



# Quinto Incontro Nazionale di Fisica Nucleare INFN 2022

## ECFA Early-Career Researchers Panel: Overview of activities and outlook

Valentina Zaccolo  
University and INFN – Trieste  
on behalf of the Italian representatives

# Past activities

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 74 members from 27 countries and 3 major laboratories

## Defined panel structure and started activities

- Hold ~3 meetings per year
  - January - to review and plan for the year
  - May / June - ahead of PECFA meeting in July
  - September - ahead of PECFA meeting in November
- Meetings are handled by the Organising Committee

# Past activities

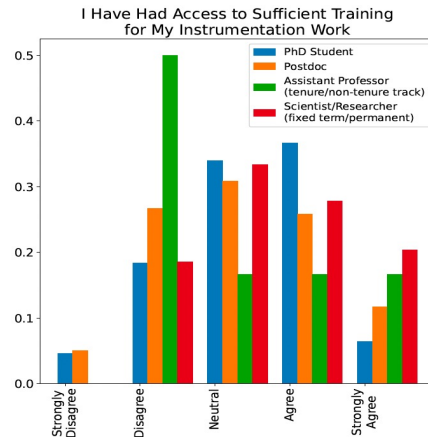
ECR Panel was invited by the ECFA Detector R&D Roadmap conveners to collect feedback from the European ECR community.

A working group within the ECFA ECR panel

1. held a Townhall Meeting (April 2021)
2. designed and broadly circulated a survey

473 participants to the survey

Among other answers, the lack of accessibility to training and facilities for under-resourced regions was highlighted.



Results of the 2021 ECFA Early-Career Researcher Survey on Training in Instrumentation

The ECFA Early-Career Researcher (ECR) Panel

July 14, 2021

The European Committee for Future Accelerators (ECFA) Early-Career Researchers (ECR) Panel was invited by the ECFA Detector R&D Roadmap conveners to collect feedback from the European ECR community. A working group within the ECFA ECR panel held a Townhall Meeting to get first input, and then designed and broadly circulated a detailed survey to gather feedback from the larger ECR community. A total of 473 responses to this survey were received, providing a useful overview of the experiences of ECRs in instrumentation training and related topics. This report summarises the feedback received, and is intended to serve as an input to the ECFA Detector R&D Roadmap process.

<https://arxiv.org/abs/2107.05739>

# ECR Panel working groups

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## 1. **Networking for ECRs in Instrumentation**

to establish new networking opportunities on instrumentation

- This WG organises a series of events bringing together senior and early career physicists, also Townhall open to everybody
- First event: Panel discussion (on zoom) in February 2022

## 2. **Career prospects: getting out of the limbo**

to discuss all important aspects of ECR career development

## 3. **Electron-Ion Colliders**

to raise awareness of EIC physics

## 4. **Diversity in Physics Programme**

to promote diversity in European experimental programmes

# ECR Panel working groups

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to discuss all important aspects of ECR career development

## 3. Electron-Ion Colliders 💪

to raise awareness of EIC physics

## 4. Diversity in Physics Programme 💪

to promote diversity in European experimental programmes

# The Italian representatives

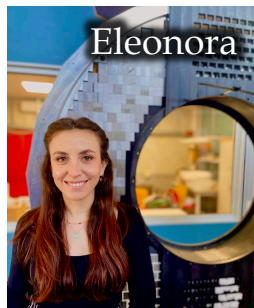
## In CSN1

- Francesco Brizioli (PostDoc Perugia - NA62 )
- Eleonora Diociaiuti (PostDoc Frascati - Mu2e)  
PECFA member for the ECR
- Giada Mancini (TD Frascati - ATLAS)



## In CSN2

- Giovanni Benato  
(Research Fellow LNGS  
- experimental neutrino physics)



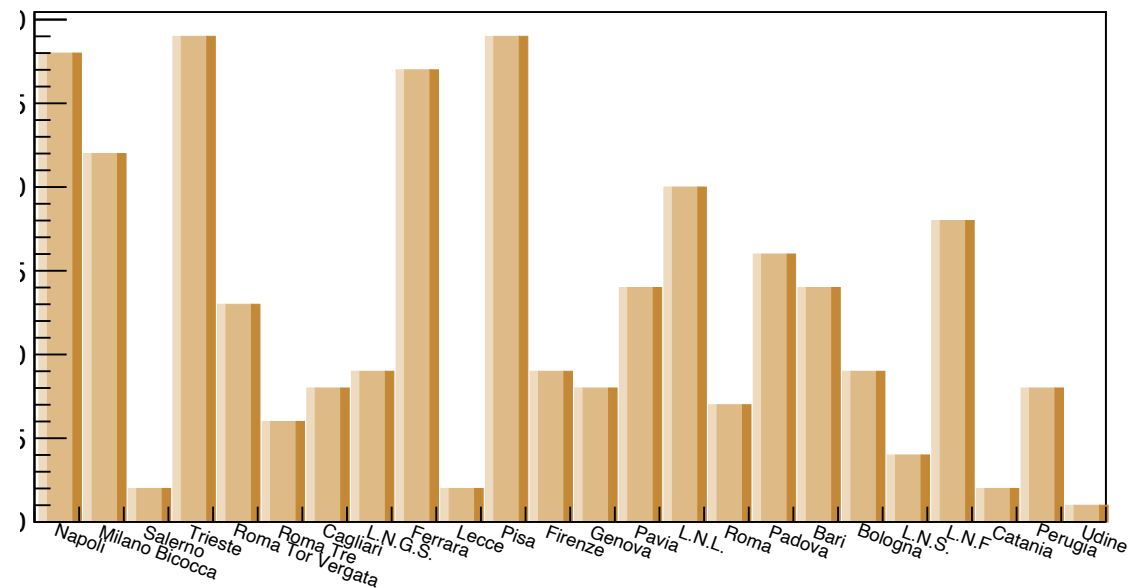
## In CSN3

- Valentina Zaccolo  
(RTDb Trieste - ALICE) member of the ECR organising committee

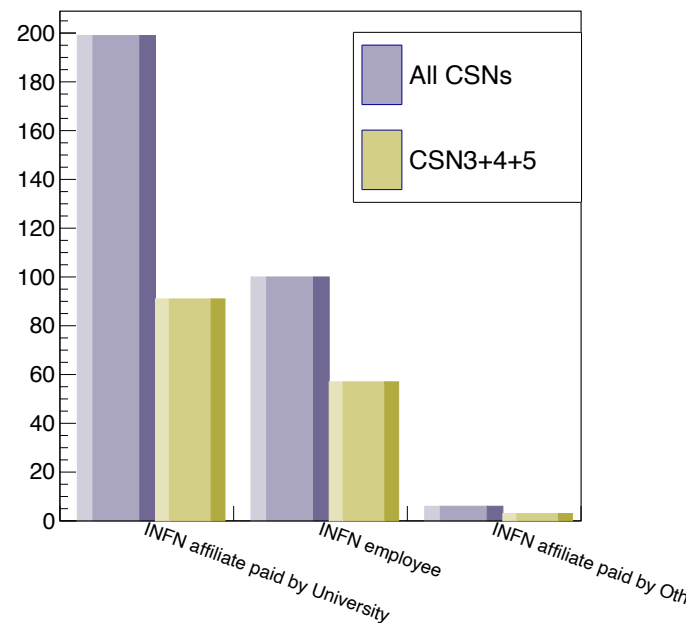
# INFN Survey: respondents

After Instrumentation survey, we created a survey on how the Italian ECRs feel about their work: 305 answers (total of ~2000 non-permanent people) in only 10 days from ~ all INFN Units

INFN unit



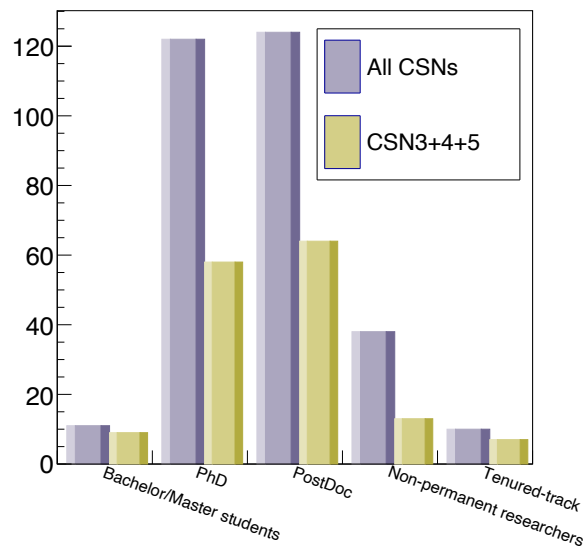
Affiliation



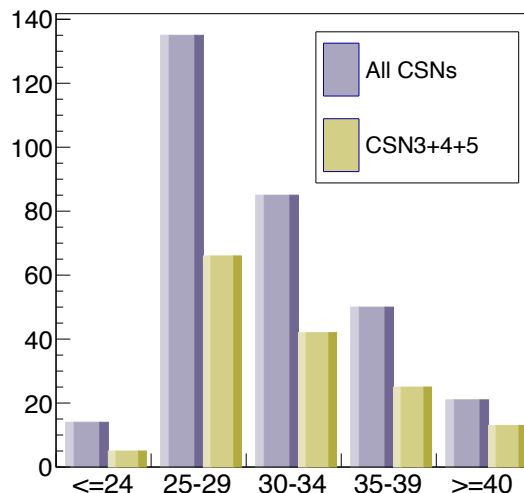
# INFN Survey: respondents

Most people are male, PhDs + PostDocs (AdR) in the age range 25 to 34

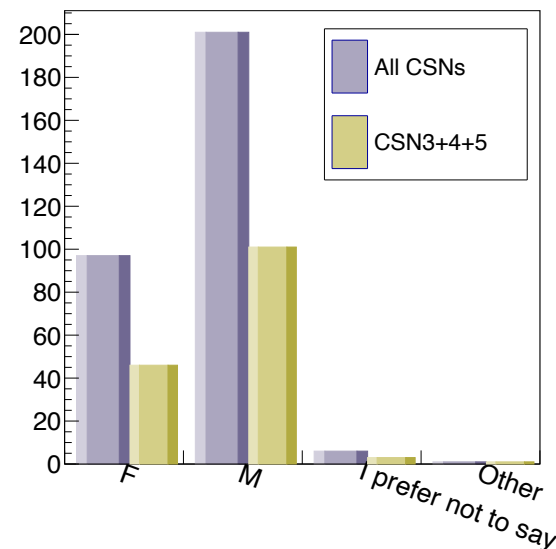
Position



Age



Gender

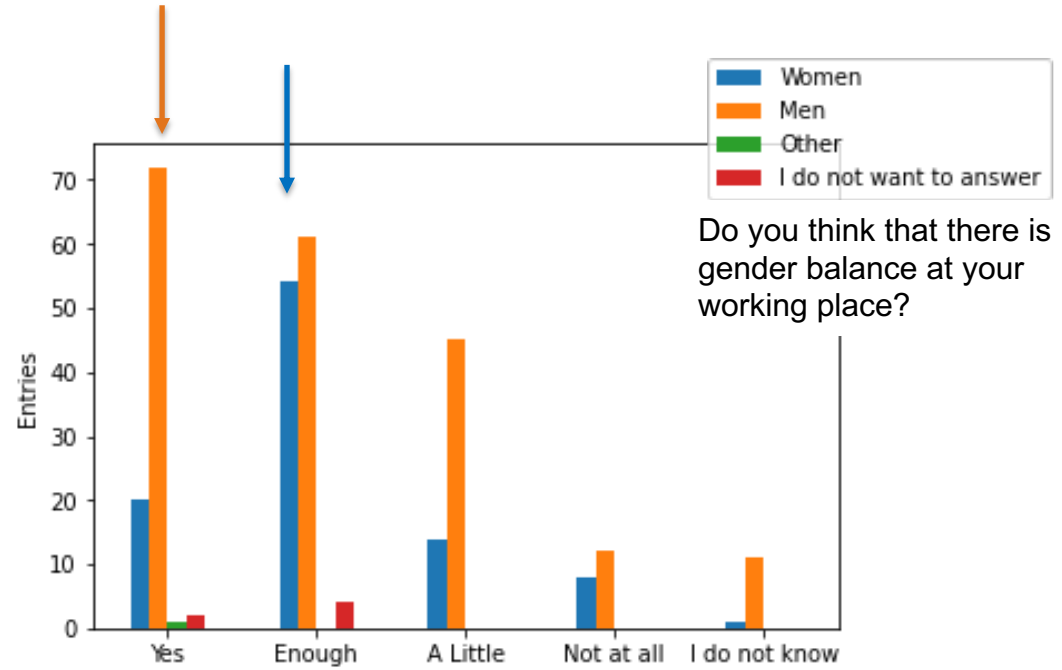
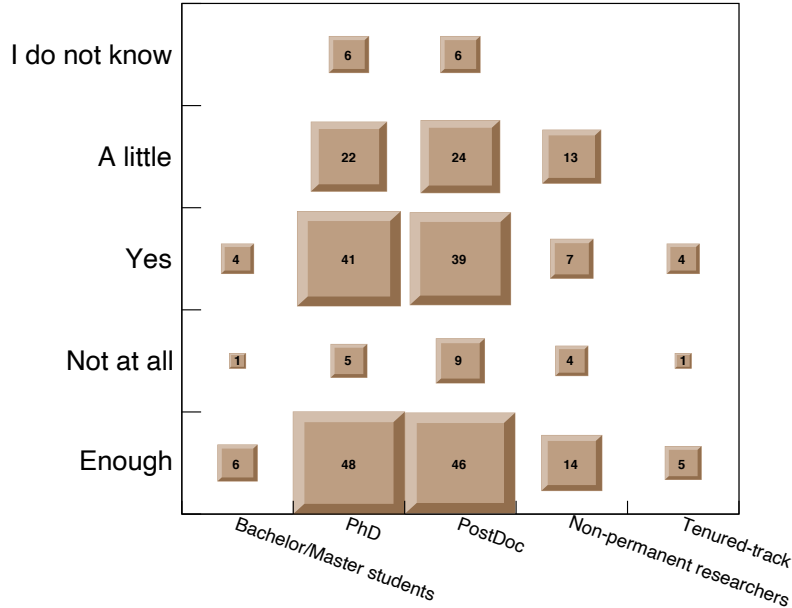




# INFN Survey: gender balance

Gender balance perception is more positive for **men** than for **women**

Position vs gender balance at work



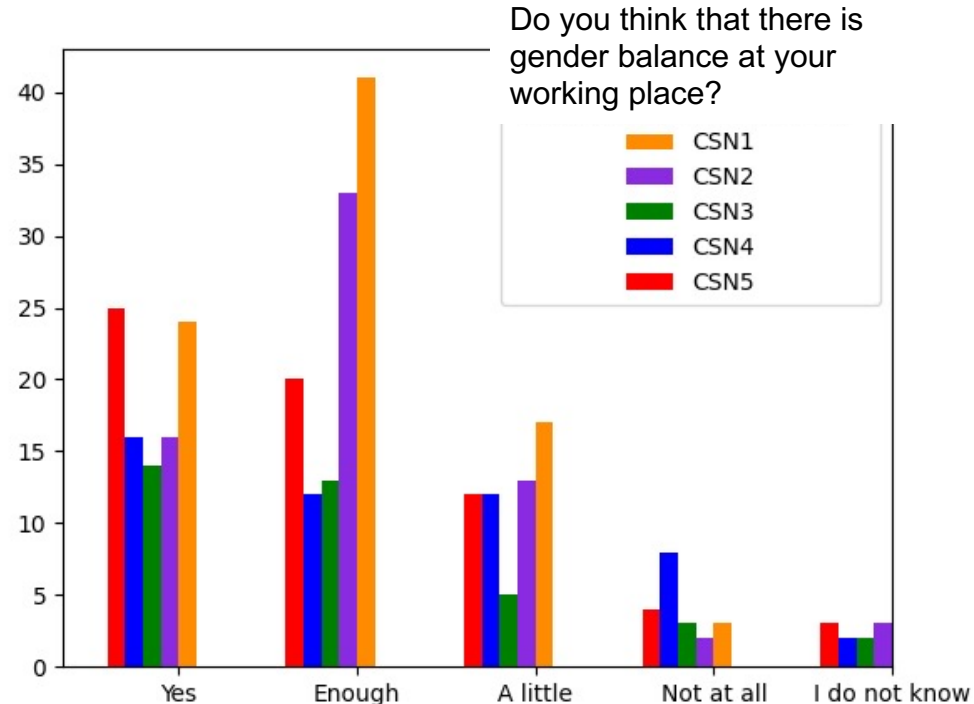
# INFN Survey: gender balance

CSN1 and 2: peaked at *Enough*

CSN3: flat *Yes and Enough*

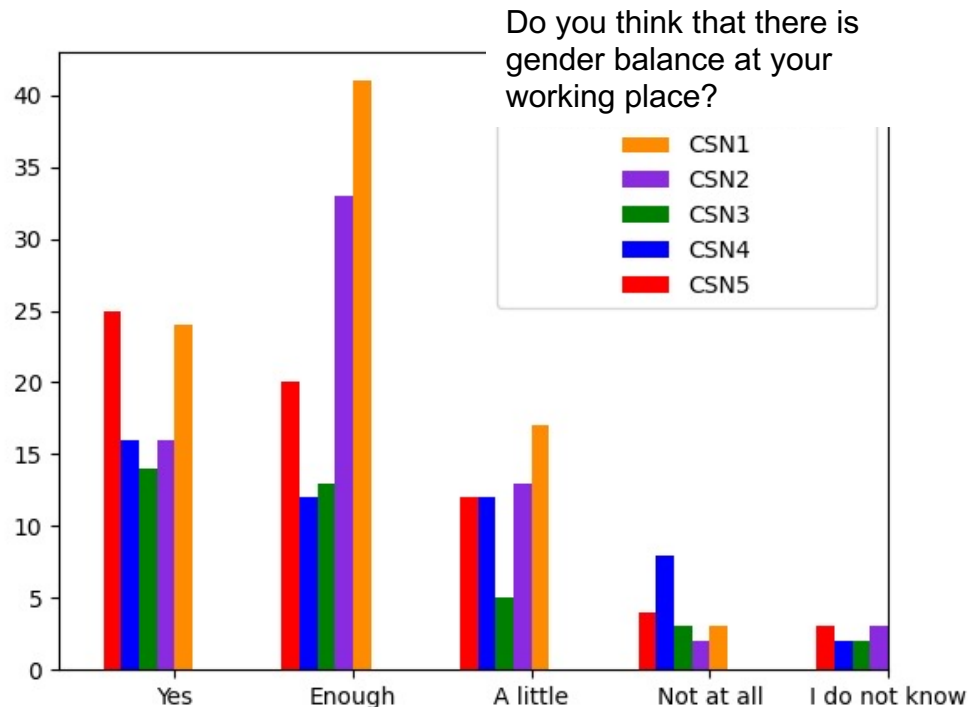
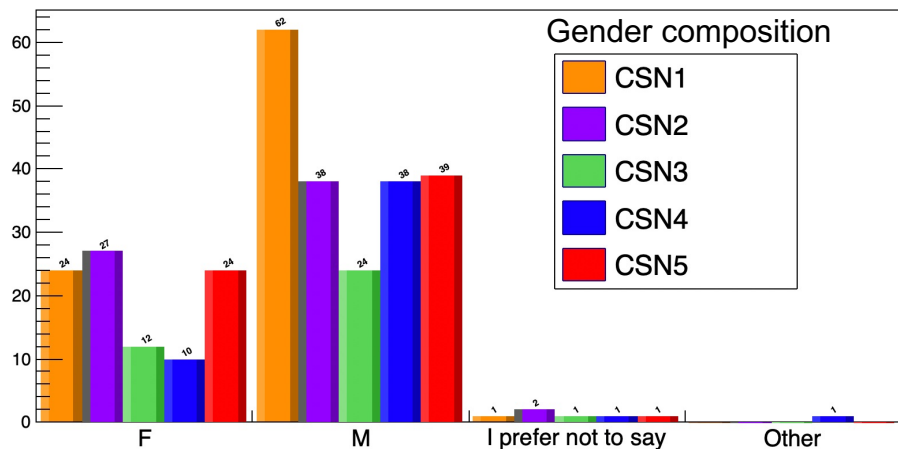
CSN4: ~equilibrium among 4 answers

CSN5: peaked at *Yes*



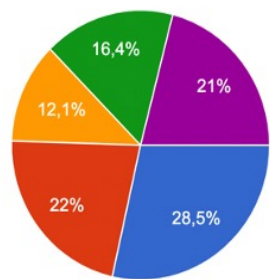
# INFN Survey: gender balance

CSN1 and 2: peaked at *Enough*  
 CSN3: flat *Yes* and *Enough*  
 CSN4: ~equilibrium among 4 answers  
 CSN5: peaked at *Yes*  
 Answers are not related to gender composition



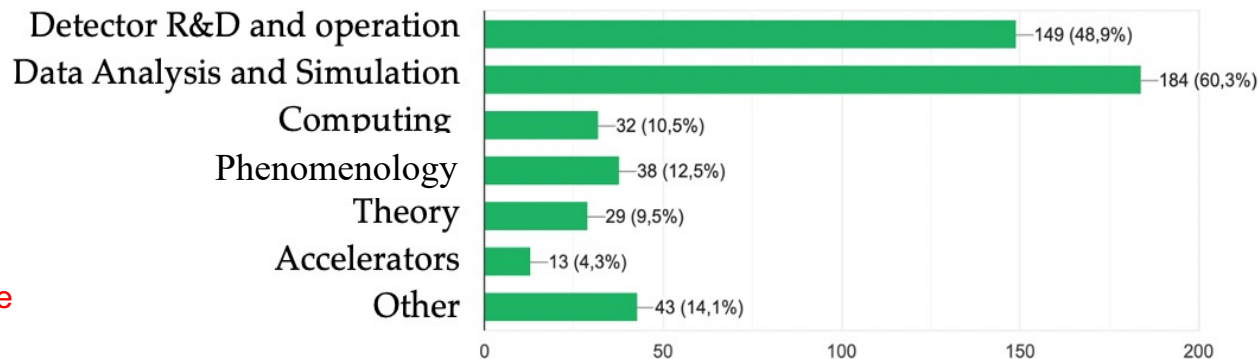
# INFN Survey: respondents

In which field are you primarily working?



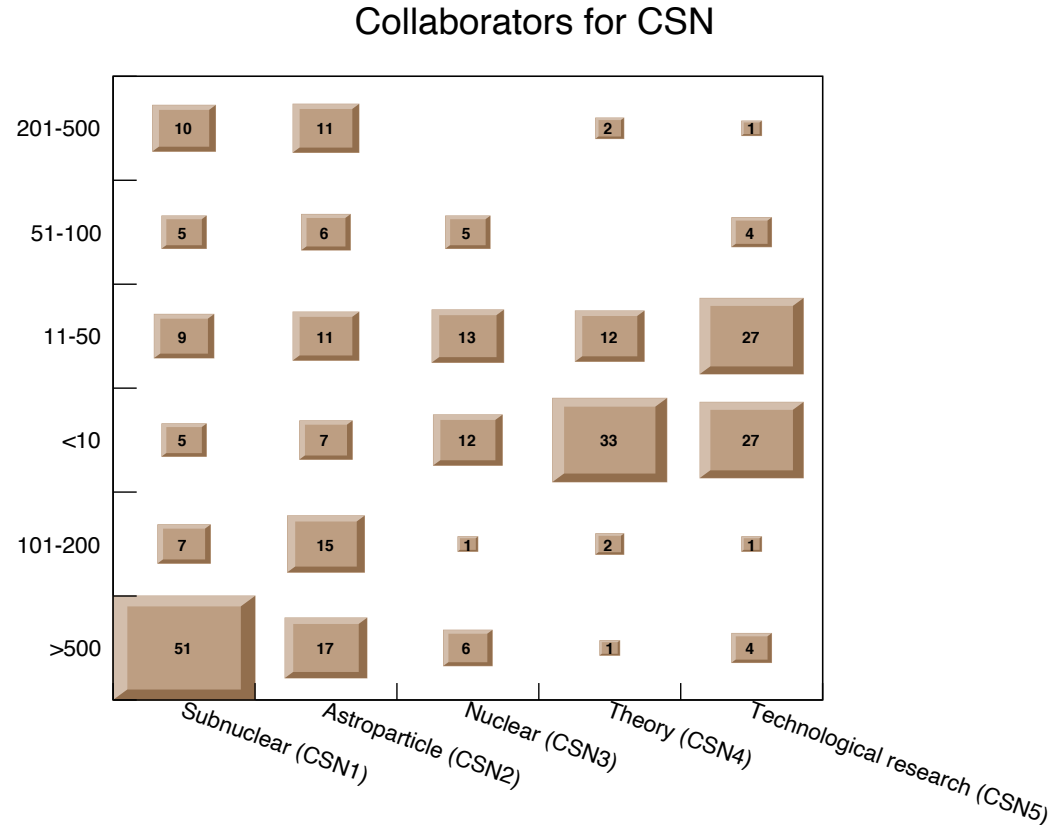
CSN1 Subnuclear  
CSN2 Astroparticle  
CSN3 Nuclear  
CSN4 Theory  
CSN5 Technological research

What is your primary occupation?  
[max 2 answers]



# INFN Survey: respondents

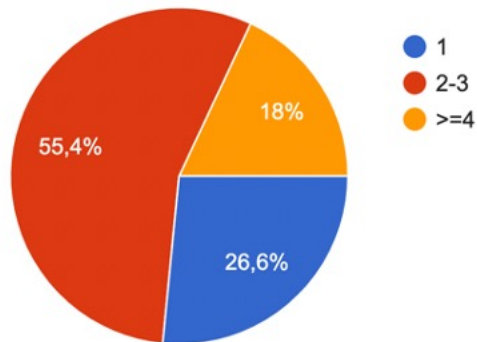
- CSN1 is mostly big collaborations
- CSN4 and 5 work in little groups
- CSN2 and 3 mix



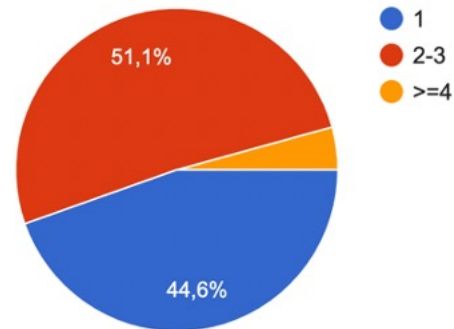
# INFN Survey: mobility

## Great mobility among ECRs

In how many **institutes** have you worked since your bachelor?



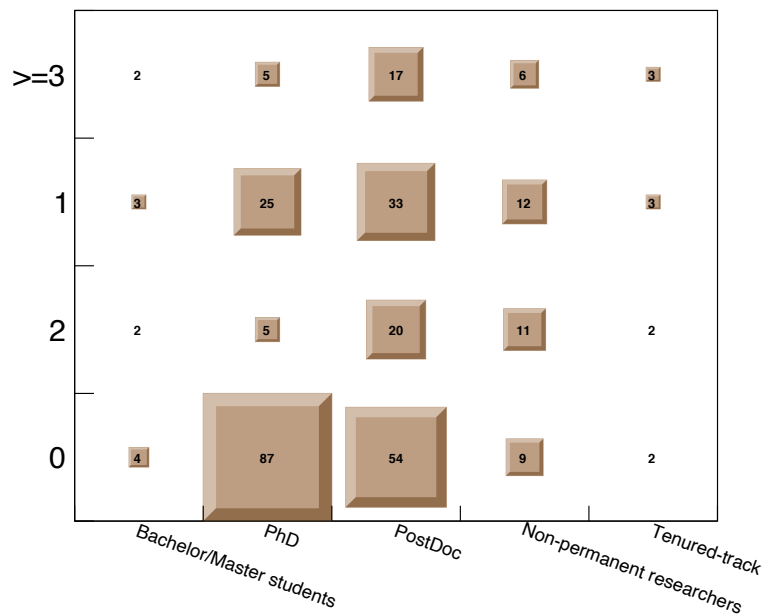
In how many **nations** have you worked since your bachelor?



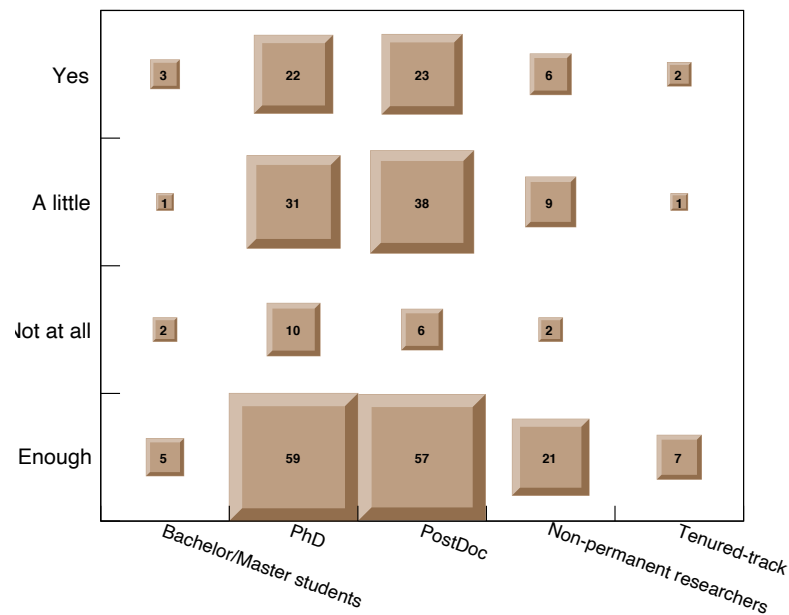
# INFN Survey: responsibilities

- PhDs have little responsibilities as expected
- Overall work recognition is good for the majority of respondents

Position vs number of responsibilities



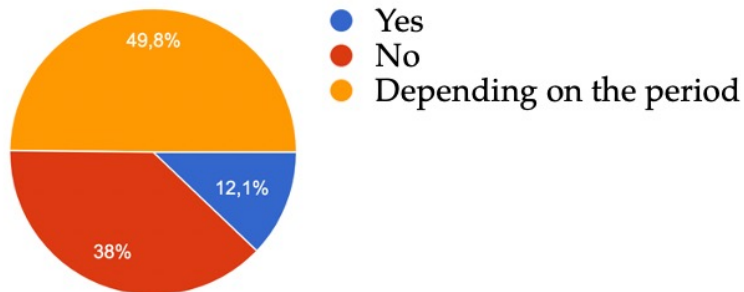
Position vs work recognition



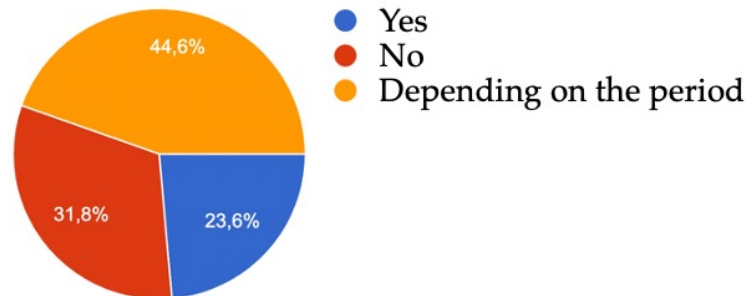
# INFN Survey: work perspectives

- Perception of future perspectives is not optimal

Do you feel like having carrier perspective within:  
INFN?



University / Other Research institutes

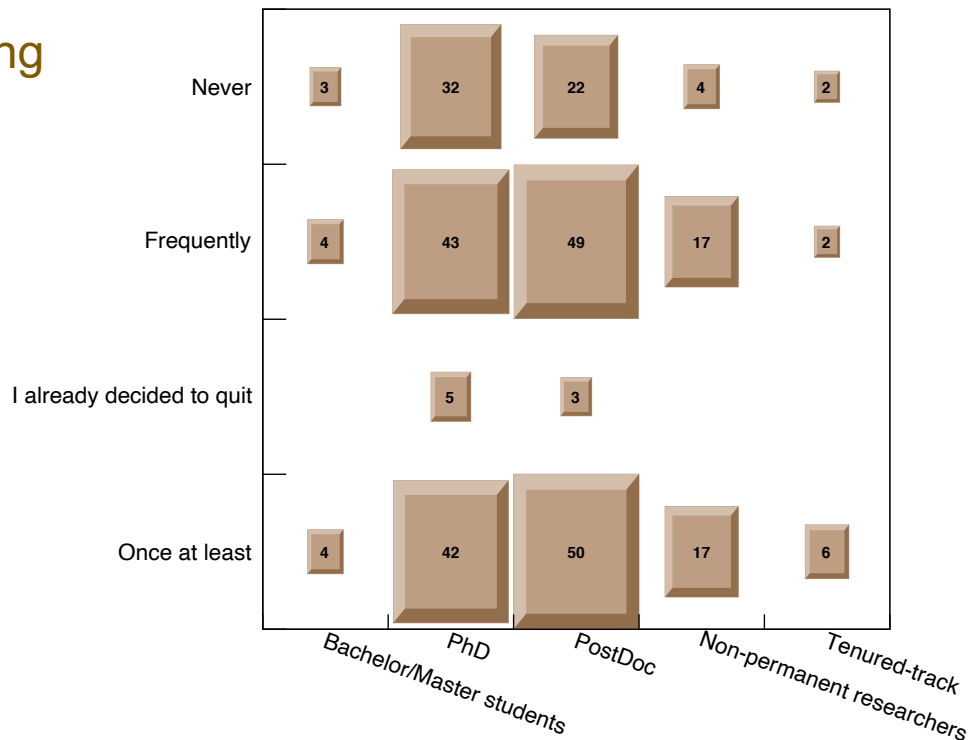




# INFN Survey: work perspectives

Majority of respondents in all categories considered/is considering leaving research, unfortunately

Position vs leaving research

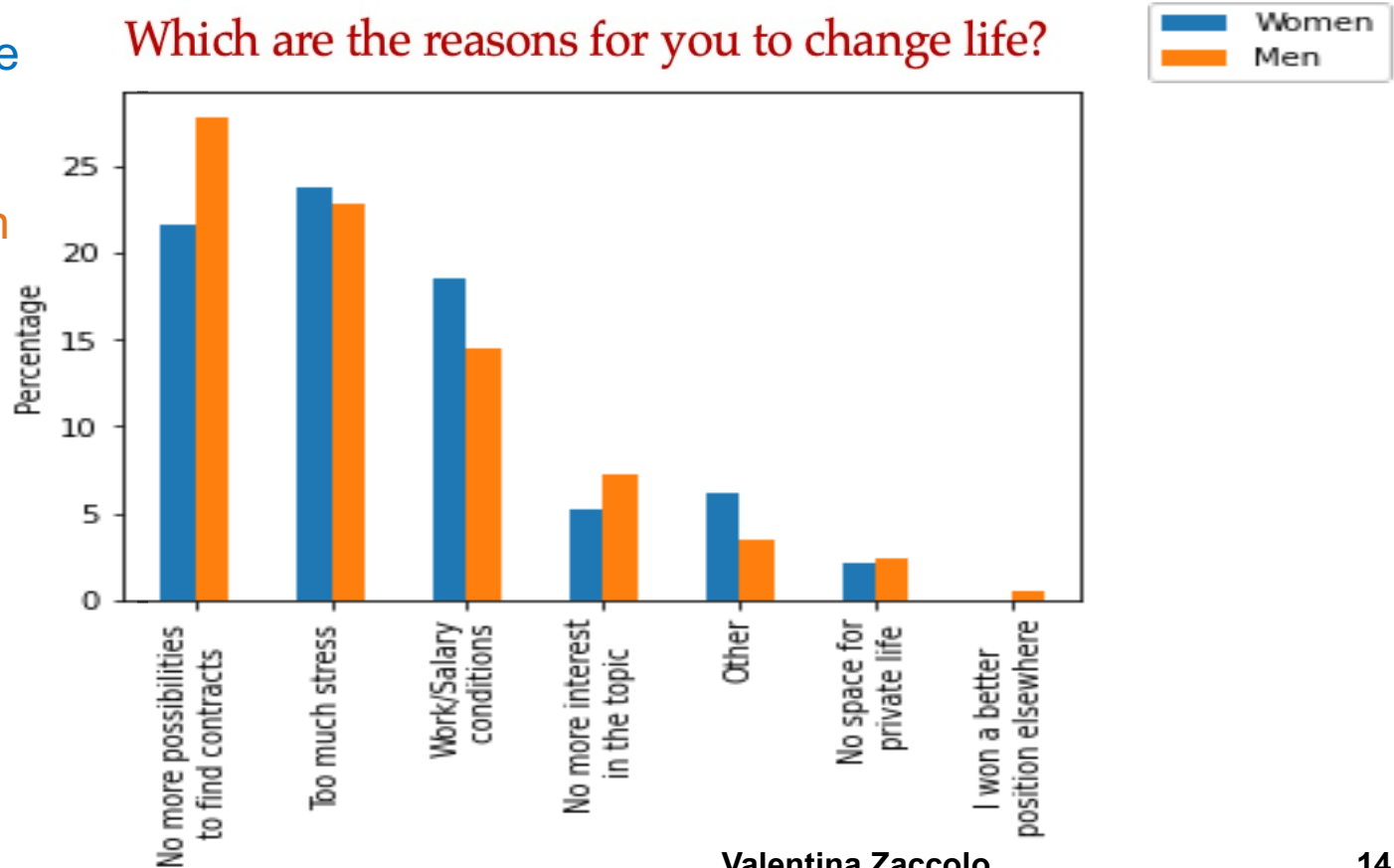


# INFN Survey: work perspectives

Women feel more the salary conditions

Men report issues on finding contracts

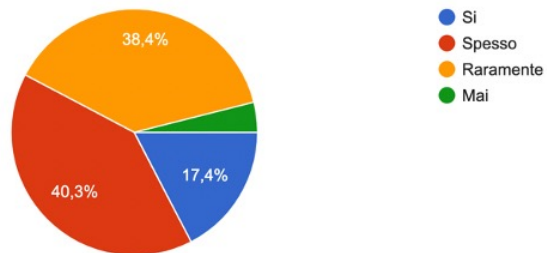
Which are the reasons for you to change life?



# INFN Survey: workday and stress

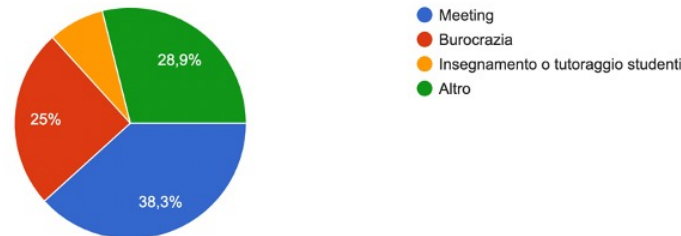
Hai l' impressione di avere abbastanza tempo per svolgere la tua ricerca in modo completo?

305 risposte



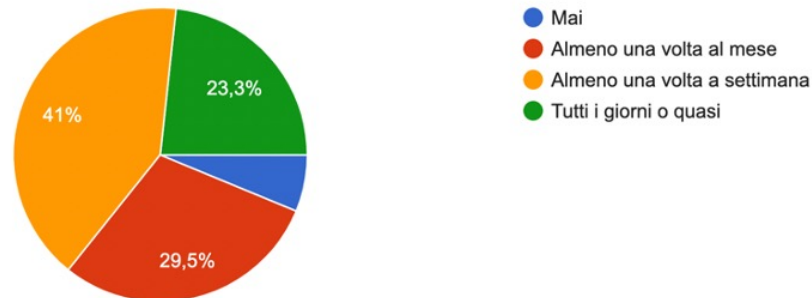
Cosa porta via una grossa parte del tuo tempo?

128 risposte



Ti senti sotto stress o sotto pressione durante la tua tipica giornata di lavoro?

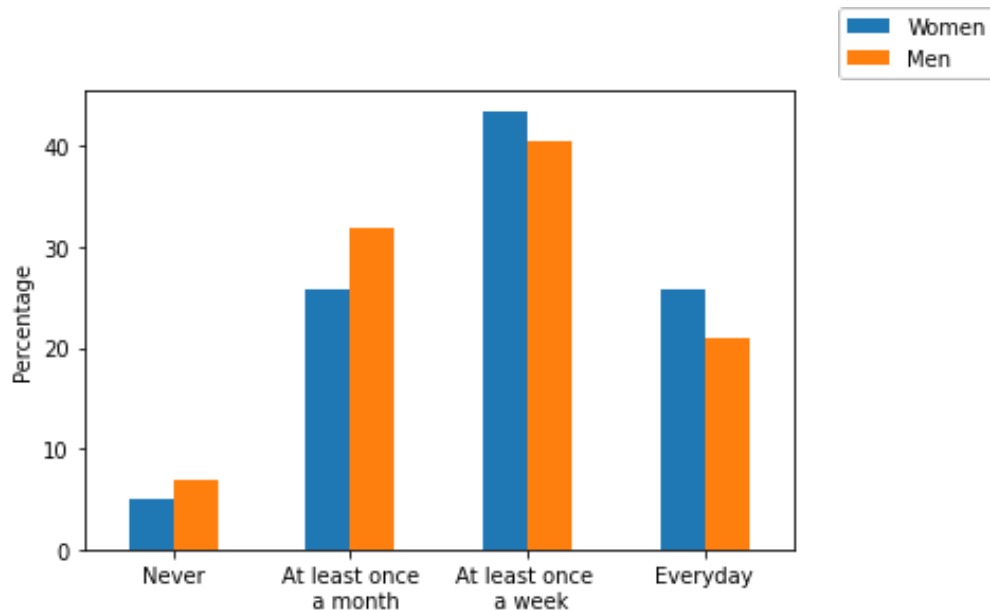
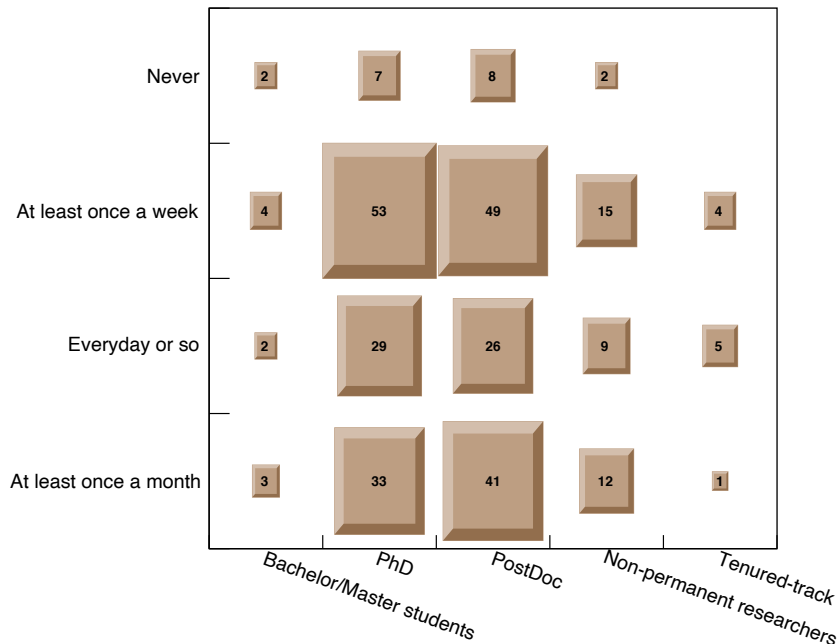
305 risposte



# INFN Survey: workday and stress

Stress levels are high for all positions. Women report to be stressed more often

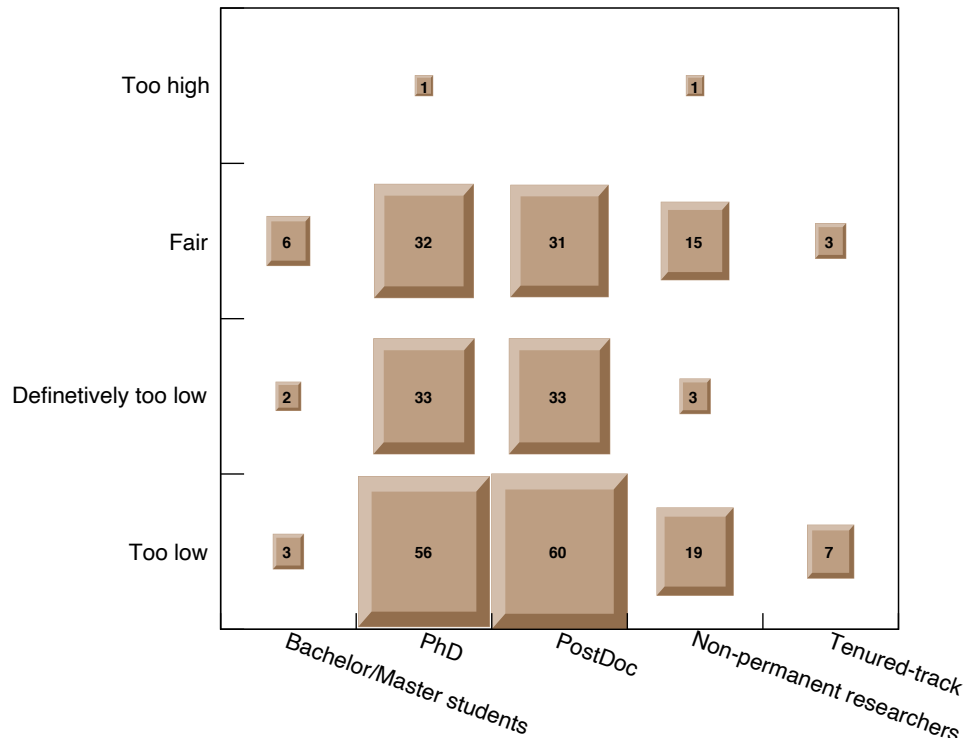
Position vs stress level



# INFN Survey: general satisfaction

- Salary is perceived as too low

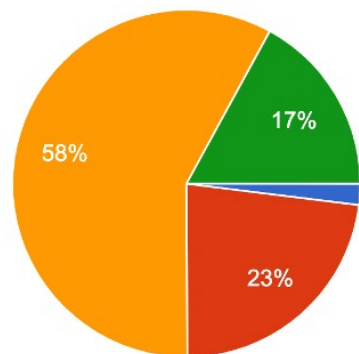
Position vs suitability of salary



# INFN Survey: general satisfaction

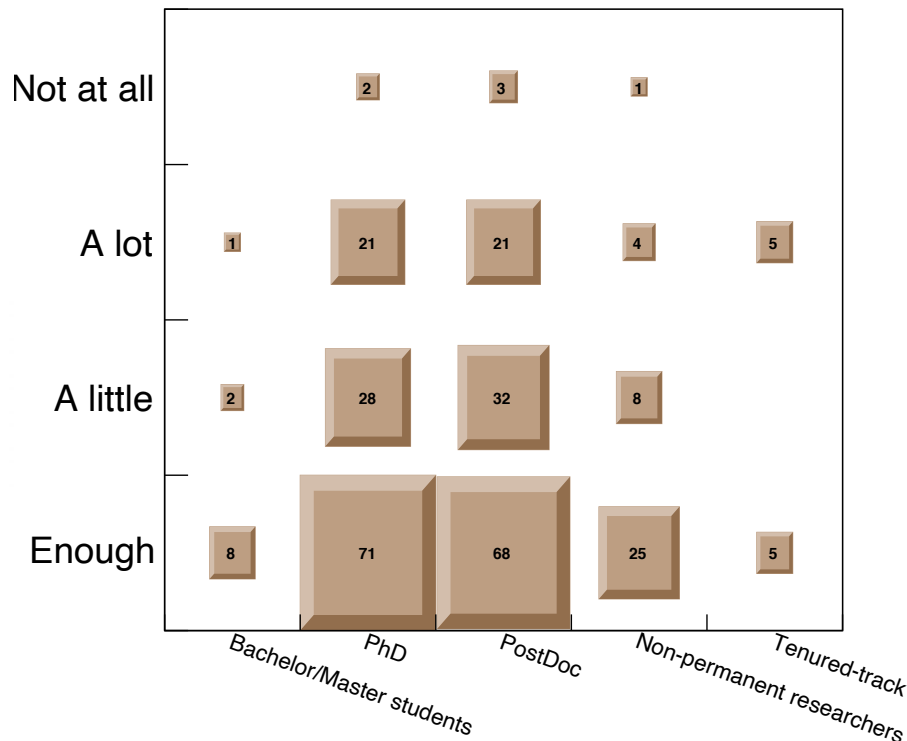
- Salary is perceived as too low
- Nevertheless, **~75% satisfied!**

Globally, do you feel satisfied with your work?



- Not at all
- A few
- Enough
- A lot

Position vs global satisfaction



# Conclusions and outlook

ECFA ECR has been formed

The panel has promptly organised working groups collecting ideas from all the members

A lot of activity from the Italian representatives:

- 305 responses for the Italian survey within 10 days demonstrates also high interest among Italian young people
- Preparing a document about the Italian ECRs feedback to be published during 2022
- Planning a Young Researchers Forum over fall/winter