# ECR perspective

**Jan Klamka (Warsaw U.)**, Krzysztof Mękała (Warsaw U.), Emanuela Musumeci (IFIC), Dimitris Ntounis (SLAC), Leonhard Reichenbach (CERN)

# Context: ECR input to ESPPU

- ECFA ECR panel initiated preparation of a **dedicated input to the Strategy** from **all European* ECRs****
- First meetings in **September 2024**
- ECR session at the 3rd ECFA Workshop on Higgs/top/EW factories (Paris):
  - ~55 participants
  - identification of key points
  - working groups proposal
- Formation of WGs and their scope

➔ ECR Workshop at CERN, November 2024

* focus on ECRs with European affiliations, but input from other continents appreciated
** Non-permanent position or < 10 years after PhD

# Context: ECR input to ESPPU

[ECR Workshop at CERN](), 14 November 2024

Up to 35 people on site,
56 people on Zoom

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|---|---|---|
| **Introduction** | *Armin Ilg* | |
| *40/S2-D01 - Salle Dirac, CERN* | 09:00 - 09:20 | |
| **WG: Communicating the importance of particle physics** | *Abdelhamid Haddad* | |
| *40/S2-D01 - Salle Dirac, CERN* | 09:20 - 09:50 | |
| **WG: Future Colliders** | *Leonhard Reichenbach* | |
| *40/S2-D01 - Salle Dirac, CERN* | 09:50 - 10:20 | |
| **Workshop photo** | | |
| *40/S2-D01 - Salle Dirac, CERN* | 10:20 - 10:25 | |
| **Coffee break** | | |
| *40/S2-D01 - Salle Dirac, CERN* | 10:25 - 10:50 | |
| **WG: Future particle physics experiments beyond colliders** | *Dr Alexander Burgman et al.* | |
| *40/S2-D01 - Salle Dirac, CERN* | 10:50 - 11:20 | |
| **WG: Interplay with neighboring fields** | *Dr Alexander Burgman* | |
| *40/S2-D01 - Salle Dirac, CERN* | 11:20 - 11:50 | |
| **WG: Career prospects and ECR leadership** | *Jan Franciszek Klamka* | |
| *40/S2-D01 - Salle Dirac, CERN* | 11:50 - 12:20 | |
| **Discussion about scope of WGs** | *Emanuela Musumeci et al.* | |
| *40/S2-D01 - Salle Dirac, CERN* | 12:20 - 12:40 | |
| **Summary and next steps** | *Krzysztof Mekala* | |
| *40/S2-D01 - Salle Dirac, CERN* | 12:40 - 13:00 | |

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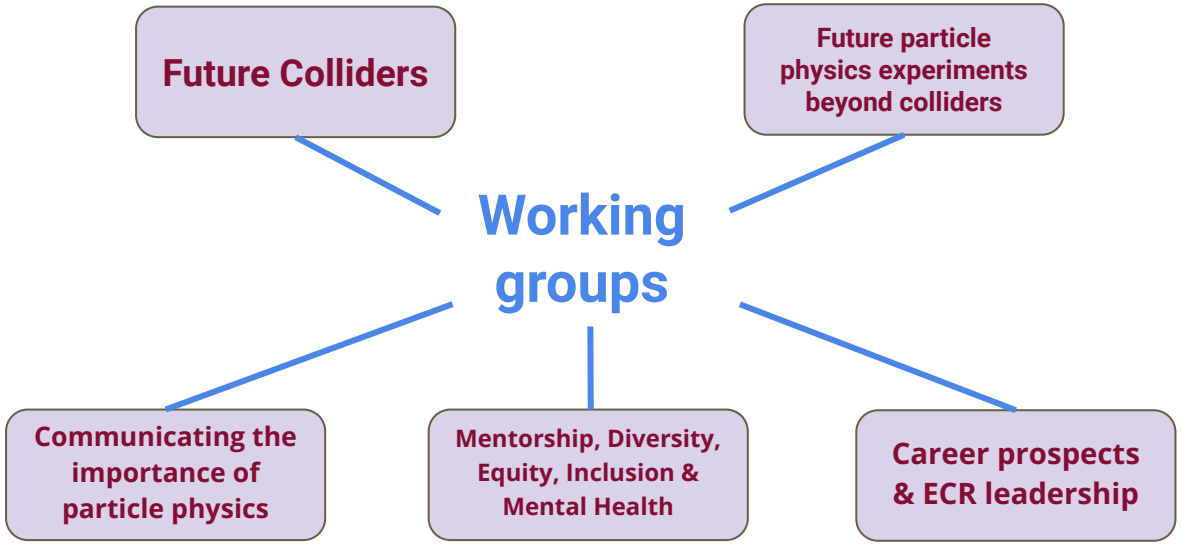
|---|---|---|
| **Parallel WG Meetings** | | |
| *CERN* | 14:00 - 16:00 | |
| **Informal ECR discussion** | *Krzysztof Mekala et al.* | |
| *40/S2-D01 - Salle Dirac, CERN* | 16:00 - 17:30 | |
| **Open Networking in R1** | | |
| *R1, CERN* | 17:30 - 19:00 | |

# Context: ECR input to ESPPU




For more details see: link

Side note: LC representatives in the “Future colliders” and “Career prospects…” WGs

# ECR input to ESPPU: the survey

- Created to gather **input from the community**
- **Future colliders questions** central (criteria important for ECRs, preferred next flagship project, etc.)
- Questions from other WGs included as well
- Answers will be cross-correlated, partly to detect any bias

In circulation since **18 December** until **15 January**

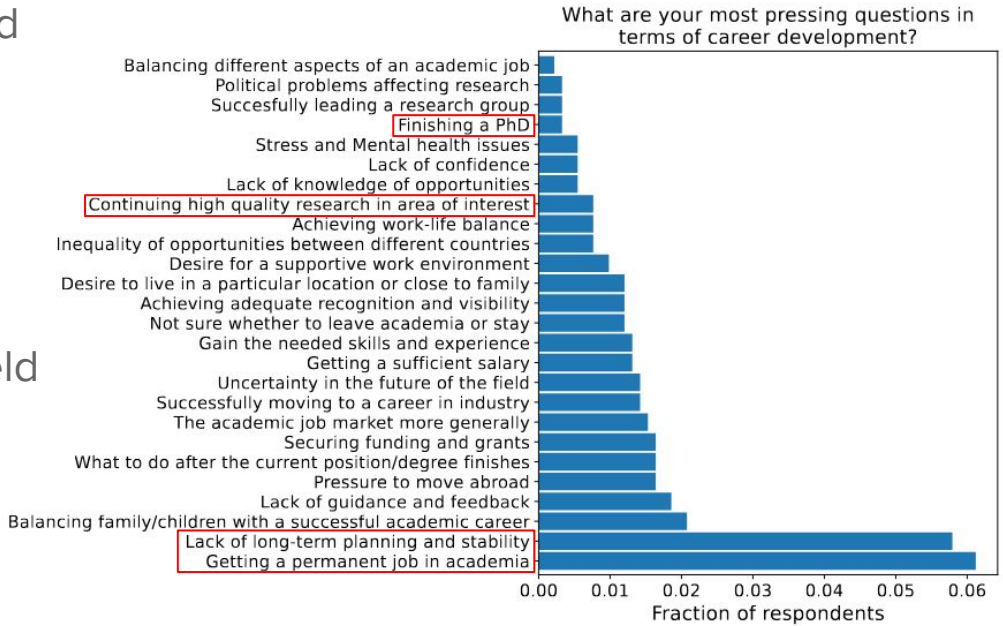
If your institution has not received the survey and/or you want to help distributing it, **please contact us**!

# ECR input to ESPPU: key points so far

Input strongly depends on the survey, but many career-related issues covered by a survey in 2022 (759 participants)

Main points already identified:

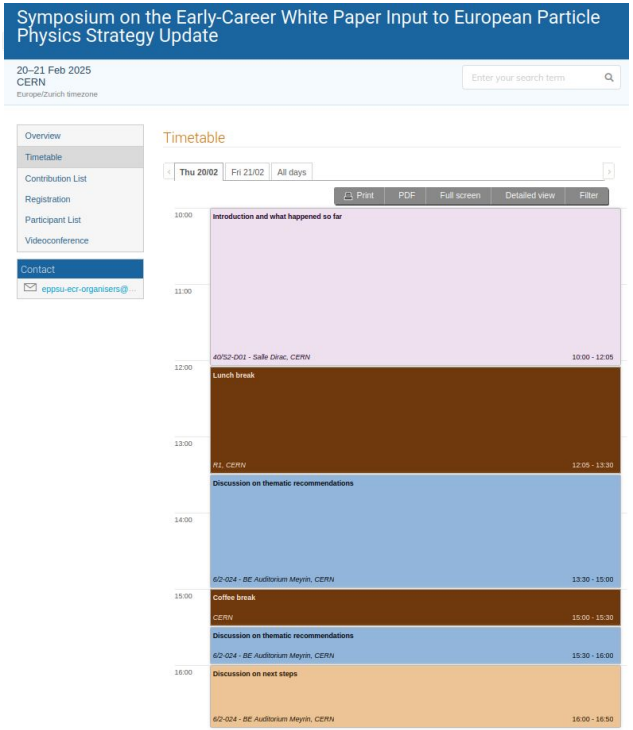
- Inclusion of **ECRs** in the **ESPPU process**; more **transparency**
- Increased attractiveness of our field
  - **Job security** and **relocation requirements** as the key challenges
- Dedicated **funding for ECR activities**



# ECR input to ESPPU: next steps

**Survey results** and the **ECR White Paper contents** to be discussed at an ECR Symposium (CERN + online), 20th of February 2025

- 84 participants currently registered
- Final preparation of the WP following the Symposium




Again:

- If possible, please help distributing information about the event
- If you employ any ECRs, please help them funding the trip :)

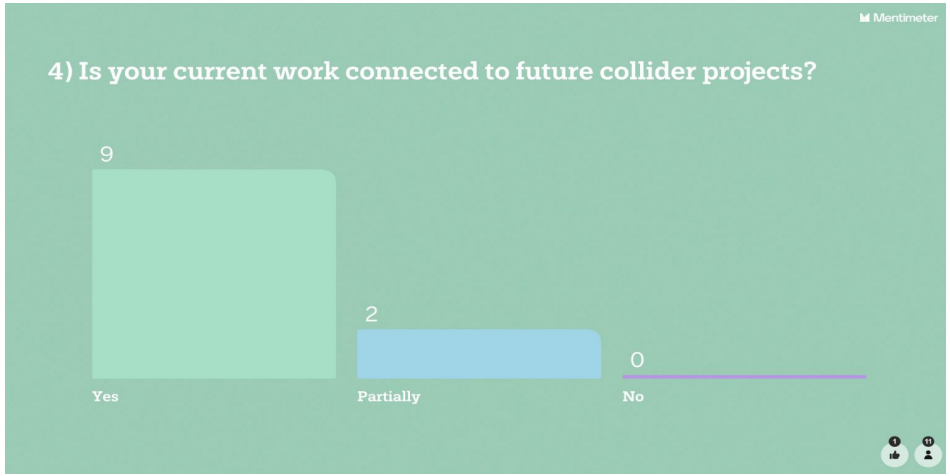
# ECR perspective on Linear Colliders

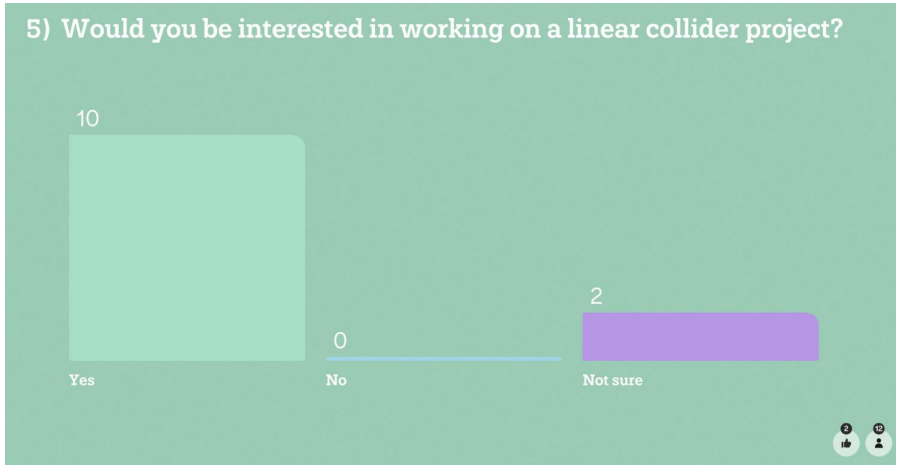
This morning:

- ~15 participants (~5 on Zoom)
- Live survey
- Open discussions

# Results of the live survey

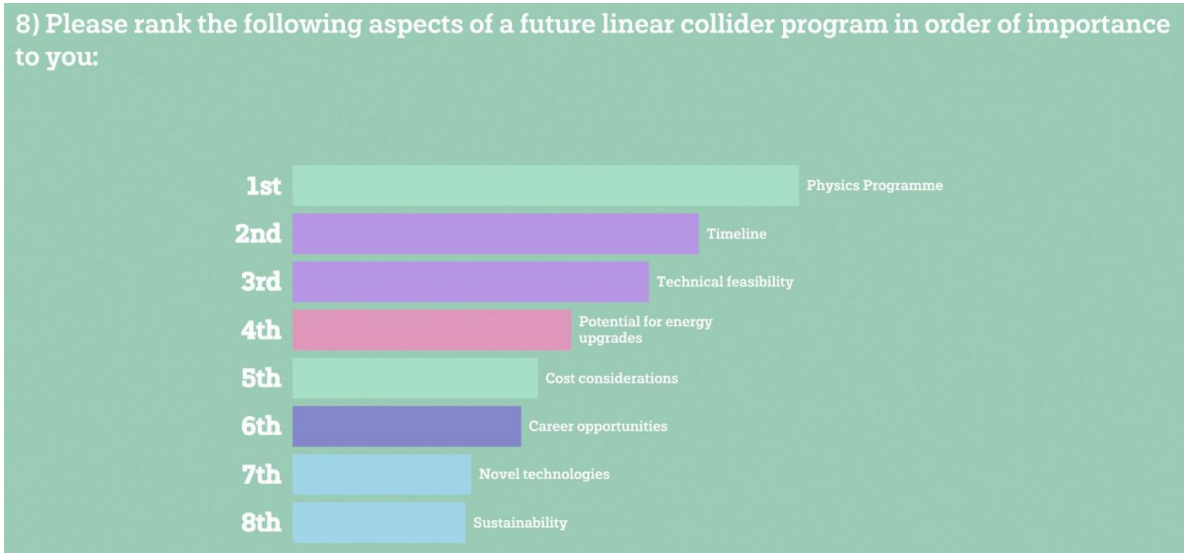
12 participants



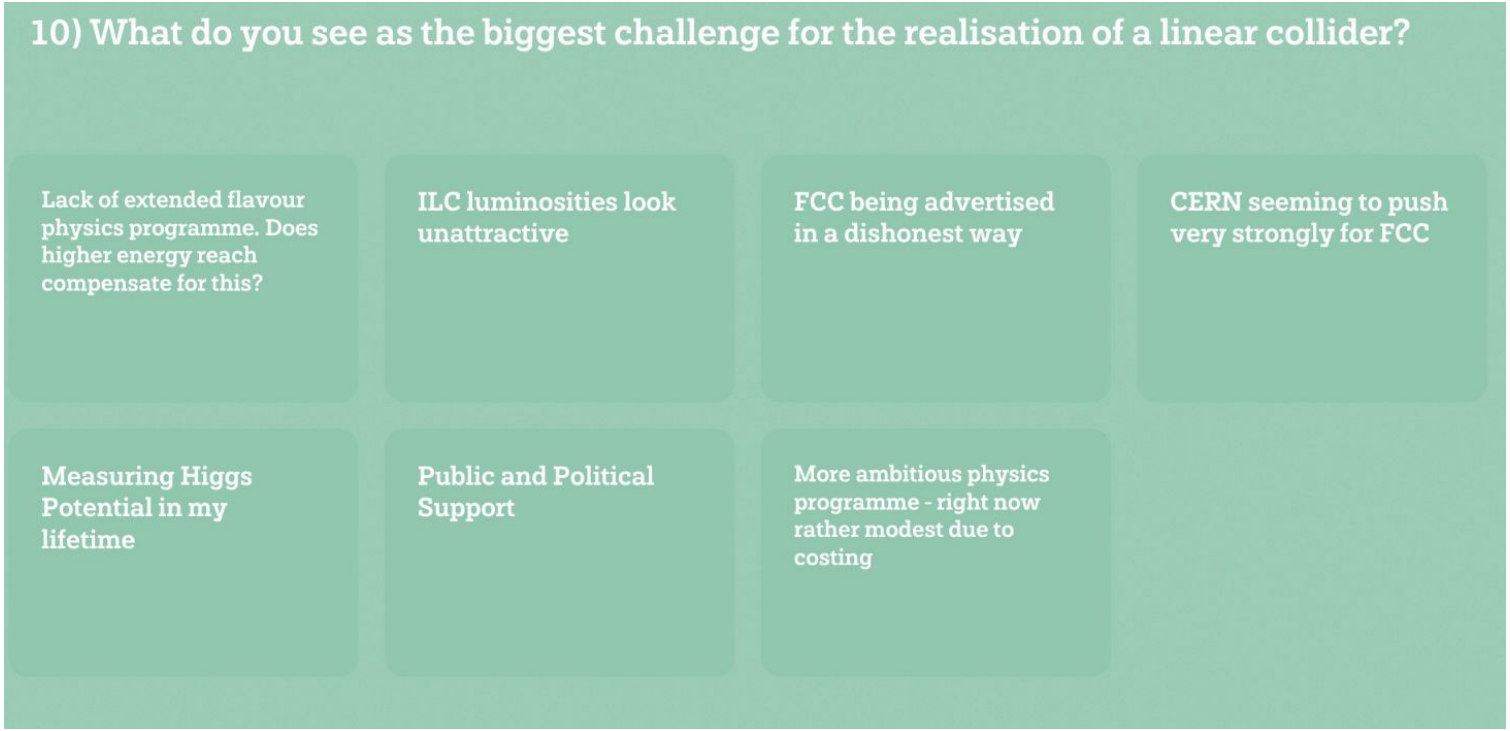



# Results of the live survey

- Physics program above timeline (!)
- Why is sustainability so low (and below cost)?

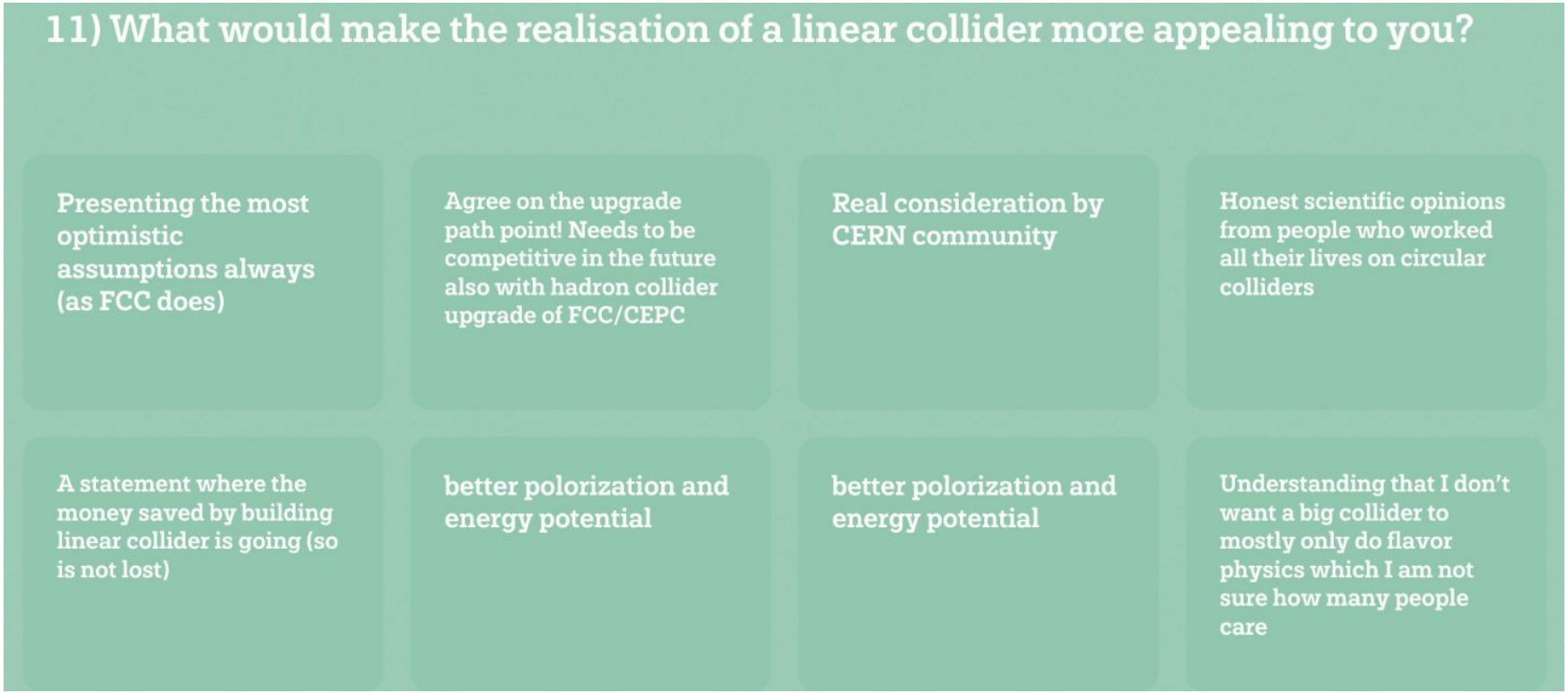


# Results of the live survey: challenges




Politics mentioned a lot as well

# Results of the live survey: opportunities




Luminosity also mentioned

# Key points from discussion session

- Think big - doing the same for the same money does not seem attractive
  - What can you get with ILC for the same money as FCC?
- Clear competitiveness/complementarity with CEPC (which energy at LC?)
- Convince management to make fair comparisons; no feasibility studies for LCs
- Physics Beyond Colliders better advertised; LC as a whole facility
- Can we use the lower cost as an argument?
  - Can the "surplus" still be used in particle physics?

# LC Vision survey

- Additional survey among ECRs dedicated to **linear colliders**
- Draft version ready

**Main goals:**

  - how familiar people are with LCs and the LC Vision?
  - what aspects make LCs attractive?
  - what would make them more attractive?

Work in progress...

# Summary

- A dedicated input to ESPPU of European ECRs in progress
  - help distributing the survey and advertising the event!
- Upgrade path should be more clear
- Explore possibilities for better polarisition and luminosity with novel technology
- “Think big” approach for linear colliders