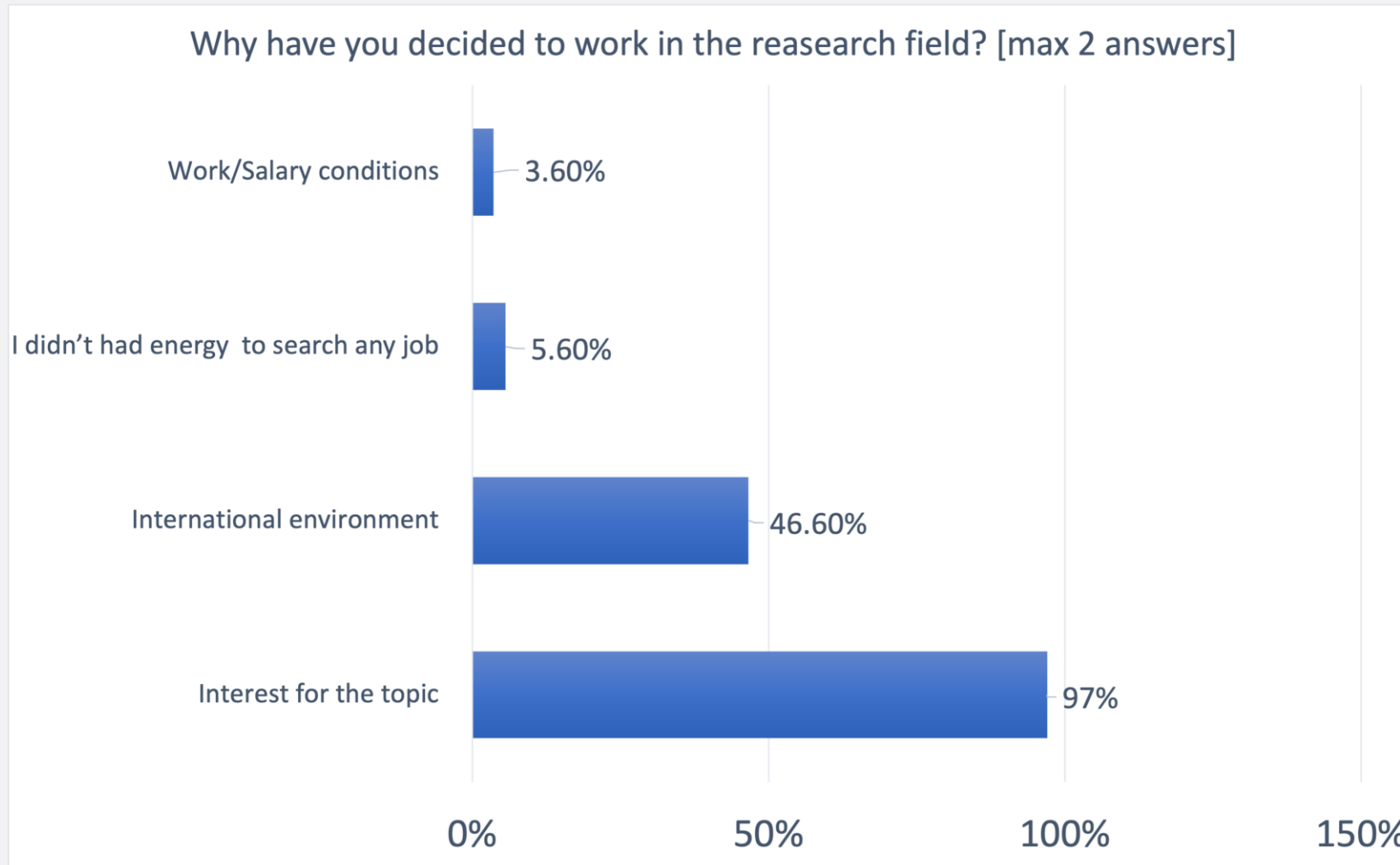
- Small responsibility (even for tenured-tracks) → Why?

We do an important part of the job!

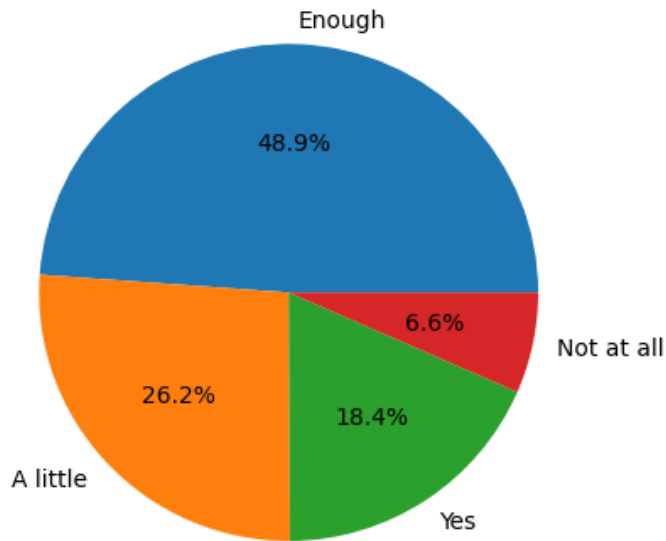


Motivation for doing research

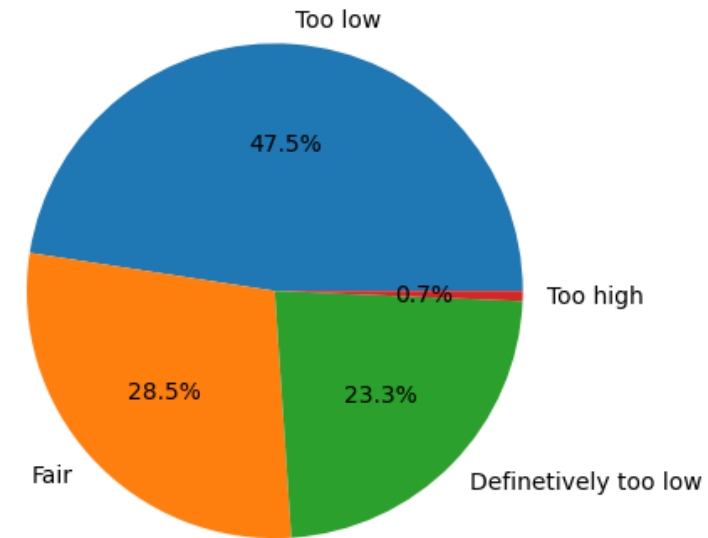
9



Do you think your work is enough acknowledged?



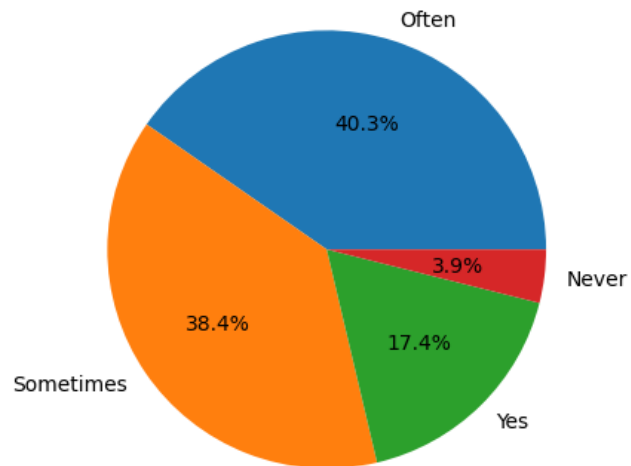
Do you think your salary is appropriate?



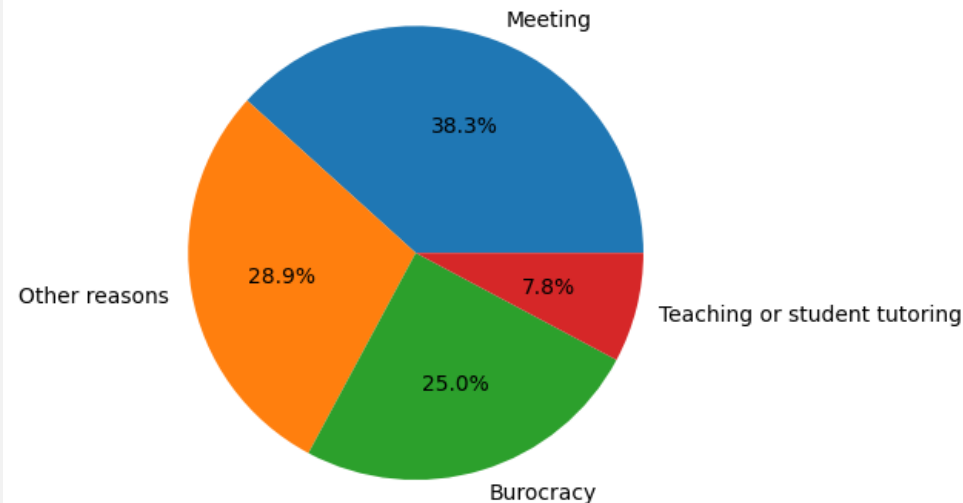
- ~32% of ECR think that recognition of their work is **insufficient or null**
- ~70% of ECR think that their **salaries are low**

Hard work, too many meetings and a lot of stress!

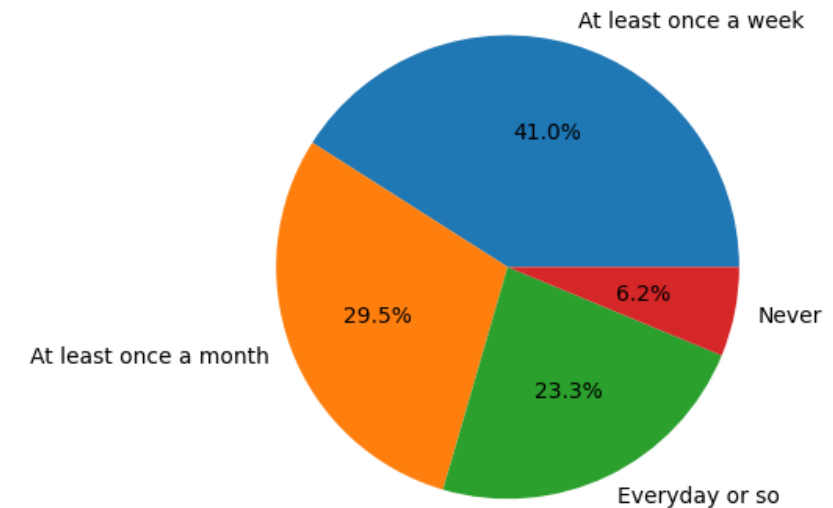
Do you have the impression of having enough time for your research activity?



How do you spend your work time?



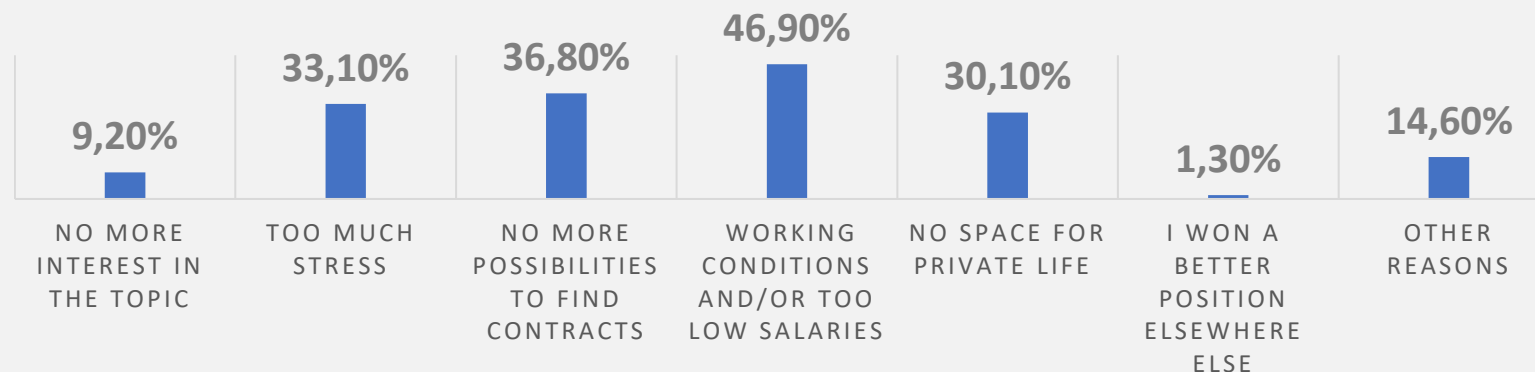
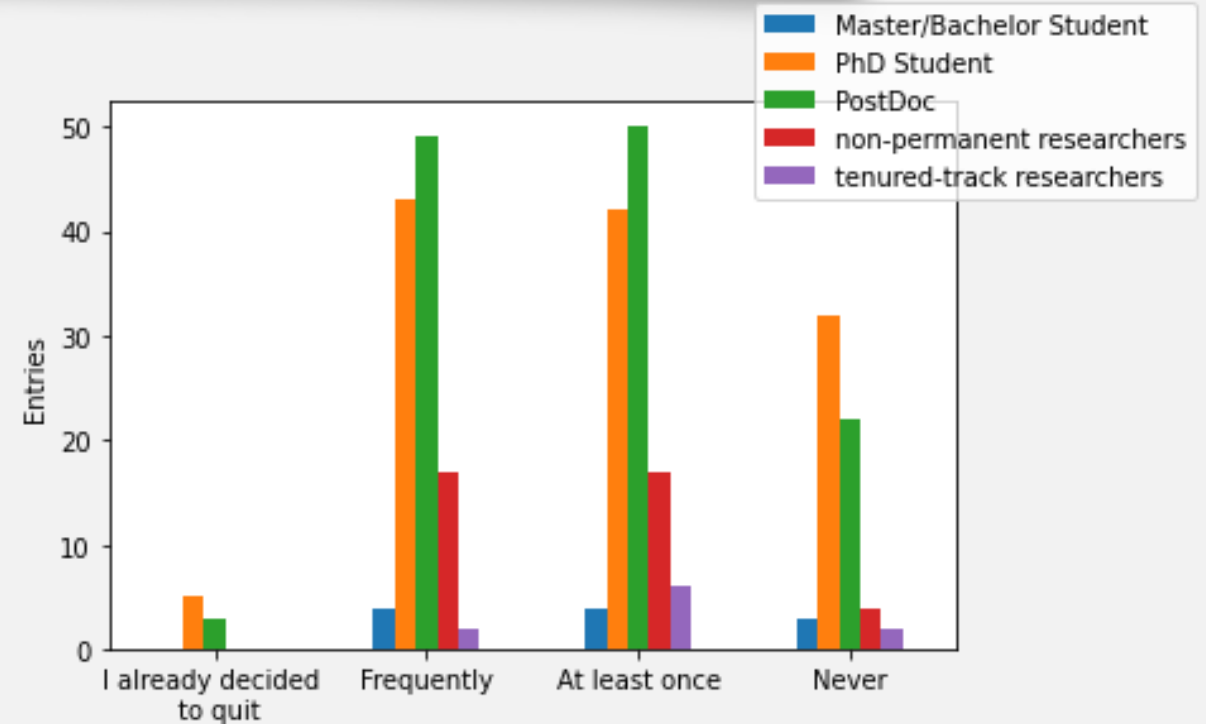
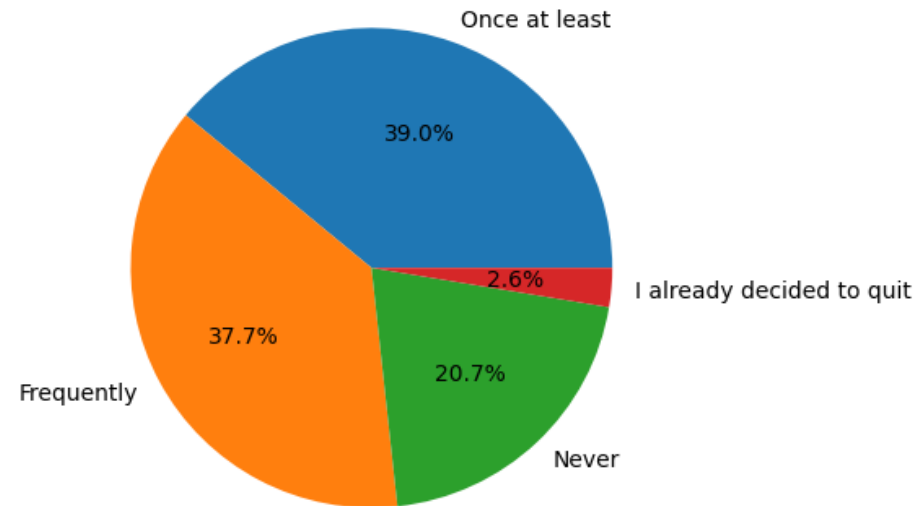
Do you feel stressed?



Quitting research

12

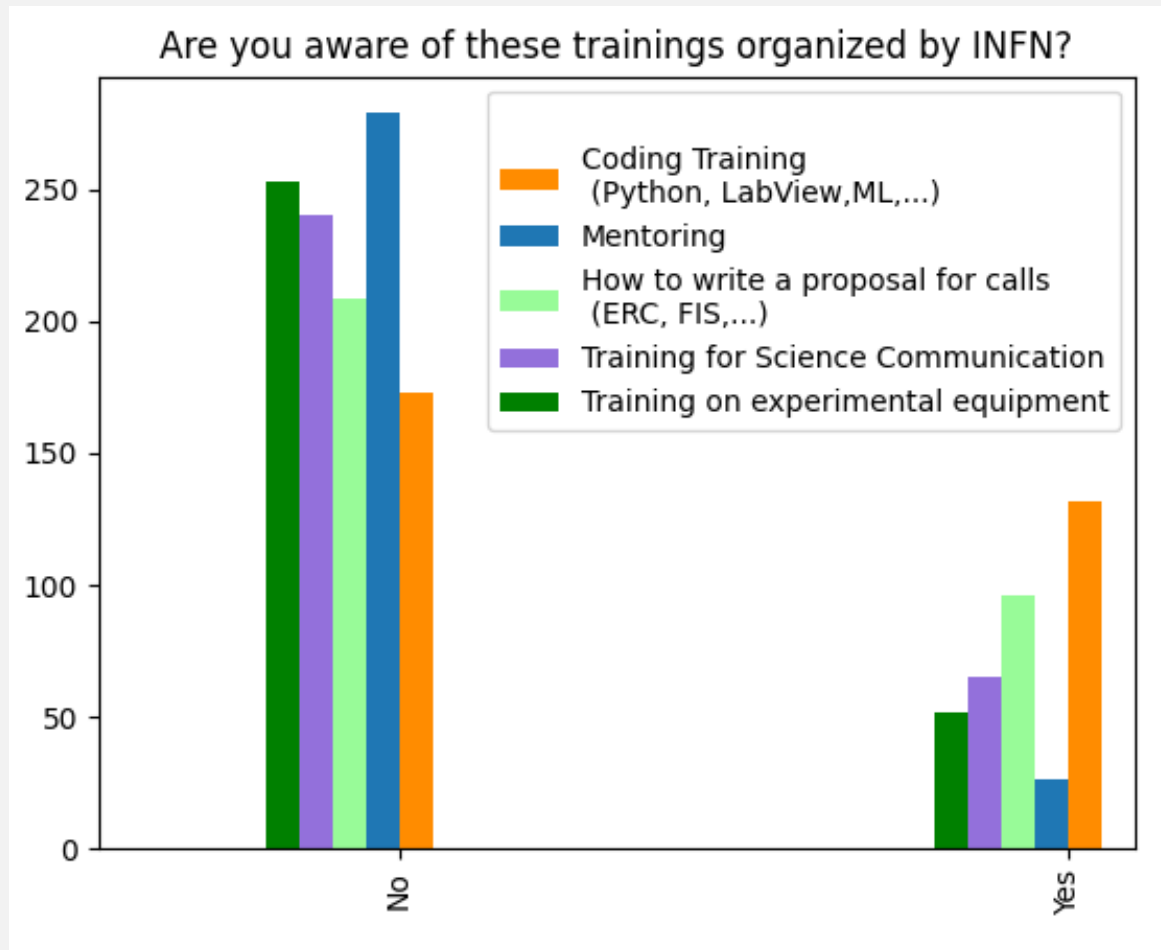
How many times have you seriously thought about quitting Physics and changing life?



Are ECR informed about INFN trainings?

13

- There are many trainings organized by INFN but often ECR are not aware of them!



- Trainings are organized for employees, while Post-Docs and PhD are only considered as associated
- Informed only if colleagues share the info!

Some good news to conclude...

14

Even if research seems not to be an easy career path the majority of the INFN ECRs are satisfied with their work!

