Early Career Researcher perspective

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Objectives of ECFA ECR WG?

Many acronyms in this title:

- **ECFA**: European Committee for Future Accelerators, should be clear by now;
- **ECR**: Early Career Researchers:
  - Non-permanent position or <10 years after PhD.
- **WG**: Working Group
  - Since the last Update of the European Strategy for Particle Physics, a panel was formed (see mandate here):
    "*to discuss all aspects that contribute in a broad sense to the future of the research field of particle physics. In its **advisory role** to ECFA, the panel reports to ECFA on a regular basis*"
  - There is up to 3 representative per country, here is an example for France (see here for more infos):
    - Bruno ALVES, PhD student, CMS
    - Guillaume PIETRZYK, Postdoc, LHCb
    - Louis PORTALES, Staff, CMS
  - A mattermost channel has been created to foster the discussion and the organisation for the white paper !
  - A dedicated session was organised during the previous ECFA meeting in Paris open to everyone remote.

To mention 1 ECR member acts as secretary in each ECFA WGs.

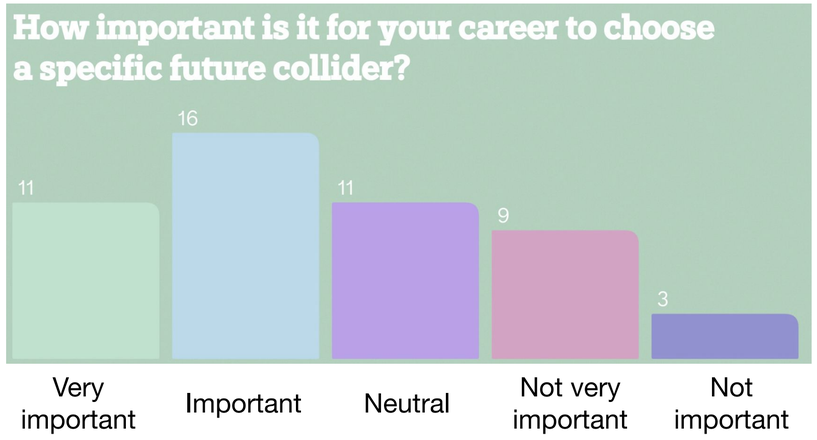
A few conclusions from Paris meeting

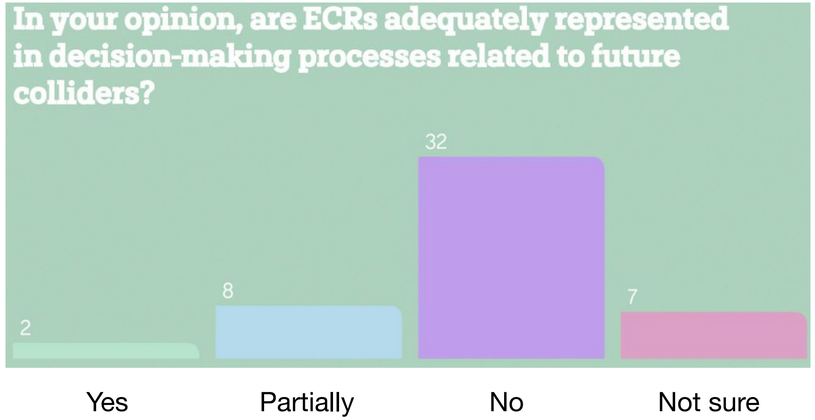
Some **sub-groups** formed to prepare the white paper:

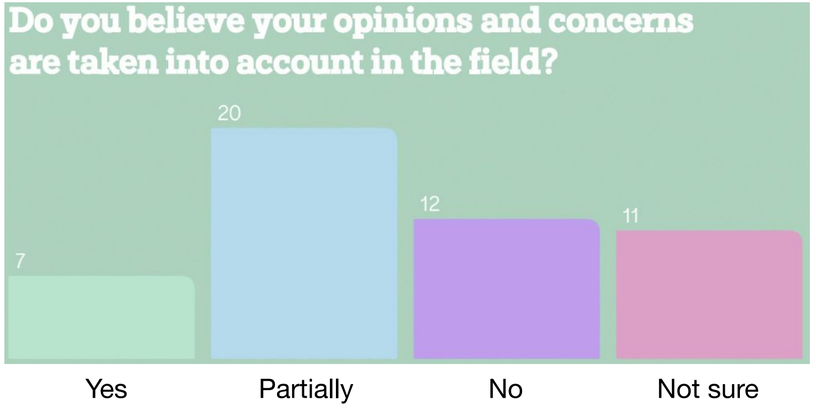
- Future colliders;
- Future particle physics experiments beyond colliders;
- Interplay of particle physics with neighbouring fields;
- Communicating the importance of particle physics;
- Career prospects and ECR leadership.

What is important for ECR for the future of particle physics in Europe ?

- Stable carriers and funding;
- Enthusiasm for flagship projects;
- Flexibility to react to new results;
- Sustainability.



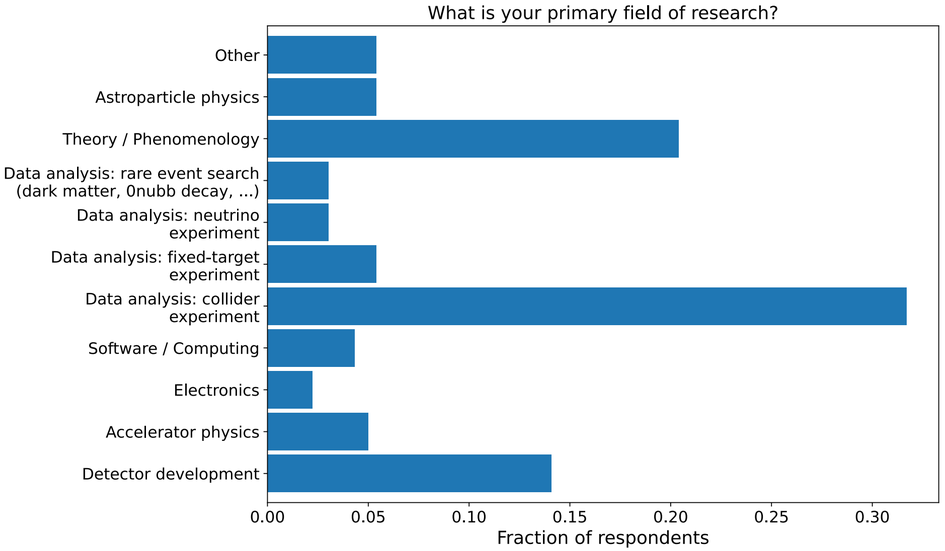




These are the feedbacks from participants of the ECFA workshop → informed answers.

ECR wider survey

In 2022/2023 a **wider survey** was conducted by the ECFA ECR Pannel to understand career prospects, diversity and sociological aspects in our field, results can be found at 2404.02074



- **759 respondents from 39 countries:**
  - < 10% with permanent position;
  - 50% of the respondents were employed in Northern Europe , ~ 25% in Mediterranean Europe and ~15% in Central and Eastern Europe;
  - 26% of participants identified as part of an underrepresented group, primarily due to gender, followed by ethnicity and socio-economic background.
- **Career perspectives and support:**
  - Limited awareness of available funding and training resources;
  - Most ECRs do not discuss career prospects often enough with supervisors or senior researchers.
- **Work-life balance:**
  - High importance placed on flexible working hours and a positive work environment;
  - Stress and frequent overtime quoted, with work-life balance and job stability to be improved.
- **Career mobility and challenges:**
  - Family and social challenges were prevalent for those who relocated.
  - Many respondents expressed a desire to return to their home countries eventually.

Selected interviews

On top of the macro perspective, I conducted a few **selected interviews** in my group with different ECRs:

- 30' to 1h discussion on various topics: open answers with details
  - hard to generalise but useful as inputs of reflexions.
- Biases: mainly French persons, only ATLAS group, small batch and ... I never studied social sciences !

Very little knowledge on existing projects:
FCC quoted at best,
Decision process considered opaque,
Needs history on process for LEP/LHC

Big collaborations:
have pros and cons →still worth pursuing for the future

Location:
Europe is quite central,
Switzerland is seen as neutral,
geopolitics can play a role in decision

How to get involved:
balance between actual and future projects.

Physics case:
Not thrilled by precision measurement,
need to be agile and open for any NP that would show up

No reflexion on economical and ecological cost of the machines. I perceived some interest in discussions but some limitations for what concerns external consequences outside of physics or the internal organisation.