



GGGIOVANI
~~Early career~~ researchers:

a perspective?

a starting point?

an exercise?

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Workshop di sezione sulla strategia europea per la

fisica delle particelle elementari

INFN Bari - 21 novembre 2024

Presenting the point of view of **early-career researchers** (ECRs) in INFN Bari and their coordination and representation at different levels (**Europe, INFN, Bari**) with respect to ECFA and the European strategy update.

Disclaimer:

The best way to do this would have probably been to show the outcome of a meeting or open discussion among ECRs in Bari concerning their career and their role in the directions of particle physics.

However, this was not possible as such initiatives have not been taken yet.

As a consequence, this is a first exercise of making sense of the opinions it was possible to gather in the last week. The representation of ECRs in Italy has changed over the last year and this situation is mirrored in Bari.

How are early career researchers represented in ECFA?

ECFA [early career researchers panel](#): “discuss all aspects that contribute in a broad sense to the **future** of the research field of **particle physics**”

- **Organizing committee**: three delegates for ECFA plenaries, one delegate for ECFA restricted discussions
- Members: 2-3 members per nation + 1 per national laboratory (**INFN has 5 delegates**)
- Plans: ECR **white paper** as **input for the Strategy update**

[Draft inputs](#) being collected now in [meetings at CERN](#)

How does the ECFA ECR panel act within INFN?

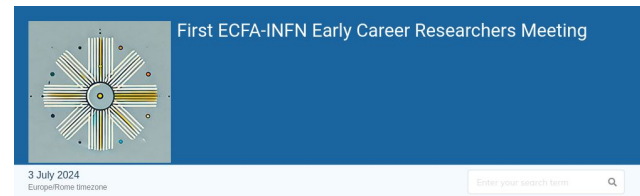
Two meetings so far in [July](#) and [September](#) 2024 organized by the INFN representatives:

- **Review** session on future experiments and colliders
- **Talks** about European strategy and role of ECRs
- **Discussion** among ECRs

Plans:

- **Collecting feedback** by ECRs through a [national survey](#) ← please fill it!
- Provide an **input document for ECFA-INFN steering group** in parallel to the 5 CSN

In this presentation: some results from **ECFA-INFN** ECR meetings, some from ECR **meetings at CERN**, some from **survey of INFN Bari** ECRs



Overview
Timetable
Contribution List
Registration
Participant List
Internet access
Privacy Policy
Safety Rules
Venue
Support
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ECFA

European Committee for Future Accelerators

A one-day event, by and for young researchers, organized by the Italian representatives of the ECFA Early Career Researcher (ECR) panel, aimed at bringing together for the first time the ECR Italian community on the occasion of the ECFA Plenary at INFN. The aim is to start a discussion about the future of our



Early career researchers at INFN Bari

How to reach all INFN Bari early career researchers?

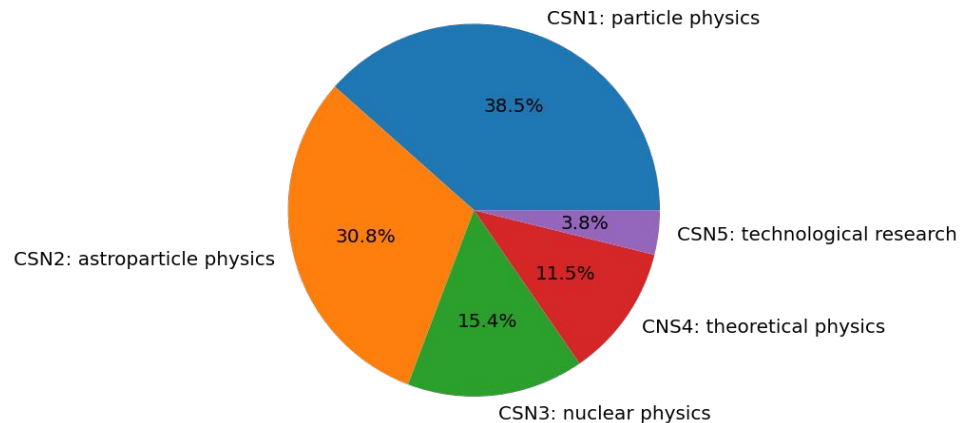
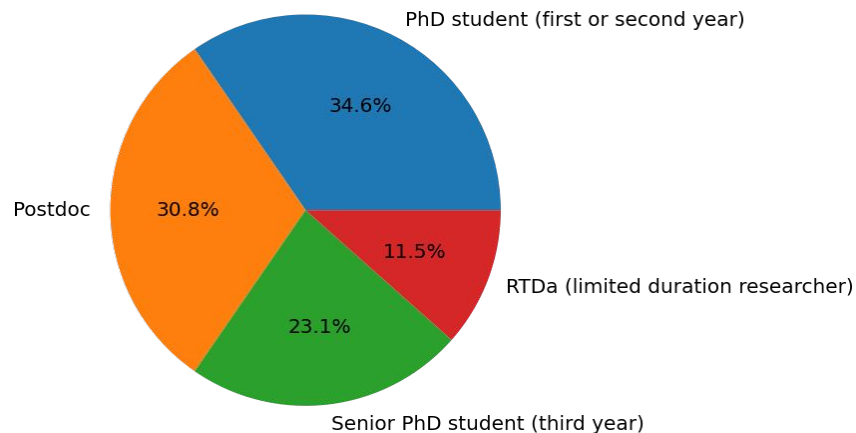
No obvious way: **no representatives** and no shared mailing list for PhD students, postdocs and RTDa

→ **Experiment: circulating a survey by word of mouth, group by group**

- 26 responders in three days

Is it enough statistics? Not for close results, but some questions had answers with clear preference

- Mostly (~90%) Italians



Present vs future experiments

Activities carried by Bari early career researchers

- Similar share of **analysis, theory and detector** activities
- A majority is **involved either in upgrade or future experiments**

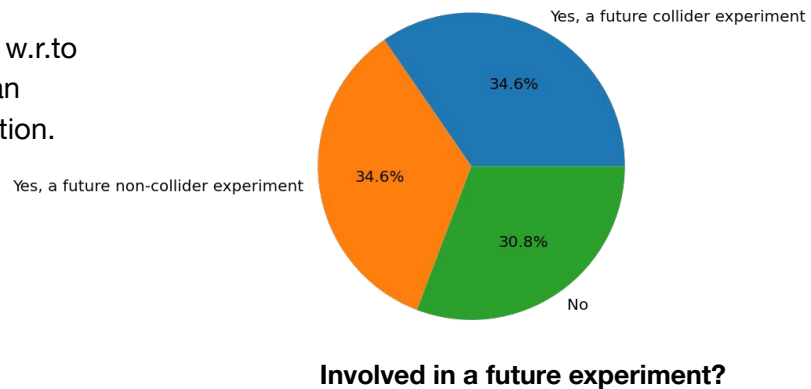
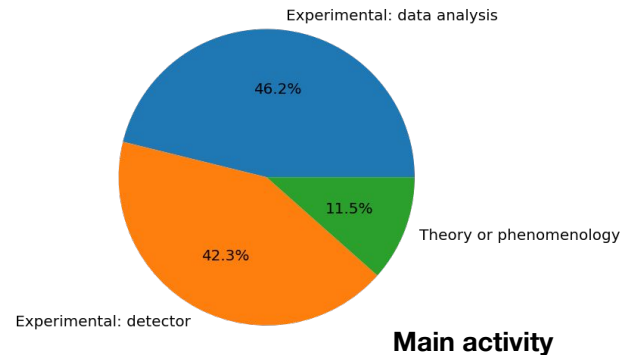
How is future collider work perceived by ECRs worldwide?

- The career impact of working on future experiments tends to attract attentions in all ECRs meetings and open discussions
 - **You can publish faster**
 - **You have less papers**

Overall, young researchers working on **future experiments feel penalized** w.r.to those working on ongoing ones. INFN procedures (e.g. presenting having an amount of papers to defend at the general exam) seem to worsen the situation.

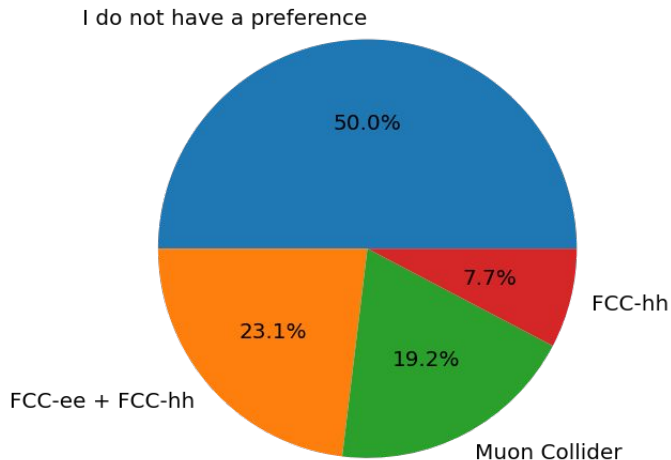
(The same for other national procedures such as ASN)

Larger discussion point: importance of publishing in the career of young researchers. Is it still significant?

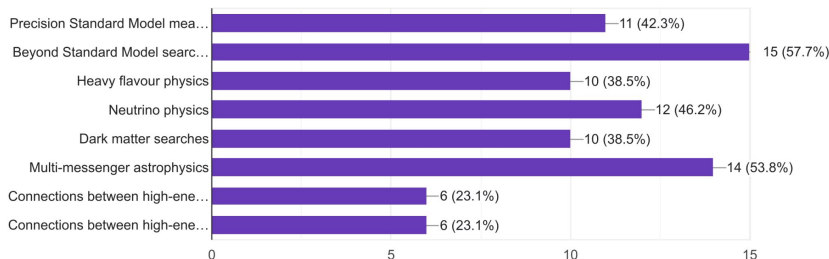


Among Bari researchers:

- **No strong preferences** among future colliders in general
- However, people **who already work** on a future collider have a **clear preferred choice**
- Physics studies with priority: BSM searches, multi-messenger astrophysics, neutrino physics



Which physics areas do you believe should have priority in the choice of future experiments?
26 responses



How do the timelines of future experiments impact on young careers?

- > 80% think the **decision** to build a next collider/experiment should arrive **before 2030**
- However, 50% of them would consider **working full-time** on a future collider or is already doing it

In some cases, this is because they don't have other choices

INFN Career perspectives

Observations about **career progression** in INFN and Italy tend to attract attention in all “open discussions”

ECRs in Bari appear strongly persuaded about their career choices:

- > 75% are interested in **HEP as long-term** career
- > 75% are interested in working in **Bari as first choice**
- > 80% of them have **started** their present activity **during their master’s** studies

However, only *half* of them are sure they would *repeat the same career* choices going back in time.

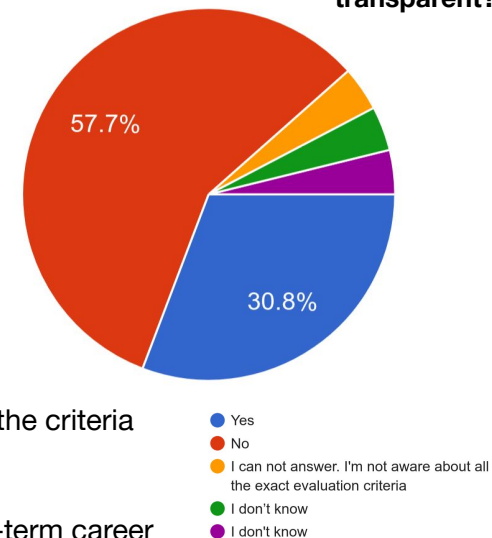
Reflected by **perceived future in INFN**:

- 70% think **stabilizations** processes in INFN are **not transparent** or they are not aware about the criteria
The fraction does not decrease (in fact it slightly increases) for postdocs and RTDA
- As a consequence, > 75% are **not sure their skills match the INFN requirements** for a long-term career
Transversal feeling across CSN and across activity (analysis, theory or detector)

Translating also in the opinions about **engaging younger generations**:

- No clear idea whether **university students in Bari are aware** about HEP perspectives
- However, > 75% think including HEP future perspectives **in courses** would **increase their interest** in the field

Is the career stabilization process in INFN transparent?



Strong agreement on social and environmental factors:

- Investing in future colliders is important to maintain a **leading role in HEP for Europe** (88.5%)

Other countries leading is fine, but only if scientific cooperation is ensured

- However, Europe should **cooperate with China and US** in determining the particle physics strategy (84.6%)

Important also for ensuring variety in scientific research (no country can cover all the fields)

- Sustainability should be a major concern** in the choice of future experiments (>96%)

In some cases it could be also the prevailing reason to choose a collider over another (e.g. Muon collider over FCC), overcoming the scientific motivations

Is sustainability well covered in ESPPU meetings?

Involvement in group decisions

Are young researchers involved in the ESPPU activities?

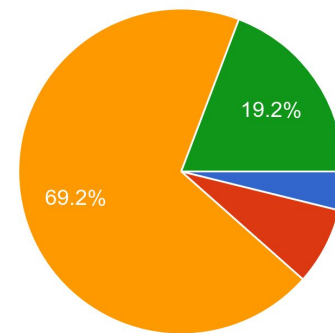
- Most are **aware**, but only ~10% are actively **following the strategy**
- More than 25% believe their generation is **sufficiently involved** in the decision-making in their international community
- However, 73% was not aware about the existence of an ECFA ECR panel in INFN

How do young researchers feel regarding their role in Bari and in their local research group?

- < 25% feel confident to say their **local research group has a leading role** in the decisions
- Almost 90% do not feel directly **involved in the decisions** taken by their local research group in Bari
*But anyways the majority is at least **aware of them***
- There is no clear agreement whether young researchers are well represented in INFN Bari
However, most people definitely knew about this meeting 😊

A transversal (cross-CSN, cross-seniority) care for anonymity!

Do you feel involved in the decision making by your research group concerning future directions?



- Yes, I have a leading role in the decisions taken by my research group
- Yes, I am involved in the decision-making in my group
- No, but I am aware of the choices made by my group
- No, I am neither involved nor aware of any new decisions

A call for greater engagement

Most of the concerns expressed by ECRs in Bari mirror the discussions held at ECR discussions in Frascati and CERN

- Limiting to **scientific arguments**, young researchers do not feel a strong attachment towards one specific physics case
 - In some cases, the political and social implications (e.g. the centrality of **Europe**, the attention for **sustainability**) give **more compelling** reasons than bare discovery potential
 - A general feeling that “**a decision has already been taken**”
- The **impact** of young generations is **felt as limited**
 - The short **duration of contracts** is seen as a hard constraint
 - In some cases, actual **fear of expressing concerns** about one’s own local research group
- **Representation** in INFN exists, but its processes are **not felt as transparent**
- A common solution: **active discussions** through topical seminars, open meetings
 - Started in INFN with ECFA-ECR panel taking the lead
 - In Bari, transmitting decisions taken by seniors and by INFN
 - Encouraging discussions cross-CSN
- A starting point: mailing list to share informations among ECRs in Bari (infn-bari-ecr@cern.ch)

ECFA ECR panel

- News shared via [egroup](#)
- [Mattermost channel](#)
- Next [meeting at CERN](#)

INFN ECR panel members

- Reachable at ita_ecr_ecfa_rep@lists.infn.it
- No common mailing list so far, spread by word of mouth
- Ongoing national [survey](#) 🙌 please answer!

INFN Bari

- Next steps: ?